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Welcome to Corel PaintShop Pro X4

Corel® PaintShop™ Pro sets the standard for affordable, professional image editing. You can manage, adjust, and edit photos, work with RAW image files, apply effects, and more — all with a set of easy-to-use workspaces.

This section presents the following topics:
• What’s in this user guide?
• What’s new in Corel PaintShop Pro X4
• Installing and uninstalling Corel programs
• Starting and exiting the program
• Registering Corel products
• Updating the program
• Corel Support Services
• About Corel

What’s in this user guide?

This user guide contains the information that you need to become familiar with the Corel PaintShop Pro workspaces and to get started with basic tasks and creative possibilities. It is designed to accompany the more comprehensive Help, which is available from within the program, as well as other learning resources. For more information about additional learning resources, see “Learning how to use Corel PaintShop Pro” on page 15.
What’s new in Corel PaintShop Pro X4

Corel PaintShop Pro X4 combines speed and performance improvements with a range of new pro-level tools and features that let you explore your passion for photography. We’ve been listening to your suggestions and following the latest photography trends so we can bring you an application that does what you want, and helps you discover something new. There is something for everyone — whether you’re pushing the creative boundaries with your DSLR camera or quickly fixing and sharing images from your mobile phone or pocket camera.

New! HDR tools

The HDR (high dynamic range) tools have been completely redesigned to give you more control over your results and help you take full advantage of photos taken with auto-bracketing features on DSLRs.

• Exposure Merge lets you combine photos taken with different exposure settings to create stunning, perfectly exposed images. For high-contrast backlit scenes, such as sunsets and interior window shots, you can bring out color and detail in the foreground, midground, and background areas. For more information, see “Combining photos by using HDR Exposure Merge” on page 109.

• Batch Merge lets you merge multiple bracketed sets of photos. If you use an auto-bracketing feature often, you’ll find this to be an invaluable tool for processing HDR sets quickly. For more information, see “Merging batches of photos into HDR images” on page 116.

New! Photo Blend

Combine photos of the same scene to remove, swap, or add details in the final image. For example, remove cars and people from a street
scene, swap in the best smiles from a series of group photos, or include multiple poses of the same person in one image. For more information, see “Combining photos with Photo Blend” on page 118.

**New! Selective Focus effect**

Selective Focus lets you create a miniature effect (also called a tilt-shift effect), transforming a real scene into a toy-like miniature model. You can also use Selective Focus to bring attention to important parts of your images — it’s perfect for blurring out busy details around your subjects. For more information, see “To apply a miniature effect by using Selective Focus” on page 136.

**New! Vignette effect**

Vignette is a classic effect that lets you bring attention to the most important part of your photo by applying a soft outer border that fades to white or black. For more information, see “To apply a Vignette effect” on page 138.

**New! Fill Light/Clarity filter**

Fill Light brightens shadow areas of photos without affecting other areas of the photo. Clarity enhances subtle yet important details. For more information, see “To brighten dark areas and adjust clarity” on page 80.

**New & Enhanced! Built-in sharing to Facebook® and Flickr®**

Share to Facebook® or Flickr® with the click of a button. For more information, see “Uploading photos to a sharing site” on page 170.

**Enhanced! Camera RAW Lab**

The Camera RAW Lab now has a larger preview area and an improved histogram that makes it easier to assess your adjustments. New highlight recovery options can help reconstruct detail in overexposed...
areas. For more information, see “Working with camera RAW photos” on page 61.

**Enhanced! Tabbed workspaces**

The application has been redesigned so you can move easily between photo workflows. Click the tabs at the top of the Corel PaintShop Pro window to switch workspaces. The Manage workspace gives you all the power to review and organize your photos. It also lets you access multi-photo processing options. The Adjust workspace puts commonly-used editing tools at your fingertips. Finally, the Edit workspace provides you with a full range of professional-level editing tools. No matter which workspace you’re in, the Organizer palette is always there — no need to go to a separate workspace or application to find more photos. For more information, see “Workspace tour” on page 21.

**Enhanced! Performance**

With new performance updates, including GPU optimizations, Corel PaintShop Pro is even faster than previous versions. Effects, such as Noise Reduction, Vibrancy and Tone Mapping, can now be applied and adjusted in real time.

**Enhanced! Full-screen review**

Quick Review lets you review your photos in a full-screen window. The feature now focuses on speed and simplicity. You can quickly view, delete, rotate, and rate your photos. For more information, see “Using Quick Review to review photos” on page 59.
Installing and un installing Corel programs

The Installer makes it easy to install Corel® programs and components.

Before installing

• Close all open programs. Note that antivirus software and firewall applications may affect installation.
• Ensure that you are logged in to your computer as Administrator or as a user with local administrative rights.

To install Corel PaintShop Pro

1 Close any open applications.
2 Insert the DVD in the DVD drive.
   If the setup does not start automatically, navigate to the DVD drive on your computer, and double-click Setup.exe.
3 Follow the instructions on your screen.

To uninstall Corel PaintShop Pro

1 Open the Windows® Control Panel.
2 In the Programs category, click the Uninstall a program link.
3 In the Programs and Features window, click Corel PaintShop Pro X4 in the list of applications.
4 Click Uninstall/Change.
5 Follow the instructions on your screen.
Starting and exiting the program

You can start Corel PaintShop Pro from the Windows taskbar or your desktop icon, and exit the program from the File menu.

To start Corel PaintShop Pro

- On the Windows taskbar, click Start ➤ All Programs ➤ Corel PaintShop Pro X4 ➤ Corel PaintShop Pro X4.

If you associate specific file formats, such as JPEG and TIFF, with Corel PaintShop Pro, you can double-click the associated file to start the program. For information about setting file format associations, see “Setting file format associations” in the Help.

To exit Corel PaintShop Pro

- Choose File ➤ Exit.

Registering Corel products

Registering Corel products is important to ensure that you receive timely access to the latest product updates, as well as valuable information about product releases. Registration also gives you access to free downloads, articles, tips and tricks, and special offers.

You can register the program immediately after you install it, or you can register at a later date.

You can register the program in one of the following ways:

- online — If you are connected to the Internet when you are prompted to register, you can launch the online registration. If no Internet connection is detected, you are presented with a list of options.
• **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.

**Updating the program**

You can check for product updates. Updates notify you of important new information about your program.

**To update your program**

• Choose Help ‣ Check for Updates.

You can turn automatic program updates on or off by clicking Help ‣ Corel Guide. In the Corel Guide, click the Product information and preferences button , and choose Message preferences. Mark the options that you want.

**Corel Support Services**

Corel® Support Services™ can provide you with prompt and accurate information about product features, specifications, pricing, availability, services, and technical support. For the most current information on available support and professional services for your Corel product, please visit www.corel.com/support.

**About Corel**

Corel is one of the world's top software companies with more than 100 million active users in over 75 countries. We develop software that helps people express their ideas and share their stories in more exciting, creative and persuasive ways. Through the years, we've built a
reputation for delivering innovative, trusted products that are easy to
learn and use, helping people achieve new levels of productivity. The
industry has responded with hundreds of awards for software
innovation, design and value.

Our award-winning product portfolio includes some of the world's
most widely recognized and popular software brands, including
CorelDRAW® Graphics Suite, Corel® Painter™, Corel DESIGNER®
Technical Suite, Corel® PaintShop™ Pro, Corel® VideoStudio®,
Corel® WinDVD®, Corel® WordPerfect® Office, WinZip® and Corel®
Digital Studio™.
The digital workflow

The digital workflow outlined below can help you understand how to best use Corel PaintShop Pro. It suggests a sequence for working with your digital images. Whether you want to organize, retouch, print or share, you can use the workflow described below as a guide.

**Bring photos into Corel PaintShop Pro**

Bringing photos into Corel PaintShop Pro is as simple as opening the application in the Manage workspace and navigating to your favorite photo folders on your computer. The application automatically catalogs the folders that you navigate to, essentially “importing” them into the application, without duplicating any files.
Manage your photos

Digital photography gives you the freedom to experiment. The result is a large number of digital files, so photographers understand the need to manage those files by reviewing, culling, and identifying photos as early in the process as possible.

The Manage workspace lets you access all the tools you need to cull, rate, tag, and prepare photos for editing or sharing. Double-clicking a thumbnail opens a full-screen review mode called Quick Review. Search options and collections make it easy to find and work with the photos that you currently store on your computer.

Quick Review is a full-screen review mode that opens when you double-click a thumbnail in the Manage workspace. You can use arrow keys to zoom and navigate.
For more information, see “Reviewing, organizing, and finding photos” on page 41.

Adjust photos quickly

The challenge for many photographers is finding the time to edit photos, so the Adjust workspace lets you move from photo to photo quickly and puts commonly-used editing tools at your finger tips. In some cases, this will be all the editing your photos will need.

After you edit photos, you can return to the Manage workspace to take advantage of multi-photo editing features such as Capture editing and Apply editing. Capture and Apply editing lets you copy edits made to a single photo and apply the edits to multiple photos. Images photographed under similar conditions can be fixed with amazing speed — no scripting required.

For more information, see the following topics:

- “The Adjust workspace” on page 23
- “Capturing and applying edits to multiple photos” on page 54
**Advanced editing and RAW files**

Professional-level tools and features are available in the Edit workspace. For example, you can apply effects, add text, and use custom painting tools. You can also use layers to create highly editable composite images, isolate image areas with selections and masks, and access tone curves, histograms, and other advanced adjustment tools.

If you like the full control of working with RAW files, you can use the Camera RAW Lab to process your photos.

For more information, explore the following topics:

- “Adjusting images” on page 65
- “Retouching and restoring images” on page 83
- “Working with selections” on page 157
- “Working with layers” on page 147
- “Applying effects” on page 129
Share photos

After you adjust and enhance your photos, you’ll want to share them. Along with printing, layout, and e-mailing options, there are sharing options that let you post to Facebook and Flickr directly from the application.

For more information, see the following topics:
• “Printing” on page 171
• “E-mailing and sharing photos” on page 169

Expanded creative options for DSLR photography

Many DSLR (digital single-lens reflex) camera owners are expanding their knowledge and looking for creative options. HDR (high dynamic range) features in Corel PaintShop Pro help you take advantage of bracketing features on your camera. You can also combine multiple photos with Photo Blend.
For more information, see the following topics:

- “Taking photos for HDR processing” on page 108
- “Combining photos by using HDR Exposure Merge” on page 109
- “Merging batches of photos into HDR images” on page 116
- “Combining photos with Photo Blend” on page 118
Learning how to use Corel PaintShop Pro

You can learn how to use Corel PaintShop Pro in various ways: by accessing the Help and videos, by using the Learning Center palette, or by exploring the Corel Guide and by visiting the Corel website (www.corel.com), where you can access tips, tutorials, and information about training.

This section presents the following topics:

• Documentation conventions
• Using the Help system
• Using the Learning Center palette
• Using the Corel Guide
• Using Web-based resources

Documentation conventions

The following table describes important conventions used in the Help.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menu</td>
<td>A menu item followed by a menu command</td>
<td>Choose File ➤ Open.</td>
</tr>
<tr>
<td>Menu command</td>
<td>A menu item followed by a menu command</td>
<td>Choose File ➤ Open.</td>
</tr>
<tr>
<td>drop-list</td>
<td>A list of options that drops down when a user clicks a down arrow button</td>
<td>Choose an option from the Selection Type drop-list on the Tool Options palette.</td>
</tr>
</tbody>
</table>

Learning how to use Corel PaintShop Pro
### Convention Description Example

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>palette</strong></td>
<td>A window containing available commands and settings relevant to a specific tool or task</td>
<td>Double-click the name of the group on the Layers palette.</td>
</tr>
<tr>
<td><strong>mark and unmark</strong></td>
<td>Terms that refer to enabling or disabling check boxes by clicking them</td>
<td>To preserve the current print size, mark the <strong>Maintain original print size</strong> check box.</td>
</tr>
<tr>
<td><strong>Enter</strong></td>
<td>The Enter key on your keyboard</td>
<td>To save this gradient as a swatch that you can access later, click the <strong>Add to swatches</strong> button, type a name, and press Enter.</td>
</tr>
<tr>
<td><strong>A tip related to photography</strong></td>
<td>For best results, use a tripod when taking photos for HDR processing.</td>
<td></td>
</tr>
<tr>
<td><strong>A video is available</strong></td>
<td>Watch a video: Smart Carver™.</td>
<td></td>
</tr>
<tr>
<td><strong>A note containing information that is important to the preceding steps. It may describe conditions under which the procedure can be performed.</strong></td>
<td>Although you can apply the <strong>Texture Preserving Smooth</strong> command to the entire image, the command works best when you select the problem area.</td>
<td></td>
</tr>
<tr>
<td><strong>A tip containing suggestions for performing the preceding steps. It may present alternatives to the steps, or other benefits and uses of the procedure.</strong></td>
<td>You can also right-click in the image to set the source point for the Clone tool.</td>
<td></td>
</tr>
</tbody>
</table>
Using the Help system

The Help that is available from within the program is the most comprehensive source of information for Corel PaintShop Pro. The Help system provides two ways to find information. You can choose a topic from the Contents page, or use the Search page to search for specific words and phrases. You can also print topics from the Help.

If you are connected to the Internet, the application displays the Web-based Help. If no Internet connection is available, the application searches the local Help system.

To use the Help system
1. Do one of the following:
   - Click Help ➔ Help topics.
2. In the Help window, click one of the following tabs:
   - Contents — lets you browse through topics in the Help
   - Search — lets you search the full text of the Help for a particular word or phrase (no quotation marks required). For example, if you are looking for information about a specific tool or command, you can type the name of the tool or command, such as Backlighting, to display a list of relevant topics.

You can also

<table>
<thead>
<tr>
<th>Print a specific Help topic</th>
<th>Open a Help topic, and from the Internet Explorer® menu, choose File ➔ Print.</th>
</tr>
</thead>
<tbody>
<tr>
<td>View Help for a dialog box</td>
<td>Click Help at the bottom of the dialog box.</td>
</tr>
</tbody>
</table>
Using the Learning Center palette

The Learning Center palette contains helpful information about Corel PaintShop Pro tasks, commands, and tools to help first-time users as well as experienced users get their work done faster. The Home page of the Learning Center palette provides a task-based workflow, which begins with getting your photos into the program. From there, the workflow takes you through tasks such as organizing your photos, adjusting and retouching photos, using layers and selections, adding text, graphics, and effects, and printing and sharing your creations.

From the Learning Center Home page, click a task, and then click a topic.
To display or hide the Learning Center palette

Edit workspace

• Choose View ▶ Palettes ▶ Learning Center.

The Learning Center palette is displayed by default. It appears along the right side of the Edit workspace.

To use the Learning Center palette

Edit workspace

1 From the Home page, click a task.
   The topics related to the task appear.

2 Click a topic.
   The procedure related to the topic appears.
   • For topics describing a tool, the tool becomes active. The Tool Options palette and any other relevant palettes appear.
   • For topics describing a command associated with a dialog box, the dialog box appears.

3 Read the procedure for using the tool or command.

Some tasks and commands are not available unless an image is open.

Using the Corel Guide

The Corel Guide provides the most up-to-date information and content for your program. You can find tips and tricks, download new content for your projects, explore new ways to share your photos, and access the latest updates for your program.

To access the Corel Guide

• Choose Help ▶ Corel Guide.
Using Web-based resources

From the Corel PaintShop Pro Help menu and the Corel website, you can access a number of Web pages dedicated to customer support and communities. You can find resources such as downloads, tutorials, tips, newsletters, newsgroups, and other online resources.

To access Web-based resources

• From the Help menu, select one of the following website links:
  • Contact Information — this link takes you to a Customer Support page listing customer service and technical support contact information
  • Online Support and Resources — lets you access the Corel Support Services page to search for answers in the Corel Knowledgebase and newsgroups, submit questions to Technical Support, provide feedback, or look for software updates
  • Check for Updates — checks the Corel Update Service to see if there are updates to your copy of Corel PaintShop Pro

You can also visit www.corel.com, and click the Support link to access the Support page.

To access Corel community sites

• Use your Internet browser to go to www.corel.com, click the Resources link, and click Community Sites.
Workspace tour

Corel PaintShop Pro includes three main workspaces that let you organize and edit your images: Manage, Adjust, and Edit.

This section presents the following topics:
• Exploring the workspaces
• Switching between workspaces
• Using palettes
• Using toolbars
• Using tools

Exploring the workspaces

Corel PaintShop Pro consists of three workspaces:
• Manage
• Adjust
• Edit

Each workspace contains specific tools and controls to help you accomplish the task at hand quickly and efficiently.

You can save the workspaces, including all open images and their magnifications and screen positions, as well as positions and preferences of palettes, toolbars, dialog boxes, and windows. For information about using custom workspaces, see “Using custom workspaces” in the Help.
The Manage workspace

When you open Corel PaintShop Pro, the Manage workspace appears as your default workspace.

The Manage workspace consists of the following components:

- **Navigation palette** — helps you find and organize photos. You can use the Search box or click the Collection tab or Computer tab to display the folders on your computer or you can sort photos by collection, tags, or ratings.

- **Preview area** — lets you choose between two views — a large single-image view or a multi-thumbnail view (expanded Organizer palette)
• **Info palette** — displays information about the selected image. It consists of a camera-style display of the settings used to take the photo and a tabbed area that lets you add information, such as tags and ratings, and access a full list of EXIF or IPTC data.

• **Organizer palette** — Available in all three workspaces, this palette lets you select photos (as thumbnails) and includes a toolbar with a range of commands and options for managing photos.

For more information about the Manage workspace, see “Reviewing, organizing, and finding photos” on page 41.

**The Adjust workspace**

Adjust is your workspace for quick edits. It lets you fix and enhance your photos by offering a set of the most commonly-used tools.

*A photo displayed in the Adjust workspace*
The Adjust workspace includes the following components:

- **Preview area** — displays the photo selected in the Organizer palette
- **Organizer palette** — lets you select photos. It includes a toolbar with a range of commands and options for managing photos.
- **Set Rating control** — lets you assign ratings to each photo, so that you can quickly find your favorites
- **Toolbar** — displays buttons for accessing common saving and viewing commands
- **Adjust palette** — displays tools and controls for adjusting photos
- **Status bar** — displays information about the selected tool

For more information about the Adjust workspace, see “Using the Adjust workspace” in the Help.

**The Edit workspace**

The Edit workspace lets you access in-depth editing features. It includes menus, tools, and palettes that you can use to create and edit images. In addition to photo editing, it lets you perform painting and drawing tasks.
The Edit workspace includes the following components:

- **Menu bar** — displays commands for performing tasks. For example, the Effects menu contains commands for applying effects to images.

- **Toolbars** — display buttons for common commands. For more information, see “Using toolbars” on page 29.

- **Palettes** — display image information and help you select tools, modify options, manage layers, select colors, and perform other editing tasks. For more information, see “Using palettes” on page 26.
• **Status bar** — displays information about the selected tool or menu command, as well as information about image dimensions, color depth, and pointer position. The status bar appears at the bottom of the workspace, and unlike other toolbars, it cannot be customized or moved. For more information about viewing image information, see “Displaying and editing photo information” on page 56.

Switching between workspaces

Corel PaintShop Pro lets you switch between different workspaces quickly and easily so that you can accomplish your photo managing and editing tasks in the most efficient manner.

**To switch between workplaces**

- At the top of the application window, click one of the following tabs:
  - Manage
  - Adjust
  - Edit

Using palettes

Corel PaintShop Pro contains many palettes that organize information and commands to help you edit your images. Some palettes appear automatically, others appear when you activate certain tools, and some palettes appear only when you choose to open them. You can easily turn a palette on and off by choosing View > Palettes. Some palettes are available only in specific workspaces.

Palettes display information and may contain both controls and command buttons. Like toolbars, palettes can be moved from their default docked position.
<table>
<thead>
<tr>
<th>Palette</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation palette</td>
<td>Lets you find and organize photos</td>
</tr>
<tr>
<td>Info palette</td>
<td>Displays information about the selected image. It consists of a camera-style display of the settings used to take the photo and a tabbed area that lets you add General information, such as tags and ratings, and access a full list of EXIF or IPTC data.</td>
</tr>
<tr>
<td>Learning Center</td>
<td>Displays information about workflow, tools, and commands to help you complete common tasks quickly and efficiently</td>
</tr>
<tr>
<td>Organizer</td>
<td>Lets you gather display photos from various folders so that you can select, edit, e-mail, or print them. You can add, remove, and rename custom trays within the palette to match your workflow.</td>
</tr>
<tr>
<td>Tool Options</td>
<td>Displays settings and controls for the active tool</td>
</tr>
<tr>
<td>Materials</td>
<td>Lets you choose colors and materials for painting, drawing, filling, and retouching</td>
</tr>
<tr>
<td>Layers</td>
<td>Lets you view, organize, and adjust settings for image layers</td>
</tr>
<tr>
<td>Overview</td>
<td>Displays a thumbnail of the active image; lets you set a zoom level, and displays image information</td>
</tr>
<tr>
<td>History</td>
<td>Lists the actions taken on the active image; lets you undo and redo adjacent or nonadjacent actions; and lets you create a Quickscript that can be instantly applied to other open images</td>
</tr>
<tr>
<td>Histogram</td>
<td>Displays a graph of the distribution of red, green, blue, grayscale, hue, saturation, and lightness values in an image. You can analyze the distribution of detail in the shadows, midtones, and highlights to help you decide how to make corrections.</td>
</tr>
</tbody>
</table>
To display or hide a palette

Edit workspace

• Choose View ➤ Palettes, and click the palette name.

Palettes that are currently displayed are denoted with a check mark.

To resize a palette

Edit workspace

• Drag the corner or edge of a palette.

You can also resize a docked palette by clicking the Minimize palette button or Maximize palette button in the upper-right corner of the palette’s title bar.

### Palette Description

<table>
<thead>
<tr>
<th>Palette</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brush Variance</td>
<td>Lets you set additional brush options when you use a paint brush or any other raster painting tool. This palette is particularly useful when you use a pressure-sensitive tablet or a four-dimensional mouse. For example, you can vary the opacity of a brushstroke by applying pressure with the stylus. Some options also work well with a mouse.</td>
</tr>
<tr>
<td>Mixer</td>
<td>Lets you place and mix pigments to use with the Oil Brush tool and the Palette Knife tool, allowing you to create realistic strokes with oil paints on Art Media layers.</td>
</tr>
<tr>
<td>Script Output</td>
<td>Displays a list of your actions and results when you run scripts.</td>
</tr>
</tbody>
</table>
Using toolbars

All three workspaces contain toolbars with buttons that are useful for performing common tasks. When you position the pointer over a button, its name appears in a tooltip, and the status bar displays additional information about the command. In addition, in the Edit workspace, the Learning Center provides advice on using the tool.

The Edit workspace is the main access point for the following toolbars:

- **Effects** — displays commands for applying effects to your images
- **Photo** — displays commands for enhancing photos
- **Script** — displays commands for creating and running scripts
- **Standard** — appears by default toward the top of the workspace and displays the most common file-management commands, such as saving images, undoing a command, and cutting and pasting items
- **Status** — appears by default at the bottom of the workspace and displays information about the selected tool
- **Tools** — contains tools for painting, drawing, cropping, typing text, and performing other image-editing tasks
- **Web** — displays commands for creating and saving images for the Web

To display or hide a toolbar

Edit workspace

- Choose View ➤ Toolbars, and choose the toolbar that you want to display or hide.
  
A check mark beside the toolbar name in the menu indicates that the toolbar is displayed.
To hide a specific toolbar, click the Close button on its title bar.

**Using tools**

You can use the tools to perform a variety of image editing and creative tasks. When you hold the pointer over a tool, a tooltip displays the tool name and shortcut key, and the status bar displays hints for using the tool.

While the Adjust workspace contains a limited number of tools for quickly touching up your images, the Edit workspace contains a wide selection of tools for advanced image creation and editing. In the Edit workspace, some of these tools, such as the Crop, Move, and Text tools, reside in their own space on the Tools toolbar. Most tools, however, are grouped with other tools that perform similar tasks. A group of tools is denoted by a small flyout arrow on the right side of the active tool.

Some tools are grouped together in flyouts. You can access all tools in a flyout by clicking the flyout arrow beside the active tool.

For information about moving, hiding, and displaying the Tools toolbar in the Edit workspace, see “Using toolbars” on page 29.

The following table briefly describes each tool on the Tools toolbar of the Edit workspace. Some of these tools are also available in the Adjust workspace.
<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan</td>
<td>Lets you control which part of the image is visible in the image window</td>
</tr>
<tr>
<td>Zoom</td>
<td>Zooms in when you click, or zooms out when you right-click. You can drag to define an area for zooming.</td>
</tr>
<tr>
<td>Pick</td>
<td>Moves, rotates, and reshapes raster layers, and selects and modifies vector objects</td>
</tr>
<tr>
<td>Move</td>
<td>Moves a raster layer or a vector layer on the canvas</td>
</tr>
<tr>
<td>Selection</td>
<td>Creates a geometrically shaped selection, such as a rectangle, ellipse, or triangle</td>
</tr>
<tr>
<td>Freehand Selection</td>
<td>Creates an irregularly shaped selection</td>
</tr>
<tr>
<td>Magic Wand</td>
<td>Makes a selection based on pixel values within a specified tolerance level</td>
</tr>
<tr>
<td>Dropper</td>
<td>Lets you choose the foreground/stroke color by clicking or the background/fill color by right-clicking</td>
</tr>
<tr>
<td>Crop</td>
<td>Trims or eliminates unwanted edges</td>
</tr>
<tr>
<td>Straighten</td>
<td>Rotates a crooked photo to straighten it</td>
</tr>
<tr>
<td>Perspective Correction</td>
<td>Squares the perspective of buildings or other objects that appear to be leaning</td>
</tr>
<tr>
<td>Red Eye</td>
<td>Quickly corrects the red-eye effect commonly seen in photos</td>
</tr>
<tr>
<td>Makeover</td>
<td>Provides five modes — Blemish Fixer, Toothbrush, Eye Drop, Suntan, and Thinify™ — which let you apply cosmetic fixes to subjects in your photos</td>
</tr>
<tr>
<td>Tool</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Clone</td>
<td>Removes flaws and objects by painting over them with another part of the image</td>
</tr>
<tr>
<td>Scratch Remover</td>
<td>Removes wrinkles, wires, and similar linear flaws from digital photos, and removes scratches from scanned photos</td>
</tr>
<tr>
<td>Object Remover</td>
<td>Covers unwanted elements of a photo with a neighboring texture in the same photo</td>
</tr>
<tr>
<td>Paint Brush</td>
<td>Lets you paint on your image with colors, textures, or gradients</td>
</tr>
<tr>
<td>Airbrush</td>
<td>Simulates painting with an airbrush or spray can</td>
</tr>
<tr>
<td>Lighten/Darken</td>
<td>Lightens areas as you drag, or darkens areas as you drag with the right mouse button. This effect is stronger than the effects produced by the Dodge and Burn tools.</td>
</tr>
<tr>
<td>Dodge</td>
<td>Lets you lighten areas of a photo by clicking or darken areas by right-clicking</td>
</tr>
<tr>
<td>Burn</td>
<td>Lets you darken areas of a photo by clicking, or lighten areas by right-clicking</td>
</tr>
<tr>
<td>Smudge</td>
<td>Smears pixels by picking up new colors as you drag, or pushes pixels by not picking up new colors as you drag with the right mouse button</td>
</tr>
<tr>
<td>Push</td>
<td>Pushes pixels by not picking up new colors as you drag, or smears pixels by picking up new colors as you drag with the right mouse button</td>
</tr>
<tr>
<td>Soften</td>
<td>Softens pixels as you drag, or sharpens pixels as you drag with the right mouse button</td>
</tr>
<tr>
<td>Sharpen</td>
<td>Sharpens pixels as you drag, or softens pixels as you drag with the right mouse button</td>
</tr>
<tr>
<td>Emboss</td>
<td>Creates an embossed effect by suppressing color and tracing edges as you drag</td>
</tr>
<tr>
<td>Tool</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Saturation Up/Down</td>
<td>Makes colors more vivid as you drag, or less vivid as you drag with the right mouse button</td>
</tr>
<tr>
<td>Hue Up/Down</td>
<td>Shifts pixel hue values up as you drag, or shifts them down as you drag with the right mouse button</td>
</tr>
<tr>
<td>Change to Target</td>
<td>Recolors pixels while retaining detail</td>
</tr>
<tr>
<td>Color Replacer</td>
<td>Replaces the background/fill color with the foreground/stroke color when you click and drag, or replaces the foreground/stroke color with the background/fill color when you right-click and drag</td>
</tr>
<tr>
<td>Eraser</td>
<td>Erases raster layer pixels to transparency</td>
</tr>
<tr>
<td>Background Eraser</td>
<td>Erases around the edges of the areas you want to keep in a photo</td>
</tr>
<tr>
<td>Flood Fill</td>
<td>Fills pixels of a similar tolerance level with the current foreground/stroke material when you click, or with the current background/fill material when you right-click</td>
</tr>
<tr>
<td>Color Changer</td>
<td>Changes the color of an object while preserving the shading and luminosity of the original color</td>
</tr>
<tr>
<td>Picture Tube</td>
<td>Places picture tubes, theme-based artistic elements, in your image</td>
</tr>
<tr>
<td>Text</td>
<td>Places text on your image</td>
</tr>
<tr>
<td>Preset Shape</td>
<td>Adds predefined shapes (such as callouts, arrows, and starbursts) to your image</td>
</tr>
<tr>
<td>Rectangle</td>
<td>Creates a rectangle or square</td>
</tr>
<tr>
<td>Ellipse</td>
<td>Creates an ellipse or circle</td>
</tr>
<tr>
<td>Tool</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Symmetric Shape</td>
<td>Creates symmetric or star-shaped objects</td>
</tr>
<tr>
<td>Pen</td>
<td>Creates connected or unconnected lines, freehand curves, and Bézier curve segments</td>
</tr>
<tr>
<td>Warp Brush</td>
<td>Shrinks, grows, twists, or distorts pixels</td>
</tr>
<tr>
<td>Mesh Warp</td>
<td>Distorts a photo by dragging points along an overlay grid</td>
</tr>
<tr>
<td>Oil Brush</td>
<td>Simulates oil brushstrokes on an Art Media layer</td>
</tr>
<tr>
<td>Chalk</td>
<td>Simulates drawing with chalk on an Art Media layer</td>
</tr>
<tr>
<td>Pastel</td>
<td>Simulates drawing with pastels on an Art Media layer</td>
</tr>
<tr>
<td>Crayon</td>
<td>Simulates drawing with crayon on an Art Media layer</td>
</tr>
<tr>
<td>Colored Pencil</td>
<td>Simulates drawing with colored pencil on an Art Media layer</td>
</tr>
<tr>
<td>Marker</td>
<td>Simulates drawing with an ink marker on an Art Media layer</td>
</tr>
<tr>
<td>Palette Knife</td>
<td>Simulates applying oil paint with a knife (instead of a brush) on an Art Media layer</td>
</tr>
<tr>
<td>Smear</td>
<td>Smears whatever pigment you've applied to an Art Media layer</td>
</tr>
<tr>
<td>Art Eraser</td>
<td>Erases whatever pigment you've applied to an Art Media layer</td>
</tr>
</tbody>
</table>
Getting started

You can bring your images into Corel PaintShop Pro in various ways: you can import photos that you have transferred to your computer, scan images directly into the application, capture images from the computer screen; or you can create an image.

After you bring your images into the application, you can access many basic commands that help you view images and image information. You can perform basic actions such as cut, copy, undo, and repeat.

For more information about performing basic actions, see “Getting Started with Corel PaintShop Pro” in the Help.

This section presents the following topics:
• Getting photos into Corel PaintShop Pro
• Opening and closing images
• Saving images
• Deleting images

Getting photos into Corel PaintShop Pro

After you transfer your photos to your computer (by using Windows or the software for your camera), you can import your photos into Corel PaintShop Pro. You import photos by browsing to folders. The photos in the folders are then cataloged automatically in a database. This makes it easy to find, edit, and update the information for your photos.
Although you can browse to folders from any workspace, the Manage workspace is designed to make it easy to review and manage multiple photos.

To import your photos into Corel PaintShop Pro

Manage workspace

1. In the Navigation palette, click the Collections tab, and click Browse More Folders.
2. In the Browse For Folder dialog box, navigate to the folder you want.
3. Click OK.

The folder is added to the folder list and all the images are cataloged in the application database.

You can open the Navigation palette from any workspace by clicking the Show/Hide Navigation button on the Organizer palette.

Opening and closing images

You can open most image formats in Corel PaintShop Pro. You can open the images by using the menu bar or by using the Manage workspace. You can associate specific file formats with Corel PaintShop Pro, such as JPEG, TIF, or PNG, so that these files will open in Corel PaintShop Pro when you double-click them. For more information about setting file format associations and supported file types, see “Setting file format associations” and “Files supported by Corel PaintShop Pro” in the Help. For information on RAW files, see “Supported RAW file formats” on page 61.
To open an image

2. In the Look in drop-list, choose the folder where the file is stored.
3. Click the name of the file that you want to open. If you want to open multiple files, hold down Ctrl, and click the filenames.
4. Click Open.

You can also

<table>
<thead>
<tr>
<th>View information about an image</th>
<th>In the Open dialog box, click the filename, and click Details.</th>
</tr>
</thead>
<tbody>
<tr>
<td>View a thumbnail in the preview area</td>
<td>In the Open dialog box, mark the Show preview check box.</td>
</tr>
</tbody>
</table>

To open an image from the Manage workspace

- Click a thumbnail to select the file.

  To view thumbnails from another folder, click Browse More Folders on the Navigation palette, and from the Browse For Folder dialog box that appears, choose the folder you want. The folder appears in the Folders list.

  You can work with the file in the Manage workspace, or click the Adjust tab or Edit tab to edit the file in another workspace.

To open a RAW photo image

- Do one of the following:
  - Choose File  Open.
  - Double-click on a RAW image thumbnail.
Hold down Ctrl, and click the filenames or thumbnails to open multiple files.

The Camera RAW Lab dialog box opens. This dialog box lets you adjust the settings that are stored with the RAW photo file.

To close an image

Choose File ▶ Close.

In the Edit workspace, you can also close an image by clicking the Close button above the image.

Saving images

Before you save an image, you need to consider the file format in which you want to save it, and you must ensure that you don’t overwrite an original image that you may need in the future.

The PspImage file format of Corel PaintShop Pro supports layers, alpha channels, and other features used in creating images. It is recommended that you save and edit your images as PspImage files. You can then save the files to common file formats. You can also use the Save for Office command if you want to optimize your images for placement in another application, such as a page layout, e-mail, or Web page design application.

For more information about options available when saving images, see “Saving images” in the Help.

Important! The Auto-Preserve Original preference setting can help you avoid overwriting original images. By default, this feature is on. For more information on this preference setting, see “Setting Auto-Preserve preferences” in the Help.
To save a new image

Edit workspace

1 Choose File ➦ Save.

The Save As dialog box appears.

2 From the Save in drop-list, choose the folder in which you want to save the file.

3 In the File name field, type a name for the file.

4 In the Save as type drop-list, choose a file format. The most commonly used formats are listed first.

   If you want to change the default settings for the file format (for example compression or color profile), click Options, and choose the settings you want.

5 Click Save.

You can also save your work by clicking the Save As button on the Standard toolbar to avoid overwriting your current file.

You can save in the last-used file format by choosing File ➦ Preferences ➦ General Program Preferences, and clicking Display and Caching from the list on the left side. In the Presentation group box, mark the Re-use last type in the file save-as dialog check box.

To save your work

Edit workspace

• Choose File ➦ Save.

   If the Auto-Preserve Originals preference setting is enabled, and this is the first time you’ve attempted to save changes to this image, you are prompted to save a copy of the original unedited image. If Auto-Preserve Originals is not enabled, the original image is overwritten by the modified image.
You can avoid overwriting the current file by using the **Save As** command.

You can also save your work by clicking the **Save** button on the Standard toolbar.

**Deleting images**

You can delete image files by using the Organizer palette.

**To delete an image**

- Right-click a thumbnail in the Organizer palette, and choose **Delete** from the context menu.
The Manage workspace is a multifaceted digital image management feature that lets you preview, organize, and streamline your photo-editing workflow.

This section presents the following topics:
- Setting up the Manage workspace
- Finding images on your computer
- Working with saved searches
- Adding keyword tags to images
- Viewing photos by tags
- Using the calendar to find images
- Working with thumbnails in the Manage workspace
- Capturing and applying edits to multiple photos
- Displaying and editing photo information
- E-mailing and sharing photos from the Manage workspace
- Using Quick Review to review photos
- Working with trays

Setting up the Manage workspace

When you start up Corel PaintShop Pro for the first time, the Manage workspace appears as your main workspace with the following four components: Navigation palette, Preview area,
Organizer palette, and the Info palette. For information about each of these palettes, see “The Manage workspace” on page 22.

Depending on your specific needs, you can customize the Manage workspace by choosing the Preview or Thumbnail mode, resizing, moving, or hiding the palettes, and selecting display and file preferences. For more information, see “Setting Manage workspace preferences” in the Help.
To switch between preview and thumbnail modes

- In the top-right corner of the Manage workspace, click one of the following buttons:
  - **Preview mode** — displays a large preview area of a single image
  - **Thumbnail mode** — expands and locks the Organizer palette content in the preview area

To hide or show the Navigation palette and Info palette

- In the Organizer palette, click any of the following buttons on the Organizer toolbar:
• **Show/Hide Navigation** — shows or hides the Navigation palette

• **Show/Hide Info** — shows or hides the Info palette

A convenient way to minimize the Organizer palette (or any palette) is to click the **Auto Hide** button on the palette title bar. For more information, see “To roll up a toolbar or palette” in the Help.

**Browsing folders for photos**

You can browse for photos on your computer by using the Collections and Computer tabs in the Navigation palette:

• The **Collections** tab is your library of virtual and physical folders. It offers an easy way to find and search for favorite photos.

• The **Computer** tab displays a complete list of all folders on your hard drive and desktop.

When you select a folder in the Navigation palette, the photos in this folder appear as thumbnails in the Organizer palette. When you browse to a folder, you are essentially importing the content of the folder into Corel PaintShop Pro. For more information, see “Getting photos into Corel PaintShop Pro” on page 35.

**To view the photos in a folder**

1. In the Navigation palette, click one of the following tabs:

   • **Collections** — displays a custom list of cataloged folders and a list of virtual collections

   • **Computer** — displays a list of all folders and devices on your computer
2 Double-click a folder to display the subfolders it contains.
3 Click the folder that contains the photos that you want to view.
   The thumbnails of all supported photo or video files in the
   selected folder appear in the Organizer palette.

You can also hide the list of subfolders in a folder by clicking the
minus sign next to its name.

To add a folder to the Collections page
Manage workspace
1 In the Navigation palette, click the Collections tab.
2 In Folders tree, click the Browse More Folders icon .
   The Browse for Folder dialog box appears.
3 Navigate to the folder containing the images you want to view,
   and then click OK.
   The folder is added to the Folders list.

You can also create a folder on your computer by clicking the
Make New Folder button in the Browse for Folder dialog box.

To view all cataloged folders
Manage workspace
1 In the Navigation palette, click the Collections tab.
2 In the Smart Collections tree, click the All Photos icon .

Finding images on your computer

When you import photos into Corel PaintShop Pro by navigating to
them from the Navigation palette, they are cataloged automatically.
Cataloged images can be searched for quickly (real-time filtering) and
easily from the Search box. You can do a simple text-based search, use
more advanced search options, or use a calendar to search for images associated with a particular date or date range.

When you perform an advanced search, you can save the search rules and results as a Smart Collection.

**To search for images quickly**

*Manage workspace*

- In the Navigation palette, type a search term in the Search box.

The search results appear in the Organizer palette.

**Note:** Search terms may be filenames (including extensions), names of folders in which images reside (including letters designating drives), tags, caption text, or image metadata (EXIF or IPTC data).

For more information about the tags that you can assign to images, see “Adding keyword tags to images” on page 47. For more information about caption text and image metadata, see “Displaying and editing photo information” on page 56.

**To do an advanced search**

*Manage workspace*

1. In the Navigation palette, click the **Collections** tab.
2. Double-click **Smart Collections** to open the list, and click **Add Smart Collection**.

   The Smart Collection dialog box appears.

3. In the Find photos that match drop-list, select one of the following options:
   - **All** — searches for images that match all of the specified rules
   - **Any** — searches for images that match any of the specified rules
4. From the first drop-list on the left, select a search option.

5. From the next drop-list, select an option to refine the search further.
   The options that appear in the drop-list depend on the search option that you chose in the previous drop-list.

6. In the text field, type or choose a search term.

7. Click Preview.
   The search results appear in the Organizer palette.

**Working with saved searches**

After you save a custom set of search criteria as a Smart Collection, you can run the search again simply by clicking it on the Collections tab. You can also edit, rename, or delete a saved search.

**To run a saved search**

1. In the Navigation palette, click the **Collections** tab.
2. Double-click **Smart Collections** to open the list.
3. Click the Smart Collection you want to use for your search.

**Adding keyword tags to images**

Keyword tags let you assign descriptive, natural-language terms to images. By creating tags such as “family,” “children,” or “birthday,” you can identify specific photos, and then simply click a tag from the list to view thumbnails of photos associated with the tag. You can create and assign as many tags as you like to an image. The Manage workspace provides several ways to create and assign tags.
To add a keyword tag to the tags catalog

Manage workspace
1. In the Navigation palette, click the Collections tab.
2. Double-click Tags to open the list.
3. In the Tags list, click the Add Tags button.
   The Add Tag dialog box appears.
4. Type the tag text, and click OK.
   The new tag appears in the Tags list.

To delete a keyword tag from the tags catalog

Manage workspace
1. In the Navigation palette, click the Collections tab.
2. Double-click Tags to open the list.
3. Right-click a tag, and click Delete.

To assign a keyword tag to one or more images

Manage workspace
1. In the Navigation palette, click the Collections tab.
2. Double-click Tags to open the list.
3. In the Organizer palette, select one or more thumbnails of the images that you want to tag.
4. Drag the thumbnails onto a tag in the Tags list.

You can also assign one or more tags to the selected thumbnails by typing the text in the Tags box on the General page of the Info palette, and clicking the Add Tag button to the right of the text field.
To remove keyword tags from one or more images

Manage workspace

1. In the Organizer palette, select one or more thumbnails.
2. In the Info palette, click the General tab to view the tag information.
3. In the list that appears below the Tags box, click one or more tags that you want to remove, and click the Delete Tag button that appears to the right of the tag name.

If the General info panel is not displayed, select the thumbnails, and then click the Image information button on the Organizer toolbar.

Viewing photos by tags

After you assign a tag to an image, you can find the image simply by clicking on the tag.

To display photos by tags

Manage workspace

1. In the Navigation palette, click the Collections tab.
2. Double-click Tags to open the list.
3. Click a tag.

Photos associated with the tag display as thumbnails in the Organizer palette.

You can also type a tag name into the Search box at the top of the Navigation palette.

You can also display photos that have no tags by clicking the No Tags button in the Tags list.
Using the calendar to find images

The Calendar Search lets you find photos according to the date they were taken. You can search by a specific date or select a date range. The image creation dates are highlighted on the calendar.

Note: When you edit and save a photo, the modification date is also captured in the Calendar Search.

To find images by using the calendar

Manage workspace

1. In the Navigation palette, click the Collections tab.

2. Click the Calendar button.
   The Calendar Search dialog box appears. Dates shown in red indicate images created on that date.

3. Choose one of the following options:
   • For photos taken today, click the Today button.
   • For a specific date and month, click the Previous (Year/Month) and Next (Month/Year) buttons, and select a date.
   • For a date range, use the Previous and Next buttons to select the month and year, hold down Shift, click the first date in the range, and then click the last date in the range.
   • For multiple dates not in sequence, use the Previous and Next buttons to select the month and year, hold down Ctrl, and click the dates.
   When you click a date or a range, the Organizer palette displays thumbnails of the photos that match the date criteria.

4. Click Close to close the Calendar Search dialog box.
Working with thumbnails in the Manage workspace

The Manage workspace makes it easy for you to preview and organize photos by using thumbnails.

For a larger view of photos, use Preview mode, zoom in and out on thumbnails, or use Quick Review to view photos in full-screen mode. You can also sort and rotate photos by using thumbnails, or delete and rename the files.

Thumbnails let you edit multiple photos by using Capture editing and Apply editing. For more information, see “Capturing and applying edits to multiple photos” on page 54.

In addition, you can select one or more RAW file thumbnails to convert the files to another format. For more information, see “Converting RAW photos to another file format” on page 64.

To preview an image in the Manage workspace

• In the Organizer palette, click a thumbnail.
  - If you are not in Preview mode, click the Preview mode button in the top-right corner of the application window.
  - The photo displays in the Preview area.

You can also

| Display the previous or the next image in the Preview area by using the keyboard | Press the Left arrow or the Right arrow keys. |
| Preview an image in full-screen mode | Click View Full Screen Preview, or double-click a thumbnail to open Quick Review. |
To zoom in or out on thumbnails

1. If the Manage workspace is not in Thumbnail mode, click the Thumbnail mode button in the top-right corner of the Manage workspace.
2. On the Organizer toolbar, move the Zoom slider to the left to zoom out, or to the right to zoom in.

The Zoom slider is not available when the Manage workspace is in Preview mode.

To sort thumbnails

Manage workspace

1. On the Organizer toolbar, click the Sort by drop-list.
2. Choose a sorting option.

To select more than one thumbnail

Manage workspace

- Do one of the following:
  - To select adjacent thumbnails, hold down Shift, and click the first and the last thumbnail in the sequence of thumbnails.
  - To select nonadjacent thumbnails, hold down Ctrl, and click the thumbnails.

To play a video from a thumbnail

Manage workspace

1. If the Manage workspace is not in Preview mode, click the Preview mode button in the top-right corner of the Manage workspace.
2. In the Organizer palette, click a video thumbnail.
3. Click the Play button below the Preview area.
You can extract a frame from a video and save it as an image by clicking the Pause button to stop the video on the frame that you want to save, and clicking the Capture button  

To rotate one or more images in the Organizer palette

Manage workspace

1. Select one or more thumbnails.
2. On the Organizer toolbar, click one of the following buttons:
   - Rotate Right — rotates thumbnails 90 degrees clockwise
   - Rotate Left — rotates thumbnails 90 degrees counterclockwise

You can also right-click a thumbnail and choose Rotate Right or Rotate Left from the context menu.

To delete one or more photos in the Manage workspace

1. Select one or more thumbnails, and press Delete.
   The Delete File dialog box or Delete Multiple Items dialog box appear.
2. Click Yes to send the images to the Recycle Bin.

You can also right-click selected thumbnails, and choose Delete in the context menu.
To rename a file in the Manage workspace
1. Right-click the thumbnail that you want to rename and choose Rename.
2. In the Rename dialog box, type the new file name, and click OK.

Capturing and applying edits to multiple photos
In the Manage workspace, you can copy the edits you make to one photo and apply them to as many photos as you want. For example, you can easily apply a lighting correction to multiple photos, or apply the same border and resizing options to a set of photos that you’re preparing for a website.

After you edit a photo in the Adjust or Edit workspace, a small editing icon appears on the photo’s thumbnail. When you return to the Manage workspace, you can access the Capture editing and Apply editing commands to copy the changes to other photos.

You can capture and apply edits to most file types, but edits to RAW files can be applied only to other RAW files. You can undo the edits you apply to one or more photos.
To capture edits
Manage workspace

1 After editing an image in the Adjust workspace or Edit workspace, or the Camera RAW Lab, save the changes, and return to the Manage workspace.

2 Select the thumbnail of the photo that you edited. A pencil icon or RAW icon appears in the bottom-left corner of thumbnails to indicate that the image has been edited.

3 Click the Capture Editing button on the Organizer toolbar.

You can capture the edits of both open or closed files for the current session only. When you close the program, all captured edits are automatically deleted.

You can also capture the edits by right-clicking the selected thumbnail and choosing Capture Editing.

To apply captured edits
Manage workspace

1 In the Organizer palette, select one or more thumbnails.

2 Click the Apply Editing button on the Organizer toolbar.

3 Click OK in the Batch Process dialog box.

   For RAW files, the saved settings from the Camera RAW Lab dialog box are applied.

When you close the program, all captured edits are automatically cleared.

You can also apply the captured edits by right-clicking the selected thumbnails and choosing Apply Editing.
To undo Apply Editing
1 In the Organizer palette, select one or more thumbnails.
2 Right-click a selected thumbnail, and choose **Revert Current Editing** from the context menu.

💡 You can also undo the editing to multiple photos by selecting the thumbnails of the edited photos, right-clicking a selected thumbnail, and choosing **Revert All Editing** from the context menu.

Displaying and editing photo information

The Info palette in the Manage workspace lets you view, add, and edit information about your photos, such as the filename, size, and creation date, as well as EXIF and IPTC metadata. You can also add tags, captions, and apply star ratings to photos. For more information about adding tags, see “Adding keyword tags to images” on page 47. Adding and updating photo information makes it easier to organize and search for your photos. For example, you can search by caption text.

At the top of the Info palette there is a camera-style display that helps you quickly review the camera settings were used for the selected photo.
### White Balance Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌞</td>
<td>Custom</td>
</tr>
<tr>
<td>🌞</td>
<td>Flash</td>
</tr>
<tr>
<td>🌞</td>
<td>Daylight</td>
</tr>
<tr>
<td>🌞</td>
<td>Overcast</td>
</tr>
<tr>
<td>🌞</td>
<td>Fluorescent</td>
</tr>
<tr>
<td>🌞</td>
<td>Shade</td>
</tr>
<tr>
<td>🌞</td>
<td>Tungsten</td>
</tr>
<tr>
<td>🌞</td>
<td>Partial metering</td>
</tr>
<tr>
<td>🌞</td>
<td>Auto-white balance</td>
</tr>
</tbody>
</table>

### Metering Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌡️</td>
<td>Custom metering</td>
</tr>
<tr>
<td>🌡️</td>
<td>Spot metering</td>
</tr>
<tr>
<td>🌡️</td>
<td>Averaged metering</td>
</tr>
<tr>
<td>🌡️</td>
<td>Multi-spot metering</td>
</tr>
<tr>
<td>🌡️</td>
<td>Center-weighted metering</td>
</tr>
<tr>
<td>🌡️</td>
<td>Pattern metering</td>
</tr>
</tbody>
</table>

### To assign a rating to one or more images

**Manage workspace**

1. Select one or more thumbnails.
2. In the Info palette, click a star, starting from left to right, to set a Rating. For example, if you want to assign a five-star rating, click the right-most star and all stars will be selected.

**You can also**

- Assign a rating by using the context menu: Right-click one or more thumbnails, click Set Rating, and then click the number of stars you want to assign.
- Assign a rating by using keyboard shortcuts: Select one or more thumbnails, and press Ctrl + the number of stars you want to assign. For example, if you want to assign one star, press Ctrl+1.
To remove the rating of an image
Manage workspace
• Right-click a thumbnail, choose Rating, and the number of stars
  that are currently assigned to the image. For example, to remove
  the rating of a three-star image, you would choose Rating ★ ★ ★.

To add a caption to one or more images
Manage workspace
1 Select a thumbnail.
2 In the Info palette, click the General tab, and type text in the
  Caption box.

To delete a caption from one or more images
Manage workspace
1 Select one or more thumbnails that have the same caption text.
2 In the Info palette, click the General tab.
3 Highlight the text you want to delete in the Caption box.
4 Press Delete.

To view advanced image information
Manage workspace
• In the Info palette, click the EXIF or IPTC tab.
  Note: You can edit only the EXIF or IPTC data that have entry
  fields.

E-mailing and sharing photos from the
Manage workspace
You can e-mail and share your photos from the Manage workspace, or
any other workspace, by accessing the Share menu on the Organizer
toolbar. For more information, see “E-mailing photos” on page 169
and “Uploading photos to a sharing site” on page 170.
Using Quick Review to review photos

You can use Quick Review to review images in full-screen mode. For example, after downloading photos from your camera, you can use Quick Review to quickly review all photos, delete the ones you don’t want, rotate photos, and apply star ratings.

To review images in full-screen mode

Manage workspace

1. In the Organizer palette, double-click a thumbnail in the folder or tray that you want to review.

   The Quick Review window opens.

2. Perform a task from the following table.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>View the next photo</td>
<td>Click the <strong>Next</strong> button.</td>
</tr>
<tr>
<td>View the previous photo</td>
<td>Click the <strong>Previous</strong> button.</td>
</tr>
<tr>
<td>Apply a star rating</td>
<td>Click a star below the photo, starting from left to right, to set a rating.</td>
</tr>
<tr>
<td>Change the Zoom level</td>
<td>Drag the Zoom slider, click the <strong>Zoom In</strong> or <strong>Zoom Out</strong> buttons, or click the <strong>Zoom to 100%</strong> button or the <strong>Zoom to Fit</strong> button.</td>
</tr>
<tr>
<td>Delete a photo</td>
<td>Click the <strong>Delete</strong> button.</td>
</tr>
<tr>
<td>Rotate a photo</td>
<td>Click the <strong>Rotate Right</strong> button or <strong>Rotate Left</strong> button.</td>
</tr>
<tr>
<td>Exit Quick Review</td>
<td>Click the <strong>Exit</strong> button or press <strong>Esc</strong>.</td>
</tr>
</tbody>
</table>
Working with trays

You can use trays to gather images from various folders. The images remain in their original location, but are referenced in the tray and can be accessed by clicking a thumbnail.

You can add, remove, and rename trays to suit your workflow. For instance, you can create a tray for images you want to edit, use for a project, print, or e-mail. Trays are created in the Organizer palette.

The default tray automatically displays the photos from the folder or collection that is currently selected in the Navigation palette. A custom tray, called My Tray, is a blank tray that is created automatically. For more information about trays, see “Working with trays” in the Help.

To add a tray

1 In the Organizer palette, click the More Options button on the Organizer toolbar, and click Add Tray.
2 Type a name for the new tray in the Name field, and click OK.

To remove a tray

1 In the Organizer palette, select the tray that you want to remove.
   Note: Removing a tray does not delete the photos in the tray.
2 Click the More Options button on the Organizer toolbar, and click Remove Tray.

   The custom tray, “My Tray”, cannot be removed.
Most DSLR cameras give you the option to take photos in RAW mode. RAW mode records more image data than a typical JPEG. A RAW photo is a 12-bit or 14-bit image and comprises of up to 16,384 levels of brightness. The camera records information, such as ISO, color temperature, and saturation settings, but stores this information in a header. The RAW image data itself remains uncompromised and uncompressed, making it similar to a photo negative that you can print as you like. Compare this to an 8-bit JPEG photo which contains 256 brightness levels, and which has already had some irreversible processing applied by the camera. The Camera RAW Lab in Corel PaintShop Pro acts like a digital darkroom and lets you apply a personal touch to your RAW files.

After processing a RAW image, you can leave it as a read-only RAW file, or export it to a JPEG, GIF, or PNG file so you can edit it.

This section presents the following topics:
- Supported RAW file formats
- Using the Camera RAW Lab
- Applying edits to multiple RAW photos
- Converting RAW photos to another file format

**Supported RAW file formats**

Camera RAW Lab works with common RAW formats from the major camera manufacturers. You can find an updated list at www.corel.com.
To find supported RAW file formats
1 Go to www.corel.com.
2 On the corel.com Web page, click Support.
3 On the Support page, click Knowledgebase.
4 In the Search Text box, type PaintShop RAW support list.
   A list of related Knowledgebase articles is displayed.

Using the Camera RAW Lab
The Camera RAW Lab lets you develop a RAW image by saving a variety of processing settings. After processing a RAW image, you can leave it as a read-only RAW file, or open it in the Edit workspace and save it to a different file format, such as JPEG, GIF, or PNG.

To launch the Camera RAW Lab
• Do one of the following:
  • In the Manage workspace, select File ➤ Open ➤ Filename.
  • In the Edit workspace, drag a thumbnail from the Organizer palette to the image window, or double-click the thumbnail. The Camera RAW Lab dialog box opens with the image.
To adjust settings for a RAW photo

1. In the Camera RAW Lab dialog box, do any of the following:
   • Drag the **Brightness**, **Saturation**, or **Shadow** sliders for a quick overall image adjustment.
   • In the White balance area, adjust color by clicking a preset lighting option from the **Scenario** drop-list, or by clicking the preview area to set the white point with the Dropper tool. You can also adjust or fine-tune color with the **Temperature** and **Tint** sliders.
   • In the Highlight recovery area, click an option in the drop-list. Highlight recovery works particularly well on images that are overexposed — it can help restore detail in blown-out areas.
   • Drag the **Threshold** slider in the Reduce noise area to smooth digital noise.

   You can preview the changes to the photo in the Preview area.

   If you want to keep the settings for future use, check the **Save image settings** checkbox.

2. Click one of the following:
   • **Reset** — resets the settings to their original values
   • **Edit** — applies the settings and opens the photo in the Edit workspace. When you edit a RAW photo, you must save it to a JPEG, TIFF, or another writable file format.
   • **Apply** — applies the settings, and exits the Camera RAW Lab
   • **Cancel** — exits the Camera RAW Lab without adjusting the photo’s settings

Image settings for RAW images are saved to a database. Changes to the file name or file location can be tracked in the database only if you make the changes in Corel PaintShop Pro.
Applying edits to multiple RAW photos

With Corel PaintShop Pro, you can copy the edits you made to a photo in the Camera RAW Lab, and quickly apply the same edits to a batch of photos. For more information about applying edits to multiple photos, see “Capturing and applying edits to multiple photos” on page 54.

Converting RAW photos to another file format

The RAW file format is read-only and the settings for a RAW file are stored as a separate header. It is these settings that you can adjust in the Camera RAW Lab. However, to use the editing features in the Adjust and Edit workspaces, you need save the RAW file to a different file format, such as JPEG, TIFF, or the native format, .pspimage. To quickly convert the file, you can use Convert RAW.

To convert a RAW file to another file type

Manage workspace

1 In the Organizer palette, select one or more RAW file thumbnails.
2 Right-click a selected thumbnail, and click Convert RAW.
3 In the Batch Process dialog box, choose a file format from the Type drop-list.
   If you want to change the default conversion settings, click Options, and adjust the settings.
4 Click Browse and choose a folder in which the converted file will be saved.
5 Click Start.

You can rename converted files by clicking Modify, choosing an option from the Rename Options list, and clicking Add.
When you view your photos in Corel PaintShop Pro, you may notice problems that you want to correct. In some photos, the problems are obvious, such as when the subject is too dark. In other photos, you may sense the need for improvement but not know what to fix. With Corel PaintShop Pro, you can correct specific aspects of a photo or allow the program to make basic photo adjustments.

This section presents the following topics:

- Rotating images
- Cropping images
- Straightening images
- Correcting photographic perspective
- Making basic photo corrections automatically
- Removing digital noise
- Adjusting color balance
- Adjusting brightness, contrast, and clarity
- Controlling depth of field

For more information about adjusting images, including correcting light and lens distortions, controlling noise, adding blur, or sharpening images, see "Adjusting images" in the Help.
Rotating images

You can rotate an image by 90 degrees to change its orientation to landscape (horizontal) or portrait (vertical). If your camera contains sensors that tag photos taken in portrait orientation, your photos are automatically rotated to the correct orientation.

You can also rotate an image to any angle by specifying a degree of rotation or by rotating it interactively on the canvas. For information about rotating an image to straighten it according to reference points within the image, such as the horizon, see “Straightening images” on page 70.

You can also use the Manage workspace to apply lossless rotation to JPEG images while retaining all of the original image data.

To rotate an image

Select an image, and perform a task from the following table.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotate an image 90 degrees clockwise or counterclockwise</td>
<td>Choose Image ➤ Rotate Right, or choose Image ➤ Rotate Left.</td>
</tr>
</tbody>
</table>
Adjusting images

You can also rotate an image by clicking the Rotate Right or Rotate Left button on the Standard toolbar.

If you want to change the center of rotation before you interactively rotate the image, hold down Ctrl, and drag the rotation pivot point (the circle at the center of the image) to a new position.

Cropping images

You can remove unwanted portions of an image to create stronger compositions or to draw attention to another area of the image. Corel PaintShop Pro helps you crop by providing presets to common image sizes, such as 4 × 6 inches or 10 × 15 centimeters.

Cropping reduces the amount of hard drive memory required for storing the image. In addition, cropping can improve color corrections.
by eliminating extraneous areas of color. If a photograph requires both cropping and color correction, you should crop the image first and then apply the color correction.

Important! Cropping permanently removes the image area outside the crop rectangle. To preserve the original photo, use the Save As command, and save the cropped version of your image to a new filename.

**To crop an image**

1. On the Tools toolbar, choose the Crop tool .
   By default, the crop rectangle appears on the image, and the area outside the crop rectangle is shaded.

2. Adjust the crop area size by dragging any of the handles or edges. To reposition the crop rectangle, place the cursor inside and drag.
   You can use a preset crop size by choosing an option from the Presets drop-list on the floating toolbar for the Crop tool, or from the drop-list on the Tool Options palette.

3. When you’re ready to crop the image, click the Apply button ✓ on the Tool Options palette or on the floating toolbar for the Crop tool.
To crop an image for printing

1. On the Tools toolbar, choose the Crop tool.
2. Define the crop area by dragging within the image.
3. On the Tool Options palette, mark the Specify Print Size check box.
   **Note:** If the Specify Print Size check box is marked, the image resolution changes when you change values in the Height and Width controls. The current resolution appears to the right of the Units drop-list.
4. In the Units drop-list, select Inches or Centimeters.

You can also

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply the crop by using your mouse or keyboard</td>
<td>Double-click inside the crop rectangle, or press Enter.</td>
</tr>
<tr>
<td>Set the size of the crop rectangle on the Tool Options palette</td>
<td>Specify the values in the Width, Height, and Units controls.</td>
</tr>
<tr>
<td>Constrain the crop area to its current proportions</td>
<td>Mark the Maintain aspect ratio check box on the Tool Options palette. This option is available only for custom-defined crop rectangles.</td>
</tr>
<tr>
<td>Rotate the crop rectangle by 90 degrees</td>
<td>Click the Rotate Crop Rectangle button on the floating toolbar.</td>
</tr>
<tr>
<td>Freely rotate the crop rectangle</td>
<td>Drag the square end of the rotation handle. This feature can be helpful when, for example, you want to straighten and then crop a crookedly scanned photo.</td>
</tr>
<tr>
<td>Clear the crop area</td>
<td>Click the Clear button on the floating toolbar for the Crop tool.</td>
</tr>
</tbody>
</table>
Note: The Pixels option is unavailable for this method of cropping.

5 Type or set position values in the Top, Bottom, Left, and Right controls.

6 Type or set the dimension values in the Height and Width controls.
   The final crop area is sized as specified, and the image resolution
   is reduced or increased as needed.

7 Click the Apply button on the Tool Options palette, or on the floating toolbar for the Crop tool.

Straightening images

You can easily straighten crooked images by aligning a straightening bar with an image feature. Corel PaintShop Pro rotates the image so that this straightening bar is perfectly horizontal and vertical. This feature is especially useful when an image has a strong vertical or horizontal feature, such as a building or horizon.

To straighten an image

1 On the Tools toolbar, choose the Straighten tool.

The Straighten tool lets you position a straightening bar within an image.
A straightening bar with end handles appears on the image.

2 Drag each handle of the straightening bar to align it with the part of the image that you want to straighten.

3 On the Tool Options palette, choose one of the following options from the Mode drop-list:
   • Auto — automatically straightens the image based on the position of the straightening bar
   • Make vertical — rotates the image to make the straightening bar vertical
   • Make horizontal — rotates the image to make the straightening bar horizontal

4 Click the Apply button .

You can also

<table>
<thead>
<tr>
<th>Choose a specific angle for the straightening bar</th>
<th>Type or set a value in the Angle control on the Tools Options palette.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop the edges of the image to make it rectangular after straightening</td>
<td>Mark the Crop image check box on the Tools Options palette.</td>
</tr>
<tr>
<td>Fill the edge areas of your image with the background color</td>
<td>Unmark the Crop image check box on the Tools Options palette.</td>
</tr>
</tbody>
</table>

You can also double-click the image to apply the command.

**Correcting photographic perspective**

When you take pictures of tall or wide objects, the resulting photographs may have perspective distortion — that is, the objects may seem to be leaning or angled. This distortion occurs when the camera is at an angle to the subject.
By using the Perspective Correction tool, you can fix perspective distortion, such as the angled sides of a building. You can also fix photographic perspective in an entire layer by using the Pick tool.

Using the Perspective Correction tool changes the angle of the building.

To correct perspective in a photo

1. On the Tools toolbar, choose the **Perspective Correction tool**.
   A bounding box with corner handles appears on the image.

2. On the Tool Options palette, choose settings for the following controls:
   - **Grid lines** — lets you type or set the number of gridlines to display
   - **Crop image** — recrops the image to a rectangular shape after the perspective is applied
   
   **Note:** Marking the **Crop image** check box deletes the areas of the image that fall outside the rectangle.

3. Drag each handle to the corner of the object that should be rectangular.

4. Click the **Apply** button.

You can also apply the command by double-clicking the image.
To reset the perspective correction box to the original rectangle, click Cancel on the Tool Options palette.

**Making basic photo corrections automatically**

If you are not sure what adjustments to make to a photo, you can apply either the One Step Photo Fix command or the Smart Photo Fix command and see if you like the results. The One Step Photo Fix command automatically applies a predetermined set of color balancing and sharpening corrections to your photo — all you need to do is select the command. If you want the option of fine-tuning the same corrections before applying them, you can use the Smart Photo Fix command.

You can use the One Step Photo Fix command to improve the exposure and color balance of images quickly and easily.
The Smart Photo Fix feature gives you control over the amount and type of corrections applied to an image.

The advanced options of the Smart Photo Fix feature let you adjust color balance by identifying the neutral areas in the photo (black, gray, and white), which are used as sampling points. The advanced options also let you modify the darkest and lightest pixels of the photo without affecting the photo’s color balance. For information about advanced options, see “To use advanced options of Smart Photo Fix” in the Help.

To apply basic corrections with One Step Photo Fix

1. Choose Adjust ▶ One Step Photo Fix.
   
   After a brief pause, several basic corrections are applied to your photo.
The corrections applied are identical to what would be applied by accepting the suggested settings of the Smart Photo Fix feature.

If you are not satisfied with the changes made to your photo, choose **Edit > Undo**. Then, choose **Adjust > Smart Photo Fix**, and adjust the available settings. You can also try using other **Adjust** menu commands, such as **Brightness and Contrast > Curves** or **Brightness and Contrast > Levels**.

**To fine-tune basic corrections with Smart Photo Fix**

 start caption

1. Choose **Adjust > Smart Photo Fix**.
2. Perform one or more tasks from the following table, and click **OK**.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brighten or darken the photo</td>
<td>In the <strong>Brightness</strong> group box, type or set a value in the <strong>Overall</strong>, <strong>Shadows</strong>, and <strong>Highlights</strong> controls, or adjust their corresponding sliders. <strong>Note:</strong> Positive settings brighten the photo, and negative settings darken the photo.</td>
</tr>
</tbody>
</table>
To reset all settings to their initial values, click Suggest Settings, or to null settings, click Reset to Default.

You can also mark Advanced Options to use advanced settings of the Smart Photo Fix feature.

### Removing digital noise

The term “noise” as it relates to photos refers to small specks of color that interfere with image clarity. These specks are usually caused by poor lighting conditions or the limitations of the sensor in your digital camera. For example, when you zoom in on a photo of a clear blue sky, you may see tiny specks of orange, red, purple, green, or other colors.

Corel PaintShop Pro gives you two fast, powerful commands for removing noise from your photos: One Step Noise Removal and Digital Noise Removal. When you use a noise removal command, the program analyzes your photo, identifies the noise artifacts, and applies corrections based on these identified areas, while preserving the important edge details of your photo.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
</table>
| Increase or decrease saturation | Type or set a value in the Saturation control, or adjust the slider.  
**Note:** Positive settings make colors more vibrant; negative settings make colors less vibrant. |
| Sharpen the edges of the photo | Type or set a value in the Focus control, or adjust the slider. |
The image on the left looks grainy because of digital camera noise. The image on the right appears smoother and less grainy after the noise has been removed.

You can automatically apply noise correction to your photo with the One Step Noise Removal command. You can also control more precisely how the same corrections are applied by using the more comprehensive Digital Noise Removal command. For more information about this command, see “Removing digital noise” in the Help.

To remove digital noise quickly

Choose Adjust ➤ One Step Noise Removal. After a brief pause, the noise is automatically removed.

Adjusting color balance

You can often improve a photo dramatically by adjusting the colors. Different types of lighting, cameras, and the processing that occurs inside the camera can cause incorrect coloring in photos. Scanned images may have unnatural color casts.

To adjust color balance

Choose Adjust ➤ Color Balance. The Color Balance dialog box appears.
2 Mark the **Smart White Balance** check box.
This allows Corel PaintShop Pro to evaluate and make minor corrections to the image automatically.

3 Drag the temperature slider to the left for cooler colors (more blue), or to the right for warmer colors (more orange).

4 Click **OK**.

   ![Image](image)

   If you know what color temperature the photo should be, you can set precise tonal balance values by marking the **Advanced Options** check box and typing or setting the temperature values in the **Temperature** and **Tint** controls in the **White Balance** group box. You can tweak the colors by adjusting values in the **Temperature** and **Tint** controls in the **Enhance Color Balance** group box.

**To correct faded colors**

1 Choose **Adjust**  >  **Color**  >  **Fade Correction**.
   Drag in the **Before** pane to center an important part of the image (such as a face).

2 Adjust the value in the **Amount of correction** control until the image looks the most natural.
   The default value is 45.

   **Note:** Use the minimum value that produces a good correction. If you apply too much correction, highlight and shadow areas may lose detail, and objects may blend together.

3 Click **OK**.

**To change color cast**

1 Choose **Adjust**  >  **Color**  >  **Red/Green/Blue**.
   The Red/Green/Blue dialog box appears.
In the Red, Green, and Blue controls, type or set a value to change the percentage for each color.

A value of 0% preserves the original value. To add more of a color, use a positive number. To remove some of a color, use a negative number.

**Note:** Reducing the amount of blue adds a yellow cast to the image, reducing the amount of green adds a magenta cast to the image, and reducing the amount of red adds a cyan cast to the image.

Click OK.

**Adjusting brightness, contrast, and clarity**

Corel PaintShop Pro lets you adjust the brightness, contrast, and clarity in your photos. Contrast is the difference between the photo’s lightest and darkest pixels. Clarity lets you adjust the level of detail in the image by analyzing contrast within localized areas.

For more information about adjustment filters in the Brightness/Contrast group, including Curves, Levels, and Histogram Adjustment, see “Adjusting brightness, clarity, and contrast” in the Help.

**To change brightness or contrast**


   The Brightness/Contrast dialog box appears.

2. Type or set a value in the Brightness control.

   A positive number lightens the photo; a negative number darkens the photo. A value of zero preserves the original setting.

3. Type or set a value in the Contrast control.

   A positive number increases contrast; a negative number decreases contrast. A value of zero preserves the original setting.
4 Click OK.

You can use the zoom control in the dialog box to set your view of the image in the Before and After panes.

To brighten dark areas and adjust clarity

1 Choose Adjust ➤ Brightness and Contrast ➤ Fill Light/Clarity.
   The Fill Light/Clarity dialog box appears.

2 Type or set a value in the Fill Light control.
   A positive number lightens the darkest areas of the photo; a negative number darkens the light areas of the photo. A value of zero preserves the original setting.

3 Type or set a value in the Clarity control.
   A positive number increases detail; a negative number decreases detail and focus. A value of zero preserves the original setting.

4 Click OK.

To enhance depth and clarity

1 Choose Adjust ➤ Brightness and Contrast ➤ Local Tone Mapping.
   The Local Tone Mapping dialog box appears.

2 Type or set a value in the Strength control.
   Use the smallest value that produces a satisfying result. Values that are too high cause unwanted artifacts to appear in the photo.

3 Click OK.

You can use the zoom control in the dialog box to set your view of the image in the Before and After panes.
Controlling depth of field

You can control the depth of field to create an area of focus that draws attention to the subject in your photo. For example, in a photo of a person surrounded by a field of flowers, you can defocus (blur) the surrounding flowers while retaining a clear focus on the person.

To create an area of focus by using the Depth of Field effect

Edit workspace

1. In the Edit workspace, select the area that you want to keep in focus.
   
   For information about selecting image areas, see “Creating selections” on page 157.

2. Click Adjust ➤ Depth of Field.
   
   The Depth of Field dialog box appears.

3. Move the Blur slider to adjust the amount of blur applied to the out-of-focus area.
If you don’t have a pre-existing selection, you can select an area of focus using any of the selection tools in the Depth of Field dialog box: Circular, Freehand, Rectangular, or Raster Selection.

Make your selection slightly larger than the area you want to keep in focus, and then fine-tune the edge of the selection by using the Focus range slider.
Retouching and restoring images

Corel PaintShop Pro provides you with many ways to retouch your images. Whether you want to remove a small scratch, erase the entire background, or simply correct red-eye, you’ll find the tools you need.

This section presents the following topics:

- Removing red-eye
- Applying cosmetic changes
- Removing scratches
- Removing flaws and objects
- Erasing image areas
- Cutting out image areas
- Recoloring image areas for a realistic effect
- Adding borders
- Scaling photos by using Smart Carver

For more topics related to retouching images, such as dodging and burning, filling image areas (with colors, gradients, or patterns), flipping, scaling, or transforming images, see “Retouching and restoring images” in the Help.
Removing red-eye

Red-eye in photos is a common problem. When light from the camera’s flash reflects off the retina of a photo subject, a red-eye effect is captured in the photo. Corel PaintShop Pro has two methods of removing red-eye from a color photo.

The fastest method of removal is to use the Red Eye tool. A more powerful method is to use the advanced Red Eye Removal command, which lets you change the eye color. For more information about the advanced red-eye removal method, see “To use advanced options for red-eye removal” in the Help.

The Red Eye tool replaces the red color in the subject’s pupil with a dark gray color, restoring a natural look.

To remove red-eye quickly

1. On the Tools toolbar, choose the Red Eye tool.
2. On the Tool Options palette, adjust the Size of Red-Eye control so that the pointer is about twice the size of the red area needing correction.
3. Position the pointer directly over the eye, and click.

You can zoom in on the photo, if necessary, for better control of the Red Eye tool.

You can size the pointer interactively by holding down Alt while dragging the Red Eye tool over the eye area.
Applying cosmetic changes

You can quickly improve the appearance of the subjects in your photos by performing the following cosmetic changes:

- removing blemishes — by using the Blemish Fixer mode of the Makeover tool
- whitening teeth — by using the Toothbrush mode of the Makeover tool
- fixing bloodshot eyes — by using the Eye Drop mode of the Makeover tool
- adding a suntan — by using the Suntan mode of the Makeover tool
- thinning a photo subject — by using the Thinify mode of the Makeover tool
- removing wrinkles — by using the Scratch Remover tool
- smoothing skin tone quickly — by using the Skin Smoothing command in the Adjust menu

You can remove blemishes, whiten teeth, and apply a suntan.
To remove facial blemishes

1. On the Tools toolbar, choose the Makeover tool 🦜.
2. On the Tool Options palette, choose the Blemish Fixer 🦜 mode.
   The pointer changes to concentric circles.
3. On the Tool Options palette, adjust the Size control to the smallest size that allows the inner circle to enclose the blemish.
   The outer circle is for the material used to cover the blemish.
4. On the Tool Options palette, adjust the Strength control.
   Values range from 1 to 100. Higher values apply more of the source material (enclosed in the outer circle) to the blemish area (enclosed in the inner circle).
5. Click directly over the blemish.

You can zoom in on the photo for better control of the Makeover tool.

To whiten teeth

1. On the Tools toolbar, choose the Makeover tool 🦜.
2. On the Tool Options palette, choose the Toothbrush 🦜 mode.
3. On the Tool Options palette, adjust the Strength control as desired.
   Higher settings produce more intense whitening but may also produce an unnatural appearance.
4. Click directly over the teeth.
   If the teeth are separated or partially obscured, you may need to apply this tool to each tooth individually.
The Toothbrush mode of the Makeover tool works only with color photos.

To apply whitening eye drops

1. On the Tools toolbar, choose the Makeover tool.
2. On the Tool Options palette, choose the Eye Drop mode.
3. Type or set a value in the Strength control.
   Higher values whiten more of the eye area but may spread the whitening beyond the affected area of the eye.
4. Zoom in as necessary, and then carefully click over the bloodshot portion of the eye.

To apply a suntan

1. On the Tools toolbar, choose the Makeover tool.
2. On the Tool Options palette, choose the Suntan mode.
3. Type or set a value in the Size control.
4. Type or set a value in the Strength control.
   Higher values produce a darker tan.
5. Carefully drag over the skin of the photo subject.

To apply a thinning effect

1. On the Tools toolbar, choose the Makeover tool.
2. On the Tool Options palette, choose the Thinify mode.
3. Type or set a value in the Strength control.
   Higher values compress more pixels in the horizontal axis.
4. Click the middle of the photo subject.
The pixels compress on either side of the point you click. You can continue clicking to enhance the thinning effect.

**To remove facial wrinkles**

1. On the Tools toolbar, choose the **Scratch Remover** tool.
2. On the Tool Options palette, choose either the square edge or the beveled edge selection box.
3. Type or set a value in the **Width** control so that the wrinkle fits inside the inner portion of the selection box you drag.
4. Position the pointer just outside the wrinkle, and carefully drag over the wrinkle so that the wrinkle is enclosed in the inner rectangle.

The wrinkle is covered by the surrounding skin texture.

If you need to start again, you can undo the correction, adjust the **Width** control, and redrag.

For wrinkle lines that are not straight, correct just one portion at a time.

**To smooth skin tone**

1. Choose **Adjust > Skin Smoothing**.
2. In the Skin Smoothing dialog box, adjust the **Amount** slider.

Moving the slider to the right applies more smoothing; moving the slider to the left applies less smoothing.
The Skin Smoothing command automatically detects and smooths skin tones without affecting eyes or lips. However, if other areas in your photo are affected because they are similar in color to the skin tone, you can use a selection to isolate the area you want to smooth. For more information about selections, see “Creating selections” on page 157.

Removing scratches

The Scratch Remover tool lets you remove scratches, cracks, and other unwanted image areas from photos.

You can repair individual scratches by using the Scratch Remover tool.
You can use the tool to enclose the flawed area and fill it with the surrounding content that you want to keep. If the background is relatively smooth, the result is usually satisfying. Scratches on a textured or more complex background may be more effectively removed with the Clone Brush tool. For information about the Clone Brush tool, see “Removing flaws and objects” on page 91.

For images containing many small scratches, you can use the Automatic Small Scratch Remover command. For more information, see “To remove scratches automatically” in the Help.

To remove scratches

1. On the Layers palette, select the layer that contains the area you want to remove.
2. On the Tools toolbar, choose the Scratch Remover tool.
3. On the Tool Options palette, choose one of the following options to define the shape of the Scratch Remover tool:
   - square edge — corrects scratches that are perpendicular to object edges, in an open area, or of uniform color
   - beveled edge — corrects scratches that are at an angle to object edges
4. Position the pointer just outside the scratch on one end, hold down the left mouse button, and drag to set a selection box over the scratch.
5. Release the mouse button.
   The enclosed area is replaced with the surrounding pixels.

You can also

<table>
<thead>
<tr>
<th>Move the selection box starting point in 1-pixel increments</th>
<th>Before releasing the mouse button, press an Arrow key.</th>
</tr>
</thead>
</table>
To avoid removing important details from areas surrounding the scratch, you can limit the correction by creating a selection. For information about creating selections, see “Creating selections” on page 157.

If you are not satisfied with the result, click the **Undo** button, reselect the scratch, and try varying the width of the tool.

If the scratch extends over several different backgrounds, you can try removing the scratch one section at a time.

### Removing flaws and objects

You can remove flaws and objects in your images by using the Clone Brush tool or the Object Remover tool. The Clone Brush tool lets you remove flaws and objects by painting over them with another part of the image. The paint source can be a part of the same layer, another layer in the image, a merged image, or a layer from another image.

---

<table>
<thead>
<tr>
<th>You can also</th>
<th>Before releasing the mouse button, press <strong>Page up</strong> or <strong>Page down</strong>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase or decrease the width of the selection box in 1-pixel increments Before releasing the mouse button, press <strong>Shift</strong>. This technique is ideal for photos in which the background contains areas with defined borders and lines, such as a brick wall.</td>
<td></td>
</tr>
<tr>
<td>Use surrounding pixels to fill the area perpendicular to the edge of the selection box</td>
<td></td>
</tr>
</tbody>
</table>

---

To avoid removing important details from areas surrounding the scratch, you can limit the correction by creating a selection. For information about creating selections, see “Creating selections” on page 157.

If you are not satisfied with the result, click the **Undo** button, reselect the scratch, and try varying the width of the tool.

If the scratch extends over several different backgrounds, you can try removing the scratch one section at a time.
The Clone Brush tool was used to remove the garbage bag from the photo on the left.

The Object Remover tool lets you remove objects when the surrounding area is fairly uniform in color and texture. This tool is similar to the Clone Brush tool in that it lets you identify the area to remove and then choose a background for covering that area.

The Object Remover tool was used to remove one boat from the water.

To clone a part of an image

1. On the Tools toolbar, choose the Clone Brush tool.
2. On the Tool Options palette, choose the brush tip, size, opacity, and other settings.

   If you want the Clone Brush tool to reset the source point each time you resume painting, mark the Aligned mode check box. You
can continue dragging over the target area to fill in the source image. Unmark the check box if you want every stroke to copy the same data from the original source point.

If you want to clone data from all layers merged together, mark the Use all layers check box. If you want to clone data from the current layer only, unmark the check box.

3 On the source image, right-click the center point of the source area.

If the image has more than one layer, click the name of the layer on the Layers palette before you define the source area.

4 Drag in the image where you want to paint the cloned area.

When you clone an image area, you must select a source area with data.

If your image contains a selection, you must right-click within the selection to set your clone source. If you are using a pen tablet, you can achieve the same result by holding down Shift.

You can also hold down Shift and click the image to set the source point.

You can resize the brush interactively by pressing Alt while dragging in the image window.

To remove objects from a photo

1 On the Tools toolbar, choose the Object Remover tool 🍒.

2 On the Tool Options palette, choose the Selection Mode button 🦝.

3 Drag around the object that you want to remove.

4 On the Tool Options palette, choose the Source Mode button 🤔.
A rectangle is displayed in the image window.

5 Position the rectangle over the area that will replace the previous selection.

6 Drag the handles on the rectangle to resize it, or drag the rotation handle on the rectangle to rotate it.
   It is recommended that you make the rectangle as large as, or slightly larger than, the area you are removing.

7 On the Tool Options palette, click the Apply button.

8 Choose Selections → Select None to deselect the selection.

You can also create a selection by using any of the selection tools before you activate the Object Remover tool.
   You can deselect the selection by pressing Ctrl + D.

**Erasing image areas**

You can use the Eraser tool to erase areas of a layer to transparency. When you use the Eraser tool on a raster layer, all pixels in the tool’s path become transparent. A gray-and-white checkerboard pattern indicates transparent areas.

![You can quickly remove the background from an image by using the Background Eraser tool.](image_url)
You can use the Background Eraser tool to erase pixels selectively. For example, in a photo of a mountain range, you can erase the sky, or you can isolate an object from the surrounding image area.

For information about the settings available for the Background Eraser tool, see “Erasing image areas” in the Help.

**To erase an image area**

1. On the Tools toolbar, choose the **Eraser tool**.
2. On the Tool Options palette, choose the brush options you want.
3. Drag in the image to erase.

**You can also**

<table>
<thead>
<tr>
<th>Restore erased pixels</th>
<th>Hold down the right mouse button, and drag over the erased area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erase a straight line</td>
<td>Click at the beginning of the line, hold down <strong>Shift</strong>, and click the end of the line. To continue erasing the line, move to the next point, hold down <strong>Shift</strong>, and click again.</td>
</tr>
</tbody>
</table>

If you erase the background layer, the Eraser tool erases to transparency, and the layer is automatically promoted to a raster layer.

**To erase the background area of an image**

1. On the Layers palette, click the layer that contains the image element that you want to isolate.
2. On the Tools toolbar, choose the **Background Eraser tool**.
3 On the Tool Options palette, choose the brush options you want.
4 Drag around the edges of the image area that you want to isolate.
   Slow, careful strokes give you the best results. Keep the center of
   the brush on regions you want to erase, while keeping the edges
   of the brush on regions you want to preserve.

You can also

<table>
<thead>
<tr>
<th>Restore erased pixels</th>
<th>Right-click and drag.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erase a straight line</td>
<td>Click once at the beginning point, hold down Shift, and click the endpoint. To continue erasing the line, move to the next point, hold down Shift, and click again.</td>
</tr>
<tr>
<td>Switch to the Eraser tool</td>
<td>Hold down the Backspace key while you drag the mouse.</td>
</tr>
</tbody>
</table>

The background layer is automatically promoted to a raster layer when you work on it with the Background Eraser tool.

Cutting out image areas

You can use the Object Extractor to cut out an image area from the surrounding background. You can then edit the cutout separately from the background, display it against a different background, or combine it with other images.
Object Extractor workflow: (1) Outline the edges of the image area; (2) add a fill; (3) preview the cutout, and touch it up if necessary; (4) bring the cutout into the image window; (5) place the cutout against a different background image (optional).

To cut out an image area

1. On the Layers palette, click the layer that contains the image area that you want to cut out.

2. Choose Image > Object Extractor.

   The Object Extractor dialog box appears, with the Brush tool activated by default.

3. Adjust the brush size by moving the Brush size slider.

4. In the preview area, draw a line along the edges of the image area that you want to cut out.

   Ensure that the selection outline slightly overlaps the surrounding background and completely surrounds the area in a closed ring.
5 Choose the Fill tool 🪑, and click inside the area you want to cut out.

An overlay covers the image area that you clicked.

**Note:** If the selection outline is not closed, the fill covers the entire image. If this is the case, click the Eraser tool 🪐 to clear the fill, and then complete the selection outline with the Brush tool.

6 Click Process to preview the result.

If you are not happy with the result, click Edit Mask to return to the previous view and touch up the cutout.

**You can also**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erase parts of the selection outline</td>
<td>Choose the Eraser tool 🪐 and drag over the selection marquee that you want to delete.</td>
</tr>
<tr>
<td>Refine the edge detail in the final result</td>
<td>Move the Accuracy slider to a higher value if the object has an intricate or complex outline. The Accuracy slider is available only after you click Process.</td>
</tr>
<tr>
<td>Revert to the original image</td>
<td>Click Reset. The Reset button is available only before you click Process and clears both the fill and the selection outline.</td>
</tr>
<tr>
<td>Hide the fill overlay and the edge outline</td>
<td>Mark the Hide Mask check box.</td>
</tr>
<tr>
<td>Specify an exact size for the brush or eraser nib</td>
<td>Type or set a value in the Brush size box.</td>
</tr>
<tr>
<td>Zoom in and out</td>
<td>Type or set a value in the Zoom box.</td>
</tr>
<tr>
<td>Display an image at its actual size</td>
<td>Click the Zoom Image to 100% button 📊.</td>
</tr>
</tbody>
</table>
You can also

<table>
<thead>
<tr>
<th>Display an image in the entire preview area</th>
<th>Click the <strong>Fit Image to Window</strong> button.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan to another area of the image</td>
<td>Using the <strong>Pan</strong> tool to drag the image until the area you want to see is visible.</td>
</tr>
</tbody>
</table>

- The background layer is automatically promoted to a raster layer when you use the Object Extractor command.

- You can switch from the **Brush** tool to the **Eraser** tool by right-clicking and dragging in the preview area.

**Recoloring image areas for a realistic effect**

You can use the Color Changer tool to realistically recolor an object or a region in an image. What sets the Color Changer tool apart from other tools and commands (such as the Flood Fill tool, some of the retouching brushes, or the Colorize, Hue/Saturation/Lightness, or Hue Map commands) is that it takes into account the shading of the specified color. The Color Changer tool detects and analyzes variations in image brightness and applies the recoloring based on that illumination.

It lets you adjust Tool Options palette settings for Tolerance and Edge Softness, and it updates the current recoloring as you modify settings on the Tool Options palette or modify the color in the Materials palette.

The Color Changer tool works best on matte objects such as clothing, carpet, and painted objects that are a solid color. It may not work as well on shiny or reflective objects and is not designed to work with gradients or patterns.
To recolor by using the Color Changer tool

1. On the Tools toolbar, choose the Color Changer tool 

   The Color Changer tool is grouped with the Flood Fill tool.

2. On the Materials palette, click the Color button on the Style drop-list, and choose a solid color.

   If the Materials palette is not displayed, choose View > Palettes > Materials.

   For realistic-looking colors, set the Saturation value (in the Material Properties dialog box) closer to 100 than to 255 (full saturation).

3. Position the Color Changer pointer over the color you want to change in the image, and then click to recolor with the Foreground/Stroke color, or right-click to recolor with the current Background/Fill color.

4. Click Apply to set the color change on the object.
While using the Color Changer tool, you can undo and redo actions such as adjusting colors or adjusting settings on the Tool Options palette.

To isolate the area you want to recolor, you can create a selection. For more information about creating selections, see “Creating selections” on page 157.

To prevent the Color Changer from affecting areas of the photo that you do not want to change, you can duplicate the layer on which the photo resides, apply the Color Changer to the new layer, and use the Eraser tool to erase the areas of changed color that you want to restore. You can then merge the layers.

### You can also

<table>
<thead>
<tr>
<th>Use a color from the current image</th>
<th>Choose the <strong>Dropper tool</strong> click the color you want in the image, and then choose the <strong>Color Changer tool</strong> to reactivate it.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instantly change the color you want to apply</td>
<td>Before clicking <strong>Apply</strong>, click a color on the Materials palette.</td>
</tr>
</tbody>
</table>
| Adjust the color application | Before clicking **Apply**, adjust any of the following controls on the Tool Options palette:  
  - **Tolerance** — determines how closely the current color needs to match similar colors for recoloring to be applied. Higher settings cause more pixels to be recolored.  
  - **Edge Softness** — determines how pixels that border the recolored pixels are affected. Higher settings cause more “bleeding” of the recoloring. |
Adding borders

You can add a colored frame or border around an image. When you add a border to an image, the dimensions of the image are expanded to the border.

For multilayer images, Corel PaintShop Pro prompts you to flatten the image before adding the border; however, you can also add a border without flattening the image by changing the canvas size. For more information, see “Resizing the canvas” in the Help.

It’s easy to add a border around your image.

To add a border to an image

1 Choose Image ➤ Add Borders. The Add Borders dialog box appears.

2 Do one of the following:
   • To create an equal-width border on all sides, mark the Symmetric check box.
   • To create borders of varying widths, unmark the Symmetric check box, and set border width values in the controls in the Size In Pixels group box.
3 Click the Color box to choose a color for the border.
4 Click OK.

You can change the units of measurement for the border by choosing an option from the drop-list in the Original Dimensions group box.

**Scaling photos by using Smart Carver**

Smart Carver lets you make a photo narrower, wider, shorter, or longer without distorting the content. By automatically detecting and removing zones in the picture that have little structural detail, this feature lets you change the aspect ratio without noticeably changing the image. You can also target a specific zone to remove from the photo, regardless of its level of detail, or preserve specific objects or image areas.

![Smart Carver example](image)

*Smart Carver lets you selectively remove or protect areas when you scale an image.*
To remove or preserve an object by using Smart Carver

1 Choose Image ➤ Smart Carver.
The Smart Carver dialog box opens.

2 To remove or preserve an object or area from a photo, do one or both of the following:
   • Click the Remove button and apply the Remove brush to the areas of the photo that you want to remove.
   • Click the Preserve button and apply the Preserve brush to the area of the photo that you want to protect.

In the Object Removal area, you can move the Brush Size slider to the left to decrease the size of the brush, or to the right to increase the size of the brush.

3 Scale the photo by applying one or more of the Smart Carving options.

You can also

<table>
<thead>
<tr>
<th>Task</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete brushstrokes</td>
<td>Click the Eraser button and apply it to the brushstrokes that you want to erase.</td>
</tr>
<tr>
<td>Zoom in or out</td>
<td>In the Zoom box, enter a magnification level, or use the slider or the arrows to adjust the zoom level.</td>
</tr>
<tr>
<td>Pan to view hidden areas of the photo</td>
<td>Click the Pan button and drag in the preview area.</td>
</tr>
<tr>
<td>Hide the brushstrokes in the preview area</td>
<td>Mark the Hide Mask check box.</td>
</tr>
<tr>
<td>Reset the photo to its original state</td>
<td>Click Reset.</td>
</tr>
</tbody>
</table>
To scale a photo by using Smart Carver

1. Choose **Image > Smart Carver**.
   The Smart Carver dialog box opens.

2. In the Smart Carving area, perform one or more tasks from the following table, and click **OK**.
   You can view the scaling results in the preview area.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
</table>
| Set a photo width          | Type or set a value in the **Width** box.  
  **Note**: The maximum width is double the width of the original photo. |
| Set a photo height         | Type or set a value in the **Height** box.  
  **Note**: The maximum height is double the height of the original photo. |
<p>| Reduce the photo width by 1-pixel increments | Click the <strong>Contract the image horizontally</strong> button until the image is the desired width. |
| Reduce the photo height by 1-pixel increments | Click the <strong>Contract the image vertically</strong> button until the image is the desired height. |
| Increase the photo width by 1-pixel increments | Click the <strong>Expand the image horizontally</strong> button until the image is the desired width. |
| Increase the photo height by 1-pixel increments | Click the <strong>Expand the image vertically</strong> button until the image is the desired height. |</p>
<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce the photo width by automatically removing the areas to which you have applied the Remove brush</td>
<td>Click the <strong>Auto-contract horizontally</strong> button to remove red-painted areas.</td>
</tr>
<tr>
<td>Reduce the photo height by automatically removing the areas to which you have applied the Remove brush</td>
<td>Click the <strong>Auto-contract vertically</strong> button to remove red-painted areas.</td>
</tr>
</tbody>
</table>
When you combine two or more photos, you can achieve some impressive results. What can you do?

- Use HDR (high dynamic range) Exposure Merge to create a perfectly exposed image.
- Seamlessly replace unwanted areas (cars, people, birds that flew into your frame) with the correct background.
- Creatively combine elements from multiple photos into one image.

If you have a DSLR camera, you likely have features that can help you take multiple photos of the same scene.

This section presents the following topics:
- Understanding HDR
- Taking photos for HDR processing
- Combining photos by using HDR Exposure Merge
- Merging batches of photos into HDR images
- Combining photos with Photo Blend

**Understanding HDR**

In photography, HDR refers to high dynamic range. “Dynamic range” is the range of luminance that can be captured in a photo, from the darkest shadows to the brightest highlights.
Unlike the human eye, digital camera sensors (or film in traditional cameras), can only capture a limited dynamic range when photographing scenes with both very bright and very dark areas, such as an interior with a large window. HDR processing creates a 32-bit image which has twice as much information, and therefore many more steps between tones, than an ordinary JPG. This HDR image is then evenly exposed, resolving details in the darkest areas, without losing definition in the brightest areas. And when pushed beyond the “corrective” boundaries, HDR can produce an unreal, plastic, or even “hyper-real” tone, and as such has become a creative technique in itself. Typically, an HDR file needs to be converted back to a 16-bit image format for final output.

The photos along the top were taken with different exposure levels, then they were combined to create a single beautifully exposed image.

Taking photos for HDR processing

If you are new to HDR processing, the information below can help you get started.
What camera features work well with HDR?

You can use automatic exposure bracketing if your camera offers it or use the aperture priority mode and adjust the shutter speed to achieve different exposures. Avoid aperture changes because the depth of field may shift enough to cause blurring in some of the photos. Review the user manual for your camera for information about bracketing options and aperture priority mode.

How many photos should I take for my HDR set?

Usually, three photos is a good base (minimum is two), but to capture a very high contrast scene, take five or more (up to a maximum of nine).

What exposure settings should I use?

Try an initial setting of 2.0 exposure value (EV) between photos. If you are taking a greater number of photos, you can set the exposure at lower increments, but make sure that the number of shots is enough to cover a wide range of exposure. If you’re using auto-bracketing, your camera might limit the EV interval (sometimes to a maximum of +/- 1.0).

Should I use a tripod?

Yes, it’s best to use a tripod, but at the very least, you need to ensure that you have a steady hand (for example, stabilized against a wall). Using a tripod means that you are less likely to have alignment issues with the photos when you use HDR processing.

Combining photos by using HDR Exposure Merge

You can use Exposure Merge to combine two or more photos by using HDR (high dynamic range) processing.
Exposure Merge uses a three-step process:

- **Merge** — Choose your merge settings, and if required, apply custom editing.

- **HDR Adjustments** — After merging your photos, you can adjust them and save the results to an editable HDR file before finalizing the merge and fine-tuning.

- **Fine-Tune** — Refine your image with noise-reduction, sharpening options, and other familiar tools from the Adjust workspace. When you’re done, you can save to a standard file format and close Exposure Merge.
Please see the topics below for more detailed information about each step.

**Step 1: Merge**

Merge settings include:

- **Camera response curve profile** — applies a curve adjustment to the image, based on the known characteristics of the sensor in your camera.
- **Alignment** — Choose between Feature-based (detects features in the photos) or Edge-based (detects edges within the photos).
- **Custom editing** — Choose which areas you want to keep (Brush in) or remove (Brush out) from each photo. Often, custom editing is applied to remove “ghosting” — the semitransparent effect caused by merging photos that captured moving objects.

**Step 2: HDR Adjustments**

After you merge your photos, you can adjust the resulting HDR image by applying a preset, customizing a preset, or by creating the look you want from scratch. The key is to experiment. You can save your custom settings as a new preset. You can manage your presets by saving, loading, deleting or resetting them.

All the adjustment options in the HDR Adjustments window let you work on an HDR, 32-bit file. You can save the HDR file with all settings, so you can reopen and modify it again in the future. When you are finished with Step 2 and move to Step 3, the final step, the application prepares the image for output by saving it to a 16-bit image.

**Step 3: Fine-Tune**

The final step is fine-tuning the merged image before you exit Exposure Merge. The controls in the Fine-Tune window are based on the controls in the Adjust workspace.
Some fine-tuning tips:

- **Digital Noise Removal** is a great tool for cleaning up noise that can result from merging photos.
- **High Pass Sharpen** can help reduce blurred areas that may result from movement between photos.
- **Smart Photo Fix** and **Color Balance** let you tweak the colors.
- To brighten the entire image, try adjusting **Brightness/Contrast**. To brighten only the dark areas, try **Fill Light/Clarity**.
- **Local Tone Mapping** and **Fill Light/Clarity** can be used to further enhance details in the image.

To choose merge options for Exposure Merge (Step 1)

1. In the Manage workspace, select the thumbnails for the photos that you want to merge.
   An orange outline appears around the thumbnails of selected photos.
2. Click **File ➤ HDR ➤ Exposure Merge**.
3. In the Step 1: Merge pane, choose a profile from the **Camera response curve profile** drop-list.
   If you are not sure what to choose, select **Auto Generate**.
   If the **EV interval** slider displays, set the exposure value that you used between photos.
4. In the Alignment area, choose an alignment type from the **Method** drop-list.
   If you want to crop any edges that don’t overlap, mark the **Auto crop** check box.
5. Click **Align**.
   You will not see the alignment in the preview area immediately.
To check the alignment of photos taken without a tripod, click the Process button, review the alignment, and click Back to return to the Step 1 pane. To try a different alignment option, in the Alignment area, click the Reset button, and choose an alignment method.

6 If you want to keep or remove specific areas from individual photos, use the controls in the Custom editing area. See “To brush in or brush out artifacts in Exposure Merge” on page 113.

7 Click Process.

The merge settings are applied and the Step 2: HDR Adjustments window appears.

Review the results in the preview area for alignment issues and ghosting issues. If you want to tweak your merge settings, click Back to return to the Step 1 window.

 HDR Exposure Merge and Photo Blend are part of the same merge utility and therefore cannot be opened simultaneously.

If your photos were not taken with a tripod or steady rest, there is likely some misalignment between shots. If the misalignment is significant, you may not be able to use the photos for HDR.

You can also add photos to or remove photos from the merge tray by clicking the Add Photo button or Remove Photo button in the tray at the bottom of the Exposure Merge window.

To brush in or brush out artifacts in Exposure Merge

1 In the tray that appears below the Step 1: Merge preview area, click a thumbnail.

2 In the Custom editing area, do any of the following:
• Click **Brush in**, and in the preview area, drag over the area that you want to preserve. You don’t need to be exact.

• Click **Brush out**, and in the preview area, and drag over the area that you want to remove.

• Click **Auto brush** if you want the application to auto-detect and remove ghosting. Auto brush works well for removing ghosting along feature edges in photos taken without a tripod. It is not recommended for larger ghost objects, such as cars and people.

3 Repeat the process for each of the photos that you want to edit.

**You can also**

<table>
<thead>
<tr>
<th>Option</th>
<th>Action</th>
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<tbody>
<tr>
<td>Change the brush size</td>
<td>Drag the <strong>Brush size</strong> slider.</td>
</tr>
<tr>
<td>Refine or erase brushstrokes</td>
<td>Click <strong>Eraser</strong>, and drag across a brushstroke in the preview area.</td>
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<tr>
<td>Remove all brushstrokes</td>
<td>Click <strong>Clear</strong>.</td>
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<tr>
<td>Change the color of brushstrokes</td>
<td>Click the arrow beside the <strong>Brush in</strong> or <strong>Brush out</strong> color swatch and click a new color.</td>
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<tr>
<td>Hide or display brushstrokes in the preview area</td>
<td>Mark or unmark the <strong>Show brushstrokes</strong> check box.</td>
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**To adjust HDR images in Exposure Merge (Step 2)**

1 In the Step 2: HDR Adjustments window, do any of the following to achieve the look you want.

• In the Presets area, click a preset thumbnail.

• Mark the **White Balance** check box, and click **Auto** or click the **Dropper tool** and click the image to set the white point. Drag the **Temperature** slider to warm or cool the colors in the image.

• Drag **Contrast**, **Highlights**, **Midtones**, and **Shadows** sliders to adjust the overall tone and contrast.
• Drag the Vibrancy slider to saturate or desaturate the colors.
• From the Detail drop-list, choose Natural detail or Creative detail, and drag the respective sliders to adjust the amount of local detail.

2 To save your HDR image for further editing, click Create HDR file, navigate to the folder you want, type a file name, and click Save.

3 Click Process.

The settings are applied to the image and it is saved as a 16-bit file in preparation for the final output. The Step 3: Fine-Tune window appears.

To manage presets in Exposure Merge

• In the Presets area of the Step 2: HDR Adjustments window, perform a task from the following table.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
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<tr>
<td>Save your adjustments as a preset</td>
<td>Click the Save Preset button and type a name in the Save Preset dialog box. A thumbnail is added to the preset area.</td>
</tr>
<tr>
<td>Import a preset file</td>
<td>Click the preset menu icon, click Load, and navigate to the file.</td>
</tr>
<tr>
<td>Delete a preset</td>
<td>Click the thumbnail for the preset, click the preset menu icon, and click Delete.</td>
</tr>
<tr>
<td>Restore the default presets list</td>
<td>Click the preset menu icon, click Reset. Click OK in the confirmation dialog box. All customized presets are deleted.</td>
</tr>
<tr>
<td>Hide or display presets</td>
<td>Click the arrow on the Presets bar.</td>
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</tbody>
</table>
To fine-tune and save an HDR-processed image (Step 3)

1. In the Step 3: Fine-Tune window, apply any of the tools or adjustment options to adjust the final image.
2. Click Save and close.
3. In the Save As dialog box, navigate to the folder that you want, type a file name, and choose a file type from the Save as type drop-list.

The file is saved to a standard, 16-bit file and the Exposure Merge window closes.

When the size of a zoomed-in image exceeds that of the preview area, you can click the Pan tool and move the rectangle to choose a preview area.

Merging batches of photos into HDR images

If you use auto-bracketing on a regular basis, you may accumulate many sets of photos that can be processed as HDR (high dynamic range) images. You can use the Batch Merge feature to quickly merge each of your bracketed sets into HDR images. You can then evaluate which sets make good candidates for the more powerful HDR tools in the Exposure Merge feature. In some cases, Batch Merge might be the only HDR processing you need to do.

Batch Merge organizes photos into sets, based on the time between photos (within a defined timeframe) or a defined number of photos per set.

To merge batches of photos into HDR images

1. In the Manage workspace, click File ➤ HDR ➤ Batch Merge.
2 Click Add files, navigate to the folder you want, select the files, and click Open.

The photos are sorted into groups of three by default.

3 Click the folder icon beside the Save processed files in box, and browse to the folder where you want to save the processed files.

4 Choose a file type from the Save as drop-list.

5 Drag the JPEG quality slider to set the file size and quality for the processed images.

   If you want to save .hdr versions of the processed files (so you can edit them in Exposure Merge), mark the Save .hdr file check box.

6 In the Group photos by drop-list, choose one of the following:

   • Sets — lets you choose a number in the Photos per set box. This option works well if you consistently shoot bracketed photos in predetermined batches.

   • Time — lets you choose a time interval in the Seconds per group box. This option works well if you vary the number of photos in a bracketed set.

7 If the photos were taken without a tripod, enable the Auto-align check box and choose an alignment option form the Method drop-list.

   If you want to crop unaligned edges along the borders of the photos, mark Auto crop.

8 Click Process.

   Processing might take a few moments, depending on the size and number of photos.

   You can now navigate to the location where you saved your processed files and evaluate them.
Combining photos with Photo Blend

Photo Blend lets you combine two or more photos of the same scene and choose exactly what you want to keep and remove from the scene. Here are some examples:

- Remove moving objects, such as people or cars, from a photo — you can create an empty street in a busy city.
- Fix a group shot where one person blinks or looks away — simply swap in a better pose from another photo.
- Get creative by showing the same person multiple times in a single photo.

Photo Blend can be used to create perfect group shots.

How do I take photos that work with Photo Blend?

From a tripod or with a steady rest, shoot two or more photos a few seconds apart. Use the same camera settings for all the photos.

Photo Tip: Use the manual setting on your camera, so you can ensure that the photos have the same size, aperture, shutter speed, and ISO.
To use Photo Blend

1. In the Manage workspace, select the set of photos that you want to blend.
2. Click File ➤ Photo Blend.
3. In the Alignment area, click Align.
   If you want to crop unaligned edges along the borders of the photos, mark Auto crop.
4. Click a thumbnail in the tray.
   The corresponding photo displays in the preview area.
5. In the Custom editing area, do any of the following:
   • Click Brush in, and in the preview area, drag over the area that you want to preserve. You don’t need to be exact.
   • Click Brush out, and in the preview area, and drag over the area that you want to remove.
   • Click Auto brush if you want the application to auto-detect the differences between the images. Leave the brushmarks as they are to remove ghosting and other differences, or use it as a starting point for custom brushstrokes.
6. Repeat the editing process for other photos by clicking thumbnails in the tray and applying brushstrokes.
7. Click Process.
   Review the results in the preview area. If you want to adjust your settings or continue editing, click Back.
8. In the Step 2: Fine-Tune panel, use any of the tools or adjustment controls to fine-tune the image.
9. Click Save and close.
10. In the Save As dialog box, navigate to the folder you want, type a file name, and choose a file type from the Save as type drop-list.
For best results, in the tray of the Step 1 window, click the thumbnail of the image that will change the least, and click the lock button to use the selected image as background. To unlock the background, click the lock button again.

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<tr>
<th>You can also</th>
<th>Drag the <strong>Brush size</strong> slider.</th>
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<td>Mark or unmark the <strong>Show brushstrokes</strong> check box.</td>
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Whether you are applying color to an image or adjusting photographic colors, it’s important to understand how Corel PaintShop Pro works with color. This section describes how to choose colors and materials that you can use in your images for painting, drawing, and filling.

This section presents the following topics:

• Using the Materials palette
• Choosing colors by using the Color Picker
• Choosing colors from an image or the desktop

For more information about working with colors and materials, including using gradients, pattern, and textures, see “Working with colors and materials” in the Help.

Using the Materials palette

Corel PaintShop Pro lets you paint, draw, and fill with a variety of styles and materials.

• A style is a color, gradient, or pattern.
• A material is the style plus an optional texture.

Both styles and materials can be selected from the Materials palette.

You can display the Materials palette at any time. You can leave it open while you work, or you can display it only when you need it.
You can also reverse the foreground and background colors or materials.

Main components of the Materials palette

- **Frame tab** — displays an outer Hue rectangle and an inner Saturation rectangle, as well as a strip containing white, three shades of gray, and black. You can drag the vertical slider to adjust lightness, and drag the horizontal slider to adjust saturation.
- **Rainbow tab** — displays the Available Colors panel, where you can click to select a color. At the bottom of the tab you can click to select white, black, or three shades of gray.
- **Swatches tab** — displays swatches, which are materials you can save to use again.
- **Foreground and Stroke** and **Background and Fill Properties** boxes — display the current foreground and background materials,
which consist of the style (color, gradient, or pattern) and optional texture. You can click either box to display the Material Properties dialog box, in which you can set material options.

- **Foreground** and **Background Color** boxes — display the current foreground and background color and let you set colors regardless of current material.
- **Style** button — shows which style is currently selected: color, gradient, or pattern. To change between the most recently selected color, gradient, and pattern, you can click the Style button and select a new style from the drop-list.
- **Texture** button — turns the current texture on or off.
- **Set to Black and White** button — sets the foreground to black and the background to white. This is helpful when you use the Edit Selection command.
- **Transparent** button — specifies whether the foreground or background material is transparent. You use a transparent material primarily with vector objects and text. A transparent foreground has no outline (only the objects or letters are filled), and a transparent background has no fill (only the objects or letters are outlined).
- **All tools** check box — specifies whether the selected foreground and background materials apply to all tools. If the check box is unmarked, the selected materials apply only to the active tool.

To display or hide the Materials palette

- Choose View ➤ Palettes ➤ Materials.

To swap the foreground and background colors or materials

- From the Materials palette, click the **Swap Colors** button or click the **Swap Materials** button.
Choosing colors by using the Color Picker

When you edit images in Corel PaintShop Pro, you often need to choose a color before painting, drawing, or filling, making manual color corrections, or choosing a background for a new raster image. The Color Picker is the most versatile tool for choosing colors.

The Color Picker appears when you click the Foreground/Stroke Properties box, the Background/Fill Properties box, or one of the two smaller Color boxes. It also appears when you click a Color box found in other dialog boxes.

The appearance of the Color Picker depends on the color depth of the active image (16 bits/channel, 8 bits/channel, 256 colors, 16 colors, or 2 colors).
The Color Picker offers many ways to select colors:

- The Color (hue) wheel and Saturation and Lightness box let you select and preview a color.
- The Basic Colors panel displays commonly used colors.
- RGB or HSL values let you choose a color based on its red, green, and blue values or its hue, saturation, and lightness values.
- HTML color code lets you enter HTML color values.
- The Color Picker lets you select a color from the active image.

By default, Corel PaintShop Pro displays decimal (base 10) numbers in the Color Picker. You can also display hexadecimal (base 16) numbers — the format of HTML color codes.

To choose a color by using the Color Picker

1. On the Materials palette, do one of the following:
   - To choose a foreground color, click the Foreground and Stroke Properties box or the Foreground Color box.
   - To choose a background color, click the Background and Fill Properties box or the Background Color box.

The Material Properties dialog box or the Color dialog box appears.

   If the Materials Property dialog box appears, click the Color tab.

2. Click or drag the hue wheel to select the approximate color.

3. Click or drag inside the Saturation/Lightness box to set saturation and lightness for the color you have selected.

   Move from left to right to adjust the saturation; move from top to bottom to adjust the lightness.
You can also choose a color directly on the Frames tab or the Rainbow tab of the Materials palette. The Frames tab contains a more compact, rectangular version of the color wheel and its controls. The Rainbow tab presents every available color. Click to choose the foreground color, or right-click to choose the background color.

You can access recently used colors by right-clicking the Color box on the Materials palette. In the Recent Colors dialog box, click Other to display the Material Properties dialog box.
To use the current colors with all tools, mark the All tools check box on the Materials palette. If you unmark this check box, the current materials are used by the active tool only.

Choosing colors from an image or the desktop

You can choose a foreground or background color from any open image, or from any color within Corel PaintShop Pro (such as a color on a toolbar). This feature is useful when you want to use the color of a specific icon, or when you want to match the Windows desktop colors. If you have Windows 2000 or a later version of Windows, you can choose a color from other applications (such as a color displayed in a word processor).

To choose a color from the active image

1. On the Tools toolbar, choose the Dropper tool.
2. On the Tool Options palette, set the options you want:
   - Sample Size drop-list — specifies the pixel area for sampling
   - Use all layers check box — mark this check box to sample from all image layers
3. Click a color in the image to make it the foreground color, or right-click to make it the background color.

You can also choose a color from the image while using brush tools, such as the Paint Brush or the Eraser tool, by holding down Ctrl and clicking in the image to choose a foreground color or right-clicking to choose a background color.

When the Color Picker is open, you can choose a color from any open image regardless of the currently selected tool.
To choose a color from the desktop

1 Make sure that the color you want is displayed on the screen.
2 Position your pointer over a color or properties box on the Materials palette or in a dialog box.
3 Hold down \texttt{Ctrl}, and position your pointer over the area of the desktop that has the color you want.
4 Click to select the color.
   The selected color appears in the color or properties box that you chose.
   If you want to change the color selection, continue to hold down \texttt{Ctrl}, and click a different part of the desktop.

\textbf{Note:}
When positioned over areas that can be sampled, a small window follows the pointer and indicates the RGB value of the color you are sampling.
Applying effects

Corel PaintShop Pro has many special effects that you can apply to your images, including 3D, artistic, illumination, reflection, and photographic effects. You can also add frames to your images, paint with images, or warp image areas to create unique effects.

This section presents the following topics:
• Choosing effects
• Applying Photo Effects
• Creating vintage-style photos with the Time Machine
• Applying film and filter effects to photos
• Adding picture frames to images
• Using the Picture Tube tool
• Warping images

For a complete list of the effects available in Corel PaintShop Pro, see “Applying effects” in the Help.

Choosing effects

You can choose effects by using the Effects menus or the Effect Browser.

You can customize most effects by adjusting their settings in dialog boxes. The dialog boxes for applying effects contain several common features:
• The Before pane shows the original image, and the After pane lets you preview the image with the current settings applied.
• The Load Preset drop-list is set by default to Last Used. Presets let you apply the same settings to multiple images.

An example of a dialog box for an effect.

Using the Effect Browser

You can use the Effect Browser when you want to preview multiple effects before applying them to your image. The Effect Browser displays the presets that come with Corel PaintShop Pro as well as any that you create.

To display the thumbnail previews that you see in the Effect Browser, Corel PaintShop Pro applies an effect’s default preset and any presets
that you saved to the image. The preset is saved as a script in the file format for Corel PaintShop Pro (PspScript).

The Effect Browser displays thumbnails that let you preview and choose effects.

To choose an effect from the Effects menu

1. From the Effects menu, choose an effect category, and choose an effect. (For example, choose Effects ➔ Distortion Effects ➔ Twirl.)
   For most effects, a dialog box appears.
2. Specify the desired settings, or choose a preset from the Load Preset drop-list.
   You can preview the effect in the After pane.
   **Note:** Presets are not available for all effects.
3. Click OK.
To choose an effect from the Effect Browser

1. Choose Effects > Effect Browser.
   The Effect Browser appears.

2. From the hierarchical list in the left pane, do one of the following:
   • To preview all effects applied to the image, click the Presets folder.
   • To preview an effect category, click a subfolder of the Effects folder (for example, 3D Effects, Artistic Effects, or Photo Effects).
   Corel PaintShop Pro scans the selected folder and creates thumbnails of the image with each effect applied to it.

3. Click a thumbnail image to choose an effect preset.

4. Click Apply.

You can also

| Save settings for reuse | Click the Save Preset button  
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<tr>
<td>Reset settings to default values</td>
<td>From the Load Preset drop-list, choose Default.</td>
</tr>
</tbody>
</table>
| Limit an effect to a specific area | Make a selection before choosing the effect.  
For information about creating selections, see “Creating selections” on page 157. |
Applying Photo Effects

You can apply different Photo Effects to your images to simulate some traditional photo techniques and processes.

**Time Machine**

The Time Machine lets you recreate some popular photographic styles from the past. It lets you choose from seven styles, which range from the year 1839 to the 1980s. For information about the Time Machine, see “Creating vintage-style photos with the Time Machine” on page 139.

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You can also

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<thead>
<tr>
<th>Modify the selected preset</th>
<th>Click <strong>Modify</strong>, and adjust the settings in the dialog box for the effect. <strong>Note:</strong> This button is unavailable for effects that cannot be adjusted.</th>
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<tbody>
<tr>
<td>Resize the thumbnail preview</td>
<td>Choose <strong>File ➤ Preferences ➤ General Program Preferences</strong>, and click <strong>Display and Caching</strong> along the left side. In the Effect browser thumbnails group box, set a value in the <strong>Size (Pixels)</strong> control.</td>
</tr>
<tr>
<td>Limit an effect to a specific area</td>
<td>Make a selection before choosing the effect. For information about creating selections, see “Creating selections” on page 157.</td>
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**Applying Photo Effects**

You can apply different Photo Effects to your images to simulate some traditional photo techniques and processes.
Film and Filters

Corel PaintShop Pro lets you experiment with effects that are inspired by different types of camera film and filters. For information about applying film and filter effects, see “Applying film and filter effects to photos” on page 139.

Black and White Film

You can simulate taking a photo with black-and-white film. To modify the effect, you can apply a wide range of RGB values as well as adjust image brightness and clarity.

Filter color adjustments in the Black and White Film dialog box can create very different results from the original photo (left-most image in top row).

Sepia Toning

You can simulate the look created when you take a photo with sepia film. Sepia-toned images are similar to black-and-white photos (also known as grayscale photos), except the tones are brown instead of gray.
Selective Focus

You can create a quick miniature effect (also known as a tilt-shift effect) so that the scene in a photo resembles a miniature model or toy. The illusion is created by adjusting the depth of field, usually across a specified horizon line, and increasing the saturation of the photo.

An urban scene (left) appears to be transformed into a miniature model (right).

You can also use Selective Focus to apply a quick depth of field effect to any photo. For general information about depth of field, see “Controlling depth of field” on page 81.

Photo tip: Photos taken from high vantage points usually make the best candidates for a miniature effect.

Vignette

You can fade the edges of a photo to create a vignette effect. You can control the appearance of the edges by choosing a shape and color (light or dark), and adjusting the amount of blur, glow, and feathering.
To apply the Black and White Film effect

1. Choose Effects > Photo Effects > Black and White Film.
   The Black and White Film dialog box appears.
2. Modify the settings you want and click OK.

To apply the Sepia Toning effect

1. Choose Effects > Photo Effects > Sepia Toning.
   The Sepia Toning dialog box appears.
2. Type or set a value in the Amount to age control to determine the strength of the effect.

To apply a miniature effect by using Selective Focus

1. Choose Effects > Photo Effects > Selective Focus.
The Selective Focus dialog box appears. You can maximize the dialog box to increase the size of the Before and After panes of the preview area.

2 In the Area of focus, click one of the following tools:

- **Planar Selection Tool** — the default tool for setting a linear area of focus. It is effective at setting an area of focus along a road, bridge, or other linear element that isn’t along the edge of your photo.

- **Half Planar Selection Tool** — lets you set a linear area of focus along the edge of a photo

- **Radial Selection Tool** — lets you set a circular area of focus

3 In the Before pane of the preview area, when your pointer displays the move cursor , drag the area of focus to the position you want.

4 Drag the rotation handle (the box at the end of the short line) to rotate the area of focus.

5 Drag a sizing handle (on the solid lines) to set the edges for the area of focus.

6 Fine-tune the results by dragging any of the following sliders:

- **Blur amount** — determines the amount of blur outside the area of focus

- **Feather edge** — determines the softness of the transition between the area in focus and the blurred areas. You can also adjust feathering interactively by dragging a feathering handle (on the dotted lines) in the Before pane.

- **Saturation** — determines the intensity of the colors in the photo. Increasing saturation can help simulate the vivid paint colors used for models and toys.
You can use the Selective Focus effect to apply a quick depth of field effect. Adjust the settings to achieve a natural look.

To apply a Vignette effect

1. Click Effects ➤ Photo Effects ➤ Vignette.
2. In the Area of focus, choose a selection tool and drag in the Before pane to set the edge for the effect.
3. Drag the Dark/Light slider to set an edge color.
4. Fine-tune the results by dragging any of the following sliders:
   - **Blur amount** — determines the amount of blur outside the area of focus
   - **Diffuse glow** — adds a luminescent brightening effect and softens details in the entire photo
   - **Feather edge** — determines the softness of the transition between the area in focus and the edge effect
Creating vintage-style photos with the Time Machine

The Time Machine lets you recreate some vintage photographic styles. It lets you choose from seven styles, which range from the year 1839 to the 1980s.

The photo on the left is the original photo, and the photo on the right has the Time Machine’s Daguerreotype style applied to it.

To create vintage-style photos with the Time Machine

2. Click one of the thumbnails above the timeline to choose an effect.
3. Move the Intensity slider to adjust the appearance of the effect.

You can add or remove edge effects for photos. Unmark the Photo Edges check box below the Intensity slider to remove the edges, or mark the check box to apply the edges.

Applying film and filter effects to photos

Whether you are a novice or an experienced photographer, you can experiment in Corel PaintShop Pro with effects that are inspired by different types of camera film and filters.
Film Looks

Film Looks are inspired by the effects achieved when you use different types of film in a traditional camera. Unlike the Creative Filters, which apply a color to the entire photo, Film Looks can change what is emphasized in a photo by making some colors more dramatic or more subtle. Some Film Looks also change the contrast or softness of photos.

The Vibrant Foliage Film Look enhances blues and greens.

Creative Filters

Creative Filters simulate the effect achieved when you use color filters on the lens of your camera. Although the color is applied across the entire photo, Corel PaintShop Pro maintains the luminance of the image, to achieve a color toning effect. You can use a preset color or choose a custom color.

The Sunset filter adds a warm orange tone to your photos.
To apply film and filter effects to a photo

Edit workspace

1. Choose Effects ➤ Photo Effects ➤ Film and Filters.

2. In the Film and Filters dialog box, perform one or more tasks from the following table, and click OK.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply a Film Look</td>
<td>Choose a style from the <strong>Film looks</strong> drop-list.</td>
</tr>
<tr>
<td>Apply a filter</td>
<td>Choose a filter from the <strong>Creative filters</strong> drop-list.</td>
</tr>
<tr>
<td>Choose a custom filter color</td>
<td>Click the <strong>Filter color</strong> swatch, and choose a color from the Color dialog box.</td>
</tr>
<tr>
<td>Change the amount of color applied by a filter</td>
<td>Type a value in the <strong>Density</strong> box. Higher numbers increase the amount of color; lower numbers decrease the amount of color.</td>
</tr>
</tbody>
</table>

**Adding picture frames to images**

You can add picture frames to your images to provide an eye-catching final touch. You can choose square or oval frames, modern or classic frames, mats or photo edges, or a variety of other styles. The frame is applied on a separate layer, which can be edited like any other layer.

You can add a frame around your image.
To add a picture frame to an image

Edit workspace

1. Choose **Image** > **Picture Frame**.
   The Picture Frame dialog box appears.

2. In the **Picture Frame** group box, choose a frame from the drop-list.

3. In the **Orientation** group box, choose one of the following options:
   - **Frame canvas** — sizes the frame to the canvas. The frame layer is named “Picture Frame” on the Layers palette. Successive frames reside on layers named “Picture Frame 1,” “Picture Frame 2,” and so on.
   - **Frame current layer** — sizes the frame to the current layer (which may have a different size than the canvas). For example, if you are creating a collage of photos for a scrapbook and each photo is on a separate layer, you can frame each photo by choosing this option. The frame layer is named after the original layer with the words “Picture Frame” appended to the name.

4. Choose one of the following options:
   - **Frame inside of the image** — resizes the frame to fit within the image canvas
   - **Frame outside of the image** — increases the canvas size to accommodate the frame. The added canvas uses the current background color if the frame is applied to the Background layer. If the frame is applied to any other layer, the extra canvas is transparent.

5. Mark any of the following check boxes:
   - **Flip frame** — reverses the frame along its horizontal axis
   - **Mirror frame** — reverses the frame along its vertical axis
   - **Rotate frame right** — lets you rotate the frame clockwise when the image is taller than it is wide

6. Click **OK**.
Using the Picture Tube tool

You can use the Picture Tube tool to paint with a collection of objects. For example, you can add butterflies and beetles to a picnic setting or frame a picture with flowers. You can use one of the picture tubes included with Corel PaintShop Pro or create your own.

Picture tubes are PspTube files. Each picture tube file is made up of a series of images arranged in rows and columns, called cells. Picture tubes may have any number of cells. As you paint with the Picture Tube tool, Corel PaintShop Pro paints one image from the picture tube after another. Many picture tubes create discrete images (such as zoo animals), and others create the effect of a continuous image (such as grass).
To make picture tube elements easier to edit, it is helpful to paint them on a separate layer.

*Important! You cannot use the Picture Tube tool on vector layers.*

For more information about picture tubes, see "Using the Picture Tube tool" in the Help.

**To paint with a picture tube**

1. On the Tools toolbar, choose the **Picture Tube** tool.
2. On the Tool Options palette, select a picture tube from the **Picture Tube** drop-list.
   
   **Note:** Most picture tube previews show the first image rather than all images in the picture tube. To view all images, select the desired picture tube and then paint with it, or open the .PspTube file in Corel PaintShop Pro.
3. If necessary, adjust the settings on the Tool Options palette, such as **Scale** and **Step**.
4. In the image window, click to paint with one picture tube image, or drag to paint with multiple picture tube images.

💡 You can make further changes to the behavior of the current picture tube by clicking the **Settings** button on the Tool Options palette and adjusting settings in the Picture Tube Settings dialog box.

**Warping images**

You can distort image areas by using the warp brushes on image pixels to produce a warping effect. You can twirl areas of images, contract or expand parts of images, and create many interesting effects. The effect of the Warp Brush is often time-dependent, which means that the
longer you hold the brush over an area, the more the brush produces the effect.

The Warp Brush tool can be used to create caricatures.

You can also warp images by using a grid. When you use the Mesh Warp tool, a grid or mesh is placed on the image. The grid intersections have mesh points, or nodes, that you drag to create deformations.

For more information about warping by using a grid, see “To warp image areas by using a grid” in the Help.

To warp image areas by using a brush

1. On the Tools toolbar, choose the Warp Brush tool.
2. On the Tool Options palette, choose the type of warp in the Warp Modes group box:
   - Push — pushes pixels in the direction of the stroke for an effect similar to smearing paint. This warp mode is time-independent.
   - Expand — pushes pixels away from the center of the brush
   - Contract — pulls pixels into the center of the brush
   - Right Twirl — rotates pixels clockwise around the center of the brush
- **Left Twirl** — rotates pixels counterclockwise around the center of the brush
- **Noise** — causes random movements of pixels under the brush
- **Iron Out** — removes unapplied warps. This warp mode is time-independent.
- **Unwarp** — removes unapplied warps

3 Specify the brush options, such as size and hardness.  
**Note:** Unlike other brushes, the size of the Warp Brush tool can be adjusted only by using the control on the Tool Options palette, not by using the keyboard.

4 Type or set a value in the **Strength** control to determine the strength of the warping effect.  
Full strength is 100%; minimum strength is 1%.

5 Choose settings for the **Edge mode**, **Draft quality**, and **Final apply** controls.

6 Drag in the image.
When you work with layers in Corel PaintShop Pro, you can add elements to your images, create artistic effects and illustrations, and edit your images more easily. You can add or delete layers, rearrange the order in which they are stacked, and blend their pixels in various ways. Unless you merge the layers, you can edit each one independently of the others.

This section presents the following topics:

• Understanding layers
• Using the Layers palette
• Creating layers
• Renaming layers
• Viewing layers
• Changing the order of layers in an image
• Setting layer opacity

For more information about layers, including promoting, duplicating, grouping, linking, and blending layers, as well as information about using adjustment layers, see “Working with layers” in the Help.

**Understanding layers**

When you create or import an image in Corel PaintShop Pro, the image has a single layer. Depending on the type of image you create or import, the single layer is labeled as Background, Raster, Vector, or Art
Media. When you open a photo, scan, or screen capture, the single layer is labeled as Background on the Layers palette.

For most simple corrections and retouching, you do not have to add layers to an image. However, it is a good practice to duplicate the single layer before making image corrections, so that you preserve the original image on its own layer. If you intend to do more complex work — such as adding elements to the image, creating photo compositions, adding text, or applying other effects — the use of layers is highly recommended.

Layers are like separate sheets that you combine to create a final composition.

The following table provides examples.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preserve the original image before making changes</td>
<td>Make a duplicate of the background layer by choosing Layers ▶ Duplicate. To work on the duplicate layer, make it the active layer by clicking it on the Layers palette.</td>
</tr>
<tr>
<td>Make color and tonal corrections</td>
<td>Use adjustment layers instead of changing the image directly. For more information about using adjustment layers, see “Using adjustment layers” in the Help.</td>
</tr>
<tr>
<td><strong>To</strong></td>
<td><strong>Do the following</strong></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Add text or graphics</td>
<td>Create text and graphics, such as lines and shapes, on vector layers to make them easier to edit. For more information about adding text, see “Working with text” on page 165. For more information about vector graphics, see “Drawing and editing vector objects” in the Help.</td>
</tr>
<tr>
<td>Create effects</td>
<td>Duplicate the background layer, apply an effect to the duplicate, and then blend the two layers by changing the opacity or blend modes of the layers.</td>
</tr>
<tr>
<td>Create a painting</td>
<td>Choose an Art Media tool from the Tools toolbar and mark the <strong>Trace</strong> check box on the Tool Options palette (an Art Media layer is created automatically). Use the Art Media brushes to create impressionistic effects.</td>
</tr>
<tr>
<td>Combine photos to create a photo collage</td>
<td>Open the photos that you want to combine and decide which image to use as your base image. Copy the other images into the base image by clicking an image, choosing <strong>Edit ➤ Copy</strong>, clicking the base image, and choosing <strong>Edit ➤ Paste As New Layer</strong>. Position each layer with the <strong>Move</strong> tool. Use the opacity setting and blend mode to control how much of each layer shows through. Use a mask layer to hide parts of a layer or to create soft edges around it.</td>
</tr>
</tbody>
</table>
Using the Layers palette

The Layers palette lists all layers in an image. The order of layers on the palette is the order of layers in the image. The top layer is listed first, and the bottom layer is listed last. You can change the stacking order of layers on the Layers palette, depending on the layer types.

<table>
<thead>
<tr>
<th>To Create a panoramic photo</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take a series of photos with overlapping subject matter. Create an image with a canvas large enough to display a panorama, and then copy each photo onto a separate layer. Decrease the opacity of one layer so that you can see through it, and use the Move tool to match up the edges of the next layer. After all layers have been positioned, return their settings to 100 percent opacity.</td>
<td></td>
</tr>
</tbody>
</table>

![Layers palette diagram](image)
You can create layer groups to organize the Layers palette. You can also link layers or groups so that they move together when you use the Move tool in the image.

By default, a thumbnail view of the layer’s contents appears to the left of the layer name. You can set the size of the thumbnail or turn the thumbnail off. By default, the settings of the active layer appear above the topmost thumbnail preview, but you can modify the appearance of these settings.

If an image has more than one layer, you must select the layer that you want to work on. Changes to the image affect only the selected layer (also called the active layer). You can select only one layer at a time.

For more information about layer types, see “Understanding layers” in the Help.

**To display or hide the Layers palette**

- Choose View > Palettes > Layers.
  
  This command toggles the display of the Layers palette on and off.

**To select a layer**

- On the Layers palette, click the name of a layer.

**To expand or collapse a vector layer or layer group**

- Perform a task from the following table.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand the group</td>
<td>On the Layers palette, click the plus sign in front of the layer or layer group name.</td>
</tr>
</tbody>
</table>
You can create a layer from the Layers palette. When you create a layer, you can specify properties such as the layer type, opacity, or blend mode. These properties can be modified as you work with the layer. You can also create layers from selections, vector objects, or other images. For more information, see “Creating layers” in the Help.

Layers are created automatically when you use the Text tool, Art Media tools, or vector drawing tools, such as the Pen tool or the Preset Shape tool.

**To create a layer from the Layers palette**

<table>
<thead>
<tr>
<th>To do the following</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collapse the group</td>
<td>On the Layers palette, click the minus sign in front of the layer or layer group name.</td>
</tr>
</tbody>
</table>

**Creating layers**

You can create a layer from the Layers palette. When you create a layer, you can specify properties such as the layer type, opacity, or blend mode. These properties can be modified as you work with the layer. You can also create layers from selections, vector objects, or other images. For more information, see “Creating layers” in the Help.

Layers are created automatically when you use the Text tool, Art Media tools, or vector drawing tools, such as the Pen tool or the Preset Shape tool.

**To create a layer from the Layers palette**

1. On the Layers palette, click the layer above which you want create a layer.
2. From the drop-list on the toolbar of the Layers palette, choose a layer type:
   - New Raster Layer
   - New Vector Layer
   - New Art Media Layer
   - New Layer Group
   - New Mask Layer
   - New Adjustment Layer
3. Adjust the available controls for the layer properties.
4 Click **OK**.

The new layer is added above the active layer. It is named with the layer type and a number, such as “Vector 1.”

For more information about renaming layers, see “Renaming layers” on page 153.

Only grayscale and 16 million–color images can have multiple raster-based layers (Vector layers are the only non raster-based layers). When you add a new raster-based layer to an image of another color depth, such as a 256-color indexed image, Corel PaintShop Pro automatically converts it to 16 million colors.

**Renaming layers**

As you add layers to an image, you may find it convenient to rename them so that they are easy to identify on the Layers palette.

**To rename a layer**

**Edit workspace**

1 On the Layers palette, click the layer you want to rename, pause a moment, and click again.

   The name appears highlighted in a box.

2 Type the new name in the box, and press **Enter**.

   You can also rename a layer by double-clicking the layer to display the Layer Properties dialog box and typing a new name in the **Name** box.
Viewing layers

You can make layers, layer groups, or vector objects visible or invisible in the image. The invisible layers remain in the image but are hidden from view.

To display or hide a layer

- Click the Visibility Toggle button for the layer that you want to display or hide.

  ![Visibility Toggle button when the layer is displayed](image)
  ![Visibility Toggle button when the layer is hidden](image)

  Hiding a layer group hides all layers within that group.

- To show one layer only, right-click the layer, and choose View ➤ Current Only.

To show or hide all layers

- Perform a task from the following table.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>View all layers</td>
<td>Choose Layers ➤ View ➤ All.</td>
</tr>
<tr>
<td>Hide all layers</td>
<td>Choose Layers ➤ View ➤ None.</td>
</tr>
</tbody>
</table>

You can also show all layers by right-clicking a layer and choosing View ➤ All or hide all layers by right-clicking a layer and choosing View ➤ None.
Changing the order of layers in an image

The order of layers within an image is critical to the appearance of the image. To rearrange layers in the image, you can easily change the stacking order of layers in the Layers palette. If a layer or a layer group has components, such as vector objects or grouped layers, all of the components move with the layer or layer group when its position in the stacking order is changed.

To move a layer or layer group

- On the Layers palette, select the layer or layer group, and drag it to a new position in the stack. A gray line shows the layer’s position as you drag.

  When you drag a layer, the cursor changes to a hand. A cursor displaying a null symbol indicates that the selected item cannot be moved to a particular position.

  You can also move a layer or layer group by choosing Layers > Arrange and then choosing an option.

Setting layer opacity

To create interesting effects, you can vary the opacity of a layer from the default of 100 percent (fully opaque) down to 0 percent (fully transparent). When a layer is partially transparent, the underlying layers show through.

You can also change the opacity of a layer group.

The Opacity setting on the Layers palette determines the opacity of each layer. The overall opacity of a layer and the opacity of individual
pixels are independent of each other. For example, if a pixel starts at 50 percent opacity and the layer is set to 50 percent opacity, the pixel appears as 25 percent opaque. If the layer is in a layer group that is set to 50 percent opacity, then the pixel appears as 12.5 percent opaque.

To set the opacity of a layer

1. On the Layers palette, select the layer or layer group.
2. Drag the Opacity slider to the desired percentage.

You can also set layer opacity by double-clicking the layer, changing the Opacity setting in the Layer Properties dialog box, and clicking OK.
Selecting the parts of images to edit is an important step in your workflow. By creating a selection, you can edit an area while leaving the rest of the image unchanged. You can use drawing or painting tools to modify selected areas of your image. You can also apply commands to flip, copy, crop, or perform other actions on the selected areas.

The border of a selection is identified by a selection marquee, which is a series of black and white dashes that outlines the selection.

This section presents the following topics
- Creating selections
- Modifying selections
- Inverting and clearing selections

For more topics about selections, including moving and modifying selections, and using feathering and anti-aliasing, see “Working with selections” in the Help.

**Creating selections**

You can create a selection when you want to isolate part of an image. For example, you can use a selection to adjust or retouch one area of a photo, or to copy a portion of a photo and paste it into another photo. The way you make a selection depends on whether you are
working on a raster layer or a vector layer. For more information about raster and vector layers, see “Understanding layers” in the Help.

You can create a selection by using a Selection tool shape (left), by creating a freehand selection (center), or by using the Magic Wand tool to select specific areas of color or opacity (right).

The following selection tools can be used to create raster selections:

- **Selection tool** — lets you create a selection of a specific shape, such as a rectangle, square, ellipse, circle, or star
- **Freehand Selection tool** — lets you create a selection around the edges of an object, such as petals of a flower or fingers on a hand. You can make four types of selections with the Freehand tool:
  - **Edge Seeker** — finds the edges between two areas with color differences when you click on the edges of irregularly shaped areas
  - **Freehand** — lets you quickly select an area by dragging
  - **Point to Point** — lets you draw straight lines between points to create a selection with straight edges
  - **Smart Edge** — automatically finds the edges of irregularly shaped areas when you click along the edges
• **Magic Wand** tool — makes a selection based on the color, hue, brightness, or opacity of an object. This tool is designed to select an area that has distinctly different pixels than those in other areas of an image — for example, a pink rose surrounded by green leaves.

You can make a selection with one tool and then switch to another tool to add to or subtract from the selection. For more information, see "Modifying selections" on page 162.

To create a selection by using the Selection tool

1. On the Tools toolbar, choose the **Selection tool**.
2. Check the settings of the following controls on the Tool Options palette, and modify them if necessary:
   - **Selection Type** — specifies the shape of the selection area
   - **Mode** — specifies whether to replace, add, or remove an existing selection. **Replace** is the default setting.
   - **Feather** — softens the edges of a selection by specifying a fade width (0 to 200 pixels)
   - **Anti-alias** — applies a smooth edge to a selection by making the pixels along its edges semitransparent
3. Drag to make the selection.
   As you drag, a border indicates the selection. When you finish dragging, the selection’s border becomes a selection marquee.

After you create a selection, changes to the settings on the Tool Options palette apply to the next action, not to the current selection. You can modify the options for the current selection by choosing **Selections › Modify** and choosing a command from the menu.
To create a selection by using the Freehand Selection tool

1. On the Tools toolbar, choose the Freehand Selection tool.

2. On the Tool Options palette, choose one of the following from the Selection Type drop-list:
   - Edge Seeker
   - Freehand
   - Point to Point
   - Smart Edge

3. Check the settings of the following controls on the Tool Options palette, and modify them if necessary:
   - Feather — softens the edges of a selection by specifying a fade width (0 to 200 pixels)
   - Smoothing — specifies the amount of smoothing to apply to the selection border
   - Anti-alias — applies a smooth edge to a selection by making pixels semitransparent
   - Use all layers — searches for an edge in all layers of the selected area. This option is available when you use the Edge Seeker or the Smart Edge selection type on multilayer images.

4. Depending on the selection type you chose, perform a task from the following table.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make a Freehand selection</td>
<td>Drag to select an image area.</td>
</tr>
<tr>
<td>Make an Edge Seeker selection</td>
<td>Click precisely along the edge of the area you want to select, and double-click or right-click to complete the selection.</td>
</tr>
</tbody>
</table>
When making an Edge Seeker selection, you can set the distance used to search for an edge by typing a value in the Range control on the Tool Options palette. You can increase the accuracy of Edge Seeker and Smart Edge selections by clicking more frequently along the edge you are following. You can delete a previous point by pressing Delete.

To create a selection by using the Magic Wand tool

1. On the Tools toolbar, choose the Magic Wand tool ▪.
2. On the Tool Options palette, choose a Match mode option. Check the settings of the following controls on the Tool Options palette, and modify them if necessary:
   • Tolerance — controls how closely the selected pixels match the pixel you click in the image. At low settings, only similar pixels are chosen; at high settings, a wider range of pixels is selected.
   • Feather — softens the edges of a selection by specifying a fade width (0 to 200 pixels)
   • Use all layers — searches for matching pixels across all layers in the image
• **Contiguous** — selects only pixels that connect to the pixel you click.

• **Anti-alias** — produces a smooth-edged selection by partially filling in pixels along the edge, making them semitransparent. You can use this option inside or outside the selection marquee.

3 Click the image area that contains the pixels you want to match. The selection marquee surrounds all matching pixels.

You can change the number of pixels you select by undoing the selection, adjusting the **Tolerance** setting, and making a new selection.

### Modifying selections

Selections can be modified in various ways. You can modify a selection by adding image content to it or by subtracting image content from it. For example, in a picture of a person carrying a large sign, you can select the sign by using the rectangular Selection tool and then add the person to the selection by using the Freehand Selection tool.

![After you create a selection, you can add to it.](image)

For more information about modifying color-based selections and removing specs and holes, see “Modifying selections” in the Help.
To add to or subtract from a selection

1. On the Tools toolbar, choose a selection tool (Selection, Freehand, or Magic Wand tool).

2. Choose settings for the tool on the Tool Options palette.

3. Perform a task from the following table.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add to a selection</td>
<td>From the Mode drop-list, choose Add, and select the image areas that you want to add to the selection. The areas do not need to be adjacent.</td>
</tr>
<tr>
<td>Subtract from a selection</td>
<td>From the Mode drop-list, choose Remove, and select the image areas that you want to remove from the selection.</td>
</tr>
</tbody>
</table>

You can also add to a selection by holding down Shift while clicking the image areas that you want to add, or subtract from a selection by holding down Ctrl while clicking the image areas that you want to remove.

Inverting and clearing selections

Sometimes, the easiest way to make a complicated selection is to select the part of the image that you don’t want and then invert the selection. For example, in a picture of a person against a solid-color background, you can select the background and then invert the selection, so that the person is selected instead of the background.
By selecting a solid background (left) and inverting the selection, you can isolate a complex, multicolored foreground (right).

You can also clear a selection, which removes the selection marquee and integrates the selection back into the image. After clearing the selection, you can resume your editing of the entire image.

To invert a selection

Edit workspace

• Choose Selections ▶ Invert.

The selection marquee now encloses the previously unselected image area and excludes the previously selected image area.

To clear a selection

Edit workspace

• Choose Selections ▶ Select None.

You can also clear a selection by right-clicking in the image outside the selection marquee or by pressing Ctrl + D.
Corel PaintShop Pro lets you add text to images and create interesting text effects.

This section presents the following topics:
• Applying text
• Formatting text

**Applying text**

Corel PaintShop Pro lets you apply different types of text to your images. You can apply vector text, raster text, and text as a selection. The type of text you apply depends on the effect you want to create.

Vector text, which is used in most instances, is the most versatile type of text because you can edit the text characters at any time. For more information about different types of text, see “Applying text” in the Help.

You can add text to your photos.

You can delete vector, raster, or selection-based text at any time.
To create text

1. On the Tools toolbar, choose the **Text** tool  

2. On the Materials palette, click the **Foreground and Stroke Properties** box, and choose a color for the text outline.
   - If the Materials palette is not displayed, choose View ➤ Palettes ➤ Materials.
   - If you want to create text with no outline, click the Transparent button  below the Foreground and Stroke Properties box.

3. On the Materials palette, click the **Background and Stroke Properties** box, and choose a color for the text fill.
   - If you want to create hollow text, click the Transparent button  below the Background and Fill Properties box, and on the Tool Options palette, set the **Stroke width** control to **1.0** or greater.

4. On the Tool Options palette, choose one of the following text types from the **Create As** drop-list:
   - **Vector** — creates fully editable text that resides on a vector layer. This text type is the default and is used in most instances.
   - **Selection** — creates a selection marquee in the shape of the text characters. The marquee is filled with the underlying layer.
   - **Floating** — creates raster text as a floating selection. The selection can be moved, but the text characters cannot be edited.

5. On the Tool Options palette, choose a font, font size, units, and font style.
   - **Note**: The Units drop-list offers two options — Points (for print output) and Pixels (for Web output).

6. In the image window, click where you want the text to appear, type the text, and click the **Apply** button ✅ on the Tool Options palette.
A bounding box appears around the text.

Do any of the following to adjust the text position:

- Position the pointer in the centre of the bounding box until the pointer changes its shape to a four-way arrow, and drag the text to the desired location.
- Position the pointer over a corner of the bounding box until the pointer changes its shape to a two-way arrow, and drag up and down to rotate the text.

For information about using the Materials palette to choose colors for the text outline and fill, see “Using the Materials palette” on page 121.

You can also apply the text after you have typed it by double-clicking the area outside the text object.

To delete text

1. On the Tools toolbar, choose the Pick tool.
2. Click the vector text you want to delete to select it.
3. Press Delete.

You can also use the following text selection methods: double-click a word to select it, triple-click a line to select it, and quadruple-click in the text or press Ctrl + A to select the entire text.

Formatting text

The text formatting options in Corel PaintShop Pro let you control the appearance of text. You can set these options when you create vector,
raster, or selection text. If you create vector text, you can reformat the text at any time by changing your text formatting settings. You cannot change the characters or formatting of raster text. You can modify raster text only by using the Pick tool.

For more information about formatting options, see “Formatting text” in the Help.

To change font attributes

1 On the Tools toolbar, choose the Text tool 

2 Select the vector text characters you want to change by dragging over them.

   Note: You can also select the entire text by pressing Ctrl + A.

3 On the Tool Options palette, perform a task from the following table, and click the Apply button ✓.

<table>
<thead>
<tr>
<th>To</th>
<th>Do the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change the font</td>
<td>Choose an option from the Font drop-list.</td>
</tr>
<tr>
<td>Change the font size</td>
<td>Choose an option from the Size drop-list.</td>
</tr>
<tr>
<td>Change the units of measurement for the font</td>
<td>From the Units drop-list, choose Points for print output or Pixels for Web output.</td>
</tr>
<tr>
<td>Apply bold formatting to text</td>
<td>Click the Bold button B.</td>
</tr>
<tr>
<td>Apply italic formatting to text</td>
<td>Click the italic button İ.</td>
</tr>
<tr>
<td>Underline the text</td>
<td>Click the Underline button U.</td>
</tr>
<tr>
<td>Apply a line through text</td>
<td>Click the Strikethrough button X</td>
</tr>
</tbody>
</table>
E-mailing and sharing photos

Corel PaintShop Pro gives you options for e-mailing your photos or sharing them on a sharing site.

This section presents the following topics:

- E-mailing photos
- Uploading photos to a sharing site

E-mailing photos

You can e-mail photos directly from any Corel PaintShop Pro workspace.

To e-mail photos

1. Choose File ➤ E-mail, and choose one of the following options:
   - Active image — lets you send the photo that is currently active in the image window
   - All open images — lets you send all the photos that are open in the image window
   - All selected items — lets you send all the photos that you currently have selected

2. In the E-mail dialog box, choose one of the following options:
   - Embedded photos — displays photos in the body of your e-mail message
   - Attachments (original file format) — sends photos as individual file attachments. This option preserves the original file formats.
3 Choose a size setting from the Maximum photo size drop-list. The total size of your e-mail is displayed beside the preview.

You can review the items you are sending by clicking the playback arrows that appear under the Preview thumbnail. You can also e-mail photos from the Organizer palette by selecting the photo thumbnails, clicking the Share button on the Organizer toolbar, and choosing E-mail.

**Uploading photos to a sharing site**

You can upload your photos to sharing sites, such as Facebook and Flickr, directly from the application when you are connected to the Internet.

**To upload photos to a sharing site**

1 In the Organizer palette (available from any workspace), select the photos that you want to share.
   
   If the Organizer palette is not displayed, click View Palettes Organizer, or press Shift + F9.

2 Click the Share button, and click one of the following:
   
   • Facebook
   
   • Flickr

3 Follow the instructions to upload the photos to your account.

If you are unable to log in to the sharing site, make sure that you have entered the correct e-mail address or username and password.

If you are unable to log in from a corporate network, you may need to modify the Proxy Server settings on your computer. Check with your Network Administrator to get the Proxy Server information for your corporate network.
Corel PaintShop Pro provides extensive options for printing your work. This section covers basic printing topics. For more information about working with layouts and preparing files for professional printing, see “Printing” in the Help.

**Printing images**

Corel PaintShop Pro offers many ways to print images. You can print from the Manage workspace, Edit workspace, or Adjust workspace. You can use a template, or use a custom layout to meet specific size and layout requirements.

Templates help you simplify image placement and sizing. You can use templates to lay out and print images in standard sizes, including 4 × 6 inches, 5 × 7 inches, and 10 × 15 centimeters. You can use a
Corel PaintShop Pro template, or you can create your own custom template from a page layout that you create.

Creating your own layouts gives you the flexibility to print images to any size and lets you create a custom page for projects such as scrapbooks. For more information about creating layouts, see "Creating layouts" in the Help.

To print the active image

1. Choose File ➤ Print.
2. In the Printer group box, click Printer.
   The Print dialog box appears.
3. Choose a printer from the Name drop-list, and click OK.
4. Click the Placement tab, and type or set a value in the Number of copies control.
5. In the Orientation group box, choose one of the following options:
   • Portrait
   • Landscape
6. In the Size and Position group box, set any of the following controls:
   • Width and Height — lets you specify width and height values to set the image size
   • Scale — lets you resize the image by entering a percentage
   • Fit to page — fits the image to the printed page
   • Center on page — centers the image on the printed page
   • Upper left of page — positions the image in the upper-left corner of the printed page
• Custom offset — lets you enter values in the Left offset and Top offset boxes.

7 Click the Options tab.

8 In the Print Output group box, choose one of the following options:
   • Color
   • Greyscale
   • CMYK separations
   If you choose the CMYK separations option, you can print CMYK labels on each color plate or page by marking the CMYK plate labels check box in the Print Marks group box.

9 Click Print.

To print a contact sheet
Manage workspace
1 In the Organizer palette, select the files that you want to print.

2 On the Organizer toolbar, click the Organizer menu button and choose Print Contact Sheet.

3 Specify the settings you want in the Print Contact Sheet dialog box.

4 Click Print.

For more information about printing options, see “Understanding printing” in the Help.

To print images by using a template
1 In the Manage or Edit workspace, select thumbnails in the Organizer palette.

2 Choose File > Print Layout.
The Print Layout window appears.

3  Click File ➤ Open Template.

   The Templates dialog box appears.

4  In the Category group box, choose a category from the list.
   Thumbnails of the templates in each category appear in the window on the right. Custom templates that you saved appear under the User Defined category. If the custom template was saved with images, the cells are filled with color.

5  Select a template, and click OK.
   Note: If you previously saved images with the template, the images appear in the template cells and in the thumbnail list. Cells are grayed in the template thumbnail for templates with missing images.

6  Drag images into the template cells.
   If you want to fill the template with copies of the same image, click a thumbnail and click the Fill Template with Image button.

7  Click File ➤ Print.

   You can remove an image from a template by selecting the image and pressing Delete.
   You can also open images by choosing File ➤ Open Image.
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