Xara

DESIGNER PRO 7

Graphics and illustration, page layout, web design and photo work created to the highest standards

MANUAL

Copyright

Contents

Support

If you need some help using this program, here are some sources of information that may be of use:

- **Program help** - Choose Help topics from the Help menu to open Xara Designer Pro 7 help (containing hundreds of pages of information).
- **Status line** - Try reading the text on the status line at the bottom of the main Xara Designer Pro 7 window. It always describes what actions are currently possible and what they will do (even during drags), and helps you learn to use the Designer Pro tools. It also gives details of what buttons and controls do as you move the pointer over them. See Status Line for more details.
- **ToolTips** - If you hold the mouse pointer over a button or control for a short while, then small message appears telling you what it does.
- **Menus** - If you want to know what a menu item does, highlight it and press "F1".
- **Dialog boxes** - If you want to know what a dialog box does or how to use it, click "Help".
- **Movies** - There are demo movies to help you make the most of Xara Designer Pro 7. Choose Movies from the Help menu to view a list of available movies or visit www.xara.com/products/designer/tutorials-demos/ to view a list of available movies.
- **The TalkGraphics forums** - You can share tips and ideas, ask questions or offer solutions to other Xara Designer Pro 7 users at the TalkGraphics forum (www.talkgraphics.com), which also includes many other graphics related forums.
- **Xara Xone** - Visit the Xara Xone (www.xaraxone.com) for a host of excellent Xara Designer Pro 7 support resources, including over ten years of Xara Designer tutorials, hints & tips, featured artists, and Xara shareware
- **"The Outsider"** newsletter (www.xara.com/outsider) - Subscribe to our monthly newsletter "The Outsider" (with monthly tutorials and tips, offers, inspirational art, and more).
- Join the Xara community on Facebook (www.xara.com/facebook) or follow our news on Twitter (www.twitter.com/xaragroup).

Support website

http://support.xara.com

Our own support site offers comprehensive FAQ page (frequently asked questions) which is constantly updated and available 24 hours, 7 days a week; always the best source for instant answers. You can also contact our technical support staff using the form on this page, if you cannot find the answer to your question!

What's new in Xara Designer Pro 7 ?

General / Document Handling

- **Live Copies** (on page 122) give you a dynamic new way of linking multiple copies of an object so that if one changes, they all do. Similar to repeating objects, Live Copies are however more powerful. You can reposition, resize and transform each Live Copy independently.
- **Brand new 'magic snap' for object alignment** (on page 104). Xara Designer Pro 7 now provides 'magic' magnetic object snapping. As you drag an object, it 'snaps' to points and lines of interest nearby and indicates what it has snapped to by displaying dynamic snap lines and points. This makes it easy to align objects with each other, or with guidelines or the page center or edges.
- **Advanced non-axis aligned snapping** (on page 104). You can now also align to lines that are neither vertical or horizontal.
- **Enhanced ease of use**. Xara Designer Pro 7 galleries now give faster access to the information you need:
    - A new default Page & Layer Gallery 'pages' mode (on page 147) displays a narrow list of page thumbnails – for easy page selection and access.
    - Designer Pro initially displays an uncluttered single page view. Use the Page & Layer Gallery (on page 142) to quickly move to different pages, or switch to multi-page view by right clicking on the page and selecting the multi-page view option.
- **Improved embedding of graphics into flowing text (on page 187).** Creating anchored objects is now a one-click action and objects that you anchor in text can now also repel text, helping you create a wrap-around effect easily.
- **New paste operations bring much more flexibility to pasting operations**, allowing Paste position, Paste size, Paste replacing selection, Paste in current layer and Paste in place in current layer.
- **Cut, copy & paste of whole pages (on page 39).** You can now cut, copy and paste whole pages both within and between documents.
- **Edit inside for easy editing of grouped objects** (on page 110). Double-click on a group or other composite object type to edit it in a separate document window.
- **Tabbed document windows** (on page 29). Tabs at the top of the Designer Pro window show clearly which document you are currently viewing, the document type and whether there are unsaved changes.
- **New gallery system (on page 52) supports fly-out galleries for instant viewing and flexible docking options.** A new gallery bar gives instant access to all galleries, which now fly out as you hover the mouse pointer over a new gallery bar.
- **Quick alignment of selected objects** (on page 113) is made possible by the new right click menu option 'Align'. This enables you to directly align multiple objects horizontally and vertically, without having to open the alignment dialog.
- **Export animation documents as AVI files (on page 418).** Xara Designer Pro 7 now allows you to export any animation document as an AVI file, or even an AVI with transparency, helping you create your own web-ready movie content.
- **HTML 5 video** (on page 340). MP4 movie files added to your website will now play without Flash installed if the browser supports HTML5 video, so movies play on iOS devices such as iPhones and iPads.

Web Authoring / Web Publishing

- **New widgets** (on page 368). Make your websites eye-catching and dynamic with our new smart widgets. Add an advanced selection of slick photo and text animations to your web pages without the need for coding knowledge.
- **Presentation websites** (on page 359). Create web-based 'slide-show' style presentations that your website visitors can step through using the keyboard arrow keys. You can also easily remotely host a web meeting (a Webinar) to showcase your presentation, step by step and page by page, to a group of invited participants.
- **New animated transition effects (on page 356) for layers and page links**. Xara Designer Pro 7 makes it easy to add a wide range of animated effects to the layers and page links in your website. You can add animated transitions to any page link or pop-up layer in your web pages.
- **Intelligent repeating headers / footers / watermarks (on page 121).** Xara Designer Pro 7 now automatically updates all occurrences of a repeating object when you edit it, so you don't have to manually update. **What's more**, Xara Designer Pro 7 is smart about positioning, so objects in the top half are positioned on other pages relative to the top, and objects near the bottom are positioned relative to the bottom, irrespective of page sizes.
- **Add individuality to your web page browser tabs using 'favicons' (on page 447).** Xara Designer Pro 7 now supports the addition of favicons, allowing you to customize the tabs of your web pages by displaying a custom graphic, such as a logo, on the document browser tab.
- **Sitemap support (on page 333).** You can now automatically generate a sitemap for submission to search engines to assist them with the crawling of your website.
- **Built-in preview window now includes navigation buttons** (on page 303). The navigation buttons in the top bar of the preview window allow you to move back or forward, just like in a web browser, and the Home button returns you to the page you started the preview on.
- **Quickly preview your pages in the most popular web browsers** (on page 303). If you have Firefox, Internet Explorer, Opera, Safari or Chrome installed, you can preview exactly how your page will appear in each of these popular web browsers with one click.
- **Preview your web page in full screen (on page 303) by clicking the new View Full Screen button in Xara Designer Pro 7's built-in Preview window**. When you next use preview, Xara Designer Pro 7 remembers the last used mode (normal, maximized or full screen). and displays subsequent previews in the same way.
- **Explore your FTP web space from within Xara Designer Pro 7** (on page 337). You can browse through and delete files and folders on your FTP server using Xara Designer Pro 7's built-in Web Space Explorer.
- **A new range of templates** gives you a greater design choice when creating your websites in Xara Designer Pro 7.

Photo

- **Photo Magic Erase** (on page 294) now allows you to rapidly and effectively erase unwanted objects from your photos even faster. Just click a button and Xara Designer Pro 7 automatically finds a suitable part of the image to clone over the top of anything you select. Don't like it? Just click again! Xara Designer Pro 7 shows you a series of possibilities, which you can scroll through until you find a replacement that suits.
- **The Optimize photo dialog (on page 262)** now includes the option to maintain the photo's current resolution.

Other minor enhancements

- **Greater control over clipping objects (on page 323).** A new option in the Website tab of the Website Properties dialog allows you to choose whether or not to clip objects to web page edges. If you do not clip, then any objects overlapping your page on to the pasteboard will be displayed in full, rather than cropped to the page border. In addition, any animated transitions you apply will now start from the browser window edge rather than the page border.
- **Improved context sensitive menus (on page 22) offer direct access to useful actions.** Right-click on objects, page or pasteboard for instant access to many useful operations relevant to the object.
- **Clearer Infobar text rendering** brings greater screen display quality and clarity to all Xara Designer Pro 7 toolbars, if ClearType text is enabled in your Windows' control panel.
- **Add your website to Xara/MAGIX user galleries** (on page 333). When you publish your website, you can now choose to include a thumbnail of your site in existing user website galleries hosted by Xara/MAGIX.
- **Prevent objects on the current layer from repelling text on other layers** (on page 186) using the new 'Text repelling within layer' option in the Layer Properties dialog. This option also stops text on the current layer being repelled by objects on higher layers. This is useful for (and is set by default on) popup layers in web documents.
- **Easily add header code to a page or website** (on page 323). Xara Designer Pro 7 now allows you to enter HTML code into the head of your web pages, as well as the body, giving you greater versatility to customize your website. You can easily add your own code (or code from a widget provider) into individual pages or all pages in your website. Also code entry for either the head or body is easier with a new larger pop-up code editing dialog.
- **Extended spell check support** (on page 181) includes Czech, Hungarian, Polish, Slovak and Turkish.
- **PDF import improvements** Further updates to the PDF import filter.
- **Improved EPS import reliability** - Some improvements to EPS import.
- **New cameras** supported for RAW import.
- **A new 'photo clipart' category** in the Designs Gallery, and a refresh of the existing templates.

Introduction to Xara Designer Pro 7

Welcome to Xara Designer Pro 7

Xara Designer Pro 7 is a powerful and easy to use graphics and document creation tool, able to produce everything from top quality web graphics and websites to highly detailed illustrations and multi-page documents for print and PDF output.

If you're working with photos, then Designer Pro can handle everything from a simple one-click auto-enhance of your photo to impressive digital photo compositions. If you're creating a website, then Designer Pro can help you produce everything you need, from Flash animations to complete web page layouts and even complete websites.   If your task includes drawing then this is a great tool for everything from simple logos to cartoons and astonishingly detailed illustrations. And since Designer Pro is equally at home with drawing, photos and text it is the perfect solution for design work from cards and invitations to posters, adverts and multi-page brochures.

Designer Pro terminology

This section describes some of the terminology used in Designer Pro.

Document

You can think of a document as a conventional sheet of paper (or a couple of it). Like a sheet of paper, you can draw lines and curves, place objects like shapes, cliparts and photos and write text (and erase them later). You can save the document for later use by storing it on disk or printing it.

Page

This is the white area in the document. You can place objects on the page margin, on the page, or overlapping both. However, only objects on the page are printed. A document can contain one or several single pages or double pages spreads. A double page is like two separate sheets of paper placed next to each other.

Lines, shapes, and objects

A **line** can be straight, curved or a mixture of both. A line must have a start and an end, thus it is always open. You can apply a thickness and color to a line.

These are all lines
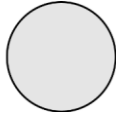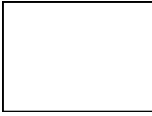
These are all shapes

A **shape** is a solid or closed object. The difference between a line and a shape is that a shape has no start or end. Because a shape is a closed object, you can fill it with a color or leave it empty with no color. You can apply a thickness and color to the line around the shape.

In postscript terminology, a shape is a closed path. Designer Pro sometimes uses "shape" as shorthand for "line or shape".

Text

These are all objects

Object is a general term. This manual uses it where the same information applies to lines, shapes, bitmaps and text. For example, moving a line is exactly the same as moving a shape, moving a bitmap or moving text.

Many operations in Designer Pro apply equally to a single object or a collection of objects. "Object" can refer both to one object and to several objects.

Attributes are the characteristics of objects such as line width and pattern, colors and so on.

Bars

There are three types of bars: the **MAIN TOOLBAR**, the **INFOBAR,** and then various other button bars which are sometimes just referred to as control bars, e.g. the **GALLERY** button bar.

Attributes

The various characteristics that define the appearance of objects on the page, such as color, line width, fill style etc are all called **ATTRIBUTES** of the object.

The Attributes of objects can be copied and pasted between different objects using the Paste Attributes (on page 116) menu command.

Getting Started

This section gives an overview of the main functionality of Designer Pro. Later sections go into more detail about each tool.

Program Layout

1 Info Bar - changes with each tool
2 Zoom
3 Designs Gallery
4 Page & Layer Gallery
5 Selector Tool
6 Photo Editing Tool
7 Drawing tools
8 Text Tool
9 Shadow Tool
10 Color line
11 Tabs for all open documents - icon identifies document type.

Note: By default Designer Pro opens a new document showing just one page. To view all the pages in your website document, right click a page and choose **MULTIPLE PAGE VIEW**. You can now scroll the Designer Pro window up and down to view all the pages in the document.

Note: All Designer Pro infobars now have improved text rendering for easier viewing, if you have ClearType text enabled in your Windows Control Panel.

Zooming / Scrolling / Pushing your page

These common operations are made very easy:

- To Zoom in or out, hold Ctrl and use the mouse-wheel
- To push the page, press your mouse-wheel and push (yes it's a button as well)
- To scroll use the mouse-wheel (or the scroll bars of course)
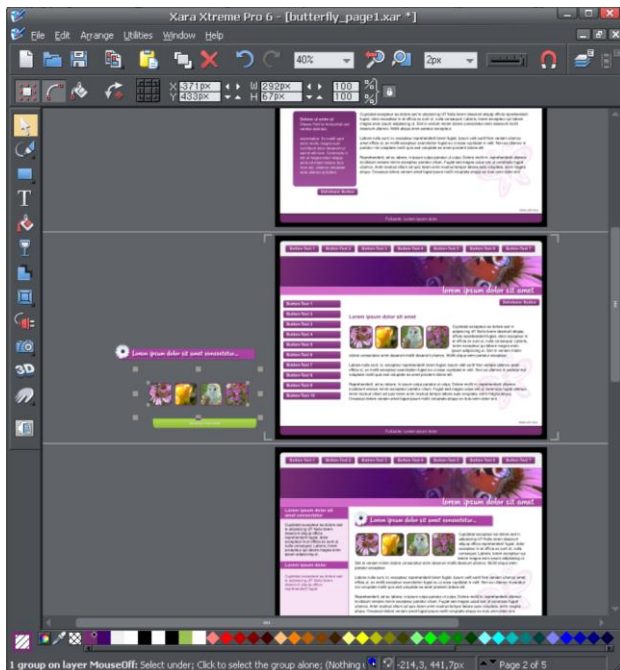
Web documents are displayed in single page mode by default and print documents in multi-page view mode. Switch between display modes by right clicking on the page or pasteboard and selecting or deselecting Multiple Page View from the drop-down menu. An example of multiple page view is shown to the left.

You can drag and drop items between pages. When you make document-wide Theme color changes, you can see how the changes affect all pages.

The current page is marked with 4 corner brackets.

In this example you can see some items have been placed on the pasteboard area beside the pages. When exporting to most export formats, off-page objects are not included. The pasteboard area is useful as a place to keep temporary or working graphics, photos or other objects.

Drawing Tools
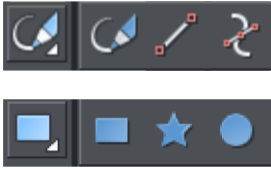
Designer Pro provides all the graphics tools you need to create just about any graphical object on your page, as well as a range of pre-designed graphical elements in the Designs Gallery. There are several basic drawing tools that let you create rectangles, ellipses, regular polygons stars or any shape you like.

Designer Pro provides vector drawing tools, which means you can resize, edit the outline shape and re-color with no loss of quality. You can zoom in to see almost infinite detail, and all edits can be undone. For details on drawing rectangles/squares, circles/ellipses and other shapes, see Drawing Lines and Shapes and Shape Handling.

The **SHAPE EDITOR TOOL** allows you to create detailed vector based shapes, and also to edit the outline of any shape.

Refer to the **THE SHAPE EDITOR TOOL** (on page 71) to learn how to use this powerful tool.

Shapes are an important part of any drawing, the other essential element that we've ignored until now is freehand drawing. Click on the **FREEHAND & BRUSH TOOL**. See the **FREEHAND & BRUSH TOOL (ON PAGE 65)** for more information.

Current attributes (styles)

An 'attribute' is some characteristic of an object which you can modify in Xara Designer Pro 7. For example a shape's attributes include its color, its outline width and its outline color.

You can change the attributes of an object after you've drawn it, by selecting it and then changing its fill color, line width, or any of its other attributes. But Xara Designer Pro 7 also keeps track of the 'current' attributes, which are the attributes that get applied to newly drawn objects as they are created.

See Copying Styles: Paste Attributes (on page 116) for more information.

Fill Tool

You can easily put a graduated color fill onto a shape using this tool (and a lot more besides). Select the tool and just drag across your object.

The fill arrow can be adjusted by dragging the ends to alter the direction, angle and extent of the graduation.
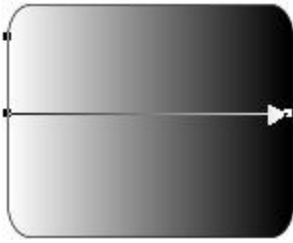
Rounded rectangle with a graduated fill.

Transparency Tool

You can adjust the transparency of any graphic or photo to make it see-through. More than this, Designer Pro supports graduated transparency. It works very like the graduated color fill. In the Transparency tool just drag across your shape and you can see the transparency fades. You can adjust the degree of transparency of each end of the fill arrow, by clicking on either end of the arrow, and adjusting the Transparency slider. See Transparency (on page 213) for more information.

Feather

This is a graphical term for blending the edges of objects. Designer Pro provides a feather control that enables any object, graphics, text or photo to be feathered - giving it a blurred edge that blends with the background. The Feather control is not a tool on the left, but one of the controls on the top bar. See Feathering (on page 141) for more information.

Shadow Tool

A very popular graphics effect is to create a soft drop-shadow under a graphic or some text. This serves to lift the object away from the background.

The **SHADOW TOOL** lets you add a soft shadow to any object, text, graphics or photo. Select the **SHADOW TOOL** and just drag on the object. You can adjust the shadow blur and transparency using InfoBar controls.

Some text with a soft shadow.

To adjust the position of an existing shadow, go into the **SHADOW TOOL** and drag on the shadow.

Example Graphics

This is a perfect example of what can be created in Designer Pro. This button combines many of the features described above - it's drawn by combining just a few feathered shapes, and using graduated transparency (the white reflection effect). The text has a slight soft shadow and the button has a glow shadow. The whole thing is grouped. (You do not need to draw this button as it's provided in the Button category of the **DESIGNS GALLERY**).

The huge benefit of vector graphics, compared to 'bitmap' graphics created in pixel editing software such Photoshop, is that you can re-color, edit, rotate, and resize the button with no loss of quality. Make it huge and it remains pin sharp:

On top of that you can re-color using the Named Color system, and it will even stretch as required - everything in Designer Pro remains non-destructive (which means you can always edit it, with no loss of quality).

Something that would take skill and time to produce using alternative graphics software, is trivially easy in Designer Pro.

Object Based Design

All the types of elements are collectively referred to as objects.

One of the unique benefits of Designer Pro is that you have complete freedom to place any object anywhere on the page, and your document or website will faithfully reproduce this.

The **SELECTOR TOOL** can be used to select any object on the page, and to move (just drag it), resize and rotate the objects.

You can adjust the stacking order (that is whether an object appears in front or behind others on the page) using the **ARRANGE** menu options or right click and choose

ARRANGE. With the **SELECTOR TOOL** you can resize objects by dragging on the corner resize handles. You can rotate any object by dragging just inside the corner selection handles.

To add some text to your website, select the **TEXT TOOL** and click anywhere on the page and start typing.

You can also create text columns, by clicking and dragging horizontally in the Text Tool, or text boxes by dragging horizontally. See the Text section (on page 25) below for more details and the Chapter Text Handling (on page 174) for a complete reference of text functions of Xara Designer Pro 7

You can use the drawing tools to create rectangles, rounded rectangles, circles and ellipses, and just about any shape you like using the **SHAPE EDITOR TOOL**. See the Drawing tools section for more detail.

Stacking Order

All objects on the page are placed one on top of another. The most recently drawn or created object is always on top, that is, in front of any others. You can adjust the stacking position by right clicking and choosing **ARRANGE** or using the **ARRANGE** menu options.

For example, when you draw a new rectangle it always appears to cover all the objects behind it. By right clicking and choosing **ARRANGE** or pressing "Ctrl + B" (or the menu "**ARRANGE**" > "**PUT TO BACK**") the object is moved behind everything else. Similarly "Ctrl + F" brings any selected object to the top, that is, in front of everything else.

There is an added complication: layers. All objects are collected into named layers, and each layer can be turned on or off to show or hide everything on that layer. See the Layers section in the pdf manual for more detail.

The **PAGE & LAYER GALLERY** allows you to easily see and adjust the stacking order of objects and layers. Objects are listed in order from front to back in the gallery. See the Page & Layer Gallery (on page 142) chapter in the pdf manual for details.

Right-click menus

When you right-click any object in the Xara Designer Pro 7 workspace, a drop-down menu lists useful operations that are relevant to the object clicked on. For example, if you right-click a rectangle you've drawn previously, the drop-down menu allows you to perform actions only relevant to a rectangle.

If you right-click a photo, however, some of the menu options that appear apply only to photos, while others are similar to the actions you can perform on a rectangle. The object-specific operations are listed towards the top of the right-click menu's list, e.g., in the case of a rectangle the first three actions above apply only to rectangles. You can also right click both the page and pasteboard to see a menu of page- and pasteboard-related operations you can apply.

If you select more than one object and right-click, the menu lists actions specific to multiple objects, such as group, align and combine, as well as the common operations such as cut, copy and delete. Similarly if you right-click objects that you have previously grouped, actions specific to a group are displayed.

Using Templates & Clipart
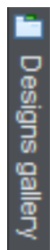
Open the Designs Gallery by clicking the **DESIGNS GALLERY** tab in the Galleries bar (or use "**FILE**" > "**NEW FROM DESIGNS GALLERY**").

This shows folders containing collections of template designs, clipart and web widgets. Some templates are intended for printing (photo albums, calendars, newsletters, etc.), others for web use and most of the graphical clipart designs can be used in any types of document.

Browse through the folders and double click to open any file as a new document or drag and drop designs and widgets onto your page.

To add new pages to your website, see Inserting pages into your document (on page 38).

Xara Designer Pro 7 includes the ability to create Flash Animations. See the Flash (on page 375) section in the help.

Some of the items in the **DESIGNS GALLERY** are dynamic widgets that you can add to your website quickly and easily. When you drag one of these onto your page, a browser window opens onto a widget website which allows you to configure the widget. Therefore you must be online to use widgets.

Once you've finished configuring your widget click the **INSERT** button at the bottom of the browser window. A placeholder image is automatically generated which is a static snapshot of what your widget will look like when it's viewed in your website. The widget won't work on the page in Xara Designer Pro 7 - you just see the preview image. Simply preview your page to see the widget in action!

For more information see Widgets (on page 368).

Photos

You can replace any photo by dragging and dropping it from your File Explorer onto any photo in Designer Pro. If you drop it onto the background then it is imported and placed on the page where you dropped it. All imported photos are shown as 500 pixels wide, but you can of course change this to be any size in the usual way with the **SELECTOR TOOL**.
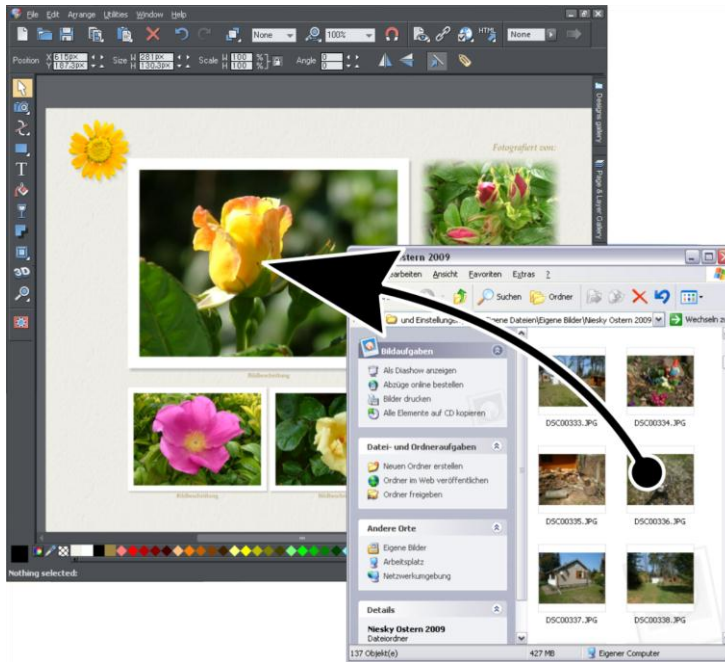
Drag and drop your photo over any existing picture to replace it. Drop onto the background to import as a new photo

When you replace an existing photo, the **FILL TOOL** is selected and a pair of fill arrows are shown at right angles on the photo.

This is because the photo is really a fill inside a shape. You can drag on the picture to re-position it, or drag on the ends of the fill arrows to resize and rotate the picture inside its outline shape.

Drag on photo to re-position inside its frame. Drag on end of arrows to resize and rotate.

See Photo Handling (on page 245) and The Photo Tools (on page 272) for more information, including replacing multiple photos and importing large photos.

Text

You can edit the text by selecting the **TEXT TOOL** and clicking on the text.

You have all the usual word processing facilities, and can paste text from the system clipboard. Double click will select a word, triple click will select a whole line - which can be useful for selecting all the text in a button. As usual the InfoBar provides a wide range of controls for this tool. Alternatively you can right click within text and choose **ADVANCED TEXT PROPERTIES**.

See Text Handling (on page 174) for more information on the font menu, creating new text objects, bulleted and numbered lists, text repel, anchored objects in text, spell checking and more.

Layers

As mentioned earlier all objects have a stacking order on the page - from the backmost to the frontmost item.
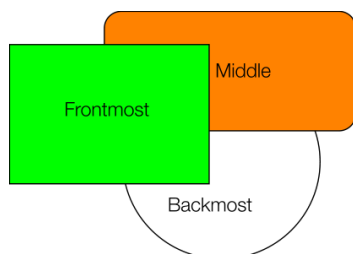
These objects are stacked over each other.

In addition, all items can be placed into named layers. Each layer can have any number of objects, and has the ability to be turned on or off. When the layer is turned off all objects on that layer become invisible.
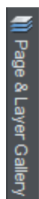
The layers are controlled from the **PAGES & LAYER GALLERY** on the Galleries bar to the right of the workspace.

In website documents, layers are used to provide mouseover (sometimes called rollover) features on your website. These include highlighting buttons (they highlight when you move the mouse over them) and also other pop-up effects. See the Web Graphics & Websites chapter of the help for full details. See Layers (on page 147) in the Page & Layer Gallery for more information.

Document handling

Starting Xara Designer Pro 7

To start Designer Pro:

Choose "**START**" > "**ALL PROGRAMS**" > "**XARA**" > "Xara Designer Pro 7".
Or double click the Xara Designer Pro 7 icon on your desktop (shown left).

This may vary depending on which version of Windows you are using.

Starting a new document

Choose "**FILE**" > "**NEW**"

This opens a sub menu with several pre-defined but blank template documents to start from. You'll find a range of blank templates under the "**FILE**" > "**NEW**" menu for creating them.
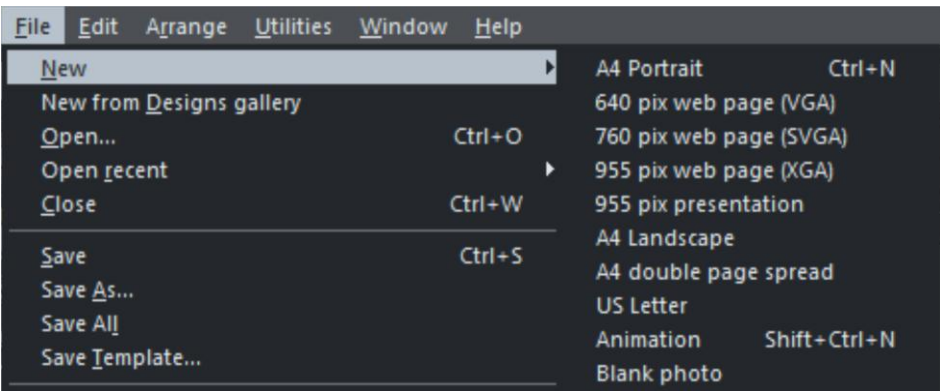
Primarily, there are five different types of documents in Xara Designer Pro 7.

Icon	Document type	Menu option	Use for..
	Print	**A4 PORTRAIT** **A4 LANDSCAPE** **US LETTER**	Creating drawings, DTP and text documents (single or multi-page) that you want to print or perhaps export as PDF documents.
	Website	**640 PIX WEB PAGE (VGA)** **760 PIX WEB PAGE (SVGA)** **955 PIX WEB PAGE (XGA)**	Creating complete websites or web graphics.

	Presentation	**955 PIX PRESENTATION**	Creating web presentations.
	Animation	**ANIMATION**	Creating animations such as a Flash animation or animated GIF.
	Photo	**BLANK PHOTO**	If you load a JPEG photo into Xara Designer Pro 7 it's loaded as a photo document. Photo documents are used where the purpose of the document is only to edit or produce a photo.

Choosing the first entry **A4 PORTRAIT** creates a document based on the Designer Pro default template.

Clicking the **NEW** button on the **STANDARD** control bar (shortcut "Ctrl + N") also creates a document based on the default template.

Tip: "Ctrl + Shift + N" opens a new animation document.

When your new document opens, its tab is added to the top of the workspace with an icon showing which type of document it is, as shown in the example below.
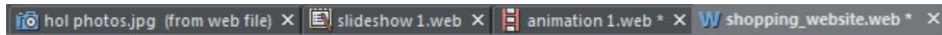
You can save your own templates with the "**FILE**" > "**SAVE TEMPLATE**" command – see Changing the template document (on page 447) for details.

The Xara Designer Pro 7 window

❶	Title bar
❷	File name
❸	Standard button bar
❹	Galleries
❺	Infobar
❻	Toolbar
❼	Rulers
❽	Pasteboard
❾	Page
❿	Status line
⓫	Color line
⓬	Live drag/snapped indicators
⓭	Document tabs - icon identifies

The Designer Pro window is similar to a conventional sheet of paper on a drawing board or easel. The white rectangle represents the sheet of paper (the spread or page). The gray border is the pasteboard. The pasteboard has two uses:

- You can create objects partly on the pasteboard and partly on the page area. For example, you may want half a circle at the edge of your document. It is easier to create a complete circle overlapping onto the pasteboard. When printed or exported as a website, the area on the pasteboard is ignored.
- You can create an object on the pasteboard and then move it to its correct position on the page area. This is useful when creating complex illustrations.

Selected document and title bar

You can have more than one file open at a time in Designer Pro, which displays all open documents as tabs at the top of the workspace.

The current document is displayed in the workspace and its name is highlighted gray in the document tabs. The current document type is indicated in the top left corner of the Designer Pro window, next to the menu options. The current document receives all input. Any unsaved changes in a document are indicated with a star after the file name.
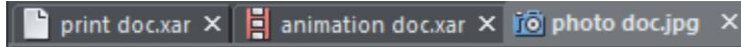
Document tabs show all open documents, with the current document tab highlighted gray.

Control bars

These contain buttons that you can use to operate Designer Pro. You can customize control bars in several ways, such as re-ordering, creating, and hiding bars.

The default window shows the standard button bar with commonly used buttons:

You can customize the standard control bar in the same way as other control bars.

Those icons with a triangle indicator in the bottom right corner have "fly-out bars" on them. Hold the mouse pointer over these icons and you'll see the fly-out bar appear, with more icons.

For information on customizing control bars, refer to "Customizing Designer Pro".

InfoBar

This is a special control bar. Its contents change when you select different tools. InfoBars specific to certain tools are described in their relevant chapters.

You cannot customize the InfoBar.

The InfoBar for the Selector Tool

Main toolbar

This is a control bar that initially contains all the tools available in Designer Pro (see left). You can customize the toolbar, or move tools to other control bars.

Some of the toolbar icons have a small triangle indicator in the bottom right corner. This indicates that there is a flyout bar containing more tool icons. Hold your mouse pointer over the icon to see the flyout bar appear. You can then move the mouse pointer over each icon in the bar to see a tooltip indicating what each one does.

Click on a tool to select it (some tools have keyboard shortcuts, too). For information on customizing control bars, refer to "Customizing Designer Pro".

Rulers

You can hide the rulers, change their zero point (origin), and use them to create guidelines. For more information, see Rulers (on page 47).

The status line

1 **line:** Click to select only this point handle; Drag to move; Shift-Clic   82,5, 379,5px
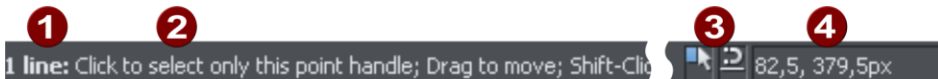
1 Selected objects
2 Available options
3 Indicators
4 Mouse pointer X-Y

This appears at the bottom of the window. The status line tells you about the selected objects, available options, live drag/snapping indicators, and the X/Y position of the pointer.

The indicators

These appear on the right of the status line:

Live drag indicator

This indicator shows whether live drag is active or not (it is active by default). Double click the indicator to toggle live drag on/off. When active, if you reposition, resize, or rotate an object, the whole object moves (not just an outline), making it far easier to judge the effect of your edits in real time. Drawing in the **FREEHAND**, **STRAIGHT LINE**, **QUICKSHAPE**, **RECTANGLE** and **ELLIPSE TOOLS** is also live with this option on. If your computer is unable to cope with a particularly complex document, it will automatically turn active drag off to ensure editing remains fast and efficient.

Snapped indicator

This indicator is active when **SNAP TO OBJECTS** is enabled (by default in web documents - click the **SNAP TO OBJECTS** button (shown on the lower left) to toggle off and on. Snap to objects allows you to see potential snapping paths and points relative to other objects and the page center and edges by showing blue snapping lines for snapping paths and red dots for points as you drag an object. For more information on snapping, refer to "Object Handling".

X/Y co-ordinates

Designer Pro shows measurements relative to the bottom left corner of the page or spread. However, this is configurable. For more information see "Object Handling (on page 92)".

Normal/full screen modes

In normal screen mode part of the window is occupied by the title bar, menu bar, and scroll bars. This can be inconvenient if you want the maximum possible editing area. Designer Pro has a second screen mode, fullscreen, which displays a more streamlined screen. You can configure each screen mode as you wish. For example, each can have its own configuration of the control bars. The configuration is remembered and applies whenever you swap between screen modes.

Normal/full screen is controlled by "**WINDOW**" > "**FULL SCREEN**" or right click and choose **FULL SCREEN** ("8" on the numeric keypad). To display the menu bar in full screen mode, move the pointer to the top of the screen.

Opening a second window

You may want to open a second window onto the same document to:

- Get an enlarged or reduced view of the document;
- Show another part of the document;
- Have two views of the same area at different quality settings.

Choose "**WINDOW**" > "**NEW VIEW**" to open another window. You can have several windows open on the same document.

Changing the zoom value

It's often useful to enlarge your view of the document to examine details or reduce your view to get an overall impression. Scalings above 100% show an enlarged view (similar to looking through a magnifying glass); below 100% a reduced view. The only change is your view of the document; the size of the document itself and the objects in it are unchanged (changing the document size is described later). To change the zoom value you can use either the **ZOOM TOOL**, mouse, or control bars.

Some shortcuts are available for quick setting of zoom values: The plain numeric keys (1, 2, 3, 4) set the zoom to between 100% and 400%. The number 5 key sets it to 50%.

Using the Zoom Tool

To zoom:

- Select the **ZOOM TOOL** from the **Main Toolbar**.
- Or press "Alt + Z" to toggle between the current tool and the **ZOOM TOOL**.
- Or press and hold down "Alt + Z" to temporarily swap to the **ZOOM TOOL** (release "Alt + Z" to return to the previous tool).
- Or press "Shift + F7" to select the **ZOOM TOOL**.

Changing the zoom value using the mouse

If you have a mouse wheel:

- Hold "Ctrl" and scroll your mouse wheel to change the zoom level.

You can also configure a mouse button to zoom in or out. Furthermore, you can change the mouse wheel action between scrolling and zooming in "**UTILITIES**" > "**OPTIONS**" > "**MOUSE TAB (ON PAGE 454)**" or right click and choose "**PAGE OPTIONS**" > "**MOUSE**" tab. The opposite action is available then by pressing "Ctrl".

Alternatively, select the **ZOOM TOOL**, and

- Click to zoom in (enlarge).
- "Shift + click" to reduce the zoom value (to see more of the document).
- Drag the mouse diagonally to create a rectangle. When you release the mouse button, the area within the rectangle is enlarged to fit the window.

Changing the zoom using the zoom InfoBar/control bar

There is a flyout bar on the standard toolbar which gives you quick access to zoom functions, without having to go into the **ZOOM TOOL**. There is also a flyout bar on the **ZOOM TOOL** icon on the main toolbar.

Hold the mouse pointer over the zoom icon on the standard toolbar to see the flyout bar.

To change the zoom:

Shortcut "Ctrl + R". Click the **PREVIOUS ZOOM** button. This is the zoom value before the current setting. Using this button lets you flip zoom in and out on the document. This is useful for switching between examining an area in detail and an overall view. The previous zoom value is stored for each window. You can swap between windows and the previous zoom values are retained.

Shortcut "1" Click the Zoom to 100% button. The zoom factor is changed to 100%.

Shortcut "Ctrl + Shift + J". Click the **ZOOM TO DRAWING** button. The window shows all the objects in the document.

Shortcut "Ctrl + Shift + P". Click the **ZOOM TO PAGE** button. The window shows the entire page or pair of pages.

Shortcut "Ctrl + Shift + Z". Click the **ZOOM TO SELECTION** button. The selected object or objects fill the window.

Type a value into the text box. Press "↵" to implement the change, or select preset zoom values including those above (page, drawing, selected, previous) in the drop-down menu.

Sliding the document within the window

The quickest and easiest way to move around the document is to use the middle mouse button (normally the mouse wheel) if you have one. Click and hold the middle button down and then move the mouse. Release the button to return to your previous tool.

To move the document within the window you can also:

- Use the scroll bars and arrows at the side of the window.
- Use the mouse wheel to scroll the document up and down ("Shift + mouse wheel" for left and right)

  - Or select the **PUSH TOOL** from the main toolbar ("H").

- Or press the space bar or "Alt + X" to toggle between the current tool and the **PUSH TOOL**.
- Or press and hold down the space bar or "Alt + X" to temporarily switch to the **PUSH TOOL** (release key(s) to return to the previous tool). You can then use the mouse to drag the document around in the window.

The **PUSH TOOL** InfoBar is the same as the **ZOOM TOOL** InfoBar (described above).

Displaying the scroll bars is optional. Choose "**WINDOW**" > "**BARS**" > "**SCROLLBARS**" to turn them off.

You can change the mouse wheel action between scrolling and zooming in "**UTILITIES**" > "**OPTIONS**" > "**MOUSE**" or right click and choose "**PAGE OPTIONS**" > "**MOUSE**". The opposite action is available then by pressing "Ctrl".

Changing the page size

You can change the size of the current page to a standard size:

1. Right click the page and choose "**PAGE OPTIONS**" > "**PAGE SIZE**" tab or choose "**UTILITY**" > "**OPTIONS**".
2. Choose the required paper size.
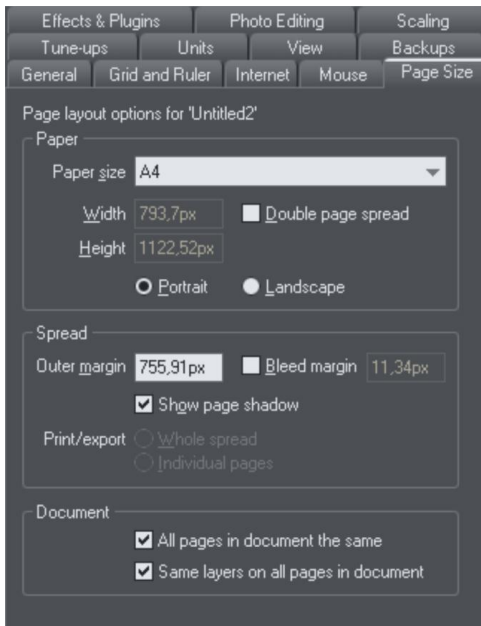
"Customizing Designer Pro (on page 447)" has full details of the options dialog box.

Paper size

A0	84.0 x 118.8cm	33.07 x 46.77inches
A1	59.4 x 84.0	23.39 x 33.07
A2	42.0 x 59.4	16.54 x 23.39
A3	29.7 x 42.0	11.69 x 16.54
A4	21.0 x 29.7	8.27 x 11.69
A5	14.85 x 21.0	5.85 x 8.27
A6	10.5 x 14.85	4.13 x 5.85
US legal	35.56 x 21.59	14 x 8.5
US letter	27.94 x 21.59	11 x 8.5
Fanfold	30.48 x 20.955	12 x 8.25

The above list is just a sample of the page sizes included in the list in the program. The list also includes commonly used sizes for web page documents, from 640 pixels wide for VGA screens up to 955 pixels wide for XGA.

For other page sizes, you can either choose the **CUSTOM** option from the paper size list and then enter the width and height. Or you can go into the **SELECTOR TOOL** and drag on the bottom edge or right edge of the page to change the page height or width respectively.
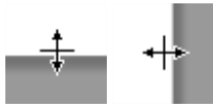
Position the mouse pointer over the edge of the page – you will see the mouse pointer change when you are in the right position, then click and drag.

The current page size is shown in the status bar as you drag.

Orientation

- Portrait orientation displays the longest sides vertically.
- Landscape orientation displays the longest sides horizontally. If you entered a custom page size, landscape turns the page sideways.

Outer margin

This lets you set the width of the pasteboard around the page or spread.

Bleed

Part of your drawing may continue over the edge of the page:
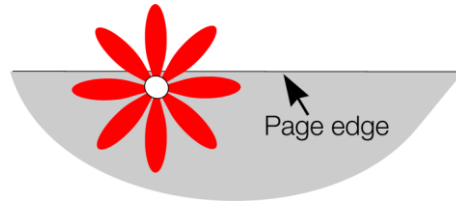
You only want to print the area on the page:
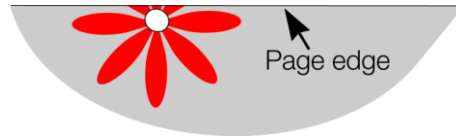
If the document is to be printed by a commercial printer, you must allow for mechanical tolerances of the printing machinery. You do this by allowing a bleed around your document. Everything in the bleed is printed,
but is trimmed off after printing.
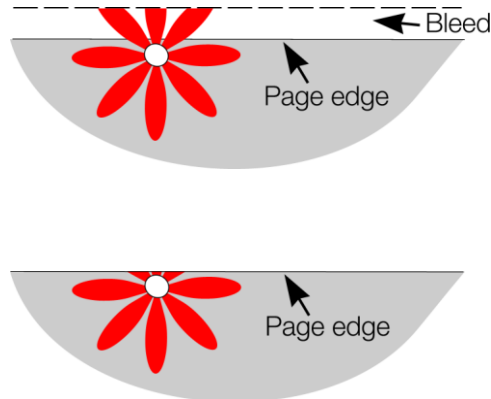
Traditionally bleeds are 0.5cm. If in doubt, ask your printing company.

Double page spread
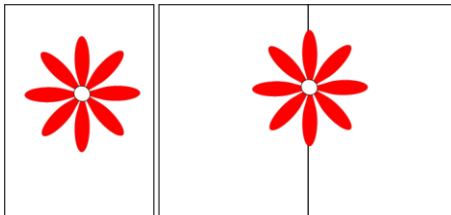
Your illustration may run across two facing pages in a multi-page publication. This is called a "double-page spread".

Single page   Double page spread

Multi-page Documents

Xara Designer Pro 7 supports multi-page documents to make DTP and website building projects simple.

DTP is the commonly used abbreviation for "desktop publishing" and describes the software-based creation of a printed publication.

You can easily create documents that are comprised of many pages, for example newsletters, PDF eBooks, brochures, small magazines or even complete HTML websites. When working on a website document, each page in the Designer Pro document is exported as one page of the website. You can easily keep track of all pages in the document/website, and easily move content from page to page.

By default when you open or create a new web document, Designer Pro shows only one page. Print documents however are displayed in multiple page view by default. Right click a page and select/deselect **MULTIPLE PAGE VIEW** to toggle between display modes.

Double page spreads in multi-page documents

Single   Double page

You can have single pages or double-page spreads in your multi-page document, as illustrated above, but only one or the other within a document.

To switch between single or double-page spreads, right click the page and choose "**PAGE OPTIONS**", and then check or uncheck the "**DOUBLE-PAGE SPREAD**" option.

If you change from a double-page spread to single pages in an existing document, your spreads will be split into single pages. Similarly, converting to a double-page spread will cause the pages in your document to be "paired up" into spreads.
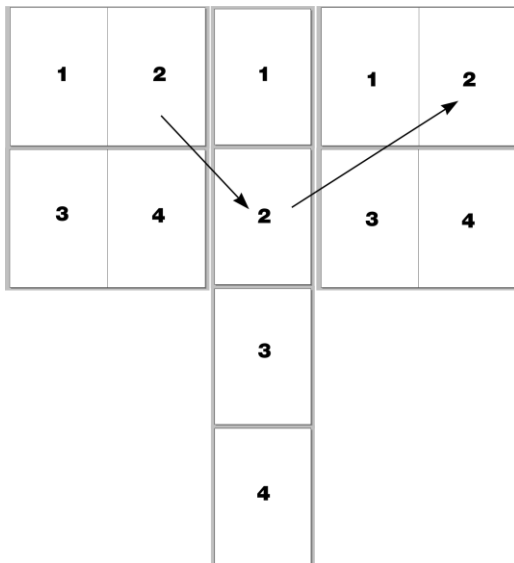
The result of converting a double page spread document to individual pages, then back again.

Note: it is possible for objects to overlap the pages of a spread (i.e. on pages 1 and 2 in the illustration above) but not over separate pages or spreads (i.e. 1 and 3; if you did want to do this, you would need to copy the object from page1 and paste it on to page 3 so that it appears there as well).

The current page

If you click a page in a multi-page document it will become the current page.

The current page is relevant when inserting, duplicating, or moving pages as described in the following sections.

The current page in the document is shown by indicators on the page's corners.

Inserting pages into your document

Right click a page and choose **NEW PAGE** or **NEW DOUBLE PAGE SPREAD**. A new blank page is inserted after the page.

or

Right click a page and choose **DUPLICATE CURRENT PAGE** or **DUPLICATE CURRENT DOUBLE PAGE SPREAD**. A duplicate of the current page is inserted after the page.
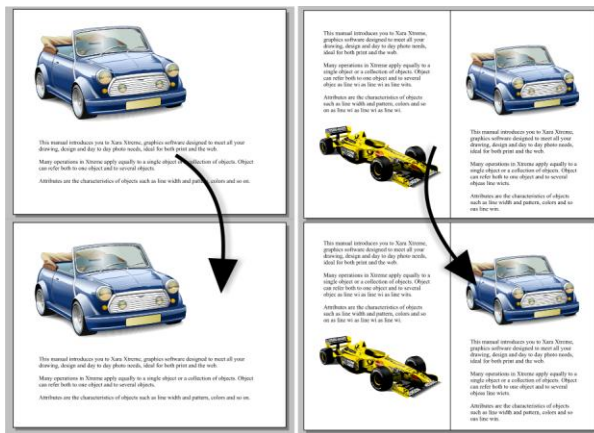
The new page will be the same as the original page, including its size and orientation, and will include all its content so that you can use it as a template for new content.

You can also use the Menu items under "**EDIT**" > "**PAGES**"

In addition, the standard toolbar has a flyout bar which allows you to add, duplicate and delete pages quickly.

Hold the mouse pointer over each icon in the bar to see a tooltip for each available operation. You can add a new blank page, duplicate the current page or delete the current page.

Copying and pasting pages

You can copy and paste whole pages in the current document or paste pages to another document. This copies the page dimensions, layers and other page attributes in addition to all the objects on the page.

To copy the current page, clear any current selection by pressing Esc or by clicking on an empty part of the page or pasteboard. The status line says "No objects selected". Right click an empty part of a page and choose **COPY PAGE** (or press "Ctrl + C").

When you paste a copied page, it is added immediately following the current page. To paste use "Ctrl + V" or right click the page and choose "**PASTE"** > "**PAGE"** from the context menu.

Note: If the document into which you paste a page has the **ALL PAGES IN DOCUMENT THE SAME** option enabled in "**FILE" > "PAGE OPTIONS"**, the dimensions of the pasted page will be overridden by the page dimensions of the document. So the new page will be given the same dimensions as all the other pages in the document.

New page from template

To insert a new page into your document using a pre-designed template, open the **DESIGNS GALLERY**, drag your chosen page template thumbnail, and drop it onto your document.

The new page is added immediately following the page that you drop on.

Duplicate a page

To create a copy of the current page after the page, right click the page and choose "**DUPLICATE CURRENT PAGE**".

You can also use this toolbar button:
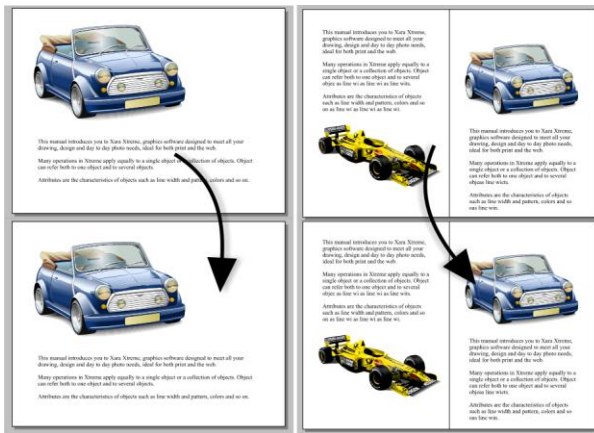
The new page will be the same as the original page, including its size and orientation, and will include all its content so that you can use it as a template for new content.

You can also duplicate a page using the **PAGE & LAYER GALLERY**. Select the page in the Page & Layer Gallery and click the **DUPLICATE** button. The new page is added after the current page.

Moving pages within the document

If you wish to change the order of pages in your document you can do so.

Right click a page and choose "**MOVE PAGE/DOUBLE PAGE SPREAD UP**" or "**MOVE PAGE/DOUBLE PAGE SPREAD DOWN**".
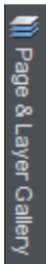
You can also change the order of pages in the **PAGE & LAYER GALLERY**.

Click the **PAGES** button in the **PAGES & LAYER GALLERY** so it shows a simple list of pages. Then you can drag and drop pages up and down in the gallery to change the page order.

Alternatively, to move the current page:

These options will be grayed-out of if you are on the first or the last page of the document respectively.

Removing pages from your document

To delete the current page from your document right click and choose "**DELETE CURRENT PAGE/DOUBLE PAGE SPREAD**".

Or to cut the current page, right click an empty part of the page and choose **CUT PAGE**.

Or select the page in the **PAGES & LAYER GALLERY** and click the **DELETE** button. The current page and all its content will be deleted. In the case of a spread, the entire spread will be deleted along with its content.

Navigating between pages

As well as the usual methods of moving through your document (such as scrollbars and the mouse wheel), there are also some other ways to navigate through the pages using the set of keys to the right of your keyboard:

Page up: Moves up the document. The amount moved depends on your zoom level. The further you are zoomed out the bigger the move.

Ctrl + Page up: Go to and center on the previous page.

Page down: Moves down the document. The amount moved depends on your zoom level. The further you are zoomed out the greater the move.

Ctrl + Page down: Go to and center on the next page.

Or click the up or down arrow on the status line: ▲▼ Page 2 of 9
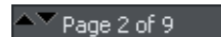
The status line is also useful for knowing what page(s) you are currently viewing.

Note: All of these movements are relative to the page you are viewing, not the current page.

The **PAGE & LAYER GALLERY** also makes it easy to go to find a specific page in your document. Click the **PAGES** button in the gallery, so it shows a simple list of pages. Then as you click on each page in the gallery, the document view is scrolled automatically to show that page.

Pages with different sizes and layers

You can choose whether the pages in your document should be all the same size or not, and whether or not all pages should have the same layers. See the Document section (on page 457) on the **PAGE SIZE** tab of the "**UTILITIES**" > "**OPTIONS**" dialog or right click a page and choose "**PAGE OPTIONS**".

Document
☑ All pages in document the same
☑ Same layers on all pages in document
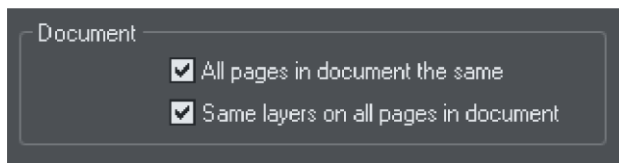
Naming pages

When creating website documents it is important to give each page a name, which is then used to name the HTML file which is exported for each page. If pages are not named the exported filenames will be distinguished from each other only by an index

number appended to the filename provided at the time of export. Eg. index.htm, index_2.htm, index_3.htm, etc. Using page names makes it easier to identify each page.

You can set the name of the current page using the Page tab of the "**UTILITIES**" > "**WEB PROPERTIES**" dialog. Set the **PAGE FILENAME** field. Or you can use the **PAGE & LAYER GALLERY**. Click on a page name to select it, then click again to start editing the page name.

Note that page names are forced to lower case and some characters are disallowed. These restrictions are intended to minimize the risk of web page filenames causing problems with some web servers and to eliminate case sensitivity problems when linking to the web pages.

Even if your document is not to be exported as a website, you may still wish to name your pages in order to make them easier to find and identify using the Page & Layer Gallery.

Page & Layer Gallery

You can also use the **PAGE & LAYER GALLERY** to conveniently manage the pages in your document. It allows you to view, add, duplicate, delete, re-order and rename pages all from a single view. For more information see **PAGE & LAYER GALLERY** (on page 142).

Saving the document

This section covers saving in Designer Pro's own format (native format). Refer to Importing and Exporting (on page 412) for details of exporting in other formats.

We recommend that you always save documents regularly. A complicated document may represent many hours of work and power failures or computer crashes always happen at just the wrong moment. Make sure you have the automatic backup facility turned on, so that regular backups are taken of your open documents as you work. See the Automatic Backups (on page 44) section below for details.

Save option (on the File menu)

("Ctrl + S", or click the **SAVE** button on the standard control bar.)

This provides a quick way to save a document using the same file name. The option is disabled unless the document has unsaved changes, i.e. you have made changes, but haven't saved them to disk.

For a new document that has not been saved to disk, this option acts like "Save as" (described below).

Save as (on the File menu)

This opens a dialog box letting you save the document under a different name or to a different directory. This option is useful for making backups of Designer Pro documents.

Save all (on the File menu)

This acts like a series of **SAVE** or **SAVE AS** commands to save all currently open files.

Support folders

Some documents which are used to create websites need to reference external files which cannot be embedded in the .xar design file. For example you may have a Flash (.swf) file which is used on your website and so you'll want to keep that file with the design file because you can't export a fully working website from the design file without also having the Flash file. And if you were to send the design to someone else, or move it to another computer, you'd want the referenced Flash file to go along with the main design file.

So Xara Designer Pro 7 uses an optional "support folder" right alongside the design file to hold these important external files.

Support folder naming

The design file and its corresponding support folder are tied together by their names. The support folder for "mySite.xar" is always "mySite_xar_files". This naming convention makes it obvious which support folder belongs to which design file. So if you rename, copy or move a design file, always remember to do the same to the corresponding support folder, if it exists! And if you send a design file to someone else, send any support files folder along with it.

If you load a design that has a support folder, and then subsequently do a **SAVE AS** to save another copy of that design, Xara Designer Pro 7 will copy the whole support folder too, if there is one.

Support folder contents

When you use the Placeholder Tab (on page 330) of the Web Properties dialog to insert a reference to an external file into your website design (using the Browse buttons), Xara Designer Pro 7 will automatically copy that file into the design's support folder for you. If the support folder doesn't already exist, it will be created.

Note that if you subsequently change a placeholder object to reference a different file, the original file will not be automatically deleted from the support folder. So if a file is no longer needed, you need to remove it manually.

You can also manually copy any files you like into the support folder of a design, creating the folder manually if required. Xara Designer Pro 7 will never delete any files from it, whether or not they are referenced from the corresponding design file. The reason for this is that there are many different ways in which a design may reference an external file. For example you may insert a complex piece of HTML code into your design, which somewhere references an external file which you've placed in the support folder. Or perhaps one of the external files references another external file! There's no way that Xara Designer Pro 7 can be sure that a file is not used by the website, so it never deletes files.

Exporting websites with support folders

When you export a website document, any files in the corresponding support folder are copied to the folder which contains all the generated images for your website. So if you export "mySite.xar" to "index.htm", then any files in folder "mySite_xar_files" are copied into the "index_htm_files folder".

Closing the document

To close the document:

- Choose "**FILE**" > "**CLOSE**".
- Or press "Ctrl + F4", or "Ctrl + W".
- Or click the smaller, lower X of the two in the top right hand corner.

Automatic Backups

Xara Designer Pro 7 will optionally save regular backup copies of your open documents while you work. This helps you avoid losing your work in the event of a power failure or other abnormal program closure. It's also useful if you decide to return to an earlier version of your document, should you want to do so.

To turn automatic backups on or off, open the "**UTILITIES**" > "**OPTIONS**" dialog and choose the **BACKUPS** tab.
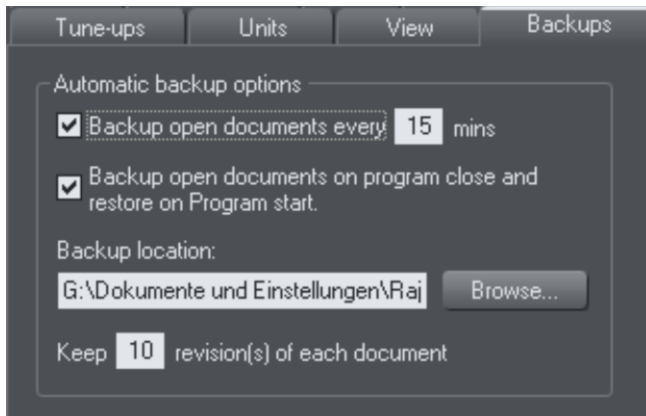
Backup open documents

To turn backups on select this checkbox and choose how often you would like backups to be taken. The suggested period is 10 mins, which means each open document will be backed up if it's more than 10 mins since the last backup of that document was taken (or since the document was created or opened).

Note that once the configured period since the last backup has expired, the next backup is only saved when the program has been idle for at least 15 secs. This is to avoid interrupting your work as much as possible and to avoid backing up the document while it is being actively modified. In normal use it's unlikely that there won't be regular

inactive periods of 15 secs or more, allowing a backup to be taken soon after it is due.
  But note that if you are actively editing for an extended period of time it could be significantly longer than the configured backup period before the next backup runs.

The Automatic Backup facility does not save modifications to open 'edit inside' sub-documents. Only the parent main document is saved when a scheduled backup runs, in its current state without the unsaved group edits. For this reason it's recommended that you save 'edit inside' edits back to the parent document regularly. When a backup is taken, you'll see the save progress bar appear at the bottom of the Xara Designer Pro 7 window while the save is completed.

Backup location

User the **BROWSE** button if you want to change the folder where your backups are stored.

You can access the backup documents saved here at any time using the "**FILE**" > "**OPEN RECENT**" > "**BACKUPS**" menu option. This opens a file dialog onto your backup folder so that you can browse, open, or delete any of your backup files.

Revisions

By default up to 10 revisions of each design are kept in your backups folder, but you can choose to change this number in the revisions field. Older revisions in excess of the number chosen are deleted automatically. Each backup file is named using the name of the document from which it is taken, suffixed by the date and time at which the backup was taken.

Warning: Note that if you have multiple documents that share the same filename in different folders on your computer, their backups will also share the same names in the backups folder. Therefore try and use unique filenames for your designs to avoid the backups of one design overwriting another with the same name.

Untitled documents

Documents that you have created and not saved are backed up using the name "Untitled" followed by a number and the date/time. This name and number corresponds to those shown in the titlebar when you are editing new unsaved documents.

Warning: Since all new unsaved documents are named Untitled1, Untitled2, etc. backups of these documents are likely to be overwritten relatively quickly. Therefore you should always save important documents with a unique name of your choice, so that you can easily identify backups of that document in the backups folder.

Backup open documents on program close

The Backups tab in the Options dialog also allows you to turn on **AUTOMATIC BACKUP AND RESTORE**. When this option is on, when the you close Xara Designer Pro 7 you will not be prompted to save any modified documents that you have open. Instead all open documents are backed up to the backups folder and the program closes. Then when you next start the program, the same documents are automatically reloaded so that you can continue working where you left off.

Note that if you have any "Edit inside" sub-document views open, these are silently closed and saved back to the main document when the program is closed, and the main document is backed up. The 'edit inside' sub-document views are not re-opened on next program start. See editing inside groups (on page 110).

Recovering from abnormal program closures

If you have automatic backups turned on and the program closes abnormally (perhaps due to a power failure for example) the program should detect this when it is next restarted. It will then offer you the chance to restore the most recent backup version of each document that was open at the time of the last backup. Abnormal closure will not be detected if no automatic backup completed since the last normal program closure.

Backups on system shut down

If you shut down Windows without first closing the program, all open documents are backed up to the backup folder even if 'Backup open documents on program close' is not turned on. This allows system shutdown to proceed without Xara Designer Pro 7 interrupting it by prompting you about unsaved or modified documents. On next program startup you'll be asked whether or not you want to restore the documents that were open at the time of the system shut down.

Recovering backups

You can access your document backups using the "**FILE**" > "**OPEN RECENT**" > "**BACKUPS**" menu option. This opens a file dialog onto your backup folder so that you can browse, open, or delete any of your backup files. It's a good idea to use this file dialog to clear out any old unwanted backups periodically. Note that when you load a backup document, it is not automatically associated with the design file from which the backup was taken. It's treated as an independent document in its own right. Therefore if you decide to keep a backup document you should use "**FILE**" > "**SAVE AS**" to save it elsewhere with a suitable name.

On-screen grid

To help you lay out your document, Designer Pro can display a grid on the screen (the grid appears only on the screen; it is never exported or printed.) The grid helps you align objects (similar to using graph paper as a drawing aid). Right click and choose "**SHOW GRID/GUIDES**" > "**SHOW GRID**" to turn display of the grid on/off or choose "**SNAP TO**" > "**SNAP TO GRID**". You can also choose "**WINDOW**" > "**SNAP TO GRID**". The grid points then act like magnets, and as you move objects, they snap to the nearest grid point. By default web documents have snap to grid on, with a 1 pixel grid.

The type of grid (isometric/rectangular), the 0,0 point (the origin), and spacing of grid points is controlled by the **GRID & RULERS TAB** (on page 452) of the options dialog box. Any changes you make apply only to the selected document.

Magnetic object snapping is also enabled by default in web documents. Object snapping is a very powerful way of accurately aligning lines, points and the edges of objects to any other object so they exactly touch. You can even use this to align the centers of objects, or align objects to the center of the page, or align them horizontally and vertically anywhere in the middle or edge of the page.

To toggle object snapping, click the **SNAP TO OBJECTS** button or right click and choose "**SNAP TO**" > "**SNAP TO OBJECTS**". You can also choose "**WINDOW**" > "**SNAP TO GRID**".

Refer to Object Handling for details on snapping to grid and snapping to objects.

Rulers

Rulers are turned off by default. To turn them on:

- Right click and choose "**SHOW GRID/GUIDES**" > "**SHOW RULERS**" to turn display of the grid on/off.
- Press "Ctrl + Shift + R".
- Or select "**WINDOW**" > "**BARS**" > "**SHOW RULERS**".

Designer Pro uses rulers to:

- Control text margins, tabs and indents (on page 183) in the **TEXT TOOL**.
- Let you know which part of the page you are viewing;
- Show the current pointer X/Y position;
- Apply guidelines. If "**WINDOW**" > "**SNAP TO GRID**" is active, guidelines snap to divisions on the ruler. For more information on guidelines, refer to the guides & guidelines section in "Object Handling".

As you create or scale objects, you can use the rulers to check their size. You can also more accurately use the **SELECTOR TOOL** (see "Selecting objects (on page 86)" for more information). Rulers are displayed at the left and top of the window. A dotted line on each ruler follows the current pointer position. The units and number of divisions on the rulers are the same as those set for customizing the on-screen grid. These are set using the Grid & Ruler Tab (on page 452) of the options dialog box. The current units and any scaling factor are displayed on the right hand end of the top ruler.

Displaying/hiding rulers

Right click and choose "**SHOW GRID/GUIDES**" > "**SHOW RULERS**" ("Ctrl + Shift + R") to turn rulers on/off. Any change applies to the current window and subsequent windows you open. It does not affect other open windows.

Changing the ruler zero points

It is often easier to measure objects if you align the origin (0,0) point of the rulers with the object. To move the origin (0,0) point, drag the square at the intersection of the two rulers.
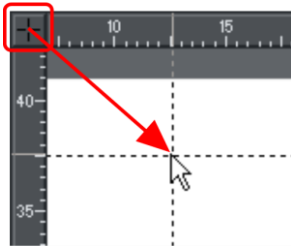
You can drag vertically or horizontally along the rulers or over any part of the Designer Pro editing window. As you do, a dotted line will outline the new position.
This also moves the grid origin so that divisions on the ruler always align with the grid.

You can also move the zero point under the **GRID & RULER** tab (on page 452) of the Options dialog.

Measurement units

You can define the units in which to display measurements. The standard set is:

pixels	pix	millimeters	mm
centimeters	cm	meters	m
inches	in	feet	ft
yards	yd	points (1/72nds inch)	pt
picas (1/6ths inch)	pi	millipoints	mp (see below)
miles	mi	kilometers	km

A few dimensions (such as kerning and tracking in the Text Tool) use other measurements. Miles and kilometers are intended for use with measurement scaling (described later).

The default display units are:

- points (1/72 of an inch) for text and line widths;
- centimeters for most measurements.

You can enter dimensions in the other units by using a suffix or prefix (dependent on the unit type). For example, 2.5in for 2.5 inches. You can enter dimensions using two units. For example, 2pi 4pt for a dimension of 2 picas, 4 points. Note that units entered will be converted and displayed in your default unit.

Millipoints

A millipoint is 1/1,000th of a point (1/72,000th of an inch). All Designer Pro measurements are stored internally in millipoints and then converted to the appropriate units when displayed. Dimensions other than millipoints are rounded if necessary. If you want to work in exact units without rounding, display measurements in millipoints.

"Customizing Designer Pro (on page 447)" has full details of the options dialog box.

Options dialog box

Measurement units for the selected document are controlled by the Options dialog. Choose **"UTILITIES" > "OPTIONS"** or right click a page and choose **"PAGE OPTIONS" > "UNITS"**.

Changing the default display units

Display the options dialog box. If necessary, click the units tab.
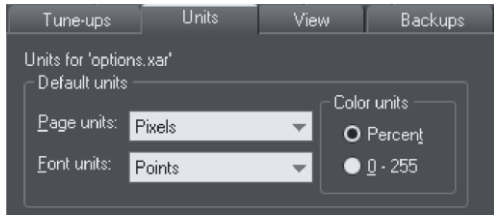
Font units are used for text sizes.
Page units are used for other measurements.

Creating a new unit

You may want to specify measurements in units not provided as standard. For example, racecourses are measured in furlongs (220 yards). Or a financial diagram may use US$. Display the **OPTIONS** dialog box. If necessary, click the **UNITS** tab.

1. Click **NEW UNIT**. The unit properties window will appear:
2. Type in the unit name (e.g. US dollars). This name appears in menus.
3. Type in the **ABBREVIATION** ($). This is used when entering or displaying the units.
4. Select **PREFIX** ($ 12.34) or **SUFFIX** (12.34 $) as appropriate. Designer Pro must be able to relate the new unit to an existing unit. Type the relationship into the "**IS EQUIVALENT TO**" field. For example, if you had used furlongs, then 1 furlong is equivalent to 220 yards.
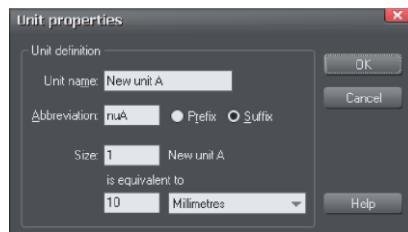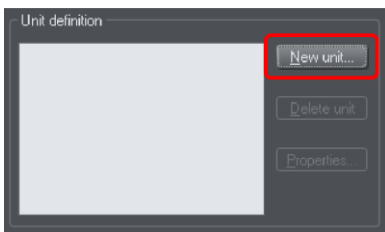
For units that do not relate to distance (for example US$), type in an appropriate scaling factor. For example, 10US$ as equivalent to 10 millimeters.

Deleting a unit

You can only delete a unit you have created, not a standard unit. Display the **OPTIONS** dialog box. If necessary, click the **UNITS** tab.

1. Choose the unit you want to delete from the **UNIT DEFINITION** list.
2. Click **DELETE UNIT**.

Applying a scaling factor

For example, you may want to specify kilometers when drawing a map. You can apply a 1:10,000 scaling factor to kilometers. A line 10cm long on the map is a dimension of 1km.
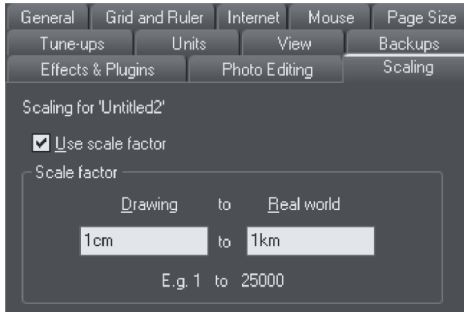
1. Choose "**UTILITIES**" > "**OPTIONS**". If necessary, click the **SCALING** tab.
2. Select **USE SCALE FACTOR**.
3. Type in the appropriate scaling. For example, 10cm to 1km.

Alternatively, type 1 into the drawing field and 10,000 into the real-world field.

Deleting a scaling factor

This is similar to applying scaling:

1. Choose "**UTILITIES**" > "**OPTIONS**". If necessary, click the **SCALING** tab.
2. Deselect **USE SCALE FACTOR**.
3. Click **OK**.

Decimal point & thousands separator characters

The characters used as a decimal point (1.23) and as a thousands separator (1,000) are those set in the Windows Control Panel. (In Windows XP, the relevant section is the "Regional and Language options".) Similarly, the number of digits following the decimal point is also set in "Regional and Language options".

View quality slider

This slider (on the **STANDARD** control bar) affects how the document appears on the screen. It has no effect on the actual document or on printing.

There are 5 different quality settings:

1 **OUTLINE ONLY**. This is now fully anti-aliased for higher quality screen display.

2 **OUTLINE WITH BLEND STEPS**.

3 **FULL COLOR** (no anti-aliasing).

4 **HIGH QUALITY** (full anti-aliasing and image smoothing)

5 **VERY HIGH QUALITY** Bi-cubic photo display considerably improves the quality of scaled down photos.

The default quality level is **VERY HIGH QUALITY** which means the document is displayed on screen exactly as it will be printed (except that the monitor is lower resolution than a printer.) Anti-aliasing gives a much smoother and more accurate screen display, especially when displaying small details. However, sometimes objects can look slightly blurred.

FULL COLOR shows the document colored, but with anti-aliasing turned off. On the **OUTLINE** setting only the outlines of the shapes appear (they are drawn as wire frames). This makes it easier to select objects hidden behind other objects.

OUTLINE WITH BLEND STEPS is particularly useful for seeing outlines of the steps of a blend.

You can also change these settings with "**WINDOW**" > "**QUALITY**". There are toolbar buttons available for the five quality settings on the Window toolbar.

Refer to "Blends (on page 239)" for more on how the quality setting affects the display of blends.

The constrain key

The "Ctrl" key has a special function in Designer Pro. It constrains the action of the current operation in some way. For example, normally you can rotate an object to any angle. But in Designer Pro, if you hold down "Ctrl" while you rotate an object, and the rotation is constrained to preset angles.
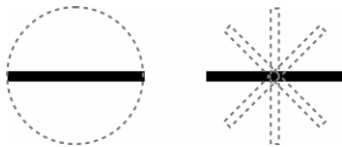
The black line on the left can be rotated to any angle within the circle. On the right is the same line, but with "Ctrl" held down it can only be rotated to the positions indicated.

Similarly, constraining a rectangle creates a perfect square and constraining an ellipse creates a perfect circle. Release "Ctrl", and they will not be constrained.

The constrain angle feature is defined in "**OPTIONS**" > "**GENERAL**" > "**ANGLE CONSTRAINT**" (on page 451) .

Galleries

Xara Designer Pro 7 uses galleries to provide convenient access to external libraries of content like templates, fonts, colors, clip-art, line attributes, and bitmaps/photos. This section of the manual gives general information on features which are common to multiple galleries. Individual sections of this manual describe features specific to a particular gallery.

When you create a new Designer Pro document, the following gallery tabs are displayed in the gallery bar to the right of the workspace in the following default order.

1. Designs
2. Page & Layer
3. Animation Frame
4. Bitmap
5. Line
6. Fill
7. Font
8. Color
9. Name

Note: The ANIMATION FRAME gallery is only displayed in animation documents. When you open an animation document, the ANIMATION FRAME gallery is displayed already open on the right of the workspace.

Some galleries view objects held in libraries external to the document:

FONTS, DESIGNS, FILL.

Other galleries relate to objects in the document, or options for those objects:

COLOR, BITMAP, LINE, PAGE & LAYER, NAME.

Displaying a gallery

1. Click or hover the mouse pointer over the vertical tab for the gallery to the right of the gallery bar. The gallery opens automatically. When you move the mouse pointer away from the gallery, it automatically closes.
2. To keep a gallery open while you work, click the Auto Hide (pin) button in its top right corner. The Auto Hide button changes so the pin points downwards to indicate that the gallery is now 'pinned' to the workspace.
3. To close a 'pinned' gallery, see Closing a Gallery.

Unpinned - gallery closes when you move the mouse pointer away from the gallery.

Pinned - gallery stays open when you move the mouse pointer away, and can also be moved and docked (on page 53) elsewhere.

Note: By default the Line, Fill, Fonts, Color and Name Gallery do not display their title, just their individual icons, until they have been opened. Designer Pro always displays the title of the last gallery that you have viewed.

Moving and docking a gallery

You can 'detach' any gallery from the gallery bar and move it to a more convenient location anywhere in the workspace. You can also dock the gallery (or a gallery group, see Grouping Galleries) in the top, bottom, left or right of the workspace.
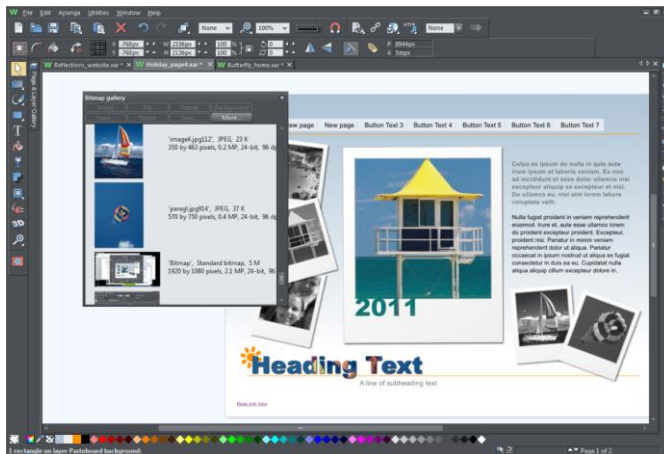
You can move a gallery anywhere in the workspace

To move a gallery:

1. Open a gallery and click the Auto Hide button to pin the gallery. The button changes to a downward-pointing pin to indicate that the gallery can be moved and pinned elsewhere.
2. Click and drag on the gallery's title bar to move it around. You can either leave the gallery 'free floating' anywhere in the workspace or dock it in a new location.

If you move any of the following galleries, the others accompany it as a group. Access an individual gallery by clicking its tab at the bottom of the group or click and drag a gallery tab to move it away from the group.

- Bitmap
- Line
- Fill
- Font
- Color
- Name

When you click and drag on a dockable gallery's title bar, a number of arrows appear on the workspace, indicating where you can dock the gallery.
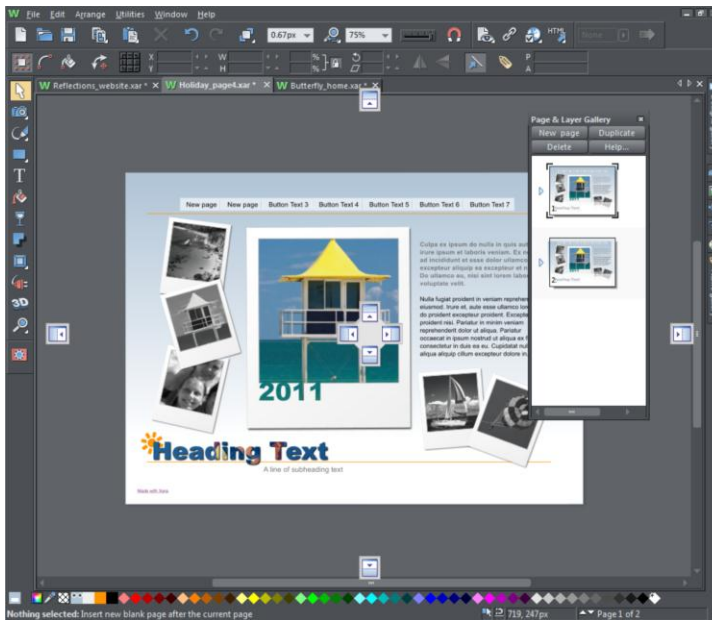
Dragging a gallery causes docking arrows to appear in the center, top, bottom, left and right of the workspace. Dock the gallery by dragging it to an arrow.
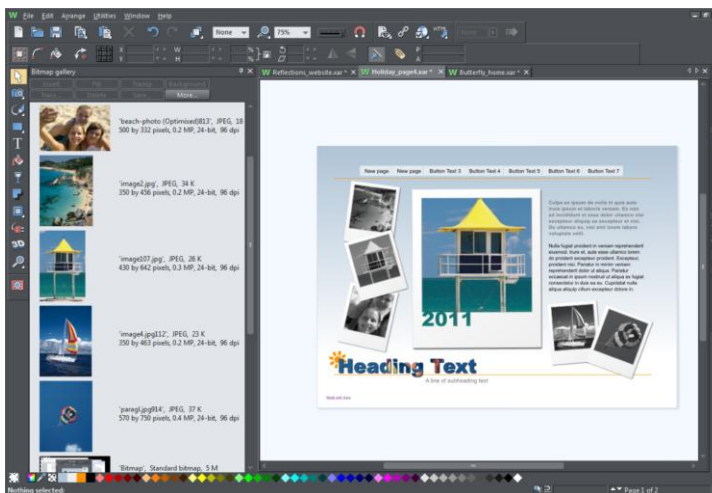
Example of a gallery that has been docked to the left of the workspace

To dock a gallery:

1.   Click and drag the gallery to the arrow pointing towards the location where you want to place the gallery. For example, if you want the gallery at the top of the screen, move it to the upward pointing arrow at the top of the workspace.

2.   When the mouse pointer reaches the arrow, a gray transparent box highlights the gallery's new location.

3.   Let go of the mouse button to dock the gallery. Now when you close or 'auto hide' the gallery, its tab will be displayed in the new location.

4.   Hover over or click its tab to reopen the gallery.

Note: To move all galleries back to their default position, choose **CONTROL BARS** from the **WINDOW** menu, click **GALLERIES** then **RESET**.

Grouping galleries

You can also group galleries and move the whole group to a new location if, for example, you are working primarily with 2 or 3 galleries that you want to be close to each other and easily accessible.
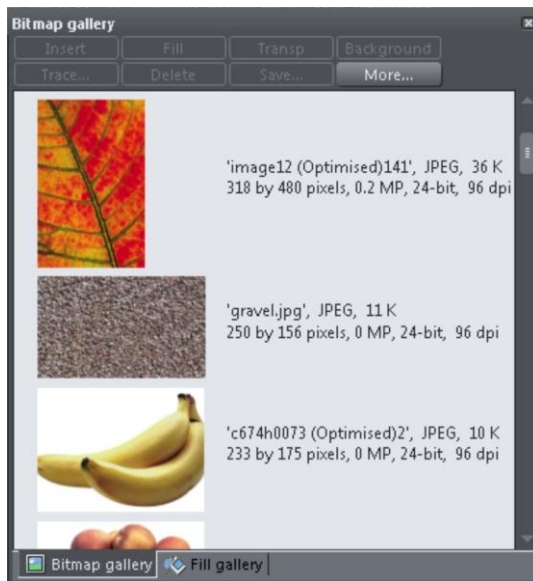
Example of a gallery group with gallery tabs at the bottom - click and drag to add a gallery to or remove a gallery from the group.

To group galleries:

- Disable the **AUTO HIDE** button (pin) on one of the following galleries: Bitmap, Line, Fill, Font, Color and Name gallery.The gallery is automatically grouped with the other five galleries, displayed as tabs at the bottom of the group. Click on a tab to open a gallery in the group.

To group a gallery with one previously docked:

- Click and drag the second gallery to the four arrows in the workspace center. Let go of the mouse when you are over the arrow pointing towards the previously moved (first) gallery. The second gallery is now grouped with the first.

To add a gallery to an existing group:

1. Click and drag a gallery group over the center of the 4 docking arrows in the center of the workspace. When you subsequently click and drag the gallery you want to add over the group you want to add it to, the four docking arrows now appear in the center of the gallery group.
2. Drag the gallery to the center of the arrows within the group. The gallery is added to the group and its tab displayed at the bottom of the group. When you dock a gallery group, all galleries within the group are also docked.

To remove a gallery from the group, click its tab and drag to move it away. When you auto hide or close a gallery group, all gallery tabs in the group are displayed in the workspace border nearest to the last docking location.

Using galleries

To fold or unfold a section in a gallery:

- Click the **FOLD/UNFOLD** icon.
- Or double click the title strip.
- Or right click a section to display a pop-up menu. Select **FOLD/UNFOLD** section. The pop-up menu also has options to scroll to the previous section or next section.
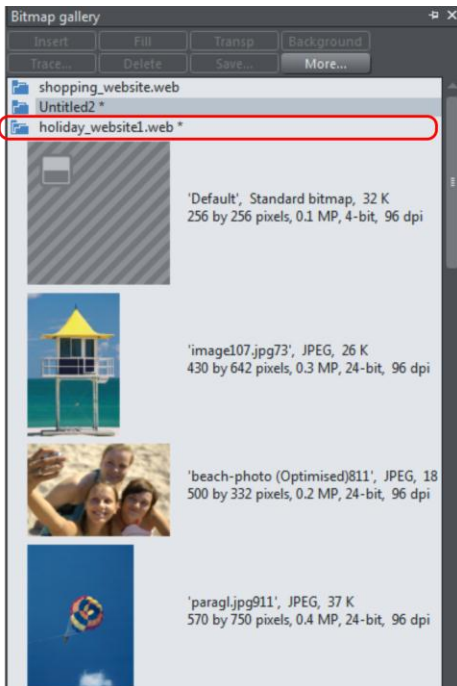
This illustration shows the gallery is unfolded. Other galleries are similar.

The buttons along the top depend on the gallery (e.g. **FILL** and **TRANSP** are specific to the **BITMAP GALLERY**.) However, most galleries have these buttons:

APPLY applies the selected item in the gallery. Click on an item to select it.

MORE opens a menu where you can then choose:

- **FIND** is described later in searching for an item name.
- **SORT** is described later in re-ordering items in a gallery.
- **PROPERTIES** provides control over size of the icons and amount of information displayed in the gallery.
- **ADD** (clipart, fill, and fonts galleries) is described later in adding to a gallery.
- **REMOVE** (clipart, fill, and fonts galleries) is described later in deleting sections from a gallery.

Selecting items

To select an item:

- Click an item to select it.
- Or click an item, then "Shift + click" on another item; all items in between the two points will be selected.
- Or "Ctrl + click" to add that item to the selection.

Re-ordering items in the gallery

In some galleries, "**MORE**" > "**SORT**" opens a dialog box. You can sort by name and, depending on the gallery, by other criteria. The primary key controls the initial sort. For some sort parameters such as file type or name length, there may be two or more files with the same type or name length. These files can be further sorted using the secondary key.

Searching for an item name

You can search, for example, for all names containing the word red:
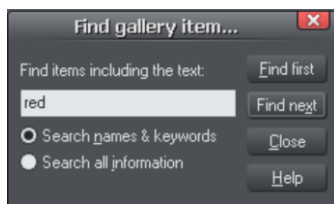
1. Choose "**MORE**" > "**FIND**".
2. Type "**red**" into the text box.
3. Select "**SEARCH NAMES & KEYWORDS**" to search only the item names, e.g. file, color, etc., or "**SEARCH ALL INFORMATION**" to search the names and keywords available in some galleries.

Adding to a gallery

You may want to add extra items to these galleries (**DESIGNS**, **FILL** & **FONTS** galleries only). To do this:

1. Copy the files you want to add into a new directory (folder) using the Windows Explorer.
   - For the **DESIGNS GALLERY** these files can be any of a wide range of vector or bitmap file types.

      -   For the **FILL GALLERY** they can be any of the bitmap formats supported by Designer Pro (listed in importing and exporting (on page 412)).

      -   For the **FONTS GALLERY** they can be Adobe Type 1 or TrueType fonts.

2.   In the appropriate gallery, click the "**DISC DESIGNS/FILLS/FONTS**" button. This opens a dialog box.
3.   Use the dialog box to select the directory you want to add.
4.   Click "**ADD**". This creates a new section in the gallery.

If you later want to add more items to the folder:

1.   Copy the new files into the existing folder.
2.   In the gallery, click "**DISC DESIGNS/FILLS/FONTS**". This opens a dialog box.
3.   Use the dialog box to select the folder you want to add.
4.   Click "**UPDATE**" to update the section in the gallery.

Deleting sections from a gallery

To delete a section from a gallery (**CLIPART**, **FILL** & **FONTS** galleries only):

1.   Click on the title strip of the section or sections you want to delete.
2.   Click "**REMOVE**".

If you later want the section again, add its folder to the gallery (described earlier).

Closing a gallery

By default a gallery's **AUTO HIDE** button is enabled (i.e., the gallery's **AUTO HIDE** button in the top right corner is unpinned), so that the gallery closes automatically when you move the mouse pointer away from it.

However if you have disabled the **AUTO HIDE** button (pinned the gallery), you have to close the gallery manually.

To close a free-floating gallery, click the **CLOSE** button in the top right of the gallery. The gallery closes and its tab is displayed in the gallery bar.

To close a docked gallery, click the **AUTO HIDE** (pin) or **CLOSE** button in the top right of the gallery. The gallery closes and its tab is displayed in the workspace border where you docked it.

To re-open the gallery, hover over or click on its tab.

Note: To remove a gallery completely, choose **GALLERIES** from the **UTILITIES** menu and choose the gallery you want removed.

The Name Gallery

The **NAME GALLERY** gives you information about the current document, and is an easy way to manage the various elements of your document. It lists:

- **Named objects in the document** – you can name objects using either the **NAME GALLERY** or the **SELECTOR TOOL**.
- **Fonts used in the document** – if you have text in your document, then the used fonts will be listed.
- **Bitmaps used in the document** – a list of bitmaps currently used.
- **Colors used in the document** – The **USED COLORS** section of the **NAME GALLERY** lists the colors used by the current document, or by the current page of the current document in the case of multi-page documents.

For more on fonts see "Text Handling (on page 174)". For more on colors see "Color Handling (on page 156)". For more on bitmaps see "Bitmap Handling."

To display the **NAME GALLERY**:

- Choose "**UTILITIES**" > "**NAME GALLERY**" ("Ctrl + Shift + F9"),
- Or click the **NAME GALLERY** button on the **GALLERIES** bar.
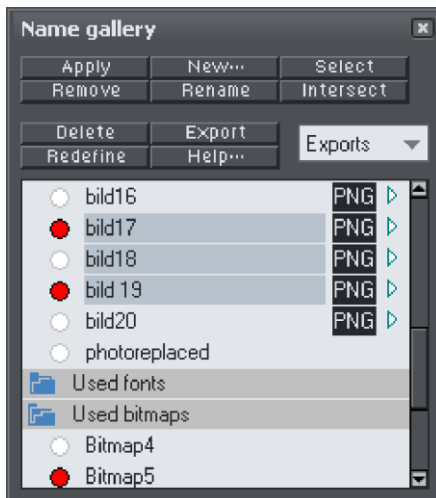
- **APPLY** is used to give names to objects.
- **NEW** creates a new name and applies it to the selected objects.
- **SELECT** selects (in the document) the objects that have any of the selected items (name, font, bitmap or color).
- **REMOVE** deletes a name from any objects using that name, but do not delete it from the **NAME GALLERY**.
- **RENAME** changes the name shown in the **NAME GALLERY**.
- **INTERSECT** selects the objects that have all the selected items (name, font, bitmap or color).
- **DELETE** deletes a name from the **NAME GALLERY** and from any objects using that name.
- **EXPORT** exports the selected named objects.
- **REDEFINE** changes which objects use a name.

Naming objects

You can apply names to any object in Xara Designer Pro 7 using the "Apply, remove or inspect names of objects" button on the **SELECTOR TOOL** infobar. Alternatively right click an object and choose **NAMES** from the drop-down list.

Naming is a general mechanism which has a variety of uses, some of which are described below. Most commonly names are used to form loose sets of objects.

Example uses of names

- Record information about the objects, e.g. what they are used for;
- Select the objects. This is particularly useful if the objects are widely separated or in a complicated drawing. One click and you select just those objects that share a name;
- Selectively export parts of the document. This is particularly useful for web pages with complex graphics, which are often split into "slices" (or small parts) on the web page;
- For linked stretching where one named object can automatically stretch another named object. For example, changing the text on a button can automatically change the width of the button.
- **Flash Animations:** Names are used in flash animations to mark objects which are to be tweened by the Flash exporter. See the Flash chapter (on page 375) for full details.

This dialog is modeless, so you can change the selection while the dialog is displayed. It shows the names for the current selection. The text field at the top of the dialog shows you how many objects are currently selected.

Adding names

To add a name to an object, select the object and open the **NAMES** dialog using the button on the **SELECTOR TOOL** infobar or right click on the object and choose **NAMES...**

Type the new name into the **APPLY NAME** field, or use the drop down list on the same field to select a name which is already used elsewhere in the current document. Click **ADD**. You should see the name appear in the **NAMES APPLIED** list.

Names applied

The **NAMES APPLIED** field shows you the names applied to the current selection. If more than one object is selected, a list of names is only shown if all objects in the selection have exactly the same set of names applied. Otherwise "<many>" is displayed, indicating that there are differences in terms of the names applied to different objects in the selection.

To remove a name from the selected object(s), click the name in the **NAMES APPLIED** list to select it and then click the **REMOVE** button.

Exports, slices, and stretches properties

Exports ▼ In this list box you can select which property of the used names are shown in the Name Gallery.

Exports
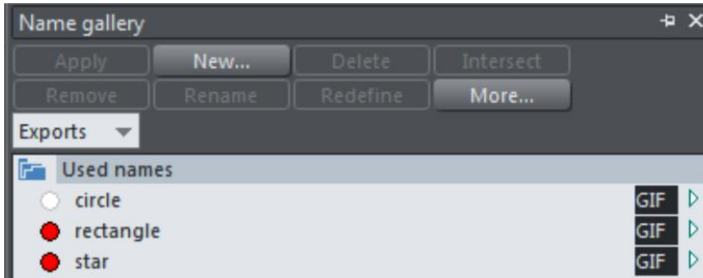
These options are used when export graphics as a series of slices (on page 422) and for batch exporting.

A click on the arrow displays a dialog box that lets you select the file name, destination folder and file format to export in. By default the file name is the same as the name in the Name Gallery. Note that clicking "**APPLY**" just stores the selected options, and that it doesn't save a bitmap; do this by exporting the image with the **EXPORT** button.

PNG (Extension displayed depends on the file format chosen.) Click the box to open the according "Export dialog (on page 439)" to specify more details. Click "**APPLY**" to store the selected options.

Slices

When you choose the **SLICES** check box those named objects slice underlying objects. For more information on image slicing read the Image slicing (on page 422) section in the "Web Graphics & Websites" chapter.

Note: When exporting images as slices, the chosen destination folder from the exports property is ignored. All the sliced graphics must be in the same folder, and the destination folder is that selected for the HTML file when you export the slices.

Stretches

You can use named objects to stretch other named objects, e.g. the text on a button. Both the text and the button are named objects, with the text flagged as stretching the button. When you change the length of the text (for example by typing in more characters), the button automatically resizes to match.

When you choose **STRETCHES** properties, a check box to the right of object names shows those objects you want to stretch (like the button in the example above). The arrow to the right of the check box shows if the stretching options are set up (solid arrow) or not (hollow arrow). Click the arrow to display the **EXTEND DIALOG BOX** which lets you select those objects from the list of named objects to control the stretching. (In the above example you would select the name for the text.) For each direction you can select if the size changes in the same direction as the controlling object (**EXTEND**) or equally from the center (**SCALE**).

Undo and Redo

The undo command

"**UNDO**" cancels the effects of the last operation. To undo an operation:

- Click **UNDO** on the standard control bar.
- Or choose "**EDIT**" > "**UNDO**" (the exact wording tells you what the next undo step is, i.e. undo scale).
- Or press "Ctrl + Z".
- Or press the comma key (in any tool except the **TEXT TOOL**).

You can repeat the undo command to step back through the sequence of previous operations.

The redo command

Redo cancels the last undo command. To redo the last operation:

- Click the **REDO** button on the standard control bar.
- Or choose "**EDIT**" > "**REDO**" (the exact wording tells you what the next redo step is, i.e. redo scale).
- Or press "Ctrl + Y".
- Or press the period (full stop) key (in any tool except the **TEXT TOOL**).

You can only redo immediately after undo. You cannot redo after changing the document (for example, by moving or adding an object).

Drawing Lines and Shapes

Drawing a line or shape

You can use any of these tools to draw lines and shapes:
- The **FREEHAND & BRUSH** Tool ("F3").
- The **STRAIGHT LINE & ARROW TOOL**
- The **SHAPE EDITOR** Tool ("F4").

The **FREEHAND & BRUSH** Tool is the easiest way to draw simple lines, curves, and shapes, and it acts rather like a pencil.

The **STRAIGHT LINE & ARROW TOOL** is best if you want to draw single segment straight lines, or add arrow heads and tails to any types of lines.

The **SHAPE EDITOR** Tool is best for drawing precise curves and lines. It is also the main tool to edit lines and shapes.

Note: Although it is not in the Drawing Tools toolbar, you can also use the **PEN TOOL** to create precise shapes. It has limited functionality and works like the line tool of other drawing programs. To use the **PEN TOOL**, choose **CONTROL BARS** from the **WINDOW** menu and click the **BUTTON PALETTE** checkbox. Then click the **PEN TOOL** icon in the Button Palette. Or use the keyboard shortcut "Shift + F5".

The Freehand & Brush Tool

You can use this tool to draw in a freehand manner, as you would with a pencil. It can also be used to create brush strokes, which is described later. And it includes the option to draw variable width lines using a compatible pressure sensitive drawing device such as a graphics tablet. While using this tool the status line provides reminders on how to use it.

1. Position the pointer where you want the line to start.
2. Press and hold down the mouse button (or draw with your graphics tablet or other connected device).
3. As you drag the pointer around the document, your line is drawn in real time.
4. Release the mouse button to terminate the line.

After you've drawn a freehand line you can control how smooth the curve is (i.e. how many control points) by adjusting the smoothing control slider on the InfoBar.

Smoothing Indicator   *Re-fit*

Low values make the line follow your mouse movement more closely by creating more control points, and higher values produce smoother curves with fewer control points.

Low values are less smooth   Higher values produce a smoother curve
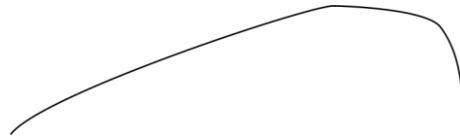
You can change the smoothing at any time until you make further edits to the line (the re-fit indicator on the InfoBar tells you when you can still change the smoothing.)

Erasing while drawing

Before you release the mouse button you can erase part of the line by holding "Shift".

The pencil icon reverses so the eraser at the end is downwards. You can now erase back along the line. Release "Shift" and you can continue drawing.

Drawing straight segments in the Freehand Tool

While drawing a freehand line hold down "Alt", move the pointer to a new position and release "Alt" to draw a straight line. You can continue drawing a line or hold down "Alt" again to draw another straight segment. Remember, you can use "Ctrl" to constrain the angle of the line. If you only want to draw lots of single segment straight lines, use the **STRAIGHT LINE TOOL** described below.

Extending a line

Make sure the line is selected (a single click on the shape or line in the **FREEHAND & BRUSH TOOL** will do this). Now if you move over the end of the line, a small + sign next to the pencil icon will indicate you can just draw to add a new freehand section to the line.

Joining two lines

Select both lines, ("Shift + click" on the second line to add it to the selection) and you can now just draw from the end of one line to an end of the other. A small + sign next to the pencil icon (appearing after a pause) indicates you are over the end.

Closing a freehand shape (to create a filled shape)

If you connect the start and end of a line, then it becomes a filled shape. You can now alter the fill color by dragging colors from the Color Line or using the Color Editor.

Editing lines/shapes with the Freehand & Brush Tool

You cannot directly modify shapes created by the Quickshape, Rectangle, or Ellipse Tools. First convert them to editable shapes using "**ARRANGE**" > "**CONVERT TO EDITABLE SHAPES**". See "Shape handling (on page 135)" for more information.

You can use the **FREEHAND & BRUSH TOOL** to edit lines (or outlines of shapes) by simply redrawing the section of line you want to replace. For example:

To edit the object:

Select the object that you wish to edit.

Move the freehand pencil over a part of the line. A ~ shows when the pencil is in position.

Draw the required line, then move the freehand pencil over to the second point of the existing line. Again, a ~ shows when the pencil is in position.

Release the mouse button, and the section of line is replaced.
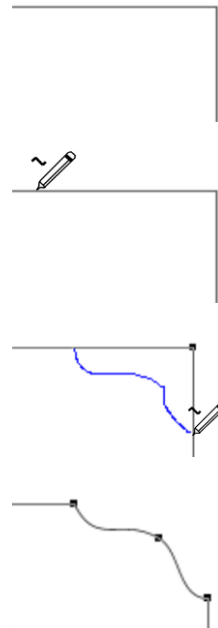
Sketch Mode

This option is useful if you are rapidly sketching lots of separate lines close to each other, perhaps using a drawing tablet.

When working this way you won't normally want to edit existing lines you've already drawn, but instead draw new lines with every stroke. But as described above, if you start a draw operation on an existing line, or on its end point, that existing line is modified. So when sketching you may inadvertently modify existing lines with your strokes, instead of drawing new lines on top as you'd intended.

To overcome this problem, turn on sketch mode. Now if you hold the mouse pointer over an existing line, or end point, you'll notice that there is a short pause before the mouse pointer changes to indicate that the line will be edited or extended. This pause means you can still edit existing lines if you want, but you won't do so unintentionally when you actually mean to sketch new lines.

Pressure sensitive drawing

Xara Designer Pro 7 supports pressure sensitive drawing using a compatible tablet device that supports pressure sensitivity.

Most modern tablets should be compatible. This allows you to draw variable width strokes - the more pressure you apply the wider the stroke.

High Pressure   *Low Pressure*

To draw a variable width stroke using your tablet:

1.   Enable pressure sensitive drawing by pressing the **ENABLE/DISABLE PRESSURE RECORDING** button on the Freehand tool infobar.
2.   Clear the current selection (click an empty part of the canvas, or press Escape).
3.   Choose a suitable line width from the line width dropdown list on the top bar. The width you select will be the width of the line that is drawn when you are applying maximum pressure.
4.   An alert appears asking if you want to make the selected line width the default for new objects. Press the Set button to confirm.
5.   Start drawing using your tablet device. Vary the pressure as you draw to vary the line width accordingly.

There is a special entry in the stroke shape dropdown list on the infobar entitled "Pressure" to indicate that the selected line has a custom profile. To convert a pressure-drawn line into an ordinary stroke simply choose an alternative stroke profile from the list. This deletes all the pressure data that was recorded for the stroke.

Pressure troubleshooting

If you can't get pressure sensitive drawing working straight away when you connect a new device, here are some tips:

- Make sure your device does support pressure sensitive drawing – many don't.
- Restart Xara Designer Pro 7 and if necessary your computer after connecting your device.

Make sure you have the latest driver and any other software updates for your device. Check the manufacturers website for updates.

Trace mode

Trace mode helps you to draw lines which follow visible edges in photo images. For example you can use it to help you draw around a building or other object in a photo, that you want to cut out.

For most photos it's best to turn smoothing down from the default value, so that the line more closely follows complex edges with less smoothing of the line as you draw. You can always adjust the smoothing after drawing the line, if required.

Trace mode on/off

Turn on trace mode using the toggle button on the infobar. Draw with the Freehand tool over a photo and you should see that the line tries to follow edges in the image.

You can also turn trace mode on and off while you are actively drawing a line, by pressing the **T** key. The mouse pointer changes to indicate whether trace mode is on or off. This allows you, for example, to turn off trace mode when you are drawing over a complex part of an image where there is no obvious edge for trace mode to follow.
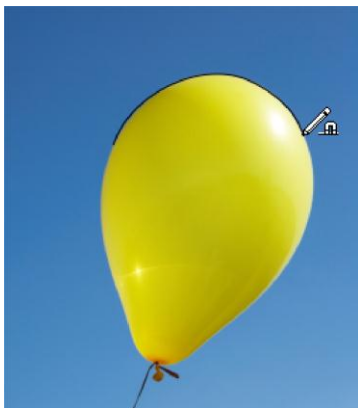
Commit points

You'll notice as you draw along an edge in a photo that sometimes the last few pixels of the line you've drawn will 'jump' as it searches for different routes. When there is more than one possible route, move the mouse pointer around and see the edge jump between them. You can 'commit' the edge at any time by pressing the **SPACE BAR**.

Continue and trace mode will find more routes between the last commit point and the mouse pointer.

Commit points are automatically added for you every 50 screen pixels, because you don't normally want to re-route the line more than that distance from where you are currently drawing.

Erasing

As mentioned above, whether tracing is on or off you can erase the last part of the line you've drawn by holding down the Shift key and moving the mouse pointer back to an earlier part of the line. The line is erased from that point to the end of the line.

Complex images

Few real world photos have objects with obvious unambiguous edges that can easily be followed by trace mode. There is often texture in the objects themselves or in the background which mean that trace mode will find many different candidate edges. Zoom into difficult parts of photos to get more control over the trace and use the space bar to enter manual commit points more often, the more complex the image. And press T to turn tracing on and off as you move between parts of an image that are easy to trace and parts that are not.

Cutting out objects from photos

To cut out part of a photo you can draw an ordinary shape over the top of the photo and then use the combine shapes operations in the **ARRANGE** menu to cut the photo with the shape (see the Shape Handling chapter (on page 127) for details).

Or you can go into mask mode, draw a mask shape over the photo and then use cut, copy and paste (or the combine shapes operations) to cut or copy the part of the photo you've indicated with the mask.

See the Photo Handling chapter (on page 245) for more information on using mask mode. Once you've cut out a piece of a photo, it's often a good idea to apply a small amount of feather to blur the edge slightly.

Non-destructive editing

The outline remains an editable vector outline that you can edit just like any other vector shape, using the Freehand tool or Shape editor. Use the shape editor to manually clean up your outline, revealing more or less of the image as you edit the edges.

Brush styles

The **FREEHAND & BRUSH TOOL** can also be used to apply different brush stroke styles along the path of the line. Instead of being a solid, fixed-width line, you can change it to be a variable-width line, or one of a near-infinite range of fancy brush styles, like airbrush, felt tip and marker. The line is fully editable so you can adjust the line shape and the brush stroke.

The Straight Line & Arrow tool

This tool makes it easy to draw single segment straight lines and to add arrow heads and tails to any lines.

Drawing & editing straight lines

Simply click and drag on the page to draw a straight line. You can click on any existing line to select it, and once selected you can click-drag on either end to move the end of the line.

Adding arrowheads & tails

The infobar has two dropdown lists on the left which allow you to choose an arrow head or tail style for each end of the selected line.

1️⃣ Arrow head
2️⃣ Arrow tail
3️⃣ Arrow head/tail size
4️⃣ Reverse path

The slider on the infobar allows you to change the size of the arrow head and tail on the current selected line. Or you can enter a percentage value into the size text field to the right of the slider.

By default new arrowheads are created with a width of around 6 times that of the line width and that is taken as the 100% size, as indicated by the size slider. If you make the line wider, the arrowhead width also updates accordingly. Therefore enter a value less than 100% to reduce the size of the arrowhead (and tail), or greater than 100% to increase. Although the slider only takes the size value up to a maximum of 800%, you can enter percentage values larger than this into the size text field.

Reverse path

Press the **REVERSE PATH** button on the infobar to switch around the head and tail of the selected line.

Adding more line segments

Lines created with the **STRAIGHT LINE TOOL** are of course fully compatible with the other drawing tools. So if you want to add more segments to a line, make it curved, or perhaps even turn it into a closed shape, use the **SHAPE EDITOR TOOL**.

The Shape Editor tool

The **SHAPE EDITOR TOOL** is the main tool used for both creating precise curves, lines, and shapes, as well as editing or altering lines and shapes.
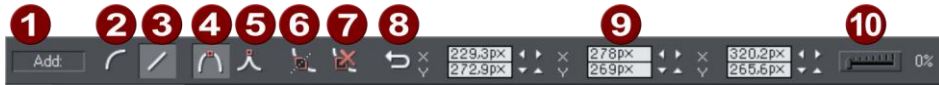
1. Add/Change/Edit Indicator
2. Make curve
3. Make line
4. Smooth join
5. Sharp join
6. Break at points
7. Delete points
8. Reverse paths
9. Positions of handles
10. Smoothing

The InfoBar, shown above, provides a wide range of controls as well as precise numeric control.

All lines and shapes in Xara Designer Pro 7 are made from a sequence of curve and line sections. Curves are sometimes called "Bézier" curves after the mathematician who first described them.

Although this section describes the **SHAPE EDITOR TOOL**, you can also edit lines and shapes using the **SELECTOR TOOL** if you have the **SHOW EDIT OBJECT** handles button selected on the **SELECTOR TOOL** InfoBar.
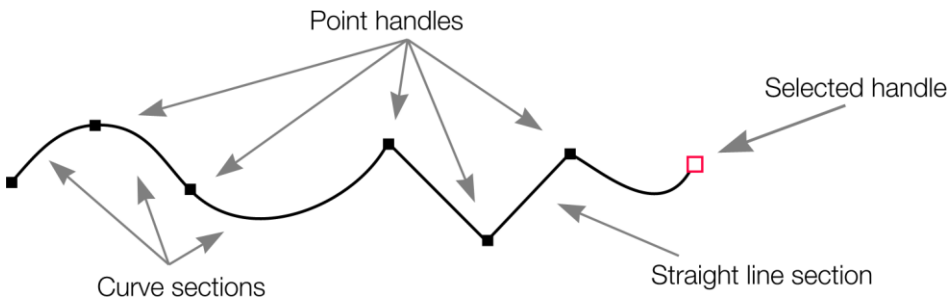
The sections or segments of a line are marked by small black point handles. You can drag, add and delete these handles to manipulate the shape of the line or outline.

Some objects such as quickshapes, rectangles, ellipses, and text have to be converted into editable shapes before you can use the **SHAPE EDITOR TOOL** on them. Select the "**ARRANGE**" > "**CONVERT TO EDITABLE SHAPE**" menu ("Ctrl + Shift + S") to do this.

To draw a straight line segment

Using the **SHAPE EDITOR** Tool, start a straight line:

1. Click where you want to start the line. You can start a line at either end; you don't have to work left to right, or top-to-bottom. This creates a point handle, and is displayed as a red square to indicate that it is the selected handle.
2. If necessary select the **MAKE LINE** button on the InfoBar ("L"). This ensures the next click will draw a straight line segment.

Selected point handle

Original point handle
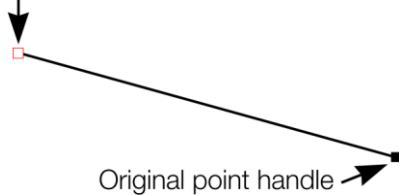
Either click where you want the next point handle to be, or click and drag, and then release the mouse button when the line is correct. This creates a line segment and selects the new end point handle.

Mixing curved and straight lines

To create an object which is a mixture of straight and curved segments, just switch between the **MAKE CURVE** and **MAKE LINE** buttons as you create the object (you can also press "L" or "C" on the keyboard.)

Note: You can also use the keyboard shortcut "X" to create a Cusp Join or "S" to create a Smooth Join while using the **SHAPE EDITOR TOOL**. These affect the way two line segments come together. A Cusp Join creates 2 independent Bezier control handles that you can edit separately. With a cusp join, you can create a sharp angle. A Smooth Join creates a symmetrical join that works like a see saw. If you drag one Bezier control handle down, the opposing control handle goes up.

To draw a curved line segment:

This is similar to starting a straight line (described above).

1. Click where you want to start the line.
2. If necessary select the **MAKE CURVE** button (shortcut "C".)
3. Either click or drag (as described for straight lines) to create a second point handle, and a curve segment will be added to the line.

Curve handles
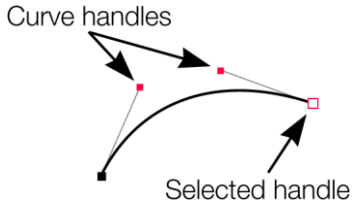
Selected handle

A curve segment has **CURVE HANDLES** associated with the selected point handle. You can drag these to adjust the angle and radius of the curve.

Extending the line

Make sure an end point handle is the selected handle (red outline) and then just click again to add a new line or curve section. Each successive click places a new point handle and draws a new line segment to the selected point handle.

This applies also to **SHAPE EDITOR** and **PEN TOOLS**. To use the **PEN TOOL**, choose **CONTROL BARS** from the **WINDOW** menu and click the **BUTTON PALETTE** checkbox, or press "Shift + F5" on your keyboard.

Finishing the line

Shift + click completes the line (keeps it selected), or press "Esc" to finish the line and de-select it. After this, additional clicks will start a new line.

This applies also to **SHAPE EDITOR** and **PEN TOOLS**. To use the **PEN TOOL**, choose **CONTROL BARS** from the **WINDOW** menu and click the **BUTTON PALETTE** checkbox, or press "Shift + F5" on your keyboard.

Adding a new point handle

The **SHAPE EDITOR TOOL** has three modes, depending on whether no point handles are selected (a click will start a new line), an end handle is selected (a click will add a new section), or one or more other point handles are selected (you can drag or change the handles).

The InfoBar shows the current mode.
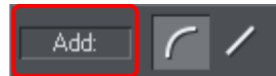
- **NEW**: Click to start a new line,
- **ADD**: Click to extend the line,
- **CHANGE**: Drag or delete point handles to change.

This applies to the **SHAPE EDITOR TOOL** only.

To the end of a line:

Make sure the line is selected, then:

Click here

1. If necessary, click on the end point to select it.
2. Position the pointer and click to add a new section.
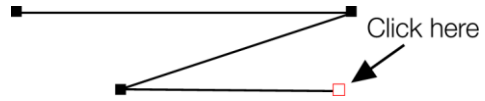
To the middle of a line:

Make sure the line is selected, then;

Click here

1. Click on the line to add a new point handle into the line
2. Drag the point handle to the required position.
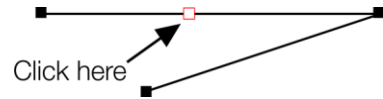
To the start of a line:

If the end point is selected, clicking on the start point closes the shape (this is described in "Closing a shape (on page 125)"). To add a new control handle to the start of a line:

1. Finish the line using "Shift + click".
2. Click on the start handle.
3. Position the pointer and click.

Selecting multiple point handles

You may want to select several point handles to delete them, move them as a group, or change a region of points to curved or straight lines. To do this:

1. Select one point handle in the normal way by clicking on it.
2. "Shift + click" the other point handles to select them ("Shift + click" also deselects.)
   - Or "Ctrl + Shift + click" on a point handle to select all point handles on the line.
   - Or drag the mouse pointer diagonally to create a selection rectangle. All point handles in the rectangle are selected.
   - Or "Shift + drag" diagonally to create a selection rectangle. This adds all points within the rectangle to those already selected.
3. If the line has one or more selected point handles:
   - End moves the selection to the end of the line.
   - Home moves the selection to the start of the line.
   - Tab moves the selection to the next point handle towards the end.
   - "Shift + Tab" moves the selection to the next point handle towards the start.

The start and end points are significant when applying arrows (on page 81).

Selector Tool

You have limited shape editing abilities using the **SELECTOR** Tool if you have the **SHOW OBJECT EDIT HANDLES** button selected.

Deleting points

Select the point handle(s) as described above and either click the **DELETE POINTS** button (**SHAPE EDITOR TOOL** InfoBar), or press "Del".

Moving point handles—Shape Editor Tool

You can move one or more selected handles:

- Drag the handles using the mouse.
- Or use the arrow keys on the keyboard.

Or to move a single handle, type new values into the text boxes on the InfoBar (see below).

Using the text boxes on the InfoBar
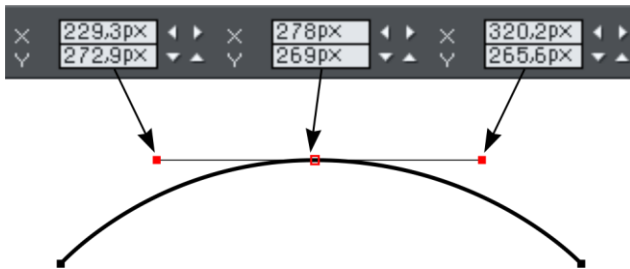
The center pair of text boxes always shows the X/Y co-ordinates of the selected point.

The surrounding X/Y fields show the co-ordinates of the curve handles on either side of the selected point.

X/Y co-ordinates are relative to the bottom left corner of the page by default for print document and top left for web documents. You can change this in the "Grid and ruler" (on page 452) tab in the options dialog.

If the selected point is on the end of a straight line section, the left fields show the length and angle of the line. You can adjust either by entering a new value and pressing return.
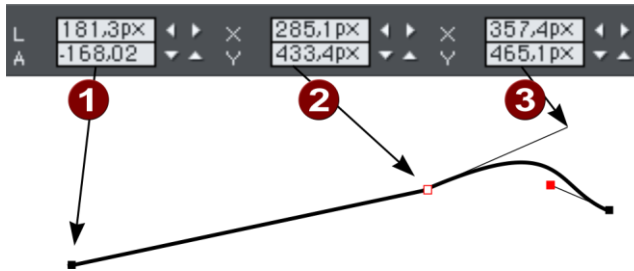
① Length and angle for straight line
② Position of selected point
③ Position of curve handle

Moving point handles—Selector Tool

You can only select and move point handles when the **SHOW EDIT HANDLES** button is selected.

Smoothing a line

Imported shapes or shapes from tracers may have unnecessary points on a line. Lines with too many points can be unwieldy and can slow down rendering. Xara Designer Pro 7 can smooth the line to remove unnecessary points.

Select all the points on the part of the line you want to smooth (see above). Drag selecting around the region in the **SHAPE EDITOR TOOL** is probably the easiest way to select a large number of points.

Drag the smoothing slider on the end of the **SHAPE EDITOR** InfoBar.

Removed points are remembered so you can make further changes to the smoothing of the line by adjusting the slider. Removed points are discarded when you make further edits to the line by dragging a handle (for example).

Tip: to make sure important points are not deleted, make sure they are not selected ("Shift+ click" on a selected point deselects it).

Constraining the line

When dragging a point handle, holding down the constrain key ("Ctrl") will constrain the movement to multiples of the constrain angle (controlled from the **OPTIONS** dialog, **GENERAL** tab). When dragging a curve handle the angle is constrained.

Constrain angles

Changing curves

Using the curve handle

Dragging the curve handle will adjust the curvature of the adjoining curve segments.

Move the curve handle towards or away from the point handle to pull the curve in the required direction.

Dragging the line segment

You can also change the curve by dragging the line segment between points.

Move over line to   As you drag the   Release the mouse
show this arrow   line is re-shaped

Notice the difference between dragging the line to change its shape, and clicking on the line to add a new point handle. Dragging a straight line segment changes it to a curved line segment.

Making sharp corners

Normally, Xara Designer Pro 7 draws a smooth curve through a point handle. For this, the two curve handles either side of a point handle are linked. Moving either curve handle also moves the other. If you want a sharp corner, you need to unlink the curve handles:

1.   Double click the point handle,
2.   Or select the point handle and either:

Click the **CUSP JOIN** button, or press "Z".

You can now move each curve handle independently.

Making smooth curves

To convert a sharp join into a smooth curve:

1.   Double click the point handle,
2.   Or select the point handle and either:

Click the **SMOOTH JOIN** button, or "S".

The two curve handles become linked and move to opposite sides of the point handle. This may change the shape of the curve.

Smooth join   Cusp join
Curve Handles are linked Curve Handles are independent

Balancing curves

Balancing makes the two curve handles the same distance from the point handle, which gives smoother, more symmetrical curves. To balance a curve, select the point handle, then drag one of the curve handles with "Shift" held down. As you drag one curve handle the other one will move to be exactly opposite it and the same distance from the point handle.

Changing a straight line to a curve (and vice versa)

1.   Select the point handles at both ends of a line segment. For several line segments select all bordering point handles.
2.   Click the Make curve ❶ or Make line ❷ button on the InfoBar, or press "L" or "C" (these shortcuts only work in the Shape Editor Tool).

Add:

After changing the line type, you may need to move the curve handles for a smooth transition between curved and straight line segments.

You can select several line segments and convert them all. The point handles at both ends of the segment must be selected.

Joining lines

You can only join lines if both are selected (the point handles are shown on both lines):

Using the **SELECTOR** Tool, hold down "Shift" and click on the lines to select them (if you are already in the **SHAPE EDITOR** Tool, you can press "Alt + S" to temporarily go into the **SELECTOR** Tool, "Shift + click" to select the second line, then "Alt + S" again to return to the **SHAPE EDITOR** Tool).

Selecting objects is described fully in "Selecting objects (on page 86)".

Once both objects are selected, in the **SHAPE EDITOR TOOL** or the **PEN TOOL**, drag the end handle of one line over the end of the other line. As you drag the mouse pointer will show a **+** symbol to indicate that the lines will be joined..

Drag an end point over another end point to join lines

... like this
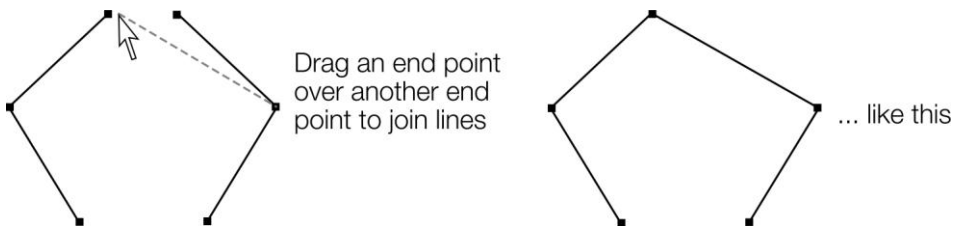
If the ends of the two lines are already very close to each other (but not joined), then you can either zoom in or drag the end point away, and then back again so it's over the end point, and you see the + sign to indicate a join will occur. To create a filled shape, drag the other two end handles together. Because you join the end handles, you can only join lines and not shapes. Shapes are closed objects and so have no end handles.

There's more information on this in "Shape handling (on page 125)".

Notes:

- To use the **PEN TOOL**, choose **CONTROL BARS** from the **WINDOW** menu and click the **BUTTON PALETTE** checkbox, or press "Shift + F5" on your keyboard.
- You can also use the **FREEHAND & BRUSH TOOL** (described earlier) to join lines.
- There is an "**ARRANGE** > **JOIN SHAPES"** menu option which joins two or more shapes into one single shape, even if they are separated on the page. This makes overlapping areas transparent. For example, joining an object with a smaller circle on top this way, produces an object with a circular hole in it.

Splitting a shape

If you want to split (break) a line or shape: Either select an existing point handle on the line or outline of the shape, or create a new one where you want to break the line. Just click on the line in the **SHAPE EDITOR TOOL** (see above).

Click on the **BREAK AT POINTS** button, or press "B".

If you split a line, there is no visible change. However, if you move the point handle, then only part of the line moves. If you split a shape, it changes to being a line. Any fill disappears.

Note: "Slice shapes" (part of "**ARRANGE**" > "**COMBINE SHAPES**") also lets you split shapes into two separate shapes. This is described in "Shape handling (on page 129)".

Changing the line width (thickness)

To change the line thickness or the outline thickness of a shape, first select the object or objects:

Type a new line width into the text box on the **STANDARD** control bar or choose the default line thickness from the menu.
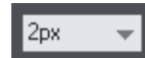
Line thickness is traditionally measured in points, abbreviated to pt. 1 point is 1/72nd of an inch (about 0.3mm), which is slightly less than the thickness of one screen pixel when viewed at 100% zoom.

You can use any of Designer Pro's standard measurement units.

You can enter the thickness value in any unit, and Xara Designer Pro 7 will convert it to the correct number of Points. E.g. you can enter 0.5cm, and you will get a line half a centimeter thick, but it will show just over 14pt in the line width field. If you have no object selected and you change the line thickness value, this changes the default for all new lines.

Note: A zero width line is a special case, and should not normally be used. This draws a line one device-pixel wide. The actual size will therefore depend on the device the drawing is displayed on. On a monitor screen one pixel is clearly visible and is never shown anti-aliased. On devices such as printers and particularly on image setters, which have a much higher resolution, the line is almost invisible (zero width lines in imported files are converted to 0.25pt).

Variable width lines

From the **FREEHAND & BRUSH TOOL** InfoBar you can select a drop-down menu that shows a selection of alternative variable line thickness profiles. As you move the mouse over the selection, an enlarged preview is shown on the right.
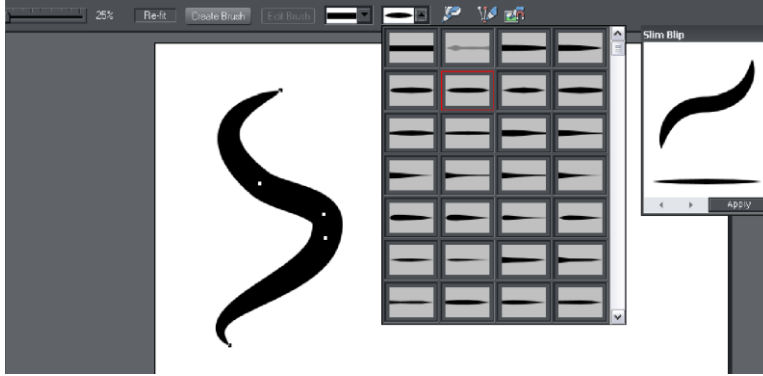
Selecting one of the styles will change the line (or outline of a shape) from being a constant thickness line, to a variable thickness. This is great for creating pen and ink style artwork, and is often used in the creation of cartoons. The line width dropdown still should be used to change the overall thickness of the line. To restore a constant line width, select the top left corner item from the menu.

The special "**PRESSURE**" profile in the dropdown menu is used to indicate when a line has a custom profile as a result of being drawn with a pressure sensitive device, with the pressure sensitivity drawing (on page 67) option turned on.

Line Gallery

The **LINE GALLERY** can be used to apply a range of line styles or attributes, such as brush strokes, dash patterns, arrow heads, and more.

To display the **LINE GALLERY**:

- Choose "**UTILITIES**" > "**LINE GALLERY**"
- Or click the **LINE GALLERY** tab on the **GALLERIES** tab.
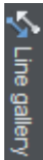
The **LINE GALLERY** is split into sections. To open or close any section, click on the small folder icon in the gallery window.
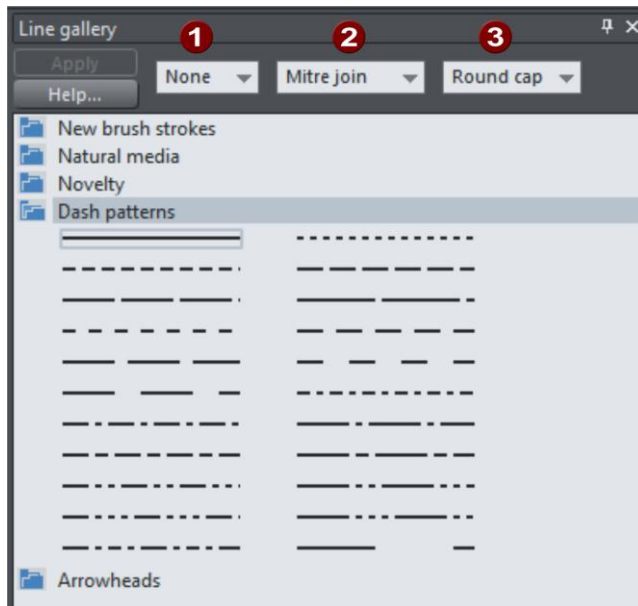
① Line Width
② Join type
③ Line cap

To apply any line style or attribute from the gallery you can:
- Drag and drop the required style from the gallery onto the shape or line.
- Or double click on the required style in the gallery.
- Or select the style and then click the **APPLY** button.

Line width

The text box at the top of the gallery duplicates that on the standard control bar.

Brush strokes

There are several sections that show a selection of various brush styles.

Dash pattern

This section provides a selection of line dash styles.

Arrowheads

The best way to apply an arrowhead is to use the **STRAIGHT LINE & ARROW TOOL** (on page 70), as described earlier in this chapter. However you can also use the line gallery. Drag and drop the arrowhead from the gallery onto the appropriate end of the line.

Alternatively, to apply an arrowhead:

- Double click on the arrowhead in the gallery.
- Or select the required arrowhead and click **APPLY**.

Designer Pro has two types of arrowhead designs: beginning and end. If the line already has a beginning arrowhead, applying an end arrowhead automatically places it at the opposite end of the line.

If the line has no arrowheads, and you use the **APPLY** button or double click a style to apply it, then the arrowhead will be placed at the end of the line.

The size of the arrow head is related to the thickness of the line. Thicker lines have proportionally larger arrowheads. If you hold "Ctrl" down and double click an arrow head or tail style, it will apply it to the other end of the line.

A line with a dash style and arrow head and arrow tail selected from the gallery.

For general information about galleries see document handling (on page 52).

Change join type

This control on the top of the **LINE GALLERY** sets the style of corners.

Mitre

Round

Bevel

To change an existing line, select the line.
To change the current join type, deselect all lines.
Select the required type from the menu.

Change line cap

This control at the top of the **LINE GALLERY** sets the style of the ends of the line.

Butt

Round

Square

To change an existing line, select the line.
To change the default line cap, deselect all lines.
Select the required type from the menu.

Brushes

Brush strokes control the appearance of lines (for example, to apply an air-brush effect).
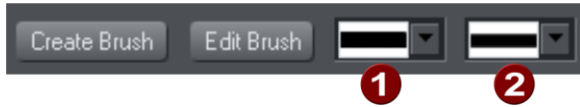
① Select a brush preset
② Select a preset for a stroke shape/pressure profile

Using an existing brush

To use an existing brush type for a line:

1. Click to select an existing brush. Click on the arrow to display a preview window of the default set of brush designs and previously created custom brushes (if available) from all open documents.
2. If required, select a stroke shape to change the appearance of the line (and to also mimic using a pressure-sensitive tablet).
3. Draw the line as required, and it will use your chosen brush and stroke shape.

You can also select an existing line in the document then go through the above process to change its appearance.

You can also browse different brush types using the LINE Gallery (on page 83).

Creating a new brush

To create a new brush type:

1. Design your desired brush in Designer Pro then select it.
2. Click **CREATE BRUSH**.
3. Give your brush an appropriate name.

You can then draw with your new brush straight away. The new brush is listed in the brushes preview window.

Brushes are stored in the document. If you want to re-use a brush in another document, you have to load the document containing your custom brush first. Only the default brushes are always available.

Editing a brush

To access advanced editing options for a brush:

1. Select the brush that you wish to edit.
2. Click **EDIT BRUSH**.

Here you can alter:
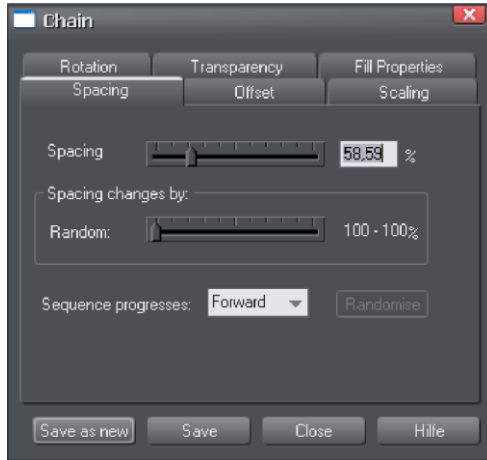
- **SPACING**: Gap between the objects in the brush.
- **OFFSET**: Distance between the original line and the objects in the brush.
- **SCALING**: Size of objects in the brush.
- **ROTATION**: Rotation of the objects in the brush as they follow the line.
- **TRANSPARENCY**: Transparency of the brush.
- **FILL PROPERTIES**: Miscellaneous options, including color options.

Transparency is described in "Transparency (on page 213)" and colors are described in "Color handling (on page 156)".

If you use a pressure-sensitive graphics tablet, the transparency and scaling options allow you to configure the brush's sensitivity levels. If you do not have a pressure-sensitive graphics tablet, you can mimic the effects using brush shapes (on page 80).

Save your edits with the **SAVE** button, with the **SAVE AS NEW** button a new brush is created.

Attention: Although you can edit a default brush, you cannot save the edits into this brush for use beyond this session. The default brushes are always restored on the start of the program. If you want to edit one of the default brushes, for use at a further time, then you have to save it as a new one.

Selecting Objects

The Selector Tool

The **SELECTOR** Tool is the main tool for selecting, moving, scaling, and rotating objects. It is typically used more than any other tool and is the central tool for manipulating documents.
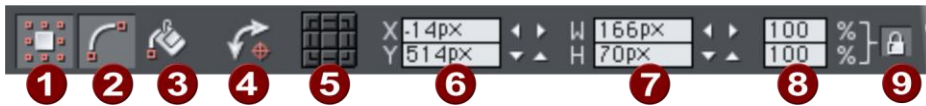
The Selector tool infobar - left side

❶ Show bounds
❷ Show edit handles
❸ Show fill handles
❹ Show rotation handles
❺ Rotation center
❻ Position of selection
❼ Dimensions of selection
❽ % size controls
❾ Lock aspect ratio

The Selector tool infobar - right side

❶ Rotate & Shear
❷ Flip horizontal
❸ Flip vertical
❹ Scale line widths
❺ Apply, remove or inspect names of objects
❻ Perimeter and area indicator

To use the **SELECTOR** Tool:

- Click on the **SELECTOR** Tool on the **MAIN TOOLBAR**.
- Or press "Alt + S", "V", or "F2".

When switching to the **SELECTOR TOOL**, if there are objects selected inside a group or other composite object type, the parent object (group) becomes selected instead.

The InfoBar

All the buttons on the InfoBar are described in the following sections except:

- **SHOW EDIT HANDLES** which is described in "Drawing lines (on page 76)".
- **SHOW FILL HANDLES** which is described in "Fills".
- **APPLY**, **REMOVE OR INSPECT NAMES OF OBJECTS** which is described in "Document handling (on page 60)".

The first two buttons let you edit the outlines and fills of objects without the need to switch tools.

Alt + S

Because the **SELECTOR TOOL** is the most used tool, there is an additional shortcut that lets you switch to the **SELECTOR TOOL** to perform a selection or other operation, and quickly switch back to the previous tool. If you are using another tool, you can easily switch to the **SELECTOR TOOL**:

- Press and release "Alt + S" to switch to the **SELECTOR TOOL**. Press again to return to the previous tool.

Selecting objects

To select a single object, click on any visible part of the object.

Change object selection

Once an object is selected, you can use the following keys to change the selection:

- End selects the back object.
- Home selects the front object.
- "Tab" selects the next object towards the back.
- "Shift + Tab" selects the next object towards the front.

Front and back objects are described in "Object handling (on page 92)".

Marquee selection

To select multiple objects, press and hold down the mouse button. Dragging the mouse draws a selection rectangle, by default all objects wholly within the selection rectangle are selected.

If you have an object in the way which is preventing you from drawing a rectangle because you end up moving the object, hold down "Shift" while dragging out the selection rectangle.

By default, dragging a selection rectangle selects only those objects which are completely inside the rectangle. This behavior can be changed so it's compatible with the way selection works in other applications, whereby the objects touching the rectangle outline also become selected. Hold down "**CTRL**" while dragging to include those objects touching the selection rectangle in the selection.

The "**UTILITIES**" > "**OPTIONS**" (on page 449) dialog (General Tab) enables you to change the default setting for marquee selection. So you can choose to have objects touching the selection rectangle selected, without having to hold down "Ctrl" during the drag. In this case, holding "Ctrl" down while dragging selects only the objects wholly inside the rectangle.

Extend Selection

To select additional objects:

- "Shift + click" on them.
- Or "Shift + drag" the mouse pointer. This draws a selection rectangle and adds objects within the rectangle to the selection.

Select under

Hold down "Alt" to select objects hidden by other objects. By "Alt + clicking" you can step through several overlapping objects.

Select inside

Groups and blends are described later. Text stories are described in "Text handling (on page 174)". Molds are described in "Distorting objects (on page 136)".

"Ctrl + click" on the object to select inside. This is used to select an object from within a blend, group or mold. This lets you, for example, edit the outline of one object in the group or blend. The other objects remain unchanged.

Note that some operations are not permitted with select inside. For example, you are not permitted to delete the end object of a blend (because the blend would then be meaningless).

Marquee selection does not work for select inside, because "Ctrl" is used to toggle the two marquee selection modes.

Scribble Selection

In the Selector Tool, drag with "Alt" held down and instead of dragging a box, a freehand line is draw. Every object that is touched by the line becomes selected. Hence you can drag the mouse around the page, touching all the objects that you want to select. This also works in conjunction "Shift" for extend selection (on page 88) and "Ctrl" for select inside (on page 88).

Moving objects selected under or inside

If you need to move a selected object that's either under others or inside a group, then just dragging doesn't work as it will select and drag a different object. To overcome this hold "Ctrl + Alt" and start dragging. This will always drag the existing selected object. You can let go of the keys once you've started dragging.

Or you can use the arrow keys on the keyboard to nudge the object.

Selecting and layers

You cannot select objects in locked or invisible layers.

See "**PAGE & LAYER GALLERY** (on page 142)" for more details on layers.

Selecting all objects

To select all objects:

- Choose "**EDIT**" > "**SELECT ALL**",
- Or press "Ctrl + A".

Deselecting an object

To deselect all objects:

- Click anywhere on an unused part of the document,
- Or choose "**EDIT**" > "**CLEAR SELECTION**",
- Or press "Esc".

To deselect one object from several:

- "Shift + click" on the object. This deselects that object. Other objects remain selected.

Selecting with Soft Groups

When you click on an object which is a member of a soft group, all members of the soft group become selected. This is one of the main purposes of Soft Groups – to keep closely related objects together even when they are on different layers. If you want to select just one member of a Soft Group, use Ctrl to select inside, as described above. See the "Soft Group (on page 112)" section in "Object Handling" for more information.

Double-click shortcuts to tools

For some types of object, double-clicking on them will take you into the tool which is most applicable to that object. So for example if you want to edit some text, double click on it to go into the Text Tool, so you can start editing it immediately. The following table summarizes the available shortcuts for different object types:

Double click on		Selects this tool
Text	T	Text Tool
Photo		Photo Tool
Rectangle		Rectangle Tool
Ellipse		Ellipse Tool
Shape		Shape Editor
Group		Starts an 'edit inside' by opening the contents of the group in a separate sub-document view.

Identifying a selected object

The selected object shows **SELECTION MARKERS** and usually **SELECTION BOUNDS HANDLES** or **ROTATION HANDLES** (although this can be turned off).

Selection markers
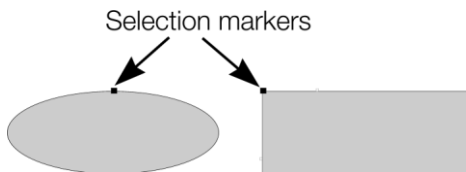
Selection markers

Each selected object displays a single selection marker to show it is selected. This is a useful reminder when selecting and deselecting several objects.

Status line

The status line at the bottom of the window also describes what is selected.

Selection bounds handles

Selection bounds handles enclose the overall selection. These are controlled by the **SELECTION BOUNDS** button on the InfoBar.

Selection bounds handles let you scale and stretch selected objects see Shape handling (on page 125), Object handling (on page 92), and Distorting objects (on page 136) for more details. Successive clicks on an object alternate between showing selection bounds and rotation handles.

Selection bounds handles   Click again to show the   Rotation handles
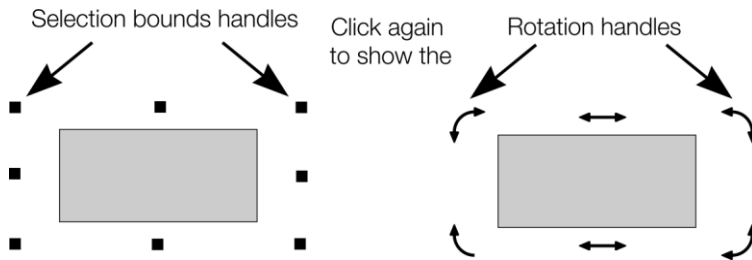
Finding objects in the Page & Layer Gallery

You can quickly locate an object in the Page & Layer Gallery by selecting it and then clicking the LOCATE button at the top of the Page & Layer Gallery. The Page & Layer Gallery automatically expands the required nodes and highlights the selected object. See "Page & Layer Gallery (on page 142)" for more information.

Rotation handles

Rotation handles enclose the overall selection. These are controlled by the ROTATION HANDLES button on the InfoBar.

Rotation handles let you rotate and skew selected objects; see "Object handling (on page 92)" for more details. Successive clicks on an object alternate between showing selection bounds and rotation handles.

Tab

With any selected object, pressing "Tab" and "Shift + Tab" will move through the selected objects (previous and next object in the document).

Object Handling

Moving objects

To slide an object across the page

1. Choose the **SELECTOR TOOL**.
2. Drag the object to the required position. Hold down "Ctrl" to restrict the direction of movement to one of the constrain angles.

The constrain angles are user definable. Refer to "Customizing Designer Pro (on page 447)"

Hold down "Ctrl + Alt" and you can drag the selected object even if the pointer is not over it. This is useful when the selected object is hidden behind another object or part of a group. Release "Ctrl" and "Alt" after you start the move unless you want to constrain the move.

You can also move objects using the arrow cursor keys. This is described on the next page.

Magnetic object snapping is also enabled by default in web documents. Object snapping is a very powerful way of accurately aligning lines, points and the edges of objects to any other object so they exactly touch. It also helps you align to the horizontal and vertical center lines of the page.

To toggle object snapping, click the **SNAP TO OBJECTS** button or right click and choose "**SNAP TO**" > "**SNAP TO OBJECTS**". You can also choose "**WINDOW**" > "**SNAP TO OBJECTS**".

Click and drag on the object you want to snap. As you drag, Designer Pro displays a magnet icon whenever you are near a "point of interest" or potential snapping site relative to a visible object on the page.

To snap in a path relative to the page center (both horizontally and vertically), move the object over the lines that appear as you drag on the page. A red dot on the line also indicates potential "point to path" snapping points, so that you can snap the object to a point such as the center or center line of the page.

See Snapping (on page 102) for details on snapping to grid and snapping to objects.

Drop copy

During a move (and while still holding the left mouse button down) click the right mouse button or press + on the numeric keypad to drop a copy of the object. The original object doesn't move. You can do this as many times as you wish to create a series of duplicated objects.

You can also hold down the right mouse button and drag a copy of the object. Left click to leave a copy at the current mouse position.

Fills

Usually, moving an object also moves the fill with it:
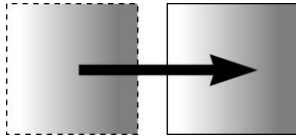
Normal move left to right with a linear filled object. This also applies to rotating, skewing, scaling and stretching objects.

Designer Pro can also move the object but not the fill origin.
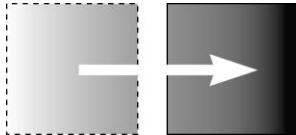
To do this click the "−" key on the numeric keypad during the move.
The same move, but pressing "−" (minus) during the drag.

Nudging objects

Usually you can move an object a small amount by using the arrow keys to nudge the object (these keys sometimes have other uses, especially in the **TEXT TOOL**).

Nudging is not affected by either magnetic or grid snapping (snapping is described later).

Nudge modifiers

To modify the nudge distance, use these key combinations while using the arrow keys:

- Ctrl   nudge 5 times the normal distance
- Shift   nudge 10 times the normal distance
- Ctrl + Shift   nudge by l/5th the normal distance
- Alt   nudge by 1 pixel
- Alt + Shift   nudge by 10 pixels

You can change the normal nudge distance under the **GENERAL** tab in "**UTILITIES**" > "**OPTIONS**". Refer to "Customizing Designer Pro (on page 451)".

Nudge works in most tools.

Cut, copy and paste

These let you move or copy an object in the same document or between different documents. The procedure is:

1. Select the object.
2. To remove the object, choose "**EDIT**" > "**CUT**" (or "Ctrl + X"). To copy the object but not remove it, choose "**EDIT**" > "**COPY**" (or "Ctrl + C"). Either option puts the object (or a copy of it) onto the clipboard.

3.   Choose "**EDIT**" > "**PASTE**", "Ctrl + V", or "**INSERT**". This pastes the clipboard contents into the document.

Note that if the objects you copy are all **on the same layer**, then you can paste those objects to any layer by first making it the current layer and then choosing "**EDIT**" > "**PASTE**" > "**PASTE IN LAYER**" or "**PASTE IN PLACE IN CURRENT LAYER**". The layer from which the objects were copied is ignored in this case.

However if the objects you copy are on several **different layers**, then the layer structure is maintained when you paste.

This allows you to copy layered data within a document or to a different document. Any layers which are missing in the target document are created automatically by this operation. So for example if you copy a mouse-over button, which has one object on the MouseOff layer and another object on the MouseOver layer, to a new document, the MouseOff and MouseOver layers will be created if they don't already exist and the button objects copied onto them.

"Ctrl + Shift + V" or "**EDIT**" > "**PASTE IN PLACE**" pastes the clipboard contents into the same X/Y position from where they were cut or copied. This only applies to objects cut or copied from within Designer Pro. Objects imported from other programs are always pasted into the center of the current view.

The object remains on the clipboard so you can paste the same object several times.

If there is a choice of formats on the clipboard, Xara Designer Pro 7 will display a **PASTE SPECIAL** dialog which allows you to choose the format you want to paste in (eg. When pasting in text you may have the choice of pasting in unformatted text or Rich Text).

In addition you may see the following paste options, depending on the clipboard contents:

Paste unformatted text

Pastes any text on the clipboard into your document without any formatting.

Paste format/attributes

Preserves the format (e.g., font and font size) or style attributes (e.g., line and fill color) of the pasted object.

Paste position

This option applies the position of a copied object on the clipboard to a currently selected object, which moves to the exact same position as the copied object. If multiple items have been copied to the clipboard, Designer Pro treats them as if they are a group and moves the currently selected object to the position of the copied group as a whole. The currently selected object is pasted or moved into the center position of the copied object or group of objects.

Paste size

This option applies the size of a copied object on the clipboard to a currently selected object, which resizes around its center to the exact size of the copied object.

If you have multiple items selected when you 'paste size' each of those objects is made the target size, instead of the selection as a whole. So for example if you copy a 200x200 pixel photo, then select 10 other photos and 'paste size', all 10 photos each become 200x200 pixels. This gives a quick way to make a bunch of objects a particular size.

Paste replacing selection

This is similar to **PASTE POSITION**, except that the copied object on the clipboard replaces the currently selected object and retains the deleted item's position.

The copied object is pasted into the center position of the deleted object.

Paste in current layer

The same as **PASTE IN PLACE**, except your object will only be pasted into the current layer.

This is useful if you want to display or hide just your pasted object when layers above or below are displayed.

Paste in place in current layer

The same as **PASTE IN CURRENT LAYER**, except your object will be pasted into the current layer in the exact same position from which you copied it.

Cut, copy and delete with a mask

If there is an active mask present, it modifies the behavior of the cut, copy and delete operations. Only the unmasked area of the selected objects is cut, copied or deleted. This provides a quick way of cutting up photos or whole drawings.
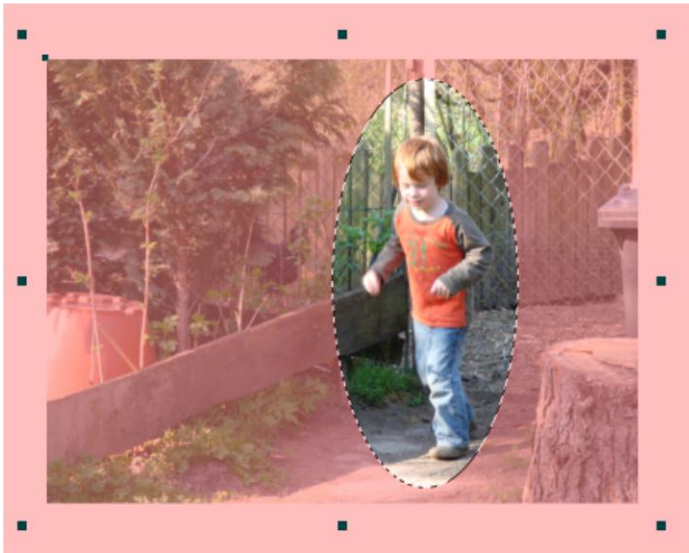
Pressing Delete will make an elliptical hole in the photo.
Pressing Ctrl +C (copy) will copy the elliptical part of the photo to the clipboard.
Pressing Ctrl +X (cut) will cut out the elliptical part of the photo and place it on the clipboard.

Removing objects from the document

First select the objects you want to remove. You can then either cut the objects to the clipboard or delete them.

Cutting objects

Choose "EDIT" > "CUT", or press "Ctrl + X".The contents of the clipboard are overwritten and you can paste the deleted object(s) somewhere else if desired.

Deleting objects

Right click and choose DELETE or choose DELETE from the EDIT menu, or press the "Delete" key, or click the DELETE button on the STANDARD control bar.

In this case the deleted objects are not put onto the clipboard. If you accidentally delete an object, undo retrieves it.

Duplicating and cloning

Both these options create a copy of the selected object. The original object is deselected and the duplicate or clone becomes the selected object.

You can also duplicate an object during moving, rotating, scaling, or skewing. During the drag action (and while still holding the left mouse button down) click the right mouse button or press "+" on the numeric keypad to drop a copy of the object. The original object doesn't move. You can do this as many times as you wish to create a series of duplicated objects.

So an easy way to create one or more copies of an object that is exactly horizontally or vertical aligned, is to drag the object, hold "Ctrl" to constrain the movement, and right click (or press "+" on the numeric keypad) for each copy required.

To quickly create a line of objects, draw one, then drag while holding "Ctrl" and right click for each copy required.

Duplicating

Choose "EDIT" > "DUPLICATE", or press "Ctrl + Alt + D", or select the object in the PAGE & LAYER GALLERY (on page 142) and click the DUPLICATE button. The copy is displaced slightly, usually down and to the right, from the original.

The duplicate distance is user definable, see Customizing Designer Pro (on page 451).

Cloning
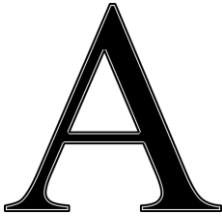
Choose "**EDIT**" > "**CLONE**", or press "Ctrl + K". This places a copy exactly on top of the original. Cloning is an easy way to create concentric shapes.
This example uses an original large letter "A" with a black fill and a 4pt thick white outline and a clone with no fill and a 1pt black line.

Moving objects forward and backwards

Complex documents have objects stacked on top of each other, such as this target:
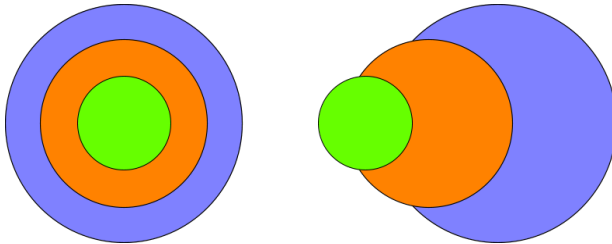
The target on the left is made from three circles stacked on top of each other.

To ensure that objects overlay each other in the correct order, you often need to rearrange their order from front to back. The front object always covers lower objects, and objects always cover other objects which are further back. Each new object you create is always created on top of older ones.

The **PAGE & LAYER GALLERY** is useful for viewing and manipulating the stacking order of objects. It shows you the objects in their stacking order. The order of objects in the gallery from top to bottom, mirrors the stacking order of those objects in the design from front to back. So the target design above looks like this in the Page & Layer Gallery (on page 142):
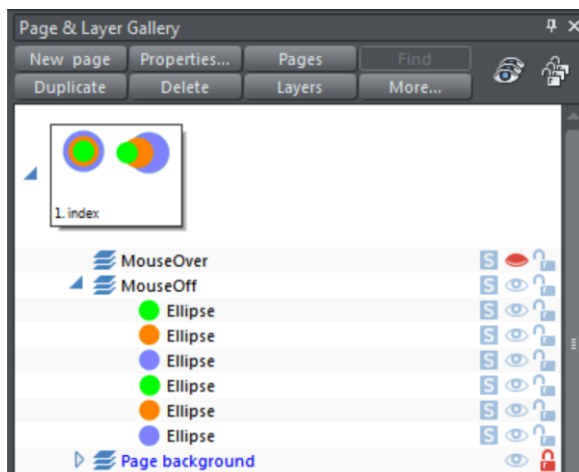
And you can change the stacking order of objects using the Page & Layer Gallery by simply dragging them up and down. So for example in the target design, dragging the blue circle in the Page & Layer Gallery, and dropping it above the green circle will bring the blue circle to the front. The **ARRANGE** menu gives you four options:

- **BRING TO FRONT** ("Ctrl + F"): This makes the selected object the front object, and it will hide any other object it covers.
- **MOVE FORWARD** ("Ctrl +Shift + F"): This moves the object up a level towards the front rather like climbing a staircase one step at a time.
- **MOVE BACKWARD** ("Ctrl +Shift + B"): This moves the object one level towards the back.
- **PUT TO BACK** ("Ctrl + B"): This moves the object to the back.

These options move objects forwards and backwards within their layer. **MOVE TO LAYER IN FRONT** and **MOVE TO LAYER BEHIND** lets you move objects between visible layers (invisible layers are skipped when moving objects).

Read more in "Page & Layer Gallery (on page 142)"

Rotating objects

This is part of the **SELECTOR** Tool.

⊕ When in rotate mode, the transformation center (around which the object rotates) initially appears in the center of the object, as shown by a small target like this.

Simply click on a object again to put the selector into rotate mode, or click the **ROTATION HANDLES** button on the InfoBar.

To move the transformation center:

- Drag the transformation center target where required.
- Or use the 3x3 matrix on the InfoBar for accurate positioning.

- This moves the transformation center to the corners, the center or the side mid-points of the object or selection. The transformation center aligns with the outer edges of the object. This means that if the object has a thick line applied, the transformation center can be outside of the object.

Attention: If the rotation center is moved, it remains in this location for any selected object until all objects are deselected, at which point it returns to the center of any selected object.

Rotating using the mouse

The **SELECTOR** Tool must be in rotate/skew mode (the selection handles are arrow shaped).

Dragging the side handles stretches the object. This is described in Stretching and squashing objects (on page 136).

Drag on a corner arrow. As you drag, the object rotates around the transformation center. The InfoBar shows the current rotate angle.

"Shift + drag" to rotate the object around its center (the transformation center is ignored).

Hold down "Ctrl" to restrict rotation to the constrain angles. Note that for rectangular objects, the set of constrain angles includes those rotations which align the rectangle with the screen. This makes it very easy to 'straighten' rectangular objects – just hold down the Ctrl key and rotate until the rectangle snaps to the screen-aligned rotation you want.

The constrain angles are user definable. Refer to "Customizing Designer Pro (on page 451)".

To create a copy while rotating, click "+" on the numeric keypad while rotating, or click the right mouse button.
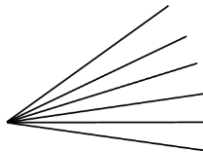
To quickly create a fan like this, draw a single line, then position the transformation center in the bottom right (click the bottom left button of the 3x3 transformation center control on the InfoBar), and then as you drag rotate the object, right click for each successive line you require.

Rotating by exact angles (using the InfoBar)

Type an angle into the rotate box and press "↵". Positive angles rotate anti-clockwise and negative angles rotate clockwise.
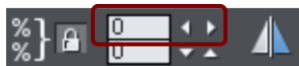
Click the arrows to the right to nudge the rotate angle.

Rotating objects in Resize Mode
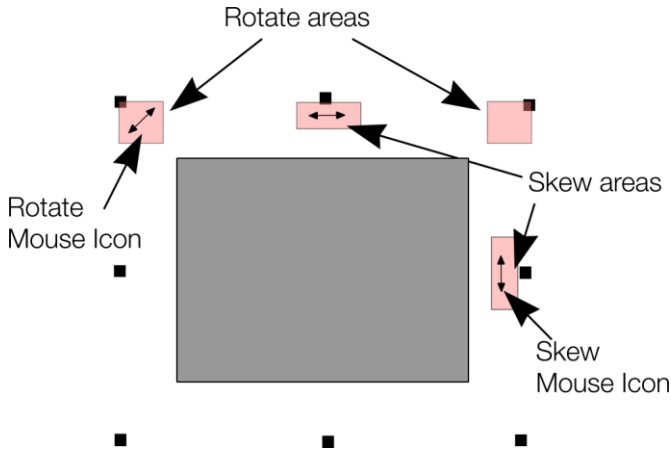
It is possible to rotate and skew an object even if not in rotate mode. Using resize mode, move the mouse pointer into the according small areas near the selection area handles as illustrated above. The mouse pointer changes into a rotate or skew icon, showing you that you are now able to rotate or skew the object by dragging with the mouse.

Scaling (resizing) objects

This is part of the **SELECTOR TOOL**.

Scale Line Widths button

The **SCALE LINE WIDTHS** button on the **SELECTOR TOOL** infobar is used in many operations where the width and height of the selected objects are important. It controls whether the line attributes (not just line widths) are taken into account when working out the size and position of the selected object(s).

With the **SCALE LINE WIDTHS** button set, scaling an object also scales its line widths. With this button unset, line widths remain unchanged.

You can toggle this button during drags by clicking "/" on the numeric keypad.

If you have a rectangle with a 4 pixel line width, as you turn **SCALE LINE WIDTHS** on and off you'll see that the X, Y W And H fields in the **SELECTOR TOOL** change as the effects of the line width are included and excluded.

The following features are affected by **SCALE LINE WIDTHS**:

- Position and size as reported on the **SELECTOR TOOL** infobar XYWH fields
- Changing position and size by entering values into the infobar XYWH fields
- Changing size by entering values in the W% H% fields
- Scaling/stretching objects by dragging in the Selector tool
- Alignment
- Snapping

The line attributes that are taken into account when SCALE LINE WIDTHS is turned on are:

- Line width
- End caps
- Join type
- Dash pattern
- Arrowheads
- Brush style
- Stroke type (inc. variable width strokes)

In general, if you are interested in the visual positions of objects you should turn SCALE LINE WIDTHS on. If you're interested in the exact positions of lines (e.g. where the centers of lines are, as is typical in technical drawings) then you should turn SCALE LINE WIDTHS off.

Lock Aspect button
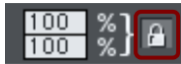
With the LOCK ASPECT button set, the width/height aspect ratio remains constant as you scale the object.

In other words, the shape remains in the same proportions as the original. It's recommended that this button remains selected most of the time in order to ensure that when you resize objects they do not become squashed.

With this button unset, you can change the aspect ratio as you scale the object, in other words, you can stretch object one way or another when dragging a corner resize handle or when entering a new size.

Scaling using the mouse

The SELECTOR TOOL must be in scale mode (the selection bounds handles are squares). If necessary, click on the object to change to scale mode.

Drag any corner handle to resize

Drag a side handle to stretch
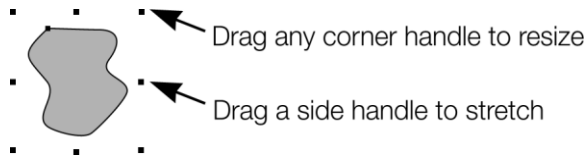
Drag one of the corner handles. The object scales as you move the pointer diagonally. The InfoBar shows the current scaling. The object will scale between the dragged handle and the opposite one. To use any other point of the object as the fixed point move the transformation center to it and use the InfoBar buttons to scale (on page 102).

Hold "Shift" while dragging to scale the object around its center. This works independently of the position of the transformation center.

"Ctrl + drag" scales the object in multiples of its original size (x2, x3, and so on).

To create a copy while scaling (leaving the original in place) right click, or press "+" on the numeric keypad.

Dragging the side handles stretches or squashes the object. This is described in Stretching and squashing objects (on page 136).

Scaling using the InfoBar

① Type into the **SCALE TEXT** boxes and press "↵".
- Scalings below 100% reduce the object. 50 halves the size of the object.
- Scalings above 100% enlarge the object. 200 doubles the object size.

② If **LOCK ASPECT** is set, you can type into either text box to resize the object by the desired percentage. If this button is unset, you can enter separate values for both the width and height.

③ Alternatively, type the required size of the object into the **W** or **H** text boxes.

If the **LOCK ASPECT** button is on, this scales the object and maintains the aspect ratio. You can enter the size in any unit, such as 1 cm.

Scaling with the InfoBar buttons (or number boxes) always scales around the transformation center. You can position this anywhere else in the object, as described in "Rotating objects (on page 98)".

Perimeter & Area
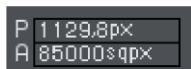
The 2 controls on the right of the Selector tool infobar show the perimeter and area of the current selected shape(s). Perimeter is shown in the current units for the document and area is shown in the current units squared. These fields are not editable.

Flipping objects

This is part of the **SELECTOR TOOL**. Clicking on the **FLIP** buttons flips the object vertically or horizontally around the transformation center.

The scale and aspect ratio do not change; the object just flips.

Snapping

Snapping makes it easier to position edges, or specific points on objects, exactly where required. It can be used to align edges to a specific point or line, or to evenly space objects, using the grid.

Xara Designer Pro 7 offers three types of snapping.

- Snap to grid
- Magnetic snapping (snap to objects)
- Snap to guidelines or guide objects

Grid snap is useful for making objects evenly spaced, or making the sizes exact multiples of a given value. Guidelines are useful for aligning edges (although it's a lot more powerful using guide objects) and magnetic snap is a general purpose way of accurately positioning lines, points or object edges relative to other objects or to the page center or edges.

Snap to grid

When **SNAP TO GRID** is selected, grid points act like magnets. Right click on the pasteboard and choose "**SNAP TO**" > "**SNAP TO GRID**" or use the menu option "**WINDOW**" > "**SNAP TO GRID**", (or press "." (decimal point) on the numeric keypad). You can control the grid spacing from the options dialog (right click and choose **PAGE OPTIONS** or use the menu command "**UTILITIES**" > "**OPTIONS**") on the Grid and Ruler tab. By default web document templates have snap to grid on, with a single pixel grid, so that normally all object dimensions and positions are whole pixels.

When dragging objects the edges will snap to grid points. If the size of the object is such that opposing edges can't both be snapped, the edge that snaps depends on the direction the object is dragged in.
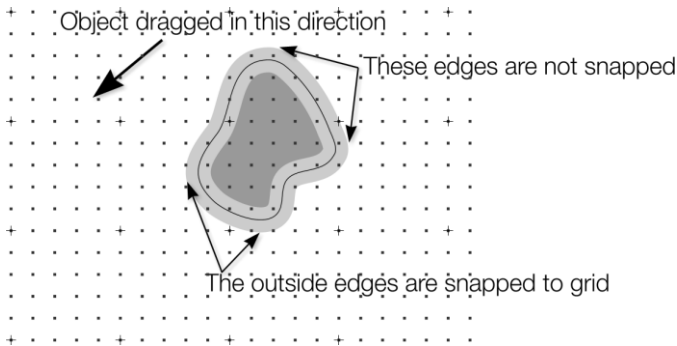
This shows a coarse grid with 5 subdivisions between major divisions. The shape has a very thick gray outline. Because the object has been dragged down and to the left, the lower and left outside edges are snapped to the nearest grid point.

Note: The default grid spacing is 50 pixel spacing for major grid lines with 50 subdivisions. This means the grid is spaced at exactly one screen pixel and so may appear not to be working at a normal 100% zoom. If you zoom in to say 500% then you can see it does snap correctly.

Alternatively, change the grid values to have, say, 10 subdivisions which means that the grid points are on 5 pixel boundaries.

Snapping and line widths

 The **SCALE LINE WIDTHS** control on the **SELECTOR TOOL** InfoBar affects whether snapping happens to the bounds of objects including their outlines.

The above example shows a shape with a thick gray outline. It also shows (thin black line) the shape outline itself (you can see the thick outline is drawn equally on either side

of the center line so that it partly overlaps the inside of the shape and partially goes outside).

With scale line widths on, the width of the outline is deemed to be important and so 'snap to grid' will snap the bounds of objects, including outlines, to the grid. Snap to objects will allow you to snap using the bounds or the outline center lines. If the outlines as they appear on screen are small, so there is little difference between these two snapping positions, bounds snaps are favored. So zoom in if you want to snap outline centers in this case.

With scale line widths off, 'snap to grid' and 'snap to objects' will snap the center lines of objects, ignoring the outline widths.

Because snapping honors the Scale line widths switch it means that the bounds used by snapping are always the same bounds that are reported in the **SELECTOR TOOL** infobar.

Magnetic object snapping (snap to objects)

Magnetic object snapping makes it much easier to accurately position objects relative to each other or relative to the page center or edges.

So, for example, if you want several lines to start at exactly the same point, or want a line to exactly join the edge of a circle, then using "magnetic object snap" is useful.

You can even use this to align the centers of objects, or align objects to the center of the page, or align them horizontally and vertically anywhere in the middle of the page.

Magnetic snapping works when either moving or scaling objects using the **SELECTOR TOOL**.

Magnetic snapping to objects is enabled by default in web documents. To toggle it on and off, click the **SNAP TO OBJECTS** button in the top toolbar. Alternatively right click the pasteboard and choose "**SNAP TO**" > "**SNAP TO OBJECTS**", or use the menu option "**WINDOW**" > "**SNAP TO OBJECTS**". You can also toggle it on/off during dragging by tapping 's'.

Click and drag on the object you want to snap. As you drag, Designer Pro displays a magnet icon, blue lines and red points whenever you are near a "point of interest" that it has snapped to.

Snap indicators

Snap indicators are shown whenever a snap occurs. That is whenever a point of interest on the object you are dragging comes in range of a point of interest in the document (which could be on another object or be part of the page). Designer Pro snaps to the point of interest and the mouse pointer changes to show a magnet symbol so you know a snap has happened. Also further indications are shown dynamically on screen to help you see what snap has occurred.

- A red dot indicates that a specific point has snapped
- A blue line indicates a snap to some feature of another object (e.g. to the edge of a rectangle).
- An orange line indicates a snap to a page feature (corners, edges, center)

The snap indicator lines pulse to show that they are temporary "live" indicators and to help them be seen over different background colors.

The snapping distance is controlled by the **MOUSE** tab of the **OPTIONS** dialog box ("**UTILITIES**" > "**OPTIONS**" or right click a page and choose **PAGE OPTIONS**).
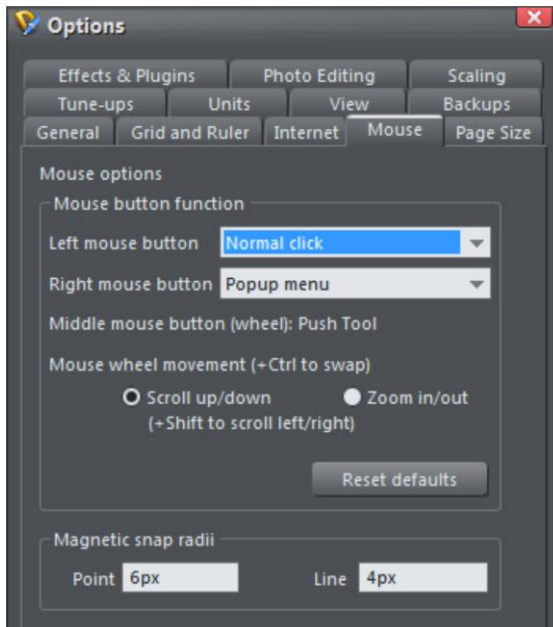
You can specify two snap distances in the "Magetic snap radii" section, which control how close things need to be before they will snap together. The size of a circle around points (point) and the distance either side of lines (lines). It's usually best to make the point value larger than the line value, so that it's easier to snap to the end points of lines.

Customizing Designer Pro (on page 447) has full details of the Options dialog.

Snapping modes

You can change the behavior of snap to objects while dragging by tapping a key to toggle different modes on and off. These mode changes are effective only for the duration of the current drag.

S   Toggle 'snap to objects' on and off. This temporarily overrides the "**WINDOWS**" > "**SNAP TO OBJECTS**" setting.

G   Group snapping. By default, to minimise the complexity and numbers of snapping lines shown, objects inside groups are ignored and only the bounds and centre of the whole group are considered for snapping. Pressing G turns on group snapping so that objects inside groups also contribute to snapping just as if they were not grouped.

A   Angled snapping. See Angled snapping below.

Snapping to original position

When 'snap to objects' is on and you drag an object to move it, the bounding box of the original position of the object is indicated by a red dashed rectangle. This also contributes to snapping making it easy for you to (for example) move an object in one

dimension only. However note that you can also constrain the angle of any drag by holding down "Ctrl" while you drag.

Angled snapping

Xara Designer Pro 7 is not restricted to axis-aligned snapping. With Angled snapping turned on, the snapping system can snap parallel lines, whatever their alignment, and find the intersections between crossing line constraints. So for example you can snap the edge of a shape that runs at 30⁰ with the edge of another running at the same angle.

Angled snapping is not on by default, because in most cases it's not useful. To activate it while dragging, simply press the 'A' (for Angle) key. Press again to turn off.

Snapping notes

Note: Only the objects that are fully or partly visible in the current view are considered for snapping. You cannot snap to objects outside the view (except the page).

Note: Snapping distances are measured in screen pixels so if you have several snapping positions close together it's best to zoom in to make sure you snap to the one you want.

Note: When snapping text to text, the baseline of the text is favored over any other snaps that are within snapping distance. This makes it easy to vertically align one text object to another with matching baselines, which is normally more useful than snapping the centers or bounding boxes of text for example.

Guide Objects and Guidelines

Guide objects and guidelines are objects on a special layer, the guides layer. A guide layer is automatically created when you create a guideline (see below), or you can create one by right clicking in the PAGE & LAYER GALLERY and selecting CREATE GUIDE LAYER (see "Page & Layer Gallery (on page 142)" for information on layers). Use SNAP TO GUIDES in the WINDOW menu (or key 2 on the numeric keypad) to turn on snapping to guide objects.

Any object placed on the guides layer becomes a guide object. These can be any object type including lines at any angle, irregular shapes, and quickshapes. You can create, scale, and delete objects on the guides layer as usual, but they always appear as thin dotted red outlines; any applied line width or fill color is ignored. This information is retained, and if you later move the object from the guides layer to a normal layer, line thickness, and colors are shown again. You can use guide objects to draw construction lines such as lines passing through a vanishing point for perspective drawing.

Placing objects onto the Guides Layer

First ensure there is a guide layer in the PAGE & LAYER GALLERY, see above. You can create objects directly on the guides layer by selecting it and creating objects as usual.
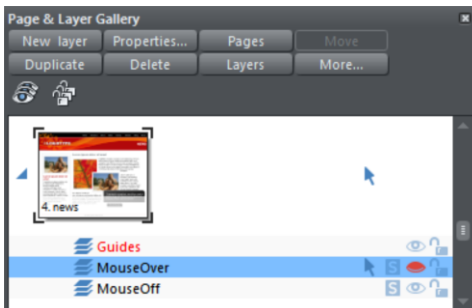
You can also cut or copy objects from another layer and then paste those objects into the guides layer. To paste the objects in the same relative position on the guides layer use the keyboard shortcut "Ctrl + Shift + V".

The Page & Layer Gallery showing a guides layer above two other layers.

MOVE TO LAYER IN FRONT and MOVE TO LAYER BEHIND on the ARRANGE menu (or right click and choose "ARRANGE" > "MOVE TO LAYER IN FRONT/BEHIND") will skip the guides layer and so cannot be used to move objects onto the guides layer.

Creating a guideline

Guidelines are vertical or horizontal lines and are a quick and easy way to align a series of objects on the page.

- Turn rulers on ("Ctrl + L").
- Drag from a ruler onto the page.

Or

- Double click on the ruler to create a guideline aligned to the click point.

This automatically creates a guides layer and puts the guidelines on that layer.

Or, using the Page & Layer Gallery (on page 142):

1. Right click in the Page & Layer Gallery and choose **PROPERTIES**.
2. If necessary, click the Guides tab.
3. Select horizontal or vertical.
4. Click new.
5. Type in the required position.

Deleting a guideline

Using the **Selector TOOL** drag the guideline onto the appropriate ruler (the vertical ruler for vertical guidelines, horizontal ruler for horizontal).

Or, right click on the guideline and then choose **DELETE**.

Grouping and ungrouping objects

The Shadow and Transparency Tools offer different results depending on whether objects are grouped or not. For more information see "Transparency (on page 213)" and "Shadows (on page 222)".

You will often create complex shapes from several different objects. The "**ARRANGE**" > "**GROUP**" menu option (or right click selected objects and choose **GROUP**) lets you lock those objects together to form what appears as a single object. You can then select the grouped objects and copy, rescale, move or perform any other operation on the entire group.

To create a group

1. Select all the objects you want in the group.
2. Right click and choose **GROUP** or choose **GROUP** from the **ARRANGE** menu (or "Ctrl + G") to create the group.

Ungrouping objects

1. Select the group.
2. Right click and choose **UNGROUP** or choose **UNGROUP** from the **ARRANGE** menu (or "Ctrl + U").

After this, all the individual objects in the group remain selected.

To add more objects to a group

1. Select the group.
2. Ungroup ("Ctrl + U")
3. Select the extra objects.
4. Group again ("Ctrl + G")

You can also incorporate a group into a second group by omitting step 2. Designer Pro remembers the original grouping information. If you ungroup the objects later, the original group remains.

Removing objects from a group

1.   Ungroup the objects.
2.   "Shift + click" on the objects you want to remove. This deselects them; the other objects remain selected.

You can then choose "ARRANGE" > "GROUP" to regroup the remaining objects.

Selecting a single object from within a group

This feature is useful for changing an object's color, for example. "Ctrl + click" on the object (you can also use this to select a "group within a group"). Pressing "Tab", or "Shift + Tab" moves the selection within the group, to the next, or previous object. Once you have selected an object inside a group, you can also use "Alt + click" to select the object under the selected one.

This is called "select inside".

Editing inside groups

If you want to edit the objects inside a group, there are broadly two ways to approach this. You can either select the objects inside the group and work on them directly in your document, or you can double click on the group to open its contents in a separate document view.

Selecting inside

If you hold down Ctrl and click on an object in the Selector tool, that object will be selected even if it's inside one or more groups. That's called a "select inside" operation. Also some tools will let you directly select objects relevant to them inside groups, just by clicking on them. For example in the Photo Tool you can just click on a photo to select it, even if it's in a group.

Editing group contents

If you want to edit several objects inside a group, it can get tedious having to keep Ctrl+clicking on each one first. So instead you can instantly open the group's contents in a separate sub-document view, to make editing much easier.

Double click on a group and a new document view opens (or right click on it and choose Open from the context menu). It contains only the contents of the group and not the group itself, so you can select all the direct children of the group just by clicking on them. You can also draw new objects and these will be added to the group when you save your changes back. Since the sub-document contains only the contents of the group, you won't see the effects of any group attributes in the sub-document view. So if for example the group has group transparency applied in the main document, that transparency won't be apparent in the sub-document.

Once you're done editing the group, hit "Ctrl + S" to instantly close the sub-document view and save your changes back to the parent document. Or you can close the view using the close button in the top right of the window, just as you close ordinary documents, and you'll be prompted to save or discard any changes you've made.

If the group you are editing contains other groups (because the parent document had multiple levels of nested groups) you can double-click on them to open those in a sub-document too. In this way you can rapidly 'drill down' multiple levels of groups in a complex document, to edit inside the groups. Remember to save each separate edit inside back to its parent, and then back to the parent document, to avoid losing any edits.

Note that whenever you start a group edit, the sub-document view opens initially with the same zoom and scroll offsets as the parent document. Therefore the group objects appear on screen with the same size and position as they have in the parent document. But you can change the zoom and scroll offsets as you work on the group contents.

If you try to close a document that has one or more of its groups open in sub-documents, and there are changes in those sub-documents, you'll be prompted about saving those sub-document changes first. Once all sub-documents have been closed, you'll then be prompted about whether to save or discard any changes to the main document.

Live Copies & Repeating Objects

You can edit inside a Live Copy just as if it was a normal group – just double click it to open in a sub-document view. As with all edits made to the objects inside a Live Copy, when you save the changes back, all copies of that Live Copy will be updated. And similarly you can edit a repeating object the same way.

Molds

You can edit the contents of a mold, which is something that is not possible using direct selection inside (molds do not allow objects inside them to become selected). Right click on the mold and choose OPEN MOLD from the context menu.

Limitations

Groups cannot contain layers and so if you introduce any layers while editing a group, those layers will be 'flattened' when you save the changes back to the parent document. In other words all the objects will be moved to the original single layer on save and any layer structure you introduced lost. Similarly a group can't contain multiple pages and so any pages you add while editing will be ignored and lost when you save back – only the first page is relevant.

The Automatic Backup facility does not save modifications to open sub-documents. Only the parent main document is saved when a scheduled backup runs, in its current state without the unsaved group edits. For this reason it's recommended that you save group edits back to the parent document regularly.

If you close the program or shutdown Windows while you have group sub-documents open with unsaved changes, those sub-documents are first closed and saved back to the parent document, before the parent document is saved to the backup folder and the

program closed down. So when you next start the program, the main document will be loaded and it will include all the group edits that were unsaved at the time of closure.

Other types of groups

Special types of group are used by some tools and functions to keep objects together and/or to give an object some special behavior.

When you anchor an object to text for example, the object is placed in an Anchored Group, as shown on the status line when you select such an object. Similarly when you make an object repeating (see Repeating Objects (on page 119)) or make it a Live Copy (see Live Copies) the objects are placed inside a "Repeating group" a "Live copy group" respectively.

Soft Groups

Ordinary Groups as described in "Grouping and ungrouping objects (on page 109)" sit on a single layer, they cannot span layers. **SOFT GROUPS** are an alternative way of linking objects together where the objects can be across several different layers.

Selecting one member of a Soft Group also selects all other members of the same Soft Group – even members that are on invisible or locked layers. This means when you delete, move, rotate or otherwise transform one member of a Soft Group, all the other members are similarly modified.

The status line indicates when a Soft Group is selected.

Soft Groups are useful for keeping closely related objects together. For example the **MOUSEOFF** and **MOUSEOVER** states of a web button are Soft Grouped together, so that if one state is moved or transformed, so is the other state.

Creating Soft Groups

To create a Soft Group, select all the objects that are to be included in it and then choose "**ARRANGE**" > "**APPLY SOFT GROUP**" (or press "Ctrl + Alt + G"). Note that if the Soft Group is to include members on invisible or locked layers, you'll need to make those layers temporarily visible and editable using the Page & Layer Gallery in order to select the objects and Soft Group them.

An object cannot be a member of more than one Soft Group and Soft Groups cannot be nested (soft groups as members of soft groups).

Removing Soft Groups

To disband a Soft Group, select it and choose "**ARRANGE**" > "**REMOVE SOFT GROUP**" (or press "Ctrl + Alt +U"). The objects don't get deleted, they are just no longer linked together by a Soft Group.

Text Synchronization

Any text objects which have the same text value and which are members of the same Soft Group are kept synchronized if any of those text objects are edited. So change the text in one object and any other text objects that had the exact same characters will also be changed to match. Only the text value itself if synchronized, so different text objects can have different sizes, fonts and text attributes.

Text sychronisation using Soft Groups is useful where a label is duplicated in several places, perhaps in different styles and you want each object to show the same label.

Alignment

This lets you accurately align or distribute two or more objects.

Quick aligning

Select the objects you want to align, and right click the selection to choose **ALIGN** from the drop-down menu, and then do one of the following:

- Align the objects vertically by choosing **LEFT EDGES**, **CENTERS** or **RIGHT EDGES**.
- Align the objects horizontally by choosing **TOP EDGES**, **CENTERS** or **BOTTOM EDGES**.

Aligning and distributing space

If you want to distribute space between the objects as well as align them, select the objects, right click the selection and choose "**ALIGN**" > "**ALIGNMENT**" to display the Object Alignment dialog. Alternatively choose "**ARRANGE**" > "**ALIGNMENT**" ("Ctrl + ⇧ + L").
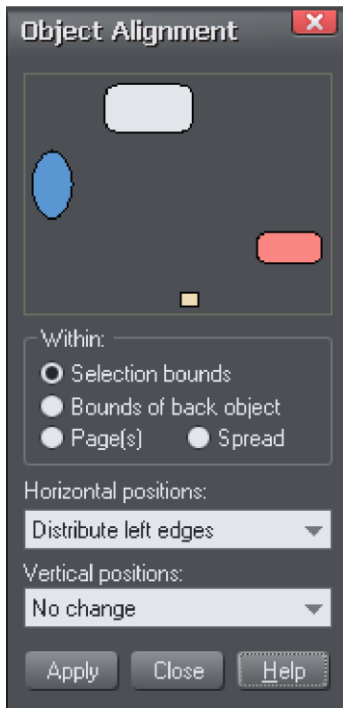
The small diagram at the top of the dialog box shows you the effect of selecting each option. The selected objects in the document do not change until you click **APPLY**.

The alignment dialog is a non-modal dialog, which means you can keep it on screen and continue to work on the document at the same time. So you can change tools, draw, and change your object selection, and then easily select from the various alignment options.

If you've got your selection wrong, you can change the selection, and just click the **APPLY** button to apply the last alignment settings again. This can be a real-time saver.

Within

This section of the dialog controls the boundaries within which you align or distribute the objects. The options are:
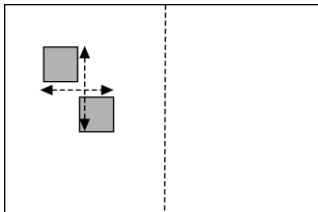
SELECTION BOUNDS: The boundaries are the outer edges of the selected objects. Their relative position on the page or spread has no effect.
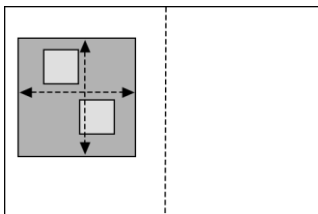
BOUNDS OF BACK OBJECT: The boundaries are the outer edges of the backmost selected object. This object is not affected by the alignment.

You can use this to define the "reference" object when you want to align several objects in a row, for instance. With the normal "Selection bounds" options on the leftmost object is the reference object (the one that won't move)
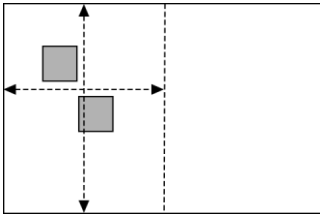
PAGE(S): If the objects are on a single page, the boundaries are the edges of the page. (This lets you, for example, center objects on the page or align against the page edge.)
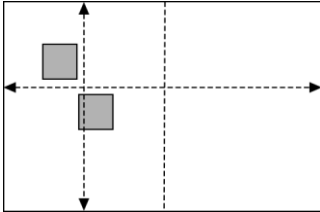
SPREAD: The boundaries are the outer edges of the spread. In most cases, this is the same as page(s) unless you have a double page spread, in which case it will use the bounds of both pages.

Aligning

To align objects, for example, so their left edges are aligned to the left.

1.   Select the objects and right click the selection.
2.   Choose "**ALIGN**" > "**LEFT EDGES**" from the drop-down list.

The selected objects move to align the left edges.

Alternatively:

1.   Choose "**ALIGN**" > "**ALIGNMENT**" or press "Ctrl + Shift + L" or choose **ALIGNMENT** from the **ARRANGE** menu to open the Object Alignment dialog.
2.   Select the required **WITHIN** option, e.g. Selection bounds.
3.   Select **ALIGN LEFT** for horizontal positions.
4.   Leave vertical positions to **NO CHANGE**.
5.   Click **APPLY**.

The selected objects move to align the left edges.

All the align options act in a similar way. For brevity, only the left align option, shown in the illustration of the dialog box is described. Experiment to learn about the other options.

To quick-select any combinations of vertical and horizontal alignment click with the mouse in the diagram:

- A simple mouse click aligns horizontal and vertical positions to the clicked position to any of the nine combinations of top-centrally-bottom/left-centrally-right.
- "Ctrl + mouse click" leaves the horizontal position unchanged and arranges the objects in a to a top, centrally, or bottom aligned row.
- "⇧+ mouse click" leaves the vertical position unchanged and arranges the objects in a left, centrally, or right-aligned column.

Distribute

The distribute options will position all the selected objects evenly across the "Within" area (usually within the selection bounds, but it could be the page or spread).

Again all the distribute options work in a similar way. The following examples show how the different vertical position options align objects:
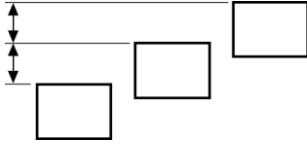
TOP EDGES DISTRIBUTION: the tops of the objects are evenly spaced. **BOTTOM EDGES** distribution is the inverse—the bottom of the objects are evenly spaced.
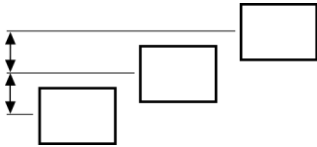
CENTERS DISTRIBUTION: the centers of the objects are evenly spaced.
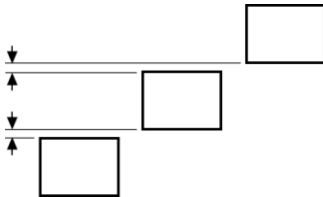
EQUI-SPACED DISTRIBUTION: the objects are evenly spaced from each other.

The horizontal position options are similar but operate in the horizontal direction.

So, for example, to distribute this collection of randomly positioned ellipses, so they are all equally spaced and aligned to the top edge:
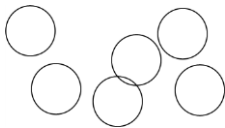
- Select the shapes
- Display the Alignment dialog ("Ctrl + ⇧ + L")
- Ensure **WITHIN** shows **SELECTION BOUNDS**
- Select Horizontal positions: Distribute centers
- Select Vertical position: Align top
- Click **APPLY**
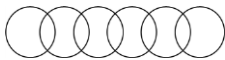
And they will now look like this, all equally spaced horizontally and aligned to the top.

Remember if you make a mistake you can always undo the operation.

Copying Styles: Paste Attributes

This lets you copy attributes (such as line pattern or fill color) between objects. It is a quick way of applying multiple attributes to an object.
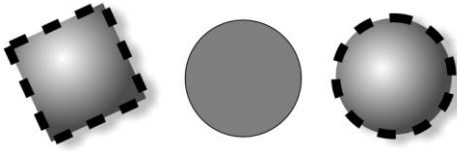
The square has a specific color, shadow, line and fill style. Copying it and then pasting its attributes on to the circle in the middle, results in the circle to the right.

1. Select the object from which you wish to copy the attributes.
2. Copy the selection to the clipboard. ("**EDIT**" > "**COPY**", or "Ctrl + C".)
3. Select the object(s) to which you want to apply the attributes.
4. Choose "**EDIT**" > "**PASTE ATTRIBUTES**", or "Ctrl + Shift + A".

The object remains on the clipboard until overwritten by a cut or copy operation. This lets you repeat paste attributes as many times as required.

Style libraries

It's quite easy to use this technique to create documents that can be used as style libraries. Create a series of small objects with a variety of useful fill, color and other attribute styles. Then the quickest way to use one of these styles is:

- Click on the source object, "Ctrl + C" to copy the style
- Move to the destination object (which can be in another document, "Ctrl + Tab" to quickly switch between open documents), click on the object to apply the style to
- Press "Ctrl + Shift + A" to apply the attributes

**Note:** Most attributes can be copied this way, including shadows, feather values, fill styles, live effects, etc. However bevels can only be copied from one object to another if the object the bevel is copied to has already a bevel to apply the bevel attributes to.

ClipView

ClipView is a very powerful feature that lets you use an object as a "window" onto other objects. You see only those parts of other objects that are within the window. We call this creating a ClipView.

This is sometimes known as "object clipping", or "Paste inside".

The effect is similar to the **INTERSECT SHAPES** option, described in the chapter on Shape handling (on page 128). The difference is that the **INTERSECT SHAPES** option actually cuts the objects, whereas ClipView just hides the parts outside the ClipView object. What's more you can then adjust the position of the objects inside the ClipView.

To create a ClipView:

1. The 'window' object must be behind the other objects in the ClipView. If necessary move it backwards. In this example the dark ellipse is the window object. Alternatively draw the 'window' shape on the mask layer (on page 234).
2. Select all the objects you want to be inside the ClipView (including your 'window' object unless it is on the mask layer).
3. Choose "**ARRANGE**" > "**APPLY CLIPVIEW**" ("Q"). All of the "window" object remains visible plus those parts of other objects that overlap the "window" object.
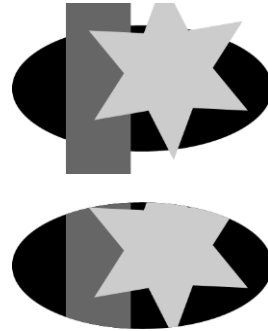
Setting the ClipView background color

The fill color of the original object used as the ClipView is the background color. So either set this to the desired color before setting the ClipView or perform a "select inside" ("Ctrl + click") on the background, and then adjust the color.

Selecting different parts of a clipview

There are 3 ways to select a clipview in order to manipulate it or its contents. You can select the whole clipview object, just the clipping object, or the objects being clipped. If you just click on the clipview, the whole clipview object is selected and you can delete, move or otherwise transform it just like any other object using the Selector Tool. Right click on the clipview and the context menu that appears has two more selection options.

Select clipping shape

This selects only the shape that you used to do the clipping. Effectively this is the 'window' through which you see the other object(s) in the clipview. Once it's selected you can move it around or otherwise transform it, to adjust your clipview.

Select clipped objects

This selects all the objects in the clipview that are being clipped. Therefore once these are selected, you can drag them around inside the clipview to adjust their position relative to the clipping shape.

Selecting objects in the Clipview

You can perform a "select inside" by holding "Ctrl" and clicking on the desired object. This is very like selecting objects inside a group described earlier in this chapter (ClipView objects are a type of group). You can now perform most edit operations on the object.

Removing a ClipView

Just select the object and the menu "**ARRANGE**" > "**REMOVE CLIPVIEW**", or press "Alt + Q".

Soft edged ClipView

With the whole ClipView object selected, you can adjust the **FEATHER** slider control on the top bar, to give the whole clipped object a soft feathered edge.

> **Note**: You can have ClipView objects inside ClipView objects.

Repeating Objects

It's common to have items like navigation buttons, headers or logos repeating on all pages of your website. Or to have the same logo, header or footer on each page of a printable document. Xara Designer Pro 7 provides the ability to repeat any item in the same place across any of your pages in a document. When you update one of the copies, Designer Pro automatically replicates those changes across all pages.

On most of the web template designs the main navigation buttons are repeating. You can make any object such as a button a repeating object by right clicking it and choosing REPEAT ON ALL PAGES. The object will be copied to the same place on all pages. Then when you change it, such as editing the text or web address, the buttons on all the pages will be updated. However if the bar is set to be a SITE NAVIGATION BAR it automatically appears the same on all pages of your site and there is no need to make it a repeating object. Logo text and footers are also normally set to be repeating objects in the templates. Again this means you can edit them on one page, and the same object is updated on all other pages.

> **Note:** This uses the current page as the source of the repeating items to copy across all the other pages. So make sure you're on the right page before updating objects. The current page is the one you're working on, and is shown with markers around the page corners. Just click anywhere on the page (or even outside it) to make the page current. Or click the page in the Page & Layer Gallery.

It's easy to create your own repeating items, just right-click any object and choose REPEAT ON ALL PAGES.

The object is copied to the same place on all pages, displaying the repeating symbol icon in the top left hand corner. If you make any further changes to this item all the copies will be automatically updated.
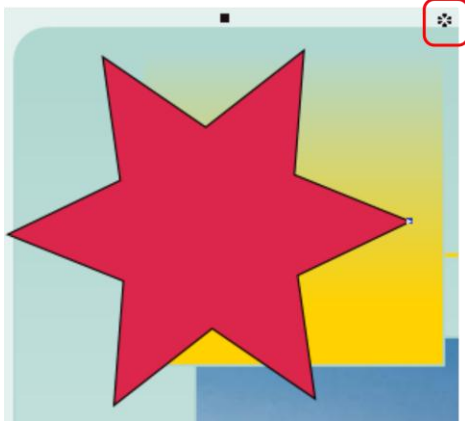
The red box shows the repeating object symbol, shown on every instance of the repeating object

If you don't want a copy of the repeating object on a page, just delete it from that page. When edited, the repeating object is only automatically updated to those pages that already have it.

If you want a repeating object on just a few pages of a large website, you can:

1. First make your object repeat on all pages of your site, using "**ARRANGE**" > "**REPEAT ON ALL PAGES**".
2. Select one of the repeating objects and copy it to the clipboard ("Ctrl + C").
3. Hit the Delete key and choose the **DELETE FROM ALL PAGES** option when prompted.
4. Now simply paste the repeating object onto each page that needs a copy of it.

Editing the contents of a repeating object

When Designer Pro creates a repeating object, the repeating items are placed in a containing 'repeating group', similar to a normal group. If you drill down to a layer containing a repeating object in the **PAGE & LAYER GALLERY**, you can see that there's a repeating group containing each repeating object on that layer.

Page & Layer Gallery

| New layer | Properties... | Pages | Locate |
| Duplicate | Delete | Layers | More... |

| ▷ Holiday photo 4 |
| ▷ Holiday photo 3 |
| ▷ Holiday photo 2 |
| ◢ Holiday photo 1 |
| ◢ Repeating Group |
| QuickShape |
| ◢ Repeating Group |
| Rectangle |
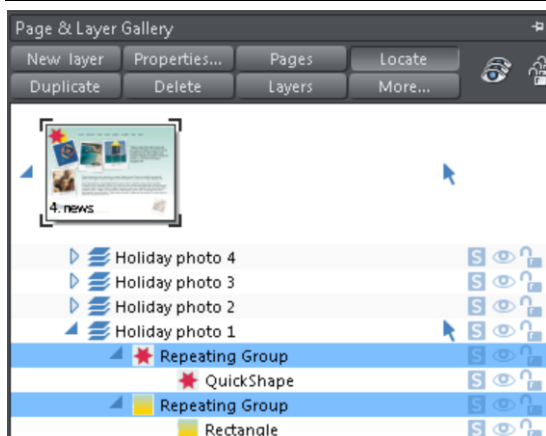
Designer Pro places each repeating object inside a repeating group

If you want to edit an item inside this repeating group, press "Ctrl + click" on the item to select it inside (on page 88) the repeating group. You can also double click on a group to edit it in a new sub-document view (or right click on it and choose **OPEN** from the context menu). It contains only the contents of the group and not the group itself, so you can select all the direct children of the group just by clicking on them.

Alternatively if you go into a specific tool you can usually click directly on any object that is applicable to that tool and it will be selected inside its repeating group (or any other type of group). So for example you can select a Quickshape that's inside a repeating group by simply going into the Quickshape tool and then clicking on the shape. As with any other edits made to a repeating object, any edits you make inside a repeating group are applied to all instances of that repeating object on other pages.

Locking a repeating object

You can lock a repeating object right clicking it and choosing **LOCK REPEATING OBJECT**. Once locked, the object is not selectable. But editing any other copies of that repeating object on other pages, which aren't locked, will change all copies, including the locked copy.

Headers / Footers

You may have pages in your site of varying lengths and want some repeating objects to be positioned relative to the top of each page and others (e.g. footers) positioned relative to the bottom of each page. This is handled automatically by Xara Designer Pro 7.

You can force a repeating object to be positioned relative to the top or bottom of the page by right clicking on it and choosing **REPEAT POSITION** then **TOP** or **BOTTOM** from the drop-down list.

The default position for a repeating object is **AUTOMATIC**, which means that its position on the page determines whether it is considered to be a header or footer. Repeating objects in the top half of the page are moved to the same position relative to the top of each page. Other repeating objects, (those which do not cover any part of the top half of the page) are moved to be in the same position relative to the bottom of each page.

Stopping objects repeating

Right click an object and choose **STOP UPDATING** to turn off the repeating nature of an object, or all of its copies in your website. Choosing **STOP UPDATING** from the **ARRANGE** menu also allows this.

You'll be asked whether you want to just stop the selected object repeating or all copies of the object in the website. Choose the **ALL** option. Now the different copies of that object can be independently edited and the next time one is changed it won't update any of them. Use this if, for example, you've used **REPEAT ON ALL PAGES** to copy an object to all pages of your website, but then you want to make those objects different on each page so that they are no longer tied together.

STOP UPDATING is also useful if you want to make a copy of a repeating object (eg. a footer or logo) on one page and you don't want that copy to be updated. In this case choose the **JUST THIS COPY** option when prompted.

Note that you can't use **STOP UPDATING** on Navbars which have the **SITE NAVIGATION BAR** option turned on in the **NAVBAR DIALOG**. That's because site navigation bars always update across the whole website. See the Navigation Bar chapter for more information on site navigation bars.

Deleting repeating objects

If you don't want a copy of the repeating object on a page, just delete it from that page. Xara Designer Pro 7 displays a prompt asking whether to delete just that copy or all copies of that repeating object.

Pressing "Ctrl + Delete" will delete just the selected repeating object without asking whether you want to delete all instances or just this one.

Live Copies

Live Copies give you a way of having multiple copies of an object that are linked together so that if one copy is changed they all change. However each Live Copy can be transformed independently, so for example you could have larger and smaller versions of the same Live Copy, or perhaps copies with different rotations.

Live Copies are similar to Repeating Objects, but more powerful because you can have multiple Live Copies on the same page and they do not share a common position in the way that Repeating Objects do.

Live Copies are Groups

In common with Repeating Objects and many other advanced object types in Designer Pro, Live Copies are a special type of group. The object or objects that constitute the Live Copy reside inside a 'Live Copy Group'. You can see this structure if you examine a Live Copy in the **PAGE & LAYER GALLERY** where it's called a "Live Copy Group", but on the status line when selected the shorter term "Live copy" is used.

Local and Global Edits

The objects inside the Live Copy Group are common to all the linked Live Copies. So if you change objects inside the group those changes are reflected in all the linked Live Copies. These are "global edits", because all copies of the Live Copy get the same changes.

However if you transform a Live Copy (move, scale, rotate or skew it using the SELECTOR TOOL) the change is not applied to other copies. These are 'local edits', so you can transform each copy differently if desired.

As with all groups, you need to select the object or objects inside the Live Copy to edit them directly, so that the changes are reflected in all copies. Many tools will do this select inside for you automatically if the object you click on is recognized by the tool. So for example in the QUICKSHAPE TOOL, clicking on a Quickshape that is inside a Live Copy will select the Quickshape inside, so that you can immediately start modifying it with the QUICKSHAPE TOOL.

So for example if you have a photo as a Live Copy, any edits you perform with the PHOTO TOOL on the photo inside the Live Copy group are global edits - all copies of the Live Copy will get the same photo edit. But if you select the Live Copy, instead of the photo inside, and make it bigger by resizing it with the SELECTOR TOOL, only that Live Copy is resized. Other copies do not change in size.

Creating Live Copies

You can turn any object or group into a Live Copy. Just select the object and choose "ARRANGE" > "CREATE LIVE COPY". A second copy of the object appears and the two copies are 'linked' in that if either one is edited the other copy updates to match. But you can move and transform the two objects independently, placing them on the same page or on different pages.

You can make more copies of the Live Copy the same way you copy normal objects, using copy/paste, duplicate, right-click drag, etc.. Each copy you make belongs to the same 'family' of Live Copies and so editing one also changes all the others.

Try this with an example:

1. Draw a hexagon using the QUICKSHAPE TOOL and make it red.
2. Go back to the SELECTOR TOOL. With the hexagon selected, choose "ARRANGE" > "CREATE LIVE COPY". Or right click and choose CREATE LIVE COPY from the drop-down menu.
3. A second copy of the hexagon appears and selecting either copy shows "1 live copy" on the status line.
4. Make several more copies of the object, using copy/paste, or any other means. Note that each is a "live copy" according the status line when you select them.
5. Go back into the QUICKSHAPE TOOL and click on any one of the red hexagons. Note the status line says "1 Quickshape 'inside'". That shows that you've selected the Quickshape object inside the Live Copy group.
6. Change the number of sides on the Quickshape from 6 to 8, using the control on the infoBar. All copies of the hexagons instantly become octagons.

Advanced

- You can apply transparency to a Live Copy and this is treated as a 'local edit' and is not applied to all linked Live Copies. That's because transparency can be applied to a group and not only to the objects inside the group (see Applying transparency to several objects). This allows you to put different transparencies onto different Live Copies if desired. The same goes for other operations that can actually be applied to a group and not just to its children, like feather and shadow.
- Live Copies force "Scale LineWidths" and "Transform Fills" switches to be on within themselves. So for instance, a thin line in a Live Copy will always become wider when you scale the Live Copy up, even if the "Scale line widths" switch is off. This is done to ensure that Live Copies can be reliably updated from each other without unexpected changes.
- It's not possible to select objects inside two Live Copies at the same time.
- Live Copies cannot be nested. So if you select an existing Live Copy and choose "**ARRANGE**" > "**CREATE LIVE COPY**", the result is that the object becomes part of a new Live Copy family.
- Pressing "Ctrl + Delete" will delete just the selected Live Copy without asking whether you want to delete all instances or just this one.

Shape Handling

Closing a shape

A shape is a closed object with no start or end handle. Only shapes can be color filled.

To close a shape:
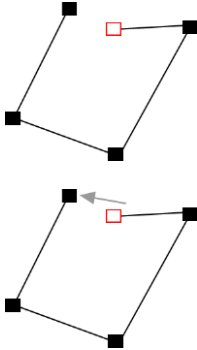
1. Create an open object with the end point handle close to the start handle. All the point handles (except the end handle) should be in their required positions.
2. Position the pointer over the end handle.
3. Drag the end handle over the start handle and release the mouse button. The two handles snap together.

Or:
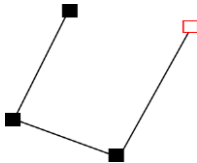
1. Create an open object with all the control handles in their correct positions. Do not create the final line segment.
2. Move the pointer over the start point. A + appears to the right of the pointer when it is over the start handle.
3. Click to create the final line segment and close the shape.

Or:

1. Choose the **SHAPE EDITOR** Tool.
2. Click on an end point to select it.
3. Press the "↵" key.

Or:

Use the **FREEHAND & BRUSH** Tool to create the final segment.

Any of these closes the shape. If there is a current fill color, the shape is filled with that color.

Closing a freehand shape

You can directly create a closed shape by ending a line back at the beginning over the start handle. A + by the pointer shows when it is positioned over the start handle.

Joining shapes

"**ARRANGE**" > "**JOIN SHAPES**" lets you create holes in solid shapes. Because overlapping parts of the same shape are drawn with no fill color (i.e. you can see through the overlapping parts), you can use this effect to create holes in shapes but retain the ability to break them apart later. For example, to create a donut shape:

1. Create an ellipse (described later).
2. Create a second ellipse over the first. (The color of the second ellipse has been changed to make it obvious.)
3. Select both.
4. Choose "**ARRANGE**" > "**JOIN SHAPES**".
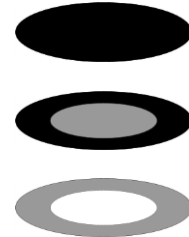
This creates a single shape with a hole in it.

You can combine or join several shapes.

The cutout is made using the top object. If that object is a group, you can make several holes in one operation. For example, a group of three stars can make a hole in this rectangle shape:
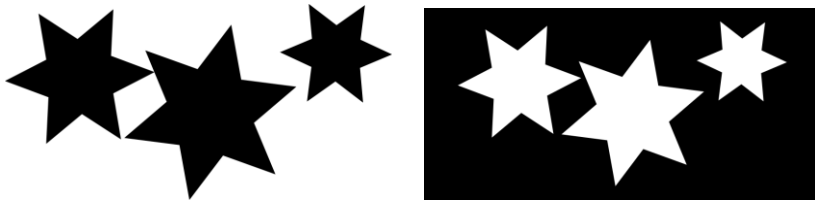
Groups are described in Object handling (on page 109).

When several shapes overlap:

- The top shape (or top group) becomes a hole through the other shapes.
- The line attributes and colors of the other shapes change to those of the top shape.
- If several shapes overlay:
    - an even number of shapes overlapping becomes a transparent area;
    - an odd number of shapes overlapping becomes a solid area.
- The numbers on this example show how many shapes overlay in each area:
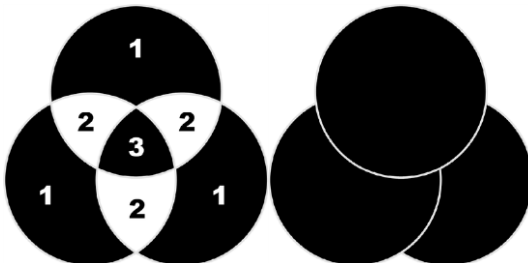
The joined shape on the left shows the number of segments which overlap. On the right are the original three circles shown unjoined.

Breaking joined shapes

Choose "**ARRANGE**" > "**BREAK SHAPES**". This breaks the joined shape into separate objects, but the original attributes will not be restored to the separated objects. You can also break several joined shapes in one operation.

Combining shapes

The **COMBINE SHAPES** option (select the objects, right click and choose **COMBINE SHAPES**) provides you with a range of advanced options to combine shapes to make new shapes, such as adding, cutting, or slicing. You can use combine shapes on any type of object, including bitmaps.

When subtracting, intersecting and slicing, you can either use the topmost selected shape to do the "cutting" of the lower shapes, or you can use a mask.

To use a mask to cut shapes, first select the shapes and then turn on mask mode. All objects except for the selected shapes disappear while mask mode is on.

Then draw your cutting shape using the main drawing tools (Freehand Tool, Shape Editor, Rectangle Tool, etc.) or paste the shape if you already drew it and copied it. Then **RIGHT CLICK** and choose **COMBINE SHAPES**. The mask shape is used to cut the shapes underneath.

See the Masking chapter (on page 234) for more information on mask mode.

This mask shape will be used to cut the shapes underneath
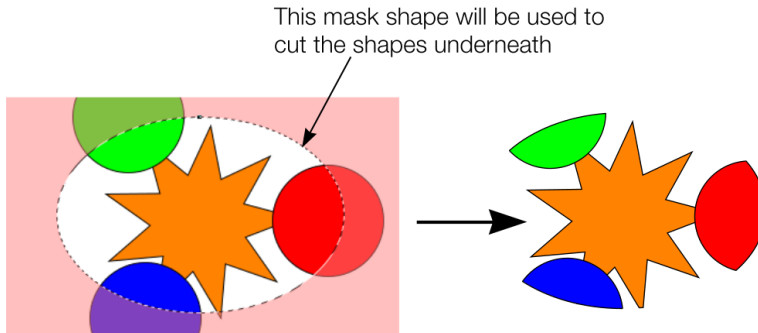
The "Add shapes" operation does not use masks because for this operation there is no single "cutting" shape.

Creating holes in shapes

Top shape

Bottom shape   Resulting shape with hole
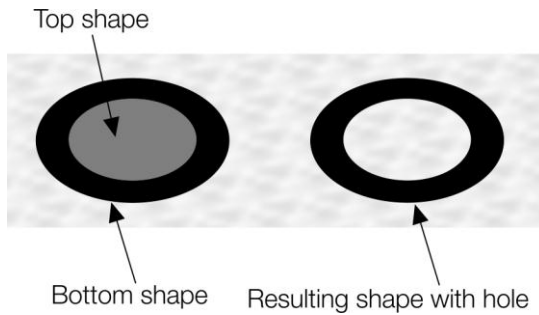
Right click and choose "COMBINE SHAPES" > "SUBTRACT SHAPES". This is similar to using join shapes (described above). The differences are:

- The top shape (or mask shape if the mask layer is used) becomes a hole through the other shapes.
- The line attributes and colors of the underlying shapes are unchanged.
- Combine shapes physically alters the lines. The only way to restore the original shapes is by using undo.
- The number of overlapping shapes has no effect.

Merging several shapes into one

For example, to produce the shape on the right from the three shapes on the left:
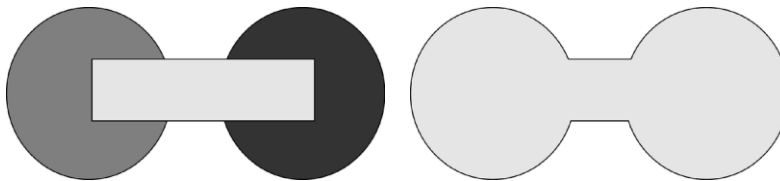
1. Create the two circles and the rectangle.
2. Select all three shapes.
3. Right click and choose "COMBINE SHAPES" > "ADD SHAPES".

The new shape takes line attributes and colors from the top shape (in this case the rectangle in the illustration).

Intersecting shapes

With INTERSECTING SHAPES, the new object is created from those parts of lower shapes that are covered by the top object, or by the mask shape on the mask layer.

Select the shapes you want to mask and the front (mask) shape. Or put the mask shape on the mask

layer using mask mode.

Right click and choose "COMBINE SHAPES" > "INTERSECT SHAPES". This creates a new shape. The top shape or mask disappears.
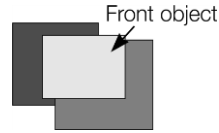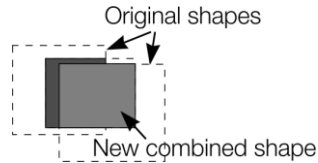
The line attributes and colors of the underlying shapes are unchanged. Areas not covered by the top shape or mask are discarded. The top shape can be a group for more complex subtracting. Groups are described in Object handling (on page 109).

Slicing shapes

Xara Designer Pro 7 lets you easily slice shapes into two or more pieces, and you can use either a solid object or a line for slicing. For example, to cut a segment from a circle:

1. Create a circle and put a triangle on top or on the mask layer.
2. Select them both (not required if using the mask layer).
3. Right click and choose "COMBINE SHAPES" > "SLICE (CUT) SHAPES". The edges of the triangle cut the circle into two shapes. The triangle disappears.
4. You can now drag the segment out from the circle:

You can also use a line to cut an object:
The line should be drawn completely though the object and extend beyond it (as shown in the illustration). If the line is too short, this operation cuts out a thin slice.
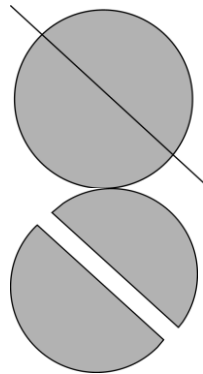
Creating regular polygons (the Quickshape Tool)

The **QUICKSHAPE** Tool lets you quickly create almost any regular, symmetrical shape with sharp or rounded corners. You can then drag the edges to bend the sides, and at any time you can change the number of sides or make the object an ellipse, a polygon, or a star.

1 Creation Modes: Radius/Diameter/Bounds
2 Polygon
3 Ellipse
4 Stellate
5 Round corners
6 Restore edges

7 Number of sides
8 Editable items menu
9 Editing fields

1. Select the **QUICKSHAPE** Tool ("Shift + F2").
2. Select **POLYGON**.
3. Select the number of sides either from the menu, or by typing into the text box.

To create the polygon drag:

1 Radius
2 Diameter
3 Bounds creation

- From the center outwards (**RADIUS** button),
- Or from an outside edge (**DIAMETER** button),
- Or diagonally to create an imaginary rectangle enclosing the polygon (**BOUNDS CREATION** button) letting you distort the polygon.

Polygons with rounded corners

Select the **ROUND CORNERS** button or
double click on a corner point.

Radius handles
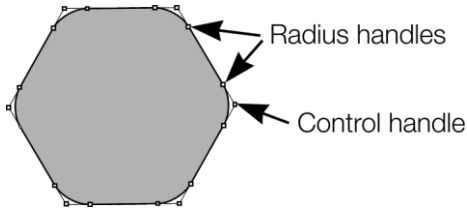
Control handle

The polygon has extra handles
(radius handles) where the rounding
starts. To increase or decrease the
radius, drag any of the radius
handles.

To remove the round corners:

- Click the **ROUND CORNERS** button.
- Or double click a control handle.

Editing a polygon

The **SELECTOR** Tool lets you move, rotate, resize, and skew a polygon as normal (the
SELECTOR Tool is described in Object handling (on page 92).)

Using the **QUICKSHAPE** Tool, you can resize or rotate:

- Drag the corner handles.
- Or select **SIZE & ROTATION** in the **EDITABLE ITEMS** menu. Type the required values into
  the text boxes.

Size
Rotation

You can also nudge the values using the buttons to the right.

To move:

- Drag the handle in the center of the polygon.
- Or use the arrow keys on the keyboard.
- Or select "Center" in the "**EDITABLE ITEMS**" menu. Type the required X/Y values into
  the text boxes.

X
Y

Apply or remove rounded corners by clicking the **ROUND CORNERS** button.

Change the polygon to an ellipse by clicking the **CREATE ELLIPSE** button (ellipses are described later) or double clicking the polygon's center.

Stellate the polygon (make it star-shaped) by clicking the **STARRED SHAPES** button (starred shapes are described later).

Drag the sides to make them curved. Move the pointer over the edge of the polygon (it changes to an arrow shape). You can now drag the sides.

On the left are the original polygons. Just drag on the sides to create curved sides.

"Ctrl + double click" on a side, or click the **RESTORE EDGES** button to make the sides straight again.

Change the number of sides by typing the number into the menu or selecting from it.
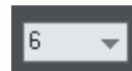
Creating stars (polygons with indented sides)

Select the **QUICKSHAPE** Tool.

To create a star or to make the selected polygon stellated:

Stellated/stellation = star shaped.

Select the **STARRED SHAPES** button
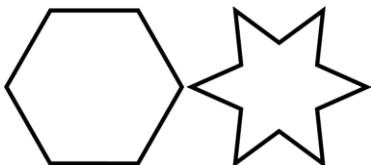
Or double click on a side.

Left: polygon with starred off. **Right**: starred on.

Removing stellation

Click the **STARRED SHAPES** button.

Control handle

Or double click on the star handle.

Star handle

Note: double click on the star handle, not the control handle.

Editing stars

You can edit stars in the same ways as ordinary polygons (described earlier).

To increase or decrease the depth of stellation:

Drag a star handle or select **STELLATION RADIUS & OFFSET** on the **EDITABLE ITEMS** menu. Type the required values into the text boxes.

The original shape is on the left.

Or drag the sides to make them curved:
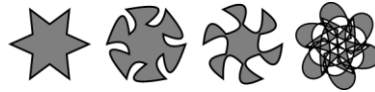
The original shape is on the left.

You can also nudge the values using the buttons to the right.

Offset from center
Angular offset

"Ctrl + drag" one side of a star moves all the sides symmetrically. "Ctrl + Shift dragging" moves pairs of sides as mirror images. "Ctrl + double click" on a side, or click the **RESTORE EDGES** button to make all sides straight again.

Creating rectangles and squares

To create a rectangle:

- Use the **RECTANGLE TOOL** ("Shift + F3", or "M").

Click and drag on the canvas to draw a rectangle.

Creating a square

To create a square rather than a rectangle, hold down "Ctrl" while dragging.

Creating and Editing rounded corner rectangles

To give your rectangle rounded corners, select it and then press the "Curved corners" button on the **RECTANGLE TOOL** infobar.

You can then drag on the selection handles shown on the corners to adjust the diameter of the rounded corners.
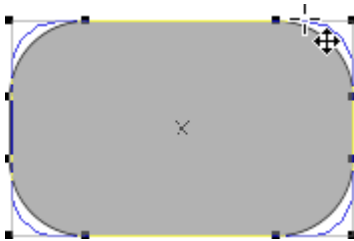
You can resize rectangles using either the **RECTANGLE TOOL** (by dragging on the handles shown at the corners) or the **SELECTOR TOOL**.

Note that if you change the aspect ratio of a rounded corner rectangle using the **SELECTOR TOOL** (by stretching it in one dimension only) the aspect ratio of the rounded corners is not stretched, it is maintained. However if you have multiple objects selected, or if you're stretching a group containing a rounded corner rectangle, the aspect ratio of the corners is not maintained.

Creating circles and ellipses

To create an ellipse or circle:

Select the **ELLIPSE TOOL** ("Shift + F4", or "L").

The **RADIUS AND DIAMETER** buttons automatically create circles.

1 Radius
2 Diameter
3 Bounds creation

With the **BOUNDS CREATION** button selected, drag on the canvas to draw an ellipse. Hold down "Ctrl" while dragging to create a circle rather than an ellipse.

Select the **RADIUS** option to draw circles. The start point of a drag determines the circle's center.

Select the **DIAMETER** option. Now the start point of a drag determines the position of the edge of the circle.

You can convert an ellipse into a circle at any time by double clicking on a control handle.

Making shapes editable

Choose "**ARRANGE**" > "**CONVERT TO EDITABLE SHAPES**" ("Ctrl + Shift + S") to convert predefined objects like bitmaps and rectangles, ellipses, quickshapes, and text into shapes. This lets you edit their outline like a normal shape.

This has several applications:

- You can manipulate just a part of predefined objects after making them editable.
- You can manipulate text in almost unlimited ways, adding new curves and ornamentation almost at will. Note that you cannot edit text converted to shapes as it ceases to be text.
- You may want to send a .xar file to someone who does not have that particular font. As converted text is just a collection of lines and curves; it does not need to use the original font.

However, the disadvantage is that you can no longer edit the objects with their original tools.

For more information on text refer to "Text handling (on page 174)".

You can also convert lines (open shapes) to the equivalent closed shape, by selecting the line and then "**ARRANGE**" > "**CONVERT LINE TO SHAPE**". If you have a straight line with a 10 pixel line width, converting it to a shape will change it into a filled rectangular shape with no outline width.

Distorting Objects

Stretching and squashing objects

This is similar to scaling objects except that the object is scaled in one direction only. Stretching and squashing are basically the same action — stretching makes the object larger, squashing makes it smaller.

Stretching/Squashing using the mouse

The **SELECTOR** Tool must be in scale mode. (The selection handles are squares.) If necessary, click on the object to change to scale mode.
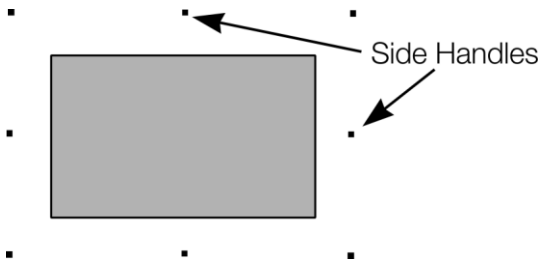
Side Handles

Drag one of the side handles. The object scales as you move the pointer in the appropriate direction. The InfoBar shows the current scaling.

The **LOCK ASPECT** button is ignored.

Right click or press "+" on the numeric keypad while dragging to stretch or squash a copy of the object, leaving the original in place.

Stretching/squashing using the InfoBar

The **LOCK ASPECT** button must be unset (if it is set, you scale the object instead of stretching or squashing it).

Type into either the width or height text box (as appropriate) and press "↵". Alternatively enter a % scale (width or height). So entering 200% into the top % scale box will make the object twice as wide, but the same height.

If the **LOCK ASPECT** is set then it will not stretch.

Skewing objects

This is part of the **SELECTOR** Tool.

Left is the original object, to the right with a horizontal skew

Skewing using the mouse

Switch the **SELECTOR** Tool to rotate/skew mode. (The selection handles are arrow shaped) by clicking on the object.

Drag a side arrow to skew the object.
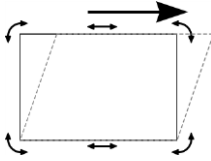
As you drag, the object skews in the direction of movement (vertical or horizontal).
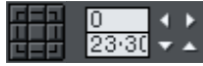
The InfoBar shows the current skew angle.

"Shift + drag" to skew the object around its center. Hold down "Ctrl" to restrict the skew to the constrain angles. Right click, or press "+" on the numeric keypad as you drag to create a copy, leaving the original where it was. Or right-drag with the mouse to create instant copies, additional copies by left clicks.

You can also skew an object in the Selector Tool's resize mode using the skew areas. Read more under Rotating objects in resize mode (on page 100).

Skewing using the InfoBar

To skew horizontally type an angle into the skew text box and press "↵".

To skew vertically:
1. Click the center-right button on the 3x3 matrix on the InfoBar.
2. Type an angle into the skew text box and press "↵". Positive values skew downwards, and negative upwards.

The Mold Tool

The **MOLD** Tool is used to distort shapes. It is used for both perspectivizing (that is, rotating in three dimensions) and enveloping (like distorting a rubber sheet).

Mold tool InfoBar

1. Mesh
2. Remove mold
3. Detach mold
4. Rotate mold
5. Copy mold
6. Enveloping
7. Paste envelope mold
8. Perspectivizing
9. Paste perspective mold

The InfoBar contains two sets of preset mold shapes. Just click a button to apply the preset mold. The left-hand button in each group is the default "no distortion" mold which you can then manually edit after applying it.

Perspective
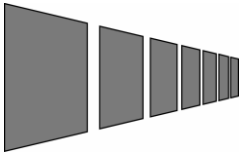
The **MOLD TOOL** lets you perspectivize shapes to give an impression of depth.

You can perspectivize all types of objects including text and bitmaps. Note that bitmaps lose perspective if you later blend them or convert them to editable shapes.

1. Select the object or objects.
2. Select the **MOLD TOOL** (shortcut "Shift + F6").
3. Choose one of the perspective options:

The right-hand button (paste perspective) is described later.

Designer Pro draws a rectangle around the object or selection. You can drag the control handles at each corner of the rectangle to produce the perspective effect. You can rotate, resize and skew the perspectivized object using the **SELECTOR TOOL**.

You may want to move control handles without redrawing the perspectivized object (doing this speeds up screen redraws).

To do this select the **DETACH MOLD** button. To refit the object, deselect the button.

Using vanishing points

As you reduce the size of the sides of the perspective mould, you see a "vanishing point" target. This is similar to vanishing points in conventional perspective drawings.
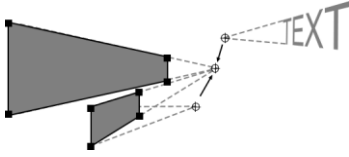
You can use vanishing points to obtain consistent perspective for several objects.

All three objects share a common vanishing point at the small cross.

The perspective mesh

This button paints a faint series of dots in a grid to preview the degree of perspective distortion of an object.

Using molds

You may want to apply the same perspective to several objects. To do this you create a mould shape, copy it to the clipboard and then use it to perspectivize the other objects. A perspective mould shape must have four straight sides:
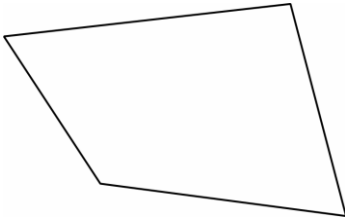
This is acceptable as a mold shape
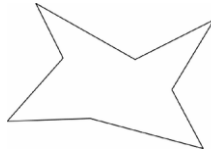
These are not acceptable. The object on the left has too many sides (must be four). The object on the right has curved sides (must be straight).

Removing perspective

Click **REMOVE** to remove perspective.

If the selected object has more than one perspective or envelope mould applied, only the most recent mold is removed.

Rotating the object within the mold

Sometimes you will find that the mold is the correct shape but the object needs rotating within it. You can rotate the object by clicking the rotate object button.

Enveloping

The **MOLD TOOL** lets you envelope shapes in a wide variety of ways.

The effect is similar to a rubber sheet or balloon that you can stretch in any direction.

You can envelope all types of objects except bitmaps.

Sample enveloped text

Enveloping is similar to applying perspective. That is:

1. Select the object or objects.
2. Select the **MOLD TOOL** (shortcut "Shift + F6").
3. Choose one of the envelope options:

The right-hand button is similar to paste perspective described earlier.

The left-hand button does not initially alter the object. The other buttons immediately alter the object.

After applying the mold, to edit it:

1. Drag any of the corner handles.
2. Or click on a corner handle and then drag the curve handles.

The above example shows the 4 curve handles of the corners have been dragged outwards to bend the content of the mold.

You can also rotate, resize and skew the enveloped object using the **SELECTOR** Tool.

The mold mesh button

The Mesh button displays a series of faint dots which can help preview the distortions that the envelope mold is giving.

Envelope molds

You can create an envelope mould from any four sided shape, which you can distort as you require, and then use as an envelope mold by clicking the **PASTE ENVELOPE** button on the **MOLD TOOL** InfoBar.

Editing mold shapes

You can edit the contents of a mold (essentially a group) using editing inside groups (on page 110). Editing is not possible using direct selection inside (molds do not allow objects inside them to become selected). To edit a mold inside, right click on the mold and choose **OPEN MOLD** from the context menu.

You can edit the shape of envelope or perspective molds with the **SHAPE EDITOR TOOL** (or the edit handles with **SELECTOR TOOL**, if shown). According to the nature of molds, there are some restrictions:

- You cannot add point handles to a perspective or envelope mold, because it has to stay a four-sided shape
- You cannot change a straight line of a perspective mold into a curve.

Feathering

Sometimes you want to blur the edges of an object so it blends, or fades, into a background object. This is called "feathering". An example is merging two bitmaps together when you want to avoid a sharp edge between them.

The feather control is on the right side of the top bar.
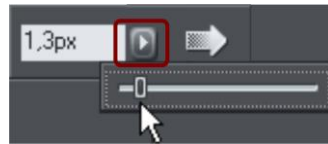
 To feather an object:

1. Select the object or objects you want to feather.
2. Either enter a numeric size for the feather into the text box
   Or
   Click the arrow to show the pop-up slider. As you drag the slider the objects are feathered.

No Feather
Feather

Feathering blends or blurs the edges of objects.

If you have multiple objects selected, the feather appears around each object. If you group the objects, the feather appears around the outside of the group.

You can also change the feathering profile. Normally a linear transition across the feather produces the best effect, but you may want to change this.

Select the **PROFILE** button to display the **PROFILE** dialog and adjust the sliders.

Page & Layer Gallery

The Page & Layer Gallery

Note to users of older versions of this software: This replaces the LAYER GALLERY

By default the PAGE & LAYER GALLERY is displayed open on the right hand side of the Designer Pro window when you open or create a new document. If you prefer, you can unpin, move, dock or close the gallery - see Galleries (on page 52) for more information.
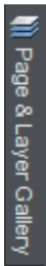
If you have previously closed the PAGE & LAYER GALLERY, which is open by default, you can reopen it by clicking the PAGE & LAYER GALLERY tab on the Galleries bar, or press F10.

The PAGE & LAYER GALLERY lists everything in your document, from the pages and layers right down to each individual item on the page. It provides a way to select, hide, lock and re-arrange these items.

It can work at many different levels. At the top level it can list only the PAGES, and provides a direct and easy way to re-arrange the order of these (by dragging), to name, copy and delete pages.

At the next level down it can show all the LAYERS and PRESENTATION STEPS on each page - and you can similarly re-arrange the stacking order, rename (layers only) as well as lock and hide any layer.

At the next level down it lists all the OBJECTS on the page, in a hierarchical manner. So for example it will list each group item on the page, but you can expand the group to show the contents of that group (which may contain other groups), in a similar way that the Windows file explorer manages folders in folders.

The hierarchy of items is like this:

Pages

      Layers/steps

            Page items, which may include groups

                        Group contents

                              ...etc

Some of the key features of the **PAGE & LAYER GALLERY** include:

Page control
- Displays a list of pages
- Pages mode displays a narrow list of page thumbnails for easy page navigation
- Add new page, duplicate, cut, copy and paste or delete pages
- Re-arrange the page order by dragging
- Rename pages

Layer control
- Displays a list of all layers on each page, from the bottom (usually background layer) to the top most layer
- In a presentation document, displays a list of all presentation steps and layers on each page, from the first to the last
- Create new layers, delete, re-order and rename layers
- Hide or show layers
- Lock layers (which makes the layer non-editable)
- Solo a layer - turn all other layers off

Object control
Display a list of all items (objects) on the page in the stacking order they appear on the page, bottom to top.
- Hide or show any item
- Move up and down the stack
- Lock any object so it becomes non-editable
- Locate and highlight any object in the gallery by clicking it on the page when in 'Locate' mode - toggle the **LOCATE** button on (enabled) and off (disabled)
- Solo an object - turn all other objects off

In addition the **PAGE & LAYER GALLERY** shows a thumbnail of each page and a tiny thumbnail of each item on the page. Hover the mouse pointer over an item to view a larger thumbnail.
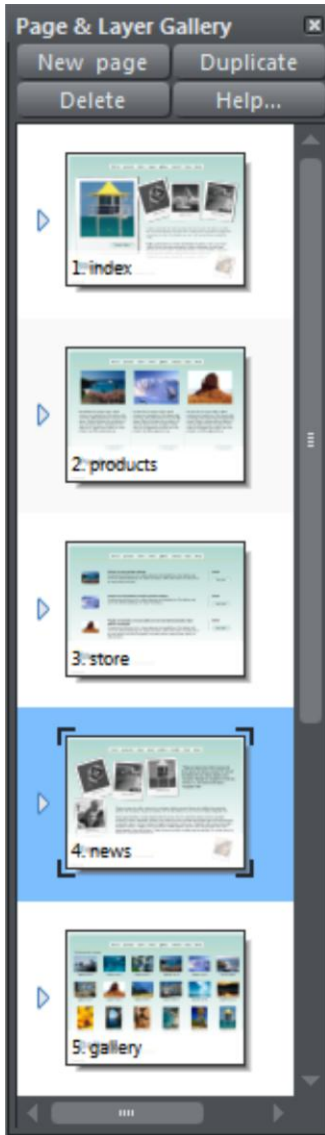
The PAGE & LAYER GALLERY in collapsed 'Pages' mode, showing 5 pages of a web document. Page 4 called 'News' is the selected page.
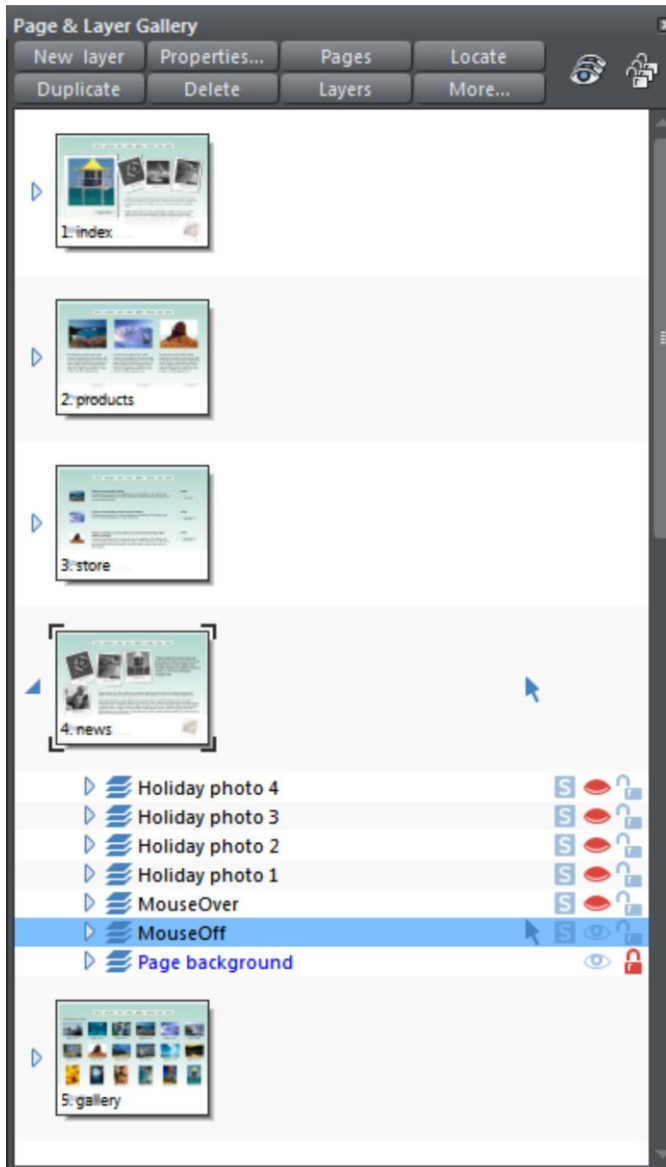
Layers mode - The News page has been expanded, by clicking on its small right facing arrow, to show all the layers on this page.

The bottom layer 'Page background' is locked. The layer called MouseOff is the active or current layer, that is where all new objects will appear. The top 5 layers are hidden (closed eye icon), so only the MouseOff and Page background layers are visible in the document.
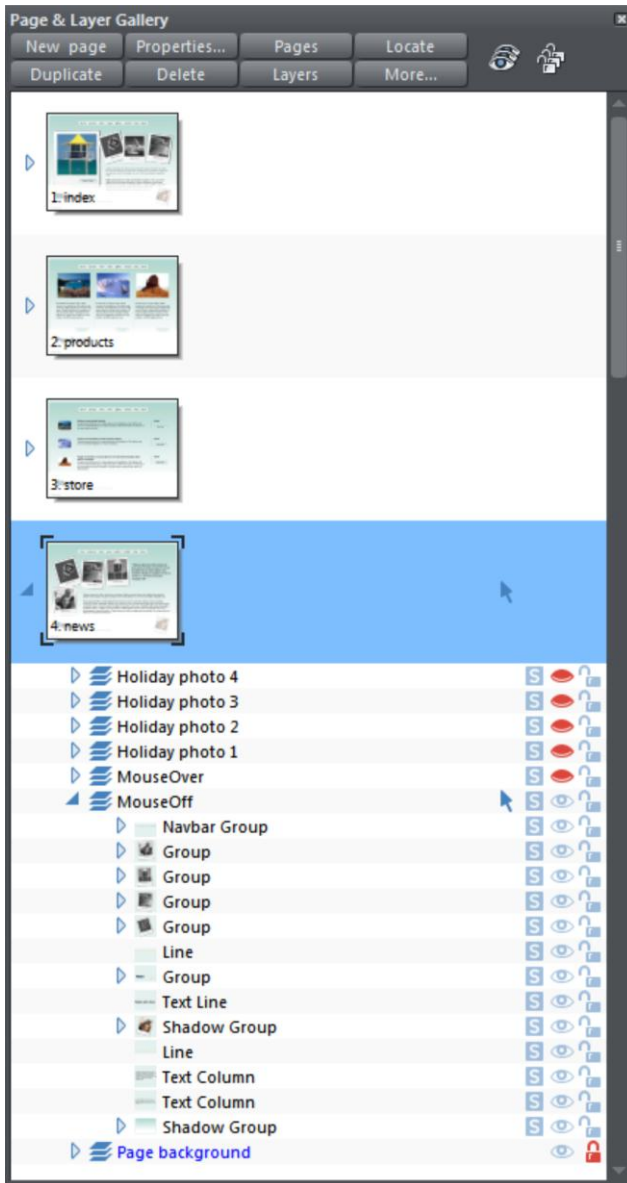
This shows the MouseOff layer has been expanded to show the contents of that layer. This shows a navbar group and other various groups, text line and text column items, and a couple of shadow group items.

Hovering the mouse pointer over the tiny thumbnails will display a larger one so you can easily identify each object on the page.

Note the right two columns indicate (and control) whether the items are editable (a pale arrow) or locked (padlock icon) and whether they are visible on the page (pale open eye icon) or hidden (darker closed icon).

Clicking on these icons will change the visibility and / or the locked or editable nature of each object.

Pages

Clicking the **PAGES** button on the top of the **PAGE & LAYER GALLERY** (or right clicking in the gallery and choosing **SHOW PAGE LEVEL**) will open pages mode, displaying only the pages in the document and collapsing all other opened levels.

When in pages mode and the gallery is docked, the width of the gallery is reduced to its minimum, to take up as little space as possible. Also the number of buttons at the top of the gallery is cut down to just those applicable to pages. To leave pages mode, simply expand one of the pages to reveal its layers. The gallery returns to its full width and the full button set is restored.

You can re-order pages by dragging on the item in the **PAGE & LAYER GALLERY**, or by right clicking a page and choosing **MOVE PAGE UP/DOWN**.

You can rename a page right clicking it and choosing **RENAME PAGE**. As well as being a useful way to identify pages in long documents, the page name is used when exporting your document as a website. For this reason in web documents it's not possible to use certain characters or symbol characters in the name (they are not accepted as web page names).

The **NEW PAGE**, **DUPLICATE** and **DELETE** buttons will do as they imply. Note that you must first have selected a page (click on it so it's highlighted in blue as shown above) in order for these buttons to work on pages. (If you had selected a layer, for example, then they would operate at the layer level).

Alternatively you can right click a page and choose the options **NEW PAGE**, **DUPLICATE CURRENT PAGE**, **CUT PAGE**, **COPY PAGE**, **PASTE PAGE** and **DELETE CURRENT PAGE.**

The **NEW PAGE** option will create a blank page the same size as the selected, current page.

The **CUT PAGE** option removes the page and stores it on the clipboard, so that you can paste it either in this or another document by right-clicking a page and choosing the **PASTE** page option. The pasted page is pasted below the currently selected page.

The **COPY PAGE** option copies the page, so that you can paste it either in this or another document by right-clicking a page and choosing the **PASTE** page option. The pasted page is pasted below the currently selected page.

▷ You can expand (open) the page to show the contents of the page by either clicking on the small right facing arrow, or by double-clicking on the page thumbnail.
Performing the same operation again will collapse (close) the page view.

Layers

Everything in your document has a stacking order but with more complex documents that have dozens, maybe hundreds or thousands of items, your work area can be become cluttered.

Using layers you can group a collection of items together and then turn the whole collection on or off (make it visible or hidden) in one easy operation. Layers can be made invisible, to hide parts of your document. You can give layers names, and you can easily create new layers or delete them. And you can open a layer and view its contents.

When you select any object, the layer it's on is shown on the status line at the bottom of the window.

The Current Layer

When you create any new object on the page, it's placed in one of the layers, called the active layer or simply the current layer. On a blank document this will either just be called Layer 1 or, in the case of web documents, it's called MouseOff. The current layer is shown with a selection arrow .

Important: All new drawn items, shapes, photos, text, and all pasted items, are placed on the current layer marked with the symbol.

You can change the current layer simply by clicking on its row in the **PAGE & LAYER GALLERY**. It's important to understand that you can have a selected object on any layer or even multiple layers, and these need not be the current layer. The current layer, with the arrow, only indicates where new items will be placed.
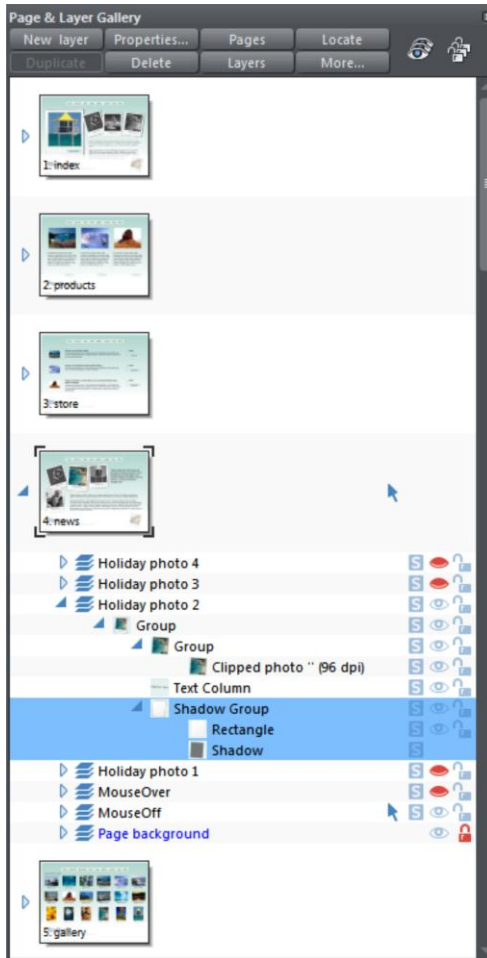
This example PAGE & LAYER GALLERY shows the current layer is called MouseOff (the current page is called news). So if you draw anything new it will be placed on the MouseOff layer.

It also shows a shadow group item selected in the document (highlighted in blue) inside another group which is on a completely different layer called Holiday photo 2.

Four layers are hidden (called Holiday photo 4, Holiday photo 3, Holiday photo 1 and MouseOver). The 'Page background' layer is locked.

Make the current layer always visible

It's possible that the current layer can be hidden or even locked. Just clicking on a layer to select it and make it the current layer does not normally change its visible or locked state. But there is a preference in the General (on page 449) tab of the Options dialog (right click a page and choose **PAGE OPTIONS** or choose **OPTIONS** from the **UTILITIES** menu) to make the current layers always visible and editable (unlocked). If you select this option then whenever you select any layer in the **PAGE & LAYER GALLERY** it's made visible and unlocked. Moving to another layer will restore the previous visible and locked state of the layer you just moved from.

Layers on websites

In websites saved from Designer Pro, layers are used for mouseover or pop-up effects (in the web browser the contents of these layers are displayed when you move over items on the page).

You can find more details on this in the Web Graphics and Web Sites chapter in the Layers, Mouseover (Rollover) & Pop-ups (on page 307) section.

Layers in PDF documents

Layers are useful for producing overlays. For example on a floor plan of a building, you might have overlays showing the fire points, power outlets or wiring. By putting such items on named layers you can easily show or hide them. When saving a document as a PDF (on page 423), you can select to enable layers in your PDF document, and so then using the Layers control in PDF reader you can turn the layers on or off.

To enable layers in your PDF file: When exporting as a PDF, select the Advanced option on the export screen, and then choose Adobe Reader 6 or higher (PDF version 1.5 or higher) from the PDF Version list. And then on the Layers tab of the same dialog, select the 'Enable Reader layers..' option. When you view your PDF file in Adobe Reader there is a Layers control available.

Soft Groups and Layers

Soft Groups (on page 112) are unusual because they are groups of objects that can span different layers. (Normal groups have to be contained within one layer). When you select any part of a soft group the other parts are also selected, even if they are on hidden or locked layers. The **PAGE & LAYER GALLERY** will show all selected items highlighted in blue, but in the case of soft groups these items may be on other layers that you've not expanded, and so are not immediately visible.

Layer Operations

Clicking the **LAYERS** button on the top of the Page & Layer Gallery (or right clicking in the gallery and choosing **LAYER MODE**) will display only the layers on the current page. This is a mode - the Layers button stays depressed. While in layers mode, as you move to different pages the layers for the current page are always shown and all other page nodes are collapsed. Click the **LAYERS** button (or right click and choose **LAYER MODE**) again to turn off layers mode.

You can re-order the layers, that is, the stacking order on the page, by using drag and drop on the layers in the Page & Layer Gallery.

You can rename a layer by performing a second (slow) click on the layer name. (The first click would select the layer.) This is very like file renaming in Windows Explorer. Alternatively right click the layer and choose **RENAME LAYER**.

Clicking the small right arrow ▷ or double clicking anywhere on the layer row will expand the layer to show its contents. Doing the same again will collapse and hide the layer contents.

Holding the mouse pointer over the small layer icons ≋ will show a thumbnail of the contents of the layer.

When you have selected a layer (clicked on it, to highlight the layer) the **NEW LAYER**, **DUPLICATE** and **DELETE** buttons on the top of the Page & Layer Gallery will do as they imply. The **NEW LAYER** button will create a new blank layer and place it at the top of the stack. You can re-arrange the order by dragging it to the required position.

The **DUPLICATE** button will copy the layer and its contents and place it on top of the stack - that is on top of all other objects on the page.

Right clicking the layer and choosing **NEW LAYER**, **DUPLICATE LAYER** or **DELETE LAYER** performs the same functions.

Layer Properties

This opens the Layer Properties dialog.
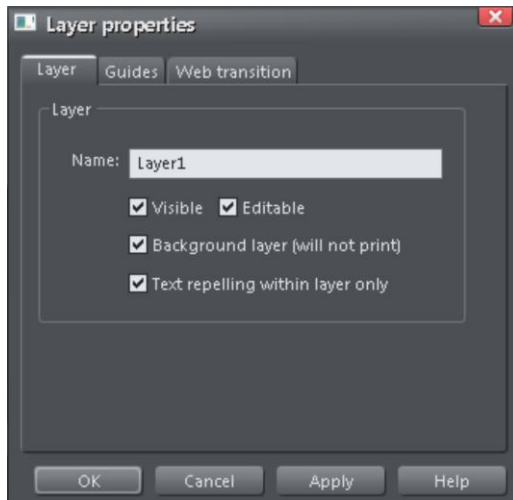
Creating layers and editing layer properties

Using the Layer tab you can:

- Create a new layer or edit an existing one.
- Make the layer editable and visible by default.
- Define the layer as a web page background that will not appear when printed.
- Specify that all objects in the layer will only repel text objects (on page 186) within the same layer. This prevents text on the layer being repelled by objects in other layers and is useful for popup layers in web pages.

Using guidelines

The Guides tab allows you to create layer guidelines at precise numeric values and choose a color for guide layer objects.

See the **GUIDE OBJECTS & GUIDELINES** section in Object handling for more information on using guidelines.

Web transitions
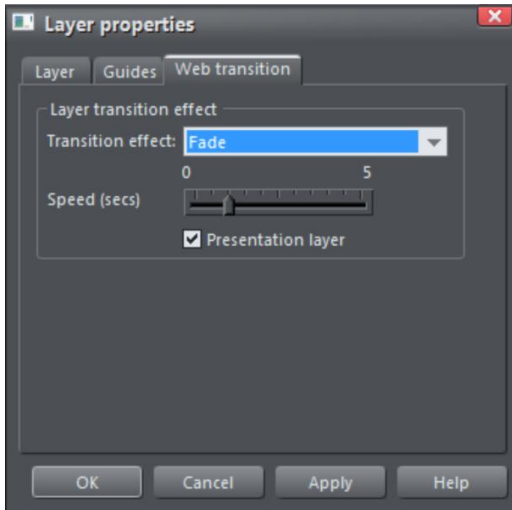
 Note: The PRESENTATION LAYER checkbox is only enabled if you are in a presentation document. To convert a web document into a presentation document, see Web Presentations (on page 324).

Using this tab you can apply animated transition effects to a layer, if it's used as a pop-up layer on a web page, or if it's a presentation layer. The layer then appears with the transition effect when it's revealed in the exported web page. Use the slider to set a transition time from 0-5 seconds.

You can apply the following transitions to a layer:

Instant (default)   New page, layer or step contents appear straight away

Fade   New page contents appear gradually

Slide in from   New page, layer or step contents slide in from various directions

In a presentation document, a layer can be set as a presentation by checking the PRESENTATION LAYER checkbox. See Website Presentations (on page 359).

Note: Turning off the PRESENTATION LAYER option will remove the step from the presentation.

By default when a transition is applied, objects will only slide in/out to the edge of the web page. If you would like objects to start from the browser window edges, rather than the web page edges, deselect the CLIP TO PAGE edges checkbox in the Website tab (on page 323) of the Web Properties dialog.

Special Layers

There are several special types of layer. They appear in the Page & Layer Gallery and can be turned on and off as usual, but behave slightly differently.

BACKGROUND LAYERS are non-printing layers that appear at the bottom of the document, under everything else. When you apply a color to the page background (drag and drop color from the color line) this will create a **PAGE BACKGROUND** layer automatically. Normally this is locked.

You can also set the color of the pasteboard (the area around the page) by dragging a color from the color line and dropping it on the pasteboard. This creates a **PASTEBOARD BACKGROUND** layer automatically. Again, this layer is locked.

When saving a document as a website, background layers are converted to web page backgrounds. See the Web Graphics & Websites chapter for more details on setting web page backgrounds and using the background layers.

The **GUIDES LAYER** is where guidelines or guide objects are placed. When you create a guideline this automatically creates a Guides layer. You can select the Guides layer and place anything you like on this layer - and it will act like a snapping guide (if you have "**WINDOW**" > "**SNAP TO GUIDE**" on).

See Guide Objects and Guidelines (on page 107) in the Object Handling chapter to find out more.

The **MASK LAYER** is where mask objects are drawn. This is created and turned on (made visible) automatically when you turn mask mode on.

See the documentation on masks (on page 234) to find out more.

PRESENTATIONS STEPS are layers that are steps in a 'slide show'-style presentation - presentation documents only. Presentations steps can contain multiple objects and have transitions applied, the same as layers, but steps can be displayed by the viewer using the right/left keyboard arrow keys.

See Website Presentations (on page 359) to find out more.

Hiding Layers and Objects

The rightmost two columns of icons in the Page & Layer Gallery control the visibility and locking of layers and all objects on the page.

Clicking on the open eye 👁 icon will hide the layer or object on the page, and the icon will turn to a closed eye 🔴. Clicking again will revert the layer or object to be visible.

When any item is hidden, it becomes invisible on the page and can no longer be seen or selected. The way to get hidden items back is to click its closed eye 🔴 icon. Alternatively you can click the **MORE**... button and select **SHOW ALL ON PAGE** option, which un-hides all items on the current page.

Locking Layers and Objects

Clicking the open padlock icon 🔓 on the right end of an object or layer row will lock the layer or object (icon changes to a closed padlock 🔒). Now you cannot select this object or any object on that layer. Any clicks on locked items will go straight through it, as if it's not there, and select items underneath. Clicking the padlock icon will unlock that object or layer again. Alternatively you can click the **MORE..** button and select the **UNLOCK ALL ON PAGE** option.

Soft Groups
There is one exception to the locked rules. If a locked item (or item on a locked layer) is part of a Soft Group (on page 112), then selecting and operating on that soft group will also select and operate on any locked items in that soft group.

Solo Mode

If you click any of the **S** icons in the column next to each layer, it will 'solo' this layer which means it hides everything else, except this layer. You can now work on this layer in isolation. Clicking the **S** icon again will restore everything back to how it was before.

You can also click and drag down the column of **S** icons to quickly browse through the layers in isolation from everything else. To exit the Solo mode, click the **S** button again.

Similarly you can use solo mode with individual objects or groups at any level in the object hierarchy shown in the gallery. Click the **S** icon against an object and all other objects are hidden, leaving only the 'soloed' object visible, making it easy to work on in isolation. Or drag up and down the column of S icons to dynamically scan through the objects at any level in the tree structure, to help find a particular object in a complex design. When soloing an object, if you draw a new object, solo mode is terminated.

Note that if you want to work on the contents of a group or other composite object type, you can double click on it to open the contents in a separate sub-document view. See editing inside groups (on page 110).

Show All & Unlock All

These two controls on the top of the **PAGE & LAYER GALLERY** are a short-cut to show all items on the current page or unlock all items. They are a temporary override of all the individual object and layer settings. Clicking the controls again will restore the previous state. So this is a quick way of showing or unlocking everything, on all layers, performing some operation, and then restoring the previous state.

When either button is selected (the buttons are shown pressed in), then it's not possible to change the state of individual items. Un-select the buttons to enable the normal operation of the layer visibility and locking state.

Clicking the **MORE** button will display menu options to **SHOW ALL ON PAGE** and **UNLOCK ALL ON PAGE**.

These are similar to the above, but they are not a toggle option. So selecting either option will turn all layers on or unlock all layers, and there is no easy way to restore the previous state - other than individually re-selecting the hidden or locked state of all the separate items.

Moving Objects Between Layers

There are several ways to move objects between layers. First select the object or objects you want to move, then;

- **CUT** the object ("Ctrl + X" or right click and **CUT**). Ensure the target layer is the current layer (shown with , click the layer if it's not) and then right click and choose **PASTE** or **PASTE IN PLACE**. Note that if you cut or copy multiple items that are on different layers, the layer structure is preserved when you paste. Items are pasted to the same layer they were copied/cut from, instead of being pasted to the current layer. If you want to paste all such items to the current layer, ignoring the layer structure, use the **PASTE IN CURRENT LAYER** option instead. If you want to retain layer structure, choose **PASTE IN PLACE IN CURRENT LAYER**. These paste options are also in the clipboard fly-out bar on the top bar, as well as the **EDIT** menu.
- Right click and choose **ARRANGE** then **MOVE TO LAYER IN FRONT** / **MOVE TO LAYER BEHIND** to shift the selected objects one layer up or down.
- Ensure the target layer is selected as current, then find the selected item in the **PAGE & LAYER GALLERY** (click the **LOCATE** button), right click and select **MOVE TO CURRENT LAYER**.

Color Handling

Xara Designer Pro 7 gives wide control over applying, creating and altering the colors of objects. For simple documents, you can just choose colors from the on-screen color palette, the Color Line. More advanced color operations are described later.

The color line

The Color Line is displayed at the bottom of the window. It shows you the current fill and line colors, provides access to the color editor and provides a palette of pre-defined colors including a special "no color".

1 **COLOR SWATCH:** The outer part of the color swatch on the left-hand end of the Color Line shows the line color and the center shows the fill color. These are the colors of any selected objects, or the current color attributes if no objects are selected.

2 This button provides access to the **COLOR EDITOR**.

3 **COLOR PICKER:** Use the eye-dropper to pick a color from any part of the document or any part of the computer screen. See Using the eye-dropper to pick colors (on page 160) for details.

4 **NO COLOR:** Clicking this applies a "no color fill". Shift-clicking applies "no color" to a line. Note that this is not the same as 100% transparent. "No color" and transparency are different. A shape with transparency applied remains a solid shape whereas a shape filled with "no color" is effectively hollow. The **NO COLOR** button can also be used to restore the original colors to a photo which has had a contone color applied.

5 **Current Fill color -** the fill color of the currently selected object (displays a diamond marker on top left).

6 **Current Line color -** the line color of the currently selected object (displays a diamond marker on top right).

If the length of the Color Line exceeds the window, you can scroll through the Color Line with the scroll bar below or by "Alt + dragging" the Color Line.

Xara Designer Pro 7 provides several options for the displayed size of the Color Line (described in Customizing Designer Pro (on page 464)).

If you do not want to display a Color Line, deselect "**WINDOW**" > "**BARS**" > "**COLOR LINE**".

Colors on the color line

1 NAMED COLORS: First comes the Named Colors with its according Linked Colors (if present in the document, see below).
LINKED COLORS are represented differently on the color line by smaller rounded rectangles, so it's much easier to distinguish which are normal independent Named Colors and which are linked to a parent. When editing templates, to change the color scheme of the design you should only normally edit the Named Colors (large squares) and leave the Linked colors unchanged.

3 SPOT COLORS: If your document contains spot colors (on page 402), they appear on the Color Line as circles (they also appear as circles in the Color Gallery). This makes it easy to distinguish them from other types of color.

4 PALETTE COLORS: By default, there is a 'Standard Palette' of 46 pre-defined colors. There are 5 shades of 7 standard hues and 10 shades of gray, black and white. Standard Palette colors are not editable (i.e they are not Named Colors) and are designed as a simple, limited selection of colors to apply to objects (either by dragging on to the object or clicking). Use the Color Gallery (on page 169) to show other palettes like Web Colors or Pantone® Colors (if available).

Little markers in the color icons shows which of the named colors (if any) or palette colors have been applied to the selected object(s).

Diamond markers show the colors used by the selected objects. A diamond in the top-left corner indicates the fill color, in the top-right corner indicates the line color.

Cross-shaped markers show the current color attributes if there are no objects selected. Line color on the right, fill color on the left.

Triangular markers show the colors of a fill if you have applied one.

This works also when choosing a color with the color picker from existing objects, see Using the eye-dropper to pick colors (on page 160). The color line markers update immediately and indicate the color of the object under the eye-dropper as you're dragging.

Re-ordering colors on the color line

You may prefer to re-arrange colors on the Color Line. To do this, "Ctrl + drag" colors along the Color Line. This also reorders the COLOR GALLERY. Only named colors can be re-arranged on the Color Line.

Color line context menu

Right click a color on the Color Line to show a context sensitive menu with these options:

EDIT	Opens the color editor with the selected color (not available for palette colors)
SET FILL COLOR / SET LINE COLOR	Set the fill or line color of the selected object with this color
RENAME	Rename a named color (not available for palette colors)
DELETE	Delete a named color (not available for palette colors)

If the selected object is a bitmap, the fill and line color options are replaced with SET CONTONE DARK COLOR / SET CONTONE LIGHT COLOR. See Bitmap coloring (on page 208) for more information.

When right clicking the "no color" swatch, the fill and line color options are replaced by: CLEAR FILL COLOR / CLEAR LINE COLOR. This sets the selected object's relative attributes to "no color". When applied to a contoned photo/bitmap, this restores the original image colors.

Applying fill & line colors by drag & drop

- To apply a fill color to an object (selected or unselected), drag a color from the Color Line and drop it into the center of the shape. Alternatively right click and choose FILL COLOR to display the color editor.
- To set the line or outline color, drop it on the line, not the center.
- To change the current fill color, drag a color into a blank space.
- To change the page background color, "Ctrl + drag" a color onto the page background.

When dragging colors an indicator beside the pointer tells you what effect dropping the color will have:

Set flat fill color (seen when you drag over an object) or the intermediary colors of a multi-color fill (on page 210)

Set line color (seen when you drag over a line).

Set the current fill color (seen when you drag over an empty space).

Set start color of graduated fill (seen when dragged over start of fill).

Set end color of graduated fill (seen when dragged over end of fill). For three and four-color fills, a number is added to mark the according end color handle.

Set page background color (seen when you drag a color onto the page).

Instead of drag & drop, if you have an object selected, you can just click on the Color Line. If only open shapes or lines are selected, this will set the line and the fill color. This means that you can, for example, draw a line and then set its color by just left-clicking on the Color Line.

In any other case, you can alter the line color by "Shift + clicking" on the Color Line.

If a bitmap or a bitmap-filled shape is selected, then clicking on Color Line will contone the bitmap. That means, the bitmap is converted to greyscale (black and white) and the used color is used as a contone light color. The contone dark color is usually black. You can set both contone colors via the Color Line context menu (see above). See Bitmap coloring (on page 208) for more information.

To set a fill or line to no color (clear), perform the operations as outlined above but use the "No color" option instead of a color.

Editing an object's color

To edit the fill color of the selected object(s):

- Choose "**UTILITIES**" > "**COLOR EDITOR**" ("Ctrl + E").
- Or click the **EDIT COLOR** icon on the Color Line.
- Or right click the object and choose **FILL COLOR**
- Or double click on the current line and fill color icon on the Color Line (the edge of the leftmost panel).

To edit the line color of the selected object /s

- "Shift + click" on the **EDIT COLOR** icon
- Or double click on the current line and fill color icon (the edge of the leftmost panel).

This displays the **COLOR EDITOR** which allows you to select from any color of the spectrum. Unlike most graphics programs the Color Editor can remain on screen while you continue to work. It changes to reflect the color of the selected objects, and so you can easily and directly adjust the color of the selected object.

The Color Editor
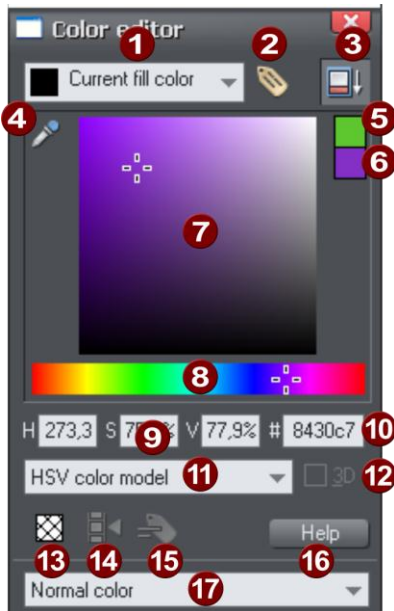
1. Shows what you are editing
2. New named color
3. Show/hide advanced options
4. Eye dropper color picker
5. Previous color
6. Current color
7. Color panel (Color model dependent)
8. HSV hue selector
9. Numeric values (Color model dependent)
10. RGB hex color value
11. Color model (HSV, RGB, CMYK or grayscale)
12. 3D editor mode option (only RGB & CMYK)
13. No color patch (only available when editing local color)
14. Make Named Color local to Frame/Layer
15. Rename named color
16. Color editor help
17. Type of color: Normal, Spot (if available), Tint, Shade or Linked

The illustration shows the full version of the **COLOR EDITOR**. Click **HIDE ADVANCED OPTIONS** to display the smaller, simpler version.

Using the eye-dropper to pick colors

Instead of selecting hues and shades on the **COLOR EDITOR** you can instead pick a color from any part of the document or any part of the computer screen—even from other windows and programs.

To do this just click and drag on the eye dropper icon. As you drag you see the color editor continuously picks up the color under the eye dropper. Release the mouse button when you have the desired color. This is an easy and quick way to use the same color again or copy colors from photos or from one object to another.

The color picker doesn't simply sample the screen (RGB) color. Instead, if you point to a shape with a solid fill color, the sampler will pick up the actual color of that shape, including the color model (RGB, HSV or CMYK), so the color is copied exactly to the selected object(s). If the target color is a named or palette color, instead of simply copying the color the color picker will apply the same color to the selected object(s).

If the object under the mouse pointer is complex (eg. has transparency applied) and the color cannot be determined, screen RGB color is applied.

The color sampler shows a small popup at the mouse pointer which indicates the color that is being sampled at that point. This will either be the palette color name, the name of a named color, or the color model and color value.

However if you want to use the same color often it is recommended to use a named color instead.

Previous and Current color

As you drag on the color editor the two small color swatches in the upper right of the color editor show the current color and the previous (before you started changing the color). This is useful if you want to make a small change and want to compare the old and new colors.

3D color editor

When editing RGB or CMYK colors the editor can be put into an advanced 3D mode that displays colors in a color cube. Some people may prefer to work this way.

Specifying colors in the Color Editor

You can enter precise RGB (or HSV or CMYK) color values in a number of ways. The most common requirement for web graphics is to enter a hex RGB color.

You can do this with the color editor showing either HSV colors (the default) or showing RGB colors.

To select the RGB picker, right click on the dialog and select RGB. This allows you to enter RGB values as percentages or 0-255 values.

Shows the expanded color editor, with the HSV picker on the left, RGB picker on the right.

Percentages are used by default, but Designer Pro allows you to change which format is used. To do this:

1. Display the **UNITS** tab of the **OPTIONS** dialog box ("**UTILITIES**" > "**OPTIONS**").
2. Click the appropriate radio button in the **COLOR UNITS** section.
3. Click **OK** to close the dialog box.

Limit to Browser palette

When clicked this button will shift the selected color to be one of the 216 common web browser palette colors. This is a legacy system that is no longer particularly important or relevant, as nearly all computers can display millions of colors, and there's no benefit in restricting web graphics to only this limited palette.

The color models

Color models let you define a color in terms of different color components. RGB and HSV are typically used for screen use. If you know your document is going to be printed and require very specific CMYK color values, then you can use CMYK colors.

Unlike some graphics software, Xara Designer Pro 7 allows you to mix RGB, HSV and CMYK colors in the same document. Models provided by Designer Pro are:

- RGB (Red–Green–Blue),
- CMYK (Cyan–Magenta–Yellow–Key),
- HSV (Hue–Saturation–Value),
- Grayscale.

RGB and HSV colors are stored within Designer Pro in 24-bit format. This gives you 16.7 million possible colors. CMYK colors are stored in 32-bit format. When printed or output as EPS or PDF they are output in CMYK format.

CMYK colors and transparency effects

When using any effect that involves transparency, including feathering, color calculations are performed in RGB. This is also true of live effects.

Transparency is described in Transparency (on page 213).

This means that if objects are defined using CMYK colors, that any part of them that involve transparency of these effects will be output in RGB colors, and this can cause slight color shifts when printed on some devices.

CMYK colors are best used when you require precise printed CMYK values (such as a company logo that has to be reproduced as an exact CMYK color), and thus typically would not be used with transparency or other effects that alter the color. It is therefore recommended that if using CMYK colors on shapes, that you avoid transparency or Live Effects on such shapes, or on any shapes that are on top or overlap.

Colors on the screen and on the printer

One problem with computer screens is that their colors do not match the available colors on a printer. Screens emit combinations of red, green, and blue. The brightness control has a dramatic effect on displayed colors. Printed images reflect combinations of cyan, magenta, yellow and black.

Tip: To get bright blue on a printer, select a color on screen that is almost pure cyan (printer's cyan is much more blue than screen cyan).

As an example, pure green on computer screen is a fluorescent bright color that is impossible to reproduce accurately on any printer. Similarly pure blue on a computer screen will often print as a much darker purple-blue. Technically, the range of colors on a computer screen (known as the "color gamut") is far greater than that on a printer. So there will always be differences between screen and print colors.

Xara Designer Pro 7 provides the ability to simulate how printed colors will look. Select the "**WINDOWS**" > "**SHOW PRINTER COLORS**" > "**SIMULATE PRINT COLORS**" menu to get a better idea of how your colors will look when printed. This is an approximation only since printers vary slightly, but it is far more accurate than normal screen colors.

Local colors and Theme colors

Designer Pro has two types of color:

- **LOCAL COLORS** are used in only one place in the document. Each object has a separate color and nothing is shared. This is useful if you want to change the color of an object without affecting other objects. Local colors are the easiest method and best for simple documents that use relatively few colors. "Applying color" and "Editing an object's color" above describe local color handling.

- **THEME COLORS (OR NAMED COLORS)** can be used again and again in the document. (As such, they are like styles in a word processor.) Any edits you make to a Theme color are immediately reflected on all objects and parts of the drawing that use that color. You can also copy Theme colors between documents. Theme colors appear on the Color Line and in the **COLOR GALLERY**. If there are any Theme colors already present in the design and you import or paste templates from the Designs gallery containing Theme colors with the same name, you will be asked if you want to match the actual color of the imported Theme colors to the existing ones. The Theme colors in most templates are consistently named so when you import elements from different themes colors are matched perfectly.

IMPORTANT: If you just select an object on the page that has a **NAMED COLOR** applied to it, and alter it with the color editor, this will always turn it into a **LOCAL COLOR** instead of a **NAMED COLOR** (because it is assumed that if you try to edit the color of the object that's what you mean to do. If you really want to change the **NAMED COLOR** so this and all occurrences of the color change, then you should do so by editing the **NAMED COLOR** (on page 165)).

Theme color schemes

Many of the web themes offered in the **DESIGNS GALLERY** and in separately purchasable Template Packs include alternative color schemes which can easily be applied to websites which use the same theme, to transform the color scheme instantly. The color schemes are normally found in the Designs Gallery in each theme, after all the page layouts and separate graphic elements that make up the theme. They all have "Color scheme" in their titles in the Designs Gallery, so they are easily identified.

To apply a color scheme to your website, simply drag the scheme from the Designs Gallery and drop it on your page. You can try applying the color schemes of one theme to a website created from the templates of another theme. But you will get mixed results doing this and some schemes will not work acceptably with some themes. So for best results stick to the color schemes of the theme that you used to create the site.

One of the color schemes provided with each theme matches the default colors used by that theme. This allows you to easily return to the original colors if you prefer. You can customize the theme colors yourself and choose a combination of colors that you think work well together. See "Editing named colors (on page 165)".

Creating your own color schemes

It's very easy to create your own color scheme files, which you can pass on to other Designer Pro users for them to apply to websites created with the same theme.

1. Load one of the page templates for the theme. Choose one which shows off all the colors of the theme most effectively. You can add more elements to the page if required, to help show off the range of theme colors.
2. Edit the named colors of the theme one at a time, as described in the 'Editing named colors' section (on page 165) below.
3. Once you are happy with your new color scheme, use "**FILE**" > "**SAVE AS**" to save it. The filename you choose MUST include "ThemeColorScheme" as part of the

filename. That is how Designer Pro identifies color scheme files – just by looking for that sequence in the filename. It's a good idea to also include the name of the theme to which the scheme applies. For example a new blue color scheme for the "Beta" themeset could be named something like "BetaThemeColorSchemeBlue.web".

4.   To test your color scheme, drag and drop it from File Explorer onto a page that still has the default theme colors. The page should be instantly re-colored using your color scheme.

Creating new named colors

If you want to use the same color in different parts of the drawing, and there is any chance you might want to change that color in future, if is highly recommended that you create a **NAMED COLOR**. This is easy in Xara Designer Pro 7:

Select an object whose color you want to use and then click **NEW NAMED COLOR** in the **COLOR EDITOR**.

Click to create a new named color

Give the color a suitable name, like "car color" and click create. You will see the new color added to the **COLOR LINE**.

You can now apply this color to any object the usual way, by drag-dropping it from the Color Line or just clicking (or right clicking to use it as a line color) to apply as the fill color.

When you edit a named color, all objects that use this color will change.

Editing named colors

There are three ways to display the color in the **COLOR EDITOR** so it can be edited:

- Choose from the menu in the **COLOR EDITOR**.
- Or right click the color on the **COLOR LINE** and choose **EDIT** from the menu that appears.
- Or drag & drop a color from the Color Line onto the **COLOR EDITOR**.
- Or drag & drop a color from the **COLOR GALLERY** onto the **COLOR EDITOR**.

You can then edit the color as required. All objects that use this color are automatically and immediately updated to show the new color.

Renaming named colors

While editing a **NAMED COLOR**, right click on the **COLOR EDITOR** and select **RENAME**

- Or select the color in the **COLOR GALLERY** and select the **NAME** button, or
- Or right click the color on the Color Line and select **RENAME**.

Deleting named colors

To delete a named color:

1. In the **COLOR GALLERY**, select the color or colors you want to delete.
2. Click **DELETE** in the **COLOR GALLERY**.

or:

Right click on the color on the Color Line and choose **DELETE**.

Importing named colors

When a design is imported into the current document (e.g. import from the **DESIGNS GALLERY**, import a XAR file or paste objects in from another design) if there are any named colors in the imported design which have the same names but different color values as colors in the current design, an alert appears as follows:
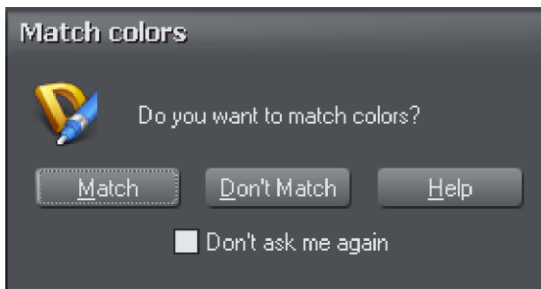
If you want the imported objects to inherit the colors of your current design, choose the "**MATCH**" option. This makes all objects using a given named color use the existing instance of that color as it appears in the current document.

Alternatively if you want the imported objects to keep their own independent colors, select the "**DON'T MATCH**" option. This adds new named colors into your design, with a number appended to the color names to distinguish them from the colors already in the current design. This allows the imported objects to keep their original colors.

Note that if you import objects from lots of different designs and choose "**DON'T MATCH**" each time, you will end up with a large number of separate Named Colors on your color line. The match prompt above includes a "**DON'T ASK ME AGAIN**" checkbox. If you check this, the option you choose will be assumed for all future imports in the current session.

Using the **MATCH** option means that you can choose a template, change its theme colors and then import more templates of the same theme and the imported designs will immediately pick up your modified theme colors. For example, import a red graphical button from the **DESIGNS GALLERY**, change its main theme color from red to green, then

import a red logo graphic of the same theme and choose the **"MATCH"** option. The logo will pick up your chosen green theme color automatically.

Make Named Color local to Frame/Layer

When you click this button, a new named color is created which is identical to the one you have selected.

This new color is then applied to all objects in the current frame or layer that use the selected named color. With one click you can localize a color to the frame/layer and then independently edit the original color and this localized color. This is useful when you are creating animations and you want an object's color to change part way through.

Normal colors, Tints, Shades and Linked colors

Normal colors

These are the normal stand-alone colors you apply to objects. Xara Designer Pro 7 can also define colors that are linked to another color, that is when the parent color changes the linked color will change as well. There are three ways you can link a color to its parent **TINTS**, **SHADES**, and **LINKED COLORS**. These are very powerful techniques that allow, for example, single-click re-coloring of complex shaded drawings.

Tints

Tints are based on other colors (called the parent color) and are always a paler version of the parent. They have two main uses:

- Where you have paler shades of a parent color and you may want to change the parent color in future with the tints automatically updating.
- To extend the range of colors available from printing inks.

  For example, a 25% red tint gives a pink color. Therefore using just a red ink you can have both a pure red and a pink using only one ink. Similarly, if just using black-and-white printing, it's often useful to be able to use tints to create various shades of gray. If you are printing with a limited range of colors it's usually cheaper to print one or two color, instead of full or four color printing. A tint can be based on any type of color, including another tint. Any changes you make to the parent color also change tints based on it. For example, you might define the color pink as 50% of a red parent color. Changing the parent color to orange automatically changes pink to light orange.

Shades

These allow both lighter and darker colors to be created all based on a parent color. Changing the color of the parent changes all associated shades. For example, a drawing of a car might use shades for the highlight and shaded regions of the car body. A single edit to the parent changes all the colors of the body but keeps the shading correct. For best results, the parent color should be a "pure" saturated color. When using the HSV color mode, saturation and value should ideally be 100%. When viewed in the **COLOR EDITOR** the cross should be in the top left-hand corner.

Linked colors

Linked colors are similar to shades but give greater flexibility. These are also based on a parent color but you define which attributes you want the linked color to share with its parent. For example you can create a linked color that is a more or less saturated version of the parent, but the hue and lightness / darkness follow the parent.

Creating a Tint, Shade or Linked color

TINTS, SHADES and LINKED COLOR have to have a master "parent" color, which needs to be a named color, so that when you change this parent color, the tint will change as well. So, if necessary, first create a named color (see Creating new named colors (on page 165)).

To create a tint, shade or linked color:

1. Select the object or objects to which you want to apply the color.
2. Open the COLOR EDITOR showing the advanced options.
3. Select the "normal color" drop-down menu and select TINT, SHADE, or LINKED.
4. From the PARENT dropdown menu, select the named color that you want this color to be linked to.
5. Adjust the TINT, SHADE or LINKED COLOR on the top section of the color editor.
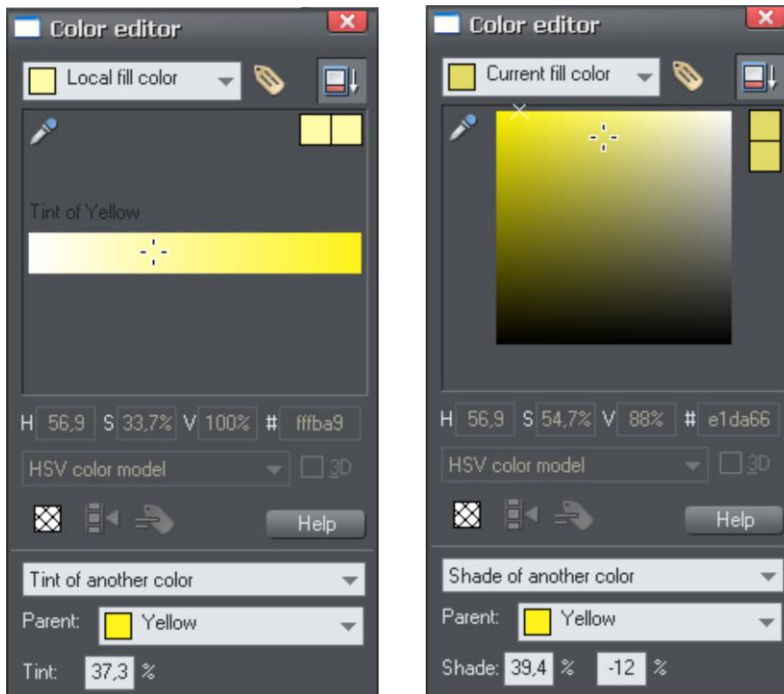
On the left you can see the new color is a tint of the parent "yellow" and so the editor provides only paler tints of the parent color. On the right, if you select a shade, you get to choose any lighter or darker shades of the parent color.

If you want to use this color in many places in the document it's recommended that you also make this a Named Color, so it appears on the Color Line, for easy picking. Just click on the **NEW NAMED COLOR** label icon on the top of the Color Editor and give it a name. It will now appear on the Color Line where you can pick it for use on other objects.

Editing the parent color

The key point of using tints, shades and linked colors is that they track any changes to the parent color. To see this working try editing the **NAMED COLOR** that is the parent (drag it from the **COLOR LINE** to the **COLOR EDITOR** and alter the color). You will see the objects with the tint, shade or linked color change in sync with the parent.

> **NOTE:** Be careful not to edit the color of objects on the page to which you've applied **NAMED**, **TINTS**, **SHADES**, or **LINKED COLORS** as this will change them to **LOCAL COLORS**.

The Color Gallery

The **COLOR GALLERY** displays all the **NAMED COLORS** used in the current, and other open documents. It also lets you create, edit, copy and delete **NAMED COLORS**.

To access the **COLOR GALLERY**:

- Choose "**UTILITIES**" > "**GALLERIES**" > "**COLOR GALLERY**" ("F9").
- Or click the **COLOR GALLERY** button on the **GALLERIES** bar.

Buttons at the top are dimmed if they are not available, for example, if there is no selected color, or more than one color is selected. Most of the options are common to all Galleries and are described in Document handling (on page 52).
The **REDEFINE** button redefines the selected color in the gallery to be that of the selected object.

The Color Gallery shows colors for all documents currently loaded.

Document handling (on page 52) has general information about galleries.

PANTONE® Colors

Introduction

PANTONE COLOR BRIDGE gives access to a wide range of standard pre-defined colors that you can use when creating materials that will be professionally produced using litho printing. Using PANTONE color numbers enables a more reliable way of reproducing known colors. For example, the Scottish Parliament has defined that the blue color used in the Scottish flag be PANTONE 300. This means anyone reproducing the flag can be sure to get the correct shade of blue.

PANTONE colors can be used two ways. The "spot color" expensive way involves your commercial printer using special inks that are exact PANTONE colors. So when you specify, say PANTONE 120 (a shade of yellow), the printer purchases an ink that is exactly this shade of yellow. This is expensive because it requires special inks to be used. It's usually only economically viable if you require large or very large production runs. This is sometimes referred to as PANTONE solid or spot colors.

The alternative, less expensive way, is to use PANTONE 4-COLOR PROCESS colors, which use a mix of the standard CMYK inks to re-create a given color, sometimes called a Process Color. This is less exact because mixing CMYK inks to create a given color is not as reliable as using a solid pure ink of the required color. However it provides a way of ensuring much more accurate color reproduction than judging colors by eye or assuming your computer monitor screen or inkjet printer is accurate (computer screens and desktop printers vary quite considerably).

Xara Designer Pro 7 also supports both type of PANTONE color system. You can use them as spot or solid colors or use the PANTONE 4-COLOR PROCESS library which defines exact mixes of CMYK colors. You can find the PANTONE color libraries in the COLOR **Gallery**.

PANTONE color libraries

Read Color handling (on page 156) beforehand, especially the articles about the color line, the color editor, CMYK color, and transparency effects and the Color Gallery.

The PANTONE libraries are at the end of the COLOR Gallery. By default they are folded; double click on the title strip to unfold a library and see the colors (see Galleries (on page 52) more information on folding and unfolding gallery sections).

The available libraries include:

- PANTONE® COLOR BRIDGE™ Coated
- PANTONE® COLOR BRIDGE™ Uncoated
- PANTONE® 4-COLOR PROCESS Coated
- PANTONE® 4-COLOR PROCESS Uncoated

PANTONE COLOR BRIDGE

These colors are listed in the gallery under **PANTONE**® COLOR BRIDGE™ Coated and **PANTONE**® COLOR BRIDGE™ Uncoated. Using these PANTONE solid colors will create spot colors. See Imagesetting (on page 402) for more information on spot colors. If you have a PANTONE color swatch you can pick a required PANTONE color for your design and specify it with a color from this section of the **COLOR Gallery**.

When sending the artwork to your print company, an additional plate will be created for each PANTONE color that you choose. The company will then print the normal plates as usual for CMYK colors and will print spot plates using the specified PANTONE inks. As the print company will use the exact PANTONE number you specified you can be assured of the color appearing exactly as expected. This is particularly useful for corporate logos where the color needs to be exactly the same whenever you produce company literature.

PANTONE colors are displayed on screen using CMYK, and if you print to a home printer then the color will be converted for printing. But any conversions are approximate; the only way to accurately see a PANTONE color is to look at a printed color swatch which you can get from PANTONE or one of its resellers, or to see a wet proof from the print company.

Technical note: To convert a PANTONE COLOR BRIDGE color to the equivalent process color, select the color in the color editor then change the color type to normal color. Note that normal (CMYK) colors cannot accurately reproduce some PANTONE colors.

PANTONE 4-COLOR PROCESS

These colors are listed in the gallery under **PANTONE**® 4-COLOR PROCESS Coated and **PANTONE**® 4-COLOR PROCESS Uncoated. These PANTONE colors are pre-defined CMYK colors. If you have a PANTONE 4-COLOR PROCESS swatch you can pick a required PANTONE color for your design and specify it with a color from these sections of the **COLOR Gallery**. Xara Designer Pro 7 will then create the color with the exact CMYK colors specified by the PANTONE system and not adjust it in any way when printing. This option is cheaper than using the PANTONE COLOR BRIDGE as no additional plates are required, and the print company does not need a special ink — all colors are created using the normal CMYK color process. But you will not be able to achieve some of the colors available through PANTONE COLOR BRIDGE

Using a PANTONE color

To use a color from a library either:

- Just drag & drop the color from the **COLOR** Gallery onto the object to which you wish to apply the color (for other ways of applying colors from the **COLOR** Gallery, see Color handling (on page 156)).

- Or in the **COLOR** Gallery, drag the color you want to use from the library section up to the section for your current document. This lets you copy several colors in one operation. (See Galleries (on page 52) for details of selecting items in a gallery.)

This copies the library color into the document and displays it on the color line.

You cannot delete, rename or redefine colors in the color libraries. However, you can change copies of colors used in your document.

Note: altering a PANTONE COLOR BRIDGE color will cause it to become a process (CMYK) color.

Important notes when using PANTONE colors

PANTONE colors (and CYMK colors in general) are useful for reproducing a known color. There is no other reason to use CMYK or PANTONE colors, and for all normal use we recommend using HSV or RGB colors.

If you use any of the Xara Designer Pro 7 transparency effects on or over any CMYK or PANTONE color, the color will be modified by the transparency process (which mixes any transparent colors with those underneath the object) and will not produce the expected PANTONE color. This is an unavoidable consequence of the way transparency works.

So a simple rule if you require a PANTONE COLOR BRIDGE color or a specific CMYK color value (and that includes the use of pure K shades of gray) is to not use transparency, feathering, soft shadows, bevels or Live Effects on or over these objects. Doing so will result in that object or portion of the object being processed as RGB colors and so will result in color shifts.

Viewing print colors on screen

There is a huge difference between screen and printed colors. Computer monitor screens can reproduce a much wider, much brighter range of colors. Printers use CMYK inks instead of RGB colors, and so the method of reproducing color is entirely different. As an example, pure bright RGB green on screen is completely impossible to reproduce on any printer. Technically speaking the screen color gamut is much larger than available on printers. Xara Designer Pro 7 provides a simple way to simulate the printer colors, which adjusts all on-screen colors to more closely match that of a typical printer. Select "**WINDOW**" > "**SHOW PRINTER COLORS**" > "**SIMULATE PRINT COLORS**" to adjust the screen colors.

Note: This does not alter the actual RGB or CMYK color values, it just adjusts the screen color gamut to more closely match that of your printer.

Note: Some Adobe software, such as Photoshop and Illustrator, handles printer colors very differently. They only support one color model at a one time and will convert all colors to the current color model. e.g. when operating in CMYK mode, all RGB colors are converted to CMYK colors. They also show all CMYK colors as "printer simulated".

Xara Designer Pro 7, on the other hand, supports mixed color models (you can use CMYK and RGB color in the same document) and does not alter the actual color value.

Text Handling

The Text Tool

Use the **TEXT** Tool ("F8") to enter or edit text.

Text Tool InfoBar Left Side

1 Font
2 Font Size
3 Aspect Ratio
4 Bold
5 Italic
6 Underlined
7 Justification
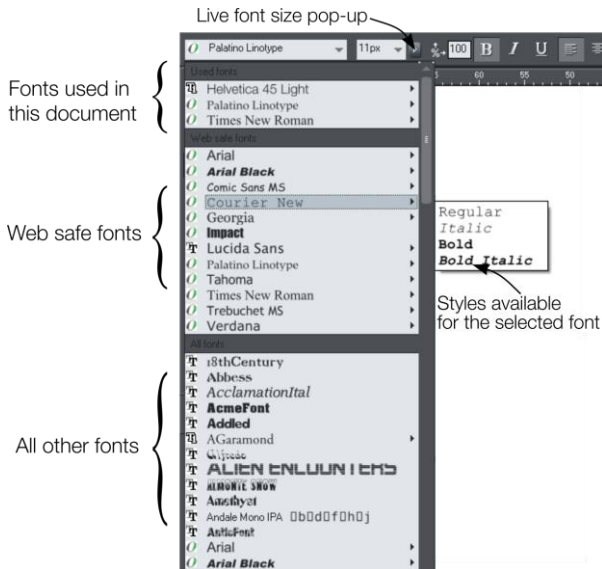8 Subscript/Superscript

Text Tool InfoBar Right Side

1 Line Spacing
2 Tracking
3 Baseline Shift
4 Kerning
5 Paragraph Spacing
6 Bulleted Lists
7 Numbered lists
8 Indent
9 Outdent
10 Spell Checker

Xara Designer Pro 7 supports three basic type of text objects

- Simple text lines: Click on the page, and type.
- Text columns: Click and drag to create a column, and type.
- Text areas: Click and drag diagonally to create a rectangular area, and type.

After you've created any text object you can transform it (rotate, scale, skew) and can apply all the normal attributes, fill color, transparency, feather etc, using the normal tools. You can also attach it to a curve. The text will remain editable.

The Font Menu

Live font size pop-up

Fonts used in this document

Web safe fonts

All other fonts

Regular
Italic
Bold
Bold Italic

Styles available for the selected font

The font menu lists all installed fonts, and is split into three sections. The top section displays those fonts that are currently used in the document. The second section shows the "web safe" fonts. These are the fonts you can safely use in web pages, because all commonly used web browsers will support these fonts. See Web Safe Fonts section. The final section displays an alphabetical list of all other installed fonts. Each font name is displayed in the menu using its own typeface, making font selection easier.

Those fonts for which multiple font styles are available are shown with small black triangles against them on the right hand side of the menu. Simply hold the mouse pointer over such a font name for a second or two and a small sub-menu appears to the right of the main menu, listing the available styles of that font. While this sub-menu is displayed, you can move the mouse pointer over it to select the desired font style.

Instant font menu navigation

While the font menu is displayed, you can type the initial characters of the font name, and the menu will be scrolled to that section of the list. E.g. if you type "ver" it will instantly scroll and locate the Verdana font.

Bold, Italic & Synthesized fonts

Xara Designer Pro 7 does not allow you to apply italic or bold to text if the necessary italic/bold font is not installed. Designer Pro 3.2 and earlier versions would allow this and would artificially synthesize an italic or bold appearance as required. The results produced by doing this were generally poor quality. Besides this, you would encounter problems if later trying to export your design to PDF, since other applications would either not synthesize the bold/italic appearance or produce even worse results.

However, you can easily emulate the same effect. To add bold to a font, just give it a small line width. To slant a font, use the skew / slant feature of the Selector Tool.

Simple text

If you wish to type a small amount of simple text, position the pointer where you want to enter text and click. A red cursor appears where you clicked and you can now start typing on the keyboard. If you make a mistake, use "Delete" and "Backspace" in the usual way. Pressing "Enter" completes the line and starts a new line of text below it. The inter-line spacing is controlled by the line spacing text box on the InfoBar.

By default text has no outline color. "Shift + clicking" on a color on the Color Line will give the selected text an outline color - the thickness of which can be controlled by the line width control, as usual. You will probably want to set the Line join type (on page 83) to be rounded to give it a more smooth appearance (control at the top of the **LINE GALLERY**).

Line width is described in Changing the line width (thickness) (on page 80). Applying color is described in Color handling (on page 156).

You can continue to enter text even after rotation, color filling or placing it on a curve.

Text in a column

If you are entering larger amounts of text, over multiple lines, using a column may be more useful. Changing the width of the column will automatically re-flow the text.

To type a column of text:

1. Select the **TEXT TOOL**.
2. Move the mouse pointer where you want the column to start.
3. Drag right to create a horizontal line the width of the column. This red line just shows you the width of the column. It is never exported or printed.
4. Type in the text. You don't need to press "Enter" at the end of a line. When the text reaches the edge of the column, it automatically flows onto a new line.

NOTE: If you click away or change tools before you start typing, the text column will be removed and nothing left on the page. Therefore always start typing after you've dragged the column width line.

Instead of typing in the text you can create the text in a separate text editor or word processor, copy it to the clipboard and paste it into Xara Designer Pro 7. Copy and paste supports RTF-formatted text.

Words only split across lines if they contain a hyphen character (minus key).

The effect of typing a hyphen into "running"

If you type "Ctrl + -" (minus key) it inserts a **soft hyphen** which is a hyphen that only appears if the word can wrap at the end of a line. This is particularly useful for narrow columns of text, to avoid rivers of white, you might need to hyphenate some words. Inserting a normal dash character will split the word at the end of the line. It's called a 'soft' hyphen because when the word appears in the middle of a line the hyphen vanishes (unlike a normal dash or minus character), so it intelligently hyphenates words only if necessary.

When editing the text a soft hyphen is treated as an invisible character (it takes no space), but you can tell it's in the text by moving the cursor left/right over where the invisible character is.

A **hard hyphen** can be inserted by typing "Ctrl + Shift + -" (minus key). A hard hyphen is one that will not cause a wrap at all. This is useful in situations where you have dashes in words that you do not want split at the end of lines.

Changing the width of the column

Drag either of the two red handles at the ends of the line.

Changing the angle of the column

"⇧+ drag" either of the red handles at the end of the line to change the angle of the column. Alternatively, "Ctrl + drag" to restrain the line to the constrain angles. Or alternatively you can use the **SELECTOR TOOL** to rotate the object in the usual way.

For more on constrain angles, see Introduction to Xara Designer Pro 7 (on page 51).
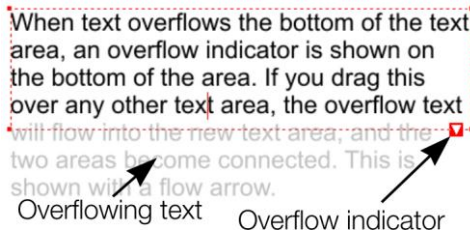
Text areas

In the **TEXT TOOL** if you click and drag diagonally on the page you will create a rectangular text area. The blinking cursor will be positioned in the top left corner and you can type or paste text.

A text area can contain a "flowing" text story. This is where a single piece of text flows from one text area to another. It's called flowing text because, like water, as you add or remove text in one area it overflows into connected text areas or flows back from text areas.

If the text overflows the bottom of the text area the overflowing text is shown gray, although you can continue to edit this text as usual.

Connecting text areas—text flow

When text overflows the bottom of the text area, an overflow indicator is shown on the bottom of the area. If you drag this over any other text area, the overflow text will flow into the new text area, and the two areas become connected. This is shown with a flow arrow.

When text overflows the bottom of the text area, an overflow indicator is shown on the bottom of the area. If you drag this over any other text area, the overflow text will flow into the new text area, and the two areas become connected. This is shown with a flow arrow.

Overflowing text   Overflow indicator

Dragging the overflow indicator from one text area to another will connect the two areas so text flows from one to another. You can link as many together as you require.

There is a quick way to create flowing text. If the text cursor in an area with overflowing text, then just click-drag on the page to create a new text area. The new text area is automatically connected and text will flow into the new area.

Tip: You can flow text from one area to another on any page, even earlier pages. If you need to flow into an area many pages away, it's probably easier to use the above method, although if you zoom out to a small page size you can drag the overflow arrow across pages.

To disconnect one text area from another, just drag on the overflow indicator and drop it away from any text area.

If you delete a text area that is connected to another only the area is deleted, the text will simply re-flow into the remaining text areas.

Resizing text areas

Using the **TEXT TOOL**, you can click and drag on any of the corner control handles. The text in the area will be reformatted to fit the new size.
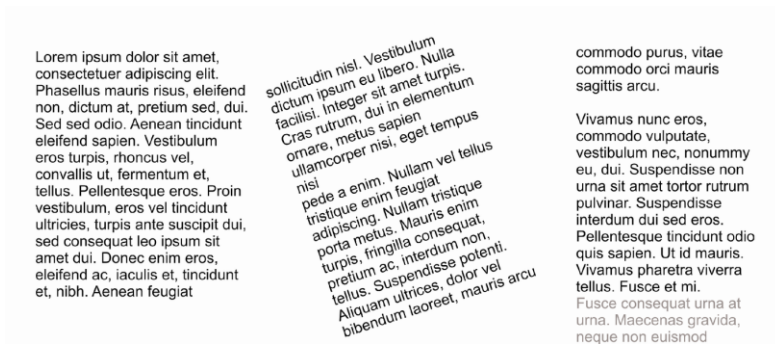
Alternatively you can use the **SELECTOR TOOL** to resize the text object, but in this case the behavior is different. If you resize a text object using the **SELECTOR TOOL**, the text itself changes size. This is consistent with the normal operation of the **SELECTOR TOOL**.

However in the case of flowing text areas this would cause undesired side-effects; you almost certainly do not want part of a flowing text story to be a different point size than the rest. Therefore, the **SELECTOR TOOL** behavior varies depending on whether you are resizing one text area that contains a flowing text story, or resizing the whole text story. The rule is:

- If you resize a single unconnected text area (or simple text or text column) then the area "container" and text content are resized together.
- If you select the text areas of the whole flowing text story (they have to be on a single page) then a resize will resize the text and areas together.
- But if you resize a text area that is part of a flowing series of text areas, then only the container size is altered and the text inside remains the original size, and will be re-formatted to fit the new size. This is like resizing a text area with the **TEXT** Tool.

If you want to resize all text in a text story, select it all with "Ctrl + A", and apply the required font size.

You can rotate a text area, using the **SELECTOR TOOL** as normal, and the text will flow through the rotated text area normally.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Phasellus mauris risus, eleifend non, dictum at, pretium sed, dui. Sed sed odio. Aenean tincidunt eleifend sapien. Vestibulum eros turpis, rhoncus vel, convallis ut, fermentum et, tellus. Pellentesque eros. Proin vestibulum, eros vel tincidunt ultricies, turpis ante suscipit dui, sed consequat leo ipsum sit amet dui. Donec enim eros, eleifend ac, iaculis et, tincidunt et, nibh. Aenean feugiat

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commodo purus, vitae commodo orci mauris sagittis arcu.

Vivamus nunc eros, commodo vulputate, vestibulum nec, nonummy eu, dui. Suspendisse non urna sit amet tortor rutrum pulvinar. Suspendisse interdum dui sed eros. Pellentesque tincidunt odio quis sapien. Ut id mauris. Vivamus pharetra viverra tellus. Fusce et mi. Fusce consequat urna at urna. Maecenas gravida, neque non euismod

Text flow is unaffected if you rotate any of the text areas

Hold down "Ctrl" while rotating to constrain the text rotation angle to 90° angles and screen aligned angles.

Word count

The word and character count total of the current text is shown in the status line. This also shows the number of overflowing words. If any region of text is selected, it shows the count of this selection instead.

Text along a curve

To place text along a curve of your choice:

1. Create either basic text, text in a column or a text area (see above).
2. Select your text object and one curve.
3. Choose "**ARRANGE**" > "**FIT TEXT TO CURVE**".

This is some text fitted along this curve

Alternatively, select a curve or line and then in the **TEXT TOOL**, click on the line, where you want the text to start, and type. This automatically fits the text along the line. When you reach the end of the line the text will wrap onto a new line, immediately below the start of the previous one.

If you do not want the text to wrap to a new line, "Shift + click" on the line.

To hide the curve so it's not visible, select the **SHAPE EDITOR TOOL** and set the line color to **NO COLOR** or a width of **NONE**. You can also edit the curve as usual this way.

Applying color is described in Color handling (on page 156).

Adjusting the left and right margin of text on a curve

If you just start typing or place a column of text on a curve, you can change the start and end position of the red handles. Just drag them along the curve as required. If you center text it will be between these two margins.

Swapping sides of the line

Right click on the text and select the **REVERSE TEXT ON CURVE** menu option.

Alternatively, if you reverse the direction of the line (**SHAPE EDITOR TOOL**, **REVERSE PATHS** button on the InfoBar), then the text will move to the other side of the line or, in the case of a closed shape, move from the inside to the outside of the shape.

Editing text

Double clicking on a text object in any tool takes you into the **TEXT TOOL** and places the cursor at the click position in the text.

All the normal word processor-style cursor and mouse operations can be used. For example:

- Click where you want to place the cursor.
- Use the left and right arrow keys to move left, right, up or down.
- Use "Ctrl + left and right arrow keys" to move left or right one word.
- Press "Home" or "End" to move to the start or end of the line.
- Press "Ctrl + Home", or "Ctrl + End" to move to the start or end of the text object.

Text selection:

- "Shift + any" of the above keys to select text
- Double click to select a word
- Triple click selects a whole line of text, or "Ctrl + L"
- Quadruple (4x) click selects a paragraph of text
- Or just drag across the text in the Text Tool to select the text
- "Ctrl + A" will select all the text in the text object (you must be in the **TEXT TOOL**.)

If you have a text selection any attribute change will apply only to the selected region of text. If you have only the cursor in the text, then any attribute change, say selecting a new color, will only appear when you type new text.

Selecting the whole text object

There is a quick shortcut for selecting the whole text object. Instead of using "Ctrl + A" or dragging across all the text, simply press the "**ESC**" key. This removes the cursor but selects the whole text (the status line will confirm 1 text object). This makes it easy to apply an effect or attribute to the whole text story.

For example, to change the font size of the whole text object, just press "**ESC**" and select the new size from the InfoBar.

Swap case

Pressing "Ctrl + W" will swap the case of the character after the cursor and move the cursor on. So, if you've accidentally typed a section of text with the caps lock key on, just place the cursor at the start and press and hold "Ctrl + W".

You can swap the case of a selected region of text, the same way. The cursor will not be moved.

Smart Quotes

When you type quote ' or double quote " characters, Xara Designer Pro 7 will automatically convert these into the more appropriate and aesthetically accurate opening or closing quotes. So this changes **'this'** into **'this'** and **"quotes"** into **"quotes"**. It's smart enough to understand the use of single quotes within words to signify missing characters, so that **'don't'** becomes **'don't'**.

Entering special characters

There are a number of useful shortcuts to allow insertion of special characters, like © or ™. See Special characters (in Text Tool) section in "Menus and keyboard shortcuts".

All these shortcuts (with the exception of the hard space) are compatible with Microsoft Word.

Entering dummy text ('Lorem Ipsum')

When creating page layouts, it's common practice to use dummy text, which is a type of pseudo-Latin (it doesn't really mean anything), but has the overall appearance of typical English text (or other similar Latin-based languages). The text begins "Lorem ipsum dolor sit amet..."

Historical note: This same text has been used as dummy text going back more than 500 years in the print trade and parts of the actual Latin used can be traced to text written more than 2000 years ago.

You can insert a paragraph of the "Lorem ipsum" text by typing "Ctrl + Shift + L" ("L" for Lorem) while using the **TEXT TOOL**. To insert a larger block of text, just press the key combination a few times.

Spell checker

The **TEXT TOOL** includes a spell checker. To turn it on, select the **SPELL CHECKER** icon on the **TEXT TOOL** infobar, which opens a menu.

Select "**CHECK SPELLING AS YOU TYPE**". Now all unrecognized words in your document and as you type are shown with a red dashed underline.

To correct a misspelled word, right click on it and the context menu shows you suggested correct spellings of the word at the top of the menu. Simply select one of the suggestions to replace the word.

All unrecognized words in your document and as you type are shown with a red dashed underlane

underline
under lane
under-lane
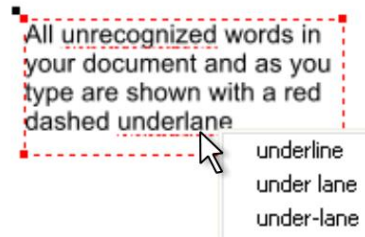
Language selection

The menu shown when you click on the Spell Checker icon on the infobar lists all the languages for which you have dictionaries installed. By default the language corresponding to the current locale setting is selected. You can choose different languages for different text objects, so you can use text in multiple languages in your document if required.

To change the language associated with a text object, select the text object, then in the **TEXT TOOL** choose the required language from the Spell Checker menu. Now the text object will be checked against the dictionary for the language you chose.

If you want to enter many text objects using a language other than the default, you can change the current language text attribute so that you don't have to change the language on every text object individually. To do this, make sure you have nothing selected (click an empty area of your design using the **SELECTOR TOOL**). Then in the **TEXT TOOL**, choose the language you want to make current using the Spell Checker menu. You will be asked if you want to set the current language text attribute. Click "Set" to confirm. Now each new text object you create is associated with the chosen language. Note that this current attribute is not re-loaded when you save and load your design. So you will need to repeat the next time you load the document, to continue entering text objects using the same language.

If you have a text object which you don't want to be spell checked at all, select the object and choose the "No language (ignore)" option from the Spell Checker menu.

User dictionary

Words that you use regularly which are not in the dictionary provided with Xara Designer Pro 7 can be added to your own personal dictionary. Right click on the word and choose "**ADD TO USER DICTIONARY**". Now the word is no longer shown as misspelled. The user dictionary applies to all documents that you use on your computer and to all languages.

Find & Replace

The Find & Replace function performs live search so that as you type the search string the text is searched and highlighted in real-time.

To search for some text select the menu "EDIT" > "FIND/REPLACE..." or "Ctrl + Alt + F" and the following dialog is displayed:
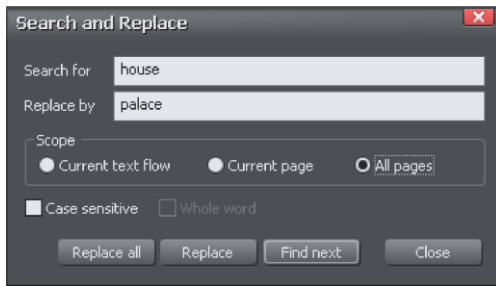
Enter the search string and it's shown highlighted in the text. You can choose to search just the current text story, page or the whole document (all text flows on all pages).

The **WHOLE WORD** option will only search for whole words that match the search string. E.G. searching for 'met' will not find 'metro'. The **CASE SENSITIVE** option will match only the exact case. E.g., with this option on, searching for 'aBc' will not find 'abc'.

Synchronising Text using Soft Groups

In some designs, you may need multiple text objects to always show the same text, but perhaps using different styles. Animating text in an animation document is one example of this. Normally when you want to change the text shown on these objects, you'd need to edit each one individually. By adding such related text objects into a Soft Group, you can ensure that they will always show the same text. To add the related text objects into a Soft Group, first make sure that they all already have exactly the same text (otherwise they will not become synchronized). Then select them all using the Selector Tool. Then select "ARRANGE" > "APPLY SOFT GROUP" ("Ctrl + Alt + G").

Now when the text is edited on one text object, the others will be updated automatically, even if they are scattered across different layers (or in the case of animation documents, different frames) throughout your document. Note that this synchronization still works even if some of the text objects are on locked or invisible layers.

To ungroup a Soft Group, select "ARRANGE" > "REMOVE SOFT GROUP" ("Ctrl + Alt + U"). See the Soft Groups section of the Object Manipulation (on page 112) chapter for more information on Soft Groups.

Tabs, Margins and Indents

Rulers

To adjust tabs, margins and indents you need to turn on rulers in your document.

- Choose "WINDOWS" > "SHOW RULERS" or right click a page and choose "SHOW GRID/GUIDES" > "SHOW RULERS".
- Or press "Ctrl + ⇧ + R".
- Or press "Ctrl + L" (when not in the TEXT TOOL).

The enhanced text features will only appear on the ruler when you are using the **TEXT TOOL** and when the text cursor is in a text story or the text object is selected when in the **TEXT TOOL**.

In the **TEXT TOOL** when you drag the margins or tabs on the ruler, you get a temporary vertical guide to make it easier to align the tabs or margins to objects elsewhere on the page. In addition when dragging tabs or margins, if you have magnetic snap switched on, these will snap to each other making it easier to position tabs and margins.

Margins and indents

Any changes you make are made to the current paragraph of text. (i.e. the paragraph containing the text cursor) or, if you have a selected region of text, to the paragraphs of the selected region.

You can apply changes to all text in a text story by selecting all the text within that story ("Ctrl + A"). To change more than one text story, select the text objects while in the **SELECTOR TOOL** then change to the **TEXT TOOL** and make the required changes.

Left margin. Drag this to change the left margin of the text.

First line margin. Drag this to change the left margin for the first line of the paragraph (useful for lists, as shown below).

Right margin. Drag this to change the right margin of the text.
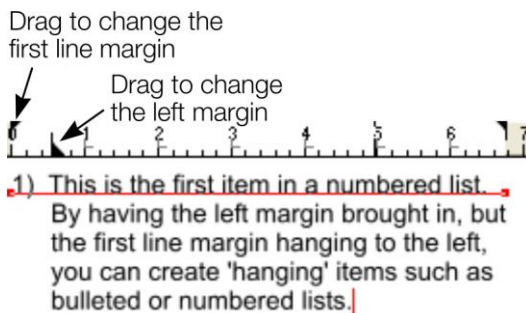
Demonstrating the left margin and first line margin

Demonstrating a right margin

Tabs

By default, text stories are created with tabs set 0.5 cm apart. This means you can just press "Tab" and your text will be moved along to the next tab stop. You only need to define new tab stop positions if you want alternative tab spacing.

These default tabs are shown as faint Ls on the ruler:
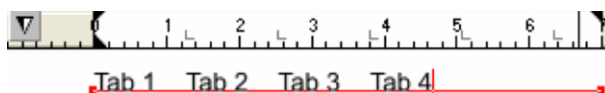
Standard tabs, indicated by faint "L"s

Custom tabs

To create a custom tab position, just click on the ruler where you wish to place the new tab. It will replace default tabs up to that point on the ruler.

For example:

The triangle indicates a custom tab
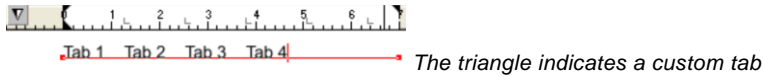
- To set more than one tab click multiple times on the ruler.
- To move a custom tab drag it along the ruler.
- To remove a tab drag it off of the ruler (default tabs will come back).

Custom tab types

You can set different types of custom tab. By default, custom tabs are left align tabs. This means that text will be aligned with the tab on the left of the text.

To change the tab type, click the tab icon on the ruler. The following custom tab types are available. You are not limited to just one type in a story, and can choose a different type then set additional tabs.

Click to change the tab type
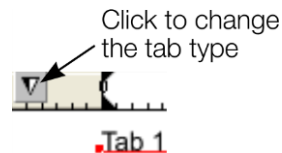
Left align: The text will be aligned with the tab to the left.

Right align: The text will be aligned with the tab to the right.
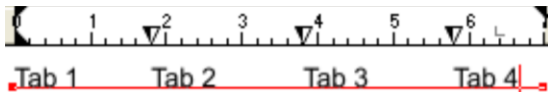
Center align: The text will be centered on the tab.
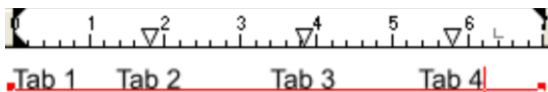
Decimal point align: The decimal points in the text will be aligned with the tab. This is useful for lists and, however long the number, the decimal points (periods) will be tab-aligned.
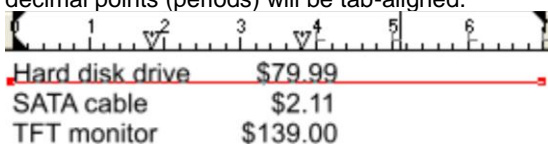
How to creating hanging indents

Hanging Indents, as they are known, are where the first line of a paragraph has a negative margin or a margin that hangs to the left of the normal left margin. Numbered or bulleted lists are examples of hanging indents.

To create hanging indents:

1. Drag the left margin inwards.
2. Click on the ruler away from the left margin (creates a new tab stop) and drag this tab stop to be exactly over the left margin.
3. Now each line will start outdented—you can insert any special character or number and press "Tab" to move to the left margin. And (as with this paragraph) all subsequent lines of text are indented to the left margin.

Repelling text objects

You can make any object in Xara Designer Pro 7 repel text so that text underneath it automatically flows around the object, instead of appearing underneath it. This makes it easy to lay out pages containing long passages of text combined with photos and graphics. Once you've set them to repel, you can adjust the positions of your graphics and photos and the text will automatically adjust and reflow around them.

You can also choose to only repel text within a layer, which stops objects within a layer from repelling text on other layers and also stops text on the layer being repelled by objects on higher layers.

Making an object repel

To make an object repel text, right click it and select the **REPEL TEXT UNDER** option. Any text in the same layer underneath the object will be repelled with a default margin of 5

pixels between the text and object. Note that repelling text objects only repel text that is underneath the objects, not any text that is on top.

Alternatively right click on the object and select **REPELLING & ANCHORING** to display the Text repelling & anchoring dialog.
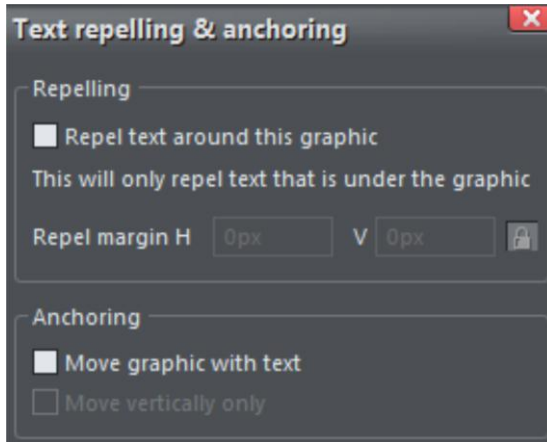
Click the **REPEL TEXT AROUND THIS GRAPHIC** checkbox.

If desired, set a repel margin for the object to set the space between the text and the object. If you want a different height and width for the repel margin, click the padlock symbol and enter the margin height in the **H** (horizontal) box and width in the **V** (vertical) box. Click **OK**.

To turn off repelling right click the object and choose the **REPEL TEXT UNDER** option again to deselect it. Or right click and select **REPELLING & ANCHORING** to display the Text repelling & anchoring dialog again. Click the **REPEL TEXT AROUND THIS GRAPHIC** checkbox to deselect it and click **OK**.

Note that single lines of text do not respond to repelling objects, only text areas and text columns do.

To only repel text within the same layer as the repelling object, see Layer Properties (on page 151).

Anchored Graphics

You can position any graphic, or group, so it's tied (anchored) to a position in some text, so that as the text moves because of editing, the graphic object will move to remain at the same relative position.

1. The quickest way to anchor a graphic or group is to right click it and choose the **ANCHOR TO TEXT** option. However, if you also want to edit anchoring properties, you can right click on the object and select **REPELLING & ANCHORING** to display the Text repelling & anchoring dialog.
2. Click the **MOVE GRAPHIC WITH TEXT** checkbox.

3. By default **MOVE VERTICALLY ONLY** is also selected, so that your anchored graphic will only move vertically as the text is edited. You can click to deselect this option to allow the graphic to move horizontally with the text. This may be useful if, for example, the graphic is around the same size as the text height and you want it to stay between specific words or in a specific place in a sentence.

4. An anchor symbol appears in the top left of the object, indicating it's now anchored.

5. Using either the **SELECTOR TOOL** or **TEXT TOOL**, click and drag the anchor symbol so that a red arrow appears.

6. Move the arrow head and drop it in the location in the text where you would like the object anchored. A red caret (inverted 'T' mark) indicates the anchor position.

7. As you edit the text around this caret mark, the anchor point and anchored object moves with the text.

cupidatat do nostrud pariatur dolor sit, eu dolor exercitation consectetur ipsum. Exercitation nulla enim lorem, fugiat velit dolor fugiat lblah blahs elit qui, fugiat exercitation sint, dolore esse Ut amet pariatur consequat et amet dolor. Exercitation ea magna laboris anim. Ipsum nulla quis do id laboris occaecat. Sunt ad, consectetur dolore deserunt non commodo irure, in esse elit aute fugiataboris ad aute tempor officia velit pariatur. Reprehenderit esse dolor, quis minim et eu ad ut ipsum dolore, mollit in ea

An anchored object displays an anchor symbol and an arrow pointing to the anchor point, shown as a red caret mark. These disappear as you type, unless you're close to the anchor point.

Note: If you drag the anchoring arrow to a place on the page where there is no text, the arrow turns into a red anchor that indicates the object's anchoring properties will be lost if it's dropped here. This also happens when the arrow is dropped on the object itself.

However note that the anchored object will not move outside the area of the page as a result of the anchor point moving. The anchored object will only move up to the page edge.

This is an example column of text with various graphic elements hanging to the left. Each of these is anchored to the start of a line of text immediatelyto its right.

It's possible to anchor any graphic object or group, including groups containing text, such as the example side-panel, shown above. It's also possible to anchor objects to appear on top of, or below the text. The example pale blue flower graphic, shown above, is anchored this way and will flow with the text.

NOTE: If an anchored object is also set to repel, only the text that the object is anchored to is repelled.

NOTE: Repelling is restricted for repeating objects: Text inside a repeating group is only repelled by repelling objects inside the repeating group. Individual repelling objects inside a repeating group only repel text that is also inside the repeating group. Repeating groups as a whole can repel any text stacked below on the page.

Moving Anchored Objects

As new text is added or deleted, the object moves as the text flows, but will always maintain its new position relative to the anchor point. You can move an anchored graphic by dragging on it as usual. This changes its position relative to the anchor point, but does not move the anchor point, which remains visible at the end of the anchor symbol arrow as you click/move the graphic.

If you want to move the anchor point to another location within the text, click and drag on the anchor symbol again to create a new arrow and drag it to the new location.

If you cut and paste the text containing the caret mark, the anchored object is also cut and pasted.

Viewing the anchor point

The anchor point of an anchored object is only visible if you click the anchored object in the **SELECTOR TOOL** or click in the surrounding text area in the **TEXT TOOL**.

When you click in a region of text with the **TEXT TOOL**, it shows any anchors points within an inverted 'T' symbol, and also draws an arrow from the anchor point to the anchor symbol in the top left of each anchored object. So the easiest way to see all the anchor points for any text is to click in it with the **TEXT TOOL**.

However, when you start to edit the text, the red caret, arrow and anchored symbol temporarily disappear until you stop typing. If you are close to the anchor point, Designer Pro displays the caret mark, along with an arrow pointing to the anchor symbol, to let you know when you're close.

Inline anchored objects

If you want to embed a small graphic into a line of text, such as an icon graphic like this 🔒; inline with the text, so it flows with the text, drag or paste the image in as an anchored object that repels and position its anchor point anywhere in the copy. It's recommended you use non-breaking space characters ("Ctrl + Space bar").

Removing an anchor

To remove an anchor from an object, right click it and choose **ANCHOR TO TEXT** again to disable the option. Now when you click the object in the **SELECTOR TOOL** or in the text in the **TEXT TOOL**, the anchor symbol is no longer displayed.

Applying text styles

Changing the font size
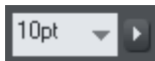
There are several ways to change the font size:

- Type a new value into the size text box on the InfoBar and press ↵.
- Or select from the **FONT SIZE** drop-down list on the InfoBar.
- Or use the Font size pop-up slider.
- Or manually increase/decrease font size with the "Ctrl + Shift + >" and "Ctrl + Shift + <" keyboard shortcuts. This applies only if all selected text parts are of the same font size.
- Or use the **SELECTOR TOOL** to scale the whole text object.

Condensing and expanding characters (aspect ratio)

The aspect ratio is the ratio between the height and width of the text. Ratios over 100% make the text wider than normal; under 100% make the text narrower.

To change the aspect ratio:

Type a new value into the **ASPECT** text box on the InfoBar and press "↵".

Or use the **SELECTOR** Tool to stretch or squash the complete line of text.

It is not recommended to use values below 80% or above 130%. Better to use a special condensed variant of the font family if available. Alternatively use the tracking control to adjust the spacing without distorting the actual shapes of the characters.

Bold & Italic

Click the **BOLD** or **ITALIC** button on the InfoBar ("Ctrl + B" or "Ctrl + I")

This applies the bold or italic variant of the current font.

Attention: Xara Designer Pro 7 does not allow you to apply italic or bold to text if the necessary italic/bold font is not installed. However you can easily emulate the same effect. To embolden a font, just give it a small line width and apply a line color. To slant a font, use the skew / slant feature of the **SELECTOR TOOL**. Read more in the "Font menu" section (on page 175)

Text Underlining

Click the underline button on the InfoBar to apply an underline to the selected text.

The underline color and size is automatically derived from the text color and size.

Underlining links
When you add a web address URL to some text, see the Web address dialog. You can decide to automatically underline all links. This is a check box option on the web address dialog ("Ctrl + Shift + W"). If you select this all linked text throughout the document is underlined, and the underline command does not affect this.

If you apply a URL to a group that contains some text, then the text will not be underlined.

Justification or text alignment

Justification always applies to the complete line. Any selected region is ignored.

① **LEFT** justification: Align the left-hand edge of the text to the initial click position.
② **CENTER** justification: Centers the text around the click position.
③ **RIGHT** justification: Align the right-hand edge of the text to the initial click position.
④ **FULL** justification: This only applies when text is along a curve or in a column and when there is at least one full line of text to justify.

When using simple text the initial click position on the page is taken as the origin for text justification.

Subscript & superscript

Click the appropriate button on the InfoBar.

Normal text $_{\text{subscript}}$ $^{\text{superscript}}$

Indents and Outdents

Indent a paragraph of text.

Outdent a paragraph of text.

Bulleted Lists

You can turn any text into a bulleted list by selecting the text and then selecting the bulleted list button on the infobar.

Each paragraph of text becomes a separate bullet. If you press return to finish a line at the end of one bullet point, the next line starts with a bullet point to.

To finish entering a bulleted list, hit return on the end of the last bullet and then immediately hit return again on the new bulleted line. This removes the last empty bulleted line and allows you to start entering normal text again.

You can nest bulleted lists by pressing the indent button on the infobar. This indents the current bulleted line and changes the bullet character to a different style, to distinguish it from the parent bullet.

- Click the Bullet list button and enter an item
- Press Return to start the next bullet point
  - Click the Indent button to make an indented list of sub-entries
  - The bullet character changes for indented lists
    - There is also
    - a third
    - level
  - Pressing Return on an empty bullet point ends the sub-list and continues the parent list
- At top level Return on an empty bullet point ends the list.

Example of a nested bulleted list

To move a bullet point from a sub-list into its parent bulleted list, simply place the text cursor in it and press the outdent button.

So it's easy to make and edit arrangements of nested bulleted lists using the indent and outdent buttons.

Numbered lists

You can create and edit numbered lists in just the same way as described for bulleted lists above, using the numbered list button.

You can also choose the numbering scheme to be used for each list, using the **LIST PROPERTIES** dialog. Place the text cursor in one of the numbered list points, press the right mouse button and choose '**LIST PROPERTIES**..." from the context menu.
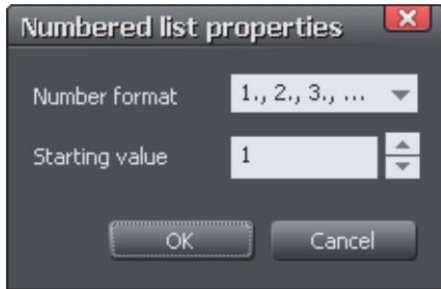
In the dialog you can choose from a variety of numbering schemes and also enter the value that should be used for the very first entry in the list. Then the number is automatically incremented for the second and subsequent entries in the list.

Line spacing
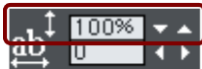
Line spacing allows you to change the space between two lines (so affects vertical spacing).

Line spacing is measured in percentages (120%) or points (12pt). You can either type the line space value in the text box or click the arrows to nudge the values.

A percentage setting has the benefit of scaling accordingly if you change your font size. If a percentage is applied to a line of text with more than one font size, the largest font size is used. For example, if a line contains 90% and 100% text, the line spacing is calculated on 100%.

Tracking

Whereas kerning (see below) changes the spacing between two characters, tracking changes the spacing equally within a region of text. An EM is the width of the capital letter "M" in the current font and font size. It is therefore relative to the font size and not a fixed value.
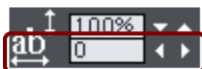
1. Select the region to which you want to apply tracking.
2. Type a value into the **TRACKING** text box (values are in 1/1000ths of ems).

From the keyboard you can increase or decrease the tracking by pressing "Alt + Right arrow", or "Alt + Left arrow". Each key press changes the tracking by 10/1000.

Kerning
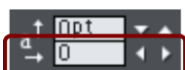
Kerning lets you alter the space between two characters (so affects horizontal spacing).

Most good fonts have auto-kerning which means they already move appropriate pairs of characters together slightly, as you can see from this diagram:

AWAY   AWAY   AWAY

Auto-kerning off   *Auto-kerning on*   *Manual kerning*

Kerning is measured in "ems" (enter values in 1/1000ths of "ems".) You can either type the kerning value in the text box, or click the arrows to nudge the values.

It shares the same key shortcuts as above. If there is just a cursor, it alters the kerning, but if there's a selected range of text, then it alters the tracking. Each key press alters it by 10/1000ths of a em.

Baseline shift

Baseline shift allows you to move part of a line up or down. Positive values move the text upwards, negative downwards.

The baseline is the imaginary line at the bottom of characters.

Select the characters for which you wish to change the baseline shift then enter a value in the **BASELINE SHIFT** text box.

abc defgh ijklm

The effect of selecting AG and then applying a downwards baseline shift (i.e. -5pt).

Baseline shift is measured in points but you can use any of Designer Pro's standard measurement units. Note that baseline shift is an absolute value, in points, and does not change if you change the font size.

Paragraph Spacing
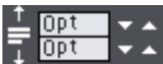
The last two fields on the end of the **TEXT TOOL** InfoBar allow you to set the spacing above and/or below paragraphs.

This is particularly useful where you want half line spaces between paragraphs.

Like Microsoft Word, when you use both spacing above and below paragraphs, the spacing between paragraphs is whichever is the greater value (it's not cumulative). Paragraph spacing above paragraphs will move the first paragraph down in a frame of text.

Advanced text properties

Right click on a text object and select "**ADVANCED TEXT PROPERTIES**..." to bring up the Advanced text properties dialog.
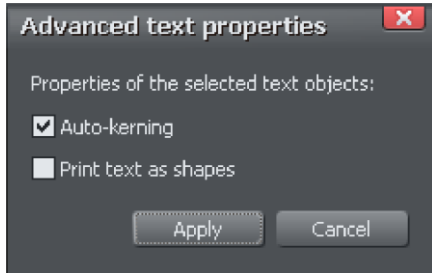
Here you can turn off auto-kerning on the selected text object if desired. See the kerning section above for information on kerning.

You can also specify that the selected text should be converted to shapes before being sent to the printer, which is useful if there are any problems printing with the font used.

Text links

You can apply a link to any part of a text object, so that when the document is exported as HTML the text shows as a clickable link in web browsers.

Use the **TEXT TOOL** to select the words or characters that you want to apply the link to, then click the link button on the **WEB** toolbar.

This brings up the **WEB PROPERTIES** dialog, with the **LINK** tab selected. On this tab you can choose whether to link to a URL, to another page of your website, or even to a pop-up layer.

By default when you apply a link to some text, the text is shown as underlined and with the text link color that is defined for the current document. You can change the link color and whether or not the links are underlined, on the **WEBSITE** tab of the **WEB PROPERTIES** dialog (right click and choose **WEB PROPERTIES** or choose **WEB PROPERTIES** from the **UTILITIES** menu). You can also set the color to be shown when the user moves the mouse pointer over a text link in a web browser ("Mouse Over Color"), and the "Visited Color" which is used to display links which the viewer has already visited with their web browser.

When setting the three global text link colors, you can either select existing named theme colors used in your website, using the drop-down lists, or you can click the **EDIT** button to bring up the **COLOR EDITOR** so you can choose any color you like.

You can also choose to override the global text link colors for individual links if required. On the **LINK** tab of the **WEB PROPERTIES** dialog, unselect the "Use common website link colors" option. Then the selected link will be displayed using the text color that you set in the document, instead of the global text link color.

Text inside groups for websites

When a document is exported as a website, all groups get exported as images. So any text inside groups is not present as text in your exported website, and so it can't be picked up by search engines or selected and copied as text by a visitor to your site. For graphical buttons, headings, logos etc. this is usually desirable as the text just forms part of the graphic. But you may have more substantial pieces of text inside groups which you want to remain as text in your exported web page. To arrange this, all you need to do is apply the special name "HTMLText" to your text object. The easiest way to do this is:

1. Go into the **TEXT TOOL** and click on your text to insert the text cursor.
2. Press escape so that the whole text object becomes selected.
3. Open the Name dialog ("**UTILITIES**" > "**NAMES...**").
4. Either select the "**HTMLTEXT**" name from the "**APPLY NAME**" dropdown list if you've already used it in the current document, or type in the name "HTMLText". Then click "**ADD**" to add the name.

When you export your website, your text will remain as text and the rest of the group will be converted to an image. All the text panels in the **DESIGNS GALLERY** already have this name applied to the text objects inside them, so the text on the panels export as text.

Browsers can't render rotated text, so you can't use this name to force rotated text to be exported as text. The name is ignored in this case.

Copying text styles

It's easy to copy the style of any text to any other region of text using the **PASTE ATTRIBUTES** feature:

- Select the source region from where you want to copy the style. This can be as little as a word (just double click).
- Select "**EDIT**" > "**COPY**" ("Ctrl + C").
- Select the region of text to which you want to apply the style.
- Select "**EDIT**" > "**PASTE ATTRIBUTES**" ("Ctrl + ⇧ + A").

If you just have the text cursor positioned in some text when you **PASTE ATTRIBUTES** the paragraph attributes will be pasted to this paragraph. If you have a region of text selected, then **PASTE ATTRIBUTES** will paste all the visual attributes of the source text.

Applying attributes to whole text stories

When you have the cursor in a simple or column text object, pressing "Esc" will select the whole text object. You can then apply an attribute, say a color, and the whole text object is altered. This is often quicker than performing "Select all" ("Ctrl + A"). With text areas this method only works if all text areas of the story are selected. You can do this in the **SELECTOR TOOL** clicking and "Shift + clicking" on the different text areas to select them. But this method is only possible if the text areas are on a single page. If your text story flows over several pages and you want to change all the text, then it's necessary to "Select all" ("Ctrl + A"), and then apply the required attributes.

Copying/Pasting formatted text (RTF)

You can copy "rich text" (as it's sometimes known) from other applications such as word processors or editors and paste into Xara Designer Pro 7 as text, and the fonts, margins, line spacing and text links will be preserved. This makes it dramatically easier to retain the style and appearance of your text.

When you paste "Rich Text Format" (RTF) from other applications you are given the choice of pasting the text in as "Unformatted text" which means it will appear in the font and style at the cursor where you paste, or "Rich Text Format", i.e. it will retain the style of the source text.

This also works the other way around. You can copy text in Designer Pro and paste into other applications that support rich text editing and the style (font, size, colors, margins etc) will be retained. This will only work if you select and copy a single text object or from a single text flow.

Some applications, such as Microsoft Word, have a "Paste special" menu option that provides a wider range of paste options. These applications will sometimes allow you to choose the format of the pasted object (text or graphic).

Seeing fonts in use

It is sometimes useful to see what fonts are used in your document, particularly if you are sharing files with other Designer Pro users who may not have the same fonts installed. For a complete list of fonts used in your document choose "**FILE**" > "**DOCUMENT INFO**". Any fonts that are used in the document but are not currently installed on your computer have **NOT INSTALLED** by them. Another way to see which fonts are used in your document is to just open the font menu of the **TEXT TOOL** InfoBar. The top section shows fonts used in your document.

Changing text into editable shapes

You may want to convert some text into editable character outlines for further manipulation or if you wish to give the document to someone who does not have the fonts used in your document.

1. Change to the **SELECTOR** Tool.
2. Select the text.
3. Choose "**ARRANGE**" > "**CONVERT TO EDITABLE SHAPES**" ("Ctrl + Shift + S").

This converts the individual characters into a series of straight and curved lines. To manipulate individual characters, select the text then select "**ARRANGE**" > "**UNGROUP**" (Ctrl + U) twice. All characters will then be separate objects.

Note: you cannot edit the text with the **TEXT** Tool after you have converted it, so make sure the text is correct before you convert it.

The Fonts Gallery

The **FONTS GALLERY** serves a number of useful purposes:

- It's an easy way to preview the style of all fonts on your system.
- It lists all the fonts included on the Xara Designer Pro 7 CD (whether or not they are installed).
- You can install fonts from the CD (or hard disk), or un-install fonts
- You can apply fonts by drag-and-drop

To display the **FONTS GALLERY** click its tab in the galleries bar to the right of the Designer Pro window. Or you can toggle display of the **FONTS GALLERY** by choosing "**UTILITIES**" > "**GALLERIES**" > "**FONTS GALLERY**" or pressing "Shift + F9".
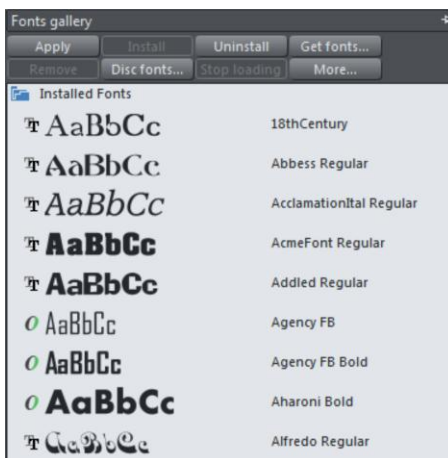
The fonts are grouped into several categories:

- At the top are fonts installed on the computer (i.e. all the fonts in your Windows/Fonts folder).
- Next are all fonts (installed or available on the Designer Pro CD) grouped by appearance (for example: script, decorative, sans serif)
- Last is a complete alphabetical list of all fonts, installed or ready to install.

Chapter Document handling (on page 52) has general information about galleries.

Applying a font from the Fonts Gallery

This is an alternative to using the **TEXT** Tool **INFOBAR**. You can either:

- Select the font in the gallery and click **APPLY** to apply to the selected text object, or double click a font
- Or drag & drop the font name onto any text (selected or not). The pointer changes shape when in position.

If you apply a font that is not installed it asks if you want the font installed.

Installing or uninstalling a font

The first part of the gallery shows fonts already installed. Remaining sections show fonts on the CD (either from the CD or from the hard disc made at install time).

1. Click on a font name to select it. You can select additional fonts by either "⇧+ clicking" to select a group or "Ctrl + clicking" to add an individual font to the selection.
2. Click **INSTALL** or the **UNINSTALL** button on the top of the gallery. Alternatively if you apply an uninstalled font this automatically installs it.

You can also click **GET FONTS** to download a selection of fonts, but this is only useful if you haven't installed the fonts from the Designer Pro CD. Fonts from other suppliers can also be installed using the Windows Control Panel (described in the Windows Help and Support section of Windows).

Note that to install fonts from the Font Gallery Xara Designer Pro 7 must be running with Administrator privileges. To do this on Windows Vista, start Xara Designer Pro 7 by right clicking on the program shortcut and choosing "Run as Administrator" from the menu that appears.

Fonts and PDF

When you create a PDF ("**FILE"** > "**EXPORT**..."), you get the option to embed fonts into the PDF file. Font embedding ensures that anyone who receives the PDF can view and print the document with the correct font, but it does make the PDF files larger.
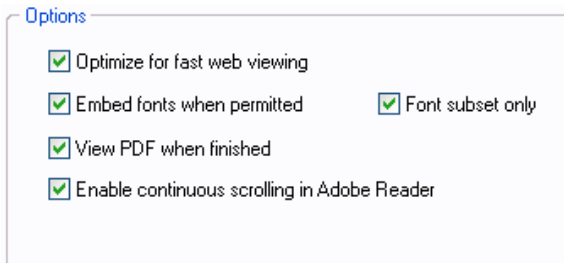
PDF Export options

This is only possible for those fonts that are marked by their creators as having permission for embedding. You are warned if it's not possible to embed fonts.

Font embedding

Xara Designer Pro 7 stores the character shapes of all the fonts used in your document. This means if you give someone else your design file, or transfer the file to another computer, the text will still look exactly right, even if the correct fonts are not installed on that computer. But this only embeds the characters that are used in the document (the

full font is not included). So on computers with the fonts missing, any text that is added in the missing fonts may be missing the correct character shapes.

Browser text compatibility

It is a sad fact that different browsers display the same text slightly differently, usually at a slightly different size or line length (so for example 10pt text is not displayed at 10pt size but at the nearest whole pixel size instead (13 pixels).

Xara Designer Pro 7 is designed to emulate the behavior of the most common browsers and adjusts intermediate sizes to be whole pixels, and adjusts the line lengths to closely emulate the text on Windows browsers. You can switch this adjustment off in the OPTIONS dialog, GENERAL tab (right click and choose PAGE OPTIONS or choose OPTIONS from the UTILITIES menu) by un-checking the 'SHOW WINDOWS COMPATIBLE TEXT LENGTHS' option.

Advanced note: If you're using Designer Pro or switch this compatibility option off, then if you enter any intermediate size, such as 13.6 pixels or 10pt, you will get text that is exactly, accurately, scaled to this size. But be warned that most web browsers will show this text as a slightly larger or smaller size than you see in Xara Designer Pro 7.

A second consequence of this browser (mis)behavior is that at small font sizes, there is a quite a large jump from one size to the next. So if you want a font size, say, between 9pix and 10pix, you can't have this. Most browsers cannot display an intermediate size (whether you use Points, ems, or any other unit type). So you will see Xara Designer Pro 7 text sizes jump from one size to the next as you resize text objects.)

Fills

The Fill Tool

Creating a graduated color fill

The process of creating a different fill is almost identical for all the fill types:

1.   Select the object or objects to which you want to apply the fill.
2.   Select the **FILL** Tool ("F5")
3.   Select the fill type from the dropdown menu
4.   Click-drag across the object to create the fill. Or, drag one of the fill handles to adjust the fill size and position

Xara Designer Pro 7 provides a smooth interactive live preview of the fill as you drag. This provides a number of advantages over traditional dialog-based Fill Tools. Not only does it require a lot fewer clicks, it's faster, and allows you to get the required start and end positions right first time.
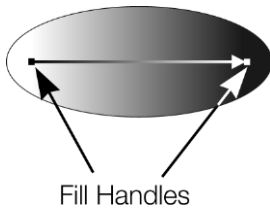
As you drag a fill arrow is created indicating the direction of the fill. Fill handles can be selected and dragged to adjust the position and angle of the fill.

Fill Handles

Coloring fills

Select one of the fill handles and click a color on the **COLOR LINE** or bring up the **COLOR EDITOR** and choose a new color. You can press "Tab" to alternate between the fill handles.

Changing selection

In the **FILL** Tool just clicking on an object will select it, and so it's not necessary to always go into the **SELECTOR** Tool to select other objects.

Fill Tool InfoBar

1. Fill type
2. Fill tiling
3. Fill effect
4. Bitmap name
5. Profile
6. Fill handle/resolution
7. Handle color/Grain

FILL TYPE selects the type of fill. Selecting from this menu:

- with a selected object, applies the fill to the object;
- without a selected object, sets the current fill type which will then be used for newly drawn objects.

FILL TILING is used when applying bitmap and fractal fills. The options are described later in bitmap fills. Fill tiling changes the repetition of the fill effect. The options are:

- Simple-the fill is used only once, regardless of the size of the object.
- Repeating/repeating tile-repeats the effect so that it fills the entire object.
- Repeating tile inverted-only available on fractal and bitmap fills. This is similar to repeating tile, but every other tile is inverted.

Fill tiling options are not available for conical. All other fill types can be made to repeat. This can produce some useful effects.
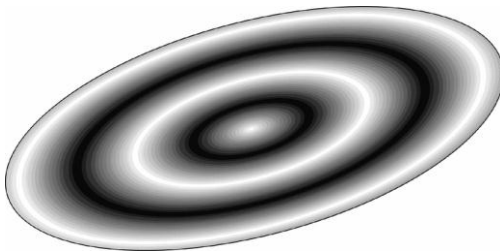
A repeating elliptical fill inside an ellipse shape

FILL EFFECT is used for all fill types, except 3 and 4-color fills. It controls how the fill colors fade from the start color to the end color:

- **FADE**: Fades between the two colors in a linear fashion
- **RAINBOW:** Blends along the shortest edge of the HSV color wheel. For example, a blend from yellow to cyan runs yellow-green-cyan.

This option has no effect when the two colors are black, white or gray.

- **ALT RAINBOW**: Similar to rainbow except the blend is along the longest edge of the color wheel. For example, yellow to cyan runs yellow-red-magenta-blue-cyan.

BITMAP NAME displays a pop-down menu showing thumbnails of all the bitmaps in the **BITMAP GALLERY** and is an easy way to select the required bitmap for a bitmap fill.

FILL PROFILE-you can change the rate of the color transition between the start and end of fills. This applies to all fill types except flat, three color, four color and bitmap (unless it's a contone colored bitmap).

To change the profile of a fill:

1.   Select the filled object.
2.   On the **FILL** Tool InfoBar click **PROFILE**. This opens the **PROFILE** dialog box.
3.   You either select a predefined profile from the dropdown list or drag the sliders to create a custom profile. The top option in the dropdown list (the straight line) creates a linear transition between the start and end of the fill.
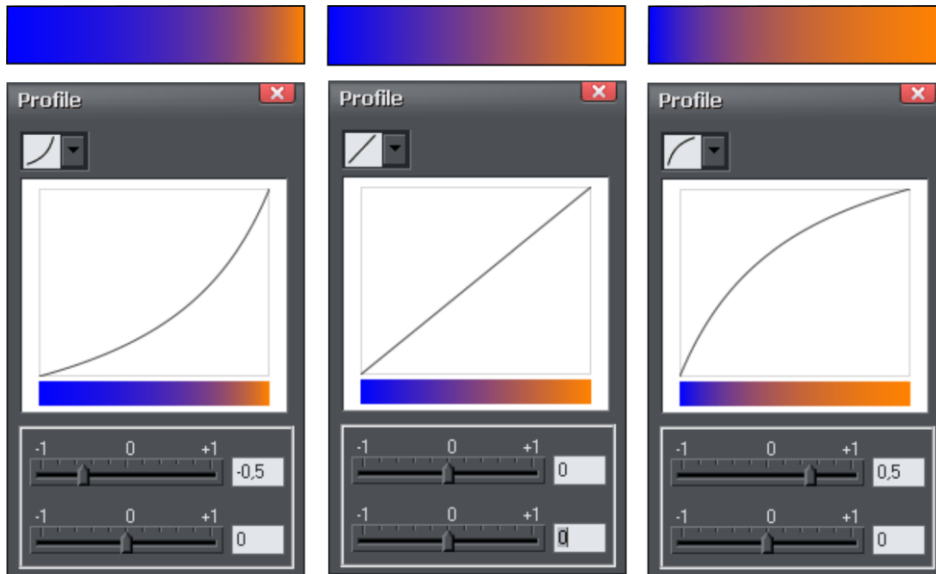
Show three different black-to-white graduated color fills and the corresponding profile dialogs. The center, default, is a linear black-to-white transition.

FILL HANDLE: Indicates if the start or end handle is selected. This field is blank for flat fills.

RESOLUTION (bitmap and fractal fills only)-shows the resolution of the bitmap (as long as you don't have a fill handle selected). You can type in a new resolution to change the size of the bitmap. Low resolutions show the individual pixels of the bitmap. You rarely need a resolution greater than 150 DPI, even for typeset output.

FILL HANDLE COLOR (except bitmap fills): Indicates the color applied to the selected fill handle.

Flat fills

To apply or change a flat fill:

1. Select flat fill from the fill type menu.
2. Choose a color from the **COLOR LINE** or **COLOR GALLERY**.

The Color Line and Color Gallery are described in Color handling (on page 156).

Linear fills

To apply a linear fill:

1. Select linear fill from the fill type menu (not necessary if the object currently has a flat fill).
2. Position the pointer where you want to start the fill (this can be outside the object).
3. Drag the mouse pointer to where you want the fill to end (again, this point can be outside the object).

The arrow drawn on the selected object is called the fill arrow. It indicates the direction and extent of the fill. You can select either end of the arrow by clicking it.

Moving the start or end handle of the fill

To change the direction and extent of the fill:

1. Move the pointer over the handle you want to move. When over the handle, the pointer changes shape.
2. Drag the handle.

Changing the colors in a fill

To change a color in a fill:

- Drag & drop the color from the **COLOR LINE** onto a fill handle (you do not have to select the handle first.)
- Or, drag & drop the color onto the object. Each fill has an imaginary center line halfway along the fill arrow. Dropping the color on the start handle side changes the start handle color, and the end handle side changes the end handle.
- Or, if one of the end handles is selected (it's shown highlighted) just click on a color. You can press "Tab" to select the other fill handle, and click the color required for the other end

The Color Line is described in Color handling (on page 156).

Each method changes the color of one handle only; they do not change any other selected fill handles, or:

1.   Select the required handle (or handles, also works with multiple objects).
2.   Choose the required color from the Color Line.
3.   This changes all selected fill handles.

Circular fills
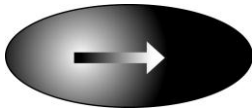
For circular fills, applying the fill, moving handles and changing colors are the same as for linear fills. The start handle is the center of the fill.

Circular fills are useful for creating highlight effects.

Changing the height/width ratio of the object automatically changes a circular fill into an elliptical fill (see below).

Elliptical fills
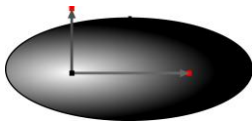
Applying an elliptical fill is similar to applying linear fills. As you drag the mouse pointer, you first create a circle with two end handles. You can then drag the end handles to create a suitable ellipse.

"⇧+ drag" preserves the aspect ratio of the fill. "Ctrl + drag" constrains rotation to the preset constrain angles. Moving handles and changing colors are the same as for linear fills.

A quick way to apply a elliptical fill:

"Shift + drag" to create a elliptical fill.

Conical fills

When you apply a conical fill, the fill arrow displays as a semi-circle with two end handles. You can then rotate either end handle around the start handle to create suitable shading.

The size of the semi-circle is irrelevant-it has no effect on the fill. "Ctrl + drag" constrains rotation to the preset constrain angles.

You can also drag the center handle to change the position of the fill.

Moving handles and changing colors are the same as for linear fills.

Diamond fills
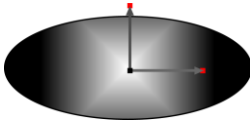
Applying diamond fills is similar to applying elliptical fills. As you drag the mouse pointer, the fill boundary appears as a square with two end handles. You can then drag the end handles to resize the diamond.

"Shift + drag" unlocks the aspect ratio of the fill, allowing you to move the fill handles independently. "Ctrl + drag" constrains your selection to the preset constrain angles.

Three-color fills
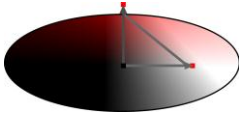
Three-color fills give the effect of three colored spotlights lighting the object. As you drag the mouse pointer, the fill displays as a triangle with three end handles.

By default there is a 60° angle between the two fill arrows. "ń+ drag" to create triangles with different angles to form the fill triangle you require.

Unlike other three-handle fill types, three-color fills can have a different color applied to each handle (the center and the two end points).

The object can contain a single (simple) or multiple instances (repeating) of the fill.

Four-color fills
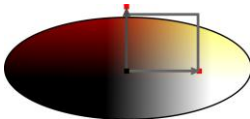
Four-color fills are similar to three-color fills and give the effect of four colored spotlights lighting the object. When you apply a four-color fill, the fill boundary displays as a square with four end handles.

You can then drag the handles to scale and rotate the rectangles. "ń+ drag" to create parallelograms instead of rectangles. Hold down Ctrl while dragging to constrain the rotation of the fill..

You can apply different colors to all four fill handles/lines. The object can contain a single (simple) or multiple instances (repeating) of the fill.

Bitmap fills

1. Fill Type
2. Fill Tiling
3. Not used
4. Bitmap name
5. Resolution
6. Not used

The **BITMAP GALLERY** is described in **THE BITMAP GALLERY** (on page 250) in the Photo Handling chapter, for the **FILL GALLERY** see below (on page 210).

Bitmap fills are one of the most powerful fill types. It allows any photo or texture to be used as a fill for any shape and you have direct immediate control over the size, angle, position and tiling. You can color bitmap fills. You can use any type of bitmap as a fill, including JPEG photos, and alpha-channel (semi-transparent) bitmaps.

When you import a photo file into Xara Designer Pro 7 (eg. a JPG or PNG file) it appears as a shape with a bitmap fill type. When such an object is selected the status line shows it as a "photo", but it is just the same as a shape that has had the photo applied as a bitmap fill.

To fill a shape with a bitmap or photo fill, do one of the following:

- Drag any bitmap from the **BITMAP GALLERY** or from your Windows File Explorer over any shape, hold "Shift" and drop, or
- Drag any fill from the **FILL GALLERY** onto the shape (there is no need to hold "Shift" to drop in this case)
- Select 'Bitmap' from the left side drop down menu of the **FILL TOOL INFOBAR**, and then select the required bitmap from the dropdown menu of bitmap names (this only shows bitmaps that are or have been previously loaded).

You can fill an object with single or multiple tiles (repetitions of the bitmap image).
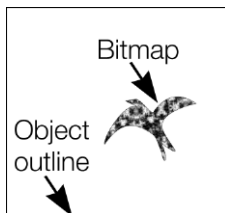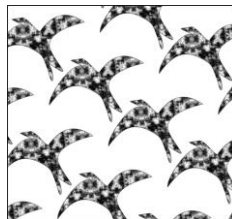
Single tile (photo)   *Repeating tile*   *Repeat inverted-the tiles fit together perfectly.*
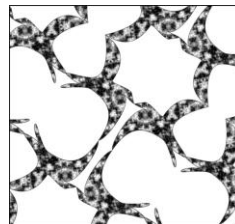
The fill has three handles. Use it for Resizing and re-positioning bitmap fills (on page 208). An alternative way to set the size of the bitmap is to type in a resolution into the InfoBar field. You first have to un-select the fill handle by clicking anywhere on the image away from a fill handle, then just type a new dpi resolution.

Replacing Bitmap Fills

If a shape already contains a bitmap, or is a photo, then you can just drag and drop a new bitmap from any source, such as Windows Explorer, and it will replace the existing bitmap. The new image is 'best fitted' into the shape so that it just fits in. By default, doing this will also replace all other instances of that photo on the current page. But if you hold down CTRL while dropping the new photo, a dialog will appear which allows you to choose whether just the one instance, all instances on the page, or all instances in the document are replaced.

Holding down SHIFT while replacing a photo in this way causes the position, scale and rotation of the bitmap fill to be preserved.

Bitmap coloring

You can color any bitmap or photo fill by just clicking on a color on the COLOR LINE (make sure no fill handles are selected, by just clicking on the image). This will create a Contone (technically a Duotone) which uses colors between black and the selected color. Alternatively right click on the object and choose "CONTONE" > "SET LIGHT COLOR" or "CONTONE" > "MAKE BLACK AND WHITE". You can also right click the color line and select either the "SET CONTONE LIGHT COLOR" or "SET CONTONE DARK COLOR".

So, for example, to make a picture black and white, just requires you to click on the White color patch on the color line.

 To cancel any applied color, apply NO COLOR to either fill handle. This restores the bitmap to its original bitmap colors.

The RESOLUTION box on the INFOBAR shows the resolution, which can be altered by moving the fill handles or typing in a value.

Resizing and re-positioning bitmap fills

 Once the fill has been created, you can drag anywhere on the image to re-position the fill inside the shape.

When you mouse over the outer fill handles the mouse pointer changes into a "rotate" mouse pointer. Dragging on these handles will stretch and rotate the bitmap fill with the current aspect ratio locked; hold down "ń" while dragging to change the horizontal and vertical size independently and to skew the fill. The InfoBar shows you the resolution of the bitmap fill (you can adjust this, and thus the bitmap size, by entering a new value).

Fractal fills

Xara Designer Pro 7 supports two types of fractal fill which are mathematically created naturalistic fill patterns. They are great for simulating sky and clouds or other natural textures.

Each time you create a new fractal fill a new pattern is created. To replace an existing fractal with a new pattern choose fractal from the fill menu again.
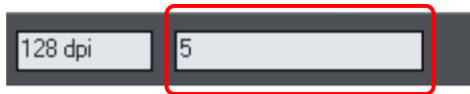
The **GRAIN** control on the **INFOBAR** provides control over the graininess of the pattern. Low values give a smooth flowing pattern, and high values give a grainy pattern.

You can adjust the size and position of the fractal fill in the usual way by dragging and adjusting the fill handles. De-select the fill handles (click on the fill away from a handle) to show the above resolution and grain controls.
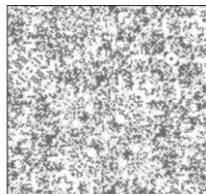
Fractal clouds fill. On the left a grain of 1, on the right a grain of 50.
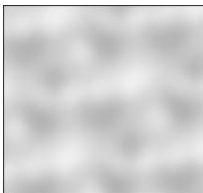
Fractal plasma fill. On the left a grain of 5, on the right a grain of 50.

Note the difference between grain and resolution. Grain controls the flow of the pattern. Resolution sets the size of the fractal bitmap and how noticeable the individual pixels are.

You can change the start and end colors of a fractal fill. Select the center or outer handles and then apply a color using either the Color Line or COLOR GALLERY. To cancel any applied color, apply no color.

Multi-stage color graduations

Many of the graduated color fill types support multi-stage graduation fills, which means instead of just fading from one color to another, you can go through a number of different color fill stages.

Multiple Fill Handles
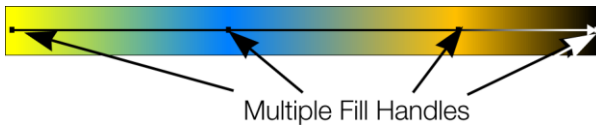
To add a new color stage to a graduation, select the Fill Tool so the fill arrow shows and then:

- Either drag a color onto the fill arrow where required.
- Or double click on the fill arrow to create a new fill handle, and now click a color or display the COLOR EDITOR.

You can re-position the fill handles by dragging.

With one fill handle selected pressing "Tab" will select the next. If the COLOR EDITOR is open, this is updated to reflect the new fill handle

To remove a fill stage handle, just click on it to select, and press "Del".

The Fill Gallery

The FILL GALLERY contains bitmap textures suitable for use as bitmap fills. Only when you use a fill is it copied into the document.

To display the FILL GALLERY:

To display the FILL GALLERY click its tab in the galleries bar to the right of the Designer Pro window. Or you can toggle display of the FILL GALLERY by choosing "UTILITIES" > "GALLERIES" > "FILL GALLERY" or pressing "Shift + F11".
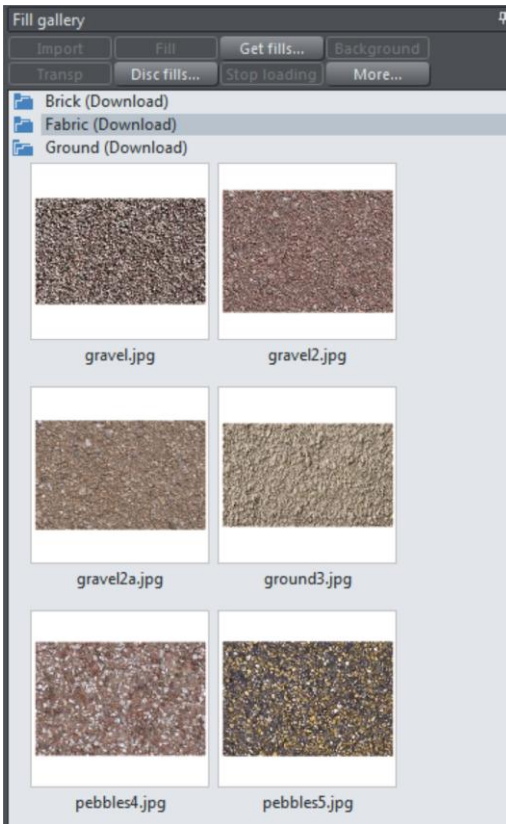
IMPORT - imports the selected bitmap into the document. A copy of the bitmap then appears in the **BITMAP GALLERY**. You can also drag-and-drop the bitmap onto a blank part of the page. This is usually easier than clicking **IMPORT**.

FILL - imports and applies the selected bitmap as:

- A bitmap fill to the selected object (if any).
- Or, if no objects are selected, it inserts the bitmap into the document as a new photo object.

You can also drag-and-drop the bitmap onto an object to apply a bitmap fill.

There are some differences between either dragging a bitmap from the **BITMAP** or **FILL GALLERY**: When dragging bitmaps from the **FILL GALLERY** and dropping on shapes to create a bitmap fill, the fill will be tiled and the bitmap won't be best-fitted into the shape. This different behavior to that seen when dragging from the **BITMAP GALLERY** is because normally textures are applied from the Fill Gallery and these should normally be tiled and not best-fitted.

TRANSP - (transparency) imports and applies the selected bitmap as:

- A transparent bitmap to the selected object (if any).
- Or sets the current transparency attribute.

GET FILLS - download free fills from Xara.

BACKGROUND - set the selected fill as the page background.

REMOVE - delete the selected fill or folder.

DISC FILLS - add new fills from your hard drive or a CD.

MORE - lets you select the size of the preview icons and whether full information about the bitmap is shown, as well as find and sort the fills.

STOP DOWNLOADING - if you have a slow connection and find getting fills from the Internet too slow, you can stop downloading them and then resume later.

Find & Sort are described in the Document handling (on page 52) chapter.

Document handling (on page 52) includes general information about galleries.

Transparency

The **TRANSPARENCY** Tool lets you specify how much of the underlying colors and objects appears through an object.

| Linear ▼ | Mix ▼ | Simple ▼ | ☐ ▼ | ➡ | End Transp | ───────●──── | 62,0% |
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |

1 Shape
2 Transparency type
3 Tiling
4 Bitmap name
5 Profile
6 Handle/Resolution
7 Amount of transparency

You have control over the level of transparency from fully opaque to fully transparent. Designer Pro goes further than other drawing packages by offering a wide range of different graduated transparencies.

You can apply flat and graduated transparency to all types of objects including bitmaps.

Some uses of transparency:

- Simulating water or glass.
- Anywhere you want objects to fade to parts of objects to fade or blend with the background.
- Clouds or mist-fractal transparencies are particularly good for this.
- Using the special type of transparency you can lighten, darken and apply special effects to objects and photos.
- Creating highlights and reflections.

Stain Glass flat transparency

Elliptical transparency applied to a white object to create sunlight reflection
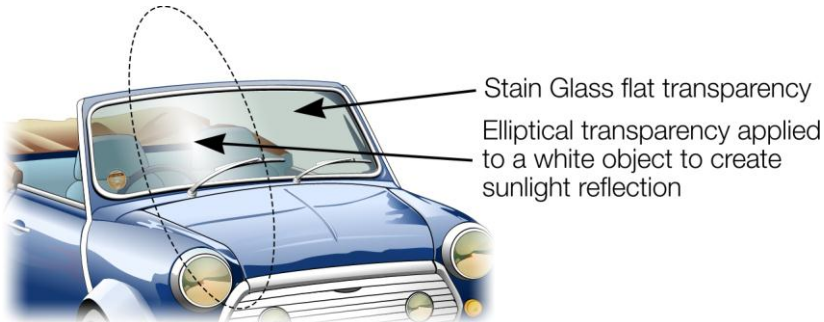
The windshield is created with multiple overlaid objects with different transparency. The reflection is 100% opaque white in the center fading in an elliptical fashion.

Applying flat transparency

It's called "flat" transparency because all parts of the objects have the same transparency, as opposed to graduated transparency.

1. Select the object or objects
2. Select the Transparency Tool ("F6")
3. Drag the transparency slider on the InfoBar

Xara Designer Pro 7 provides live-preview. As you drag the transparency slider the objects on the document are changed so you can see the effect immediately.

Applying graduated transparency

Graduated transparency works in a very similar way to graduated color fills. You just drag on the objects in the Transparency Tool to create a fading transparency. You have a very similar range of transparency shapes, the simplest being linear, but you can also have circular, elliptical, conical, fractal and bitmap transparencies, and others. To create a graduated fade:

1. Select the object or objects
2. In the **TRANSPARENCY TOOL**, drag across the objects to create a linear fade across the object.
3. Select alternative transparency shapes from the dropdown menu on the InfoBar

You can select and adjust the position and transparency strength using the "fill" handles shown on the object.

Refer to Fills (on page 201) for more information on manipulating fill handles and the different fill shapes (in this case transparency shapes)

Multi-stage graduated transparency

Just as you can add multiple stages to a graduated fill, you can do the same with a graduated transparency. This allows you to fade, for example, from opaque to 50% transparent then back up to 25% transparent, back to opaque, etc.

You can set the level of transparency at each stage, by selecting a handle and then adjusting the transparency slider. Add additional stages by double-clicking on the graduated transparency line then adjusting the slider.

See the Fills chapter (on page 201) for more information on manipulating the handles.

Transparency types

The most common type of transparency, and the only type that many other applications understand is called "Mix transparency". But Xara Designer Pro 7 supports different type that affect the objects in different ways.

Designer Pro has these types of transparency:

Mix

The color of the object mixes with the color of underlying objects. The effect is similar to spraying a thin coat of color (or paint) over underlying objects.

Stained glass

The effect is similar to viewing underlying objects through colored glass. It is useful for the simulation of glass and selectively darkening objects. The color of the object with Stained Glass applied:

- White - no effect on the colors of underlying objects.
- Gray & Black - darkens the colors of underlying objects.
- Other colors - darken underlying colors towards saturated color (light red over light red results in mid-red: green over red results in black). If you want to use a colored object to darken underlying colors, you may find DARKEN transparency type easier to use.

Technically the process is subtractive in RGB color space.

Bleach

Bleach has no clear analogy in the physical world. It is useful for highlights when the light source is not white. The color of the object with Bleach applied:

- Gray & White - lightens the colors in underlying objects.
- Black - no effect on the colors of underlying objects.
- Other colors - lighten underlying colors towards unsaturated color. (Light-red over light-red gives a pale-red: green over red gives yellow.) If you want to use a colored object to lighten but not color-shift underlying colors, you may find LIGHTEN transparency type easier to use.

Technically the process is additive in RGB color space.

Contrast

Usually you would use C on a separate object to modify the color of underlaying objects (that is, you would use an object as a filter). Depending on the color chosen, it increases the contrast of underlying colors (make them brighter or duller).The color of the object with Contrast applied:

- Gray (below a 50% tint of black) & White - increase contrast (compress the color range) to make the underlying colors brighter.
- Gray (above a 50% tint of black) & Black - make underlying colors duller (towards gray).
- Other colors - convert the color to the equivalent shade of gray. (Yellow gives light gray, Red dark gray.) Then increase or decrease the contrast of underlying objects.

Saturation

Usually you would use saturation on a separate object to modify the color of underlying objects (that is, you would use an object as a filter). Depending on the color chosen, it makes underlying objects brighter or duller. The color of the object with saturation applied:

- Gray (below a 50% tint of black) & White - increases saturation in the colors of underlying objects towards pure color.
- Gray (above a 50% tint of black) & Black - reduces saturation towards black.
- Other colors - convert the color to the equivalent shade of gray. (Yellow gives light gray, Red dark gray.) Then increase or decrease the color saturation of underlying objects.

Darken/Lighten

Darken/Lighten is useful for making underlying objects darker or lighter. Usually you would use it on a separate object to modify the color of underlaying objects (that is, you would use an object as a filter). Darken/Lighten are grayscale versions of Stained Glass/Bleach transparency types. The color of the object with Darken/Lighten applied:

- White - no effect on the colors of underlying objects.
- Gray & Black - darkens/lightens the colors of underlying objects.
- Other colors - convert the color to the equivalent shade of gray. (Yellow gives light gray, Red dark gray.) Then darken/lighten the colors of underlying objects.

Brightness

Depending on the color chosen, Brightness makes the colors of underlying objects lighter or darker. The color of the object with Brightness applied:

- Gray (below a 50% tint of black) & White - makes the colors of underlying objects lighter. White has maximum effect
- Gray (above a 50% tint of black) & Black - makes the colors of underlying objects darker. Black has maximum effect.
- Other colors - convert the color to the equivalent shade of gray. (Yellow gives light gray, Red dark gray.) Then lighten or darken the colors of underlying objects.

Luminosity

Luminosity uses the grayscale equivalent of the color to control the luminosity (or Value) of underlying objects. Note that Luminosity has no effect on gray, white or black underlying objects. The color of the object with Luminosity applied:

- Gray & White - increase the luminosity of underlying objects. White has the greatest effect, producing saturated color.
- Black - remains as a black object.
- Other colors - convert the color to the equivalent shade of gray. (Yellow gives light gray, Red dark gray.) Then increase the luminosity of underlying objects.

Hue

Hue is useful for color-shifting underlying objects. Its action is most easily understood using the HSV color model. The color of the object with Hue applied:

- Gray, White & Black - no effect. These are at the center of the color wheel and have no hue.
- If the underlying color is gray, white, or black - Hue transparency type has no effect.
- Other colors - replace the Hue of the underlying color with the Hue of this object. Use the Saturation and Value of the underlying color.

For all these, the slider controls the amount of transparency from opaque (0% transparent) to fully (100%) transparent.

Applying a flat transparency to an object also applies transparency to the line around the object. It is not possible to set different transparencies, but you can remove the line by setting it to no color or by selecting "None" as the outline width. To create an object with a transparent fill and a non-transparent line, use a non-flat transparency type.

For more information on colors see Color Handling (on page 156).

Enhance
See Enhance below for more information on Enhance transparency.

Enhance

Enhance transparency allows you to modify any part of your design using the Enhance Photo Tool, just as if it was a photo. For example you can draw a shape over any part of your design, apply enhance transparency to it and then adjust the brightness of just the area of your design which is covered by the shape.

Applying Enhance transparency

To apply enhance transparency:-

1.   Draw or select the shape to which you want to apply the enhance transparency effect.

2. Go into the **TRANSPARENCY TOOL** and select "**ENHANCE**" from the **TRANSPARENCY TYPE** list on the infobar.
3. The shape seems to have disappeared from your page! That's because it will only apply enhancements to objects underneath it, and you've yet to specify the enhancements it will apply. The object should still be selected however.
4. Switch into the **PHOTO ENHANCE TOOL**. Turn up the brightness using the control on the infobar. Now you can see that the area covered by your shape is brightened compared to the area outside the shape.
5. You can adjust brightness, contrast, saturation and temperature.
6. Move your shape around, or transform it and it always applies the photo enhancement(s) to the area underneath the shape.

Normally you'll also want to apply some feathering to the shape using the **FEATHER TOOL** (on page 141), to soften the edges of your shape and blend it into your design.

Photo editing with Enhance transparency

When you apply enhance transparency as described above, the shape remains as an independent object that is not tied to any photos or other objects in your design (unless you go on to manually group it with other objects of course). Because you will most commonly want to use this effect when editing photos, there is a better way to use Enhance transparency which is more suited to working with photos.

To apply enhance transparency to part of a photo, select the photo, go into **MASK MODE** and draw around the area of the photo you want to modify.

Then go to the PHOTO ENHANCE TOOL and start to modify the photo using the controls on the infobar.

The mask shape is converted into a shape with enhance transparency applied. The shape is also grouped with the photo, to form a Photo Group (on page 245). This means as you move or otherwise transform the photo, the enhanced shapes move/transform with it. The enhance shape is also clipped to the edges of the photo.

For more information on using Enhance transparency with photos, see the Photo Tool chapter.

Note that you can't apply the Blur/sharpen effect to enhance transparent objects, except if they are applied as part of a Photo Group, as described above.

Profile

You can change the rate of change of transition between the start and end of transparencies. This applies to all single stage graduated transparency types except three point and four point (where the option is not available)

To change the profile of a transparency:

1. Select the object.
2. On the **TRANSPARENCY** Tool InfoBar click **PROFILE**. This opens the **PROFILE** dialog.

3.   You either select a predefined profile from the dropdown list or drag the sliders to create a custom profile. The top option in the dropdown list (the straight line) creates a linear transition between the start and end of the transparency.

Bitmaps

BITMAP & FILL GALLERIES are described in Photo Handling (on page 250) and Fills (on page 210).

When you select a transparency type of **BITMAP**, a default bitmap is initially used. Click on **BITMAP NAME** in the transparency InfoBar, or use the **BITMAP** or **FILL GALLERIES** to change the bitmap used (click the **TRANSP** button in the gallery or drag-and-drop from the gallery).

By default, the lighter colors in a bitmap are the most transparent (you can, of course, alter the relative amounts of transparency later).

Handle/resolution

If you have a handle selected, this box tells you what handle it is. With no handles selected, and when using a bitmap transparency, it controls the DPI.

Opacity Masks

As described above, the Transparency Tool allows you to apply either flat or graduated transparency to any object or group. But sometimes you need more advanced control over the transparency (or opacity) of an object. Opacity masks are a very powerful way of achieving this.

The Opacity Mask system takes any object, or group of objects, and uses the color (usually black to white shading) of these objects to define which parts of any other object are transparent or opaque.

Original watch design   *Watch applied as an opacity mask to a rectangle*

First draw the shapes you want to define the opacity (the opacity mask). It can be anything from a simple shape, or blend, to a complex grouped drawing. Any black color will become 100% transparent, while white will be 100% opaque and shades in-between will create varying degrees of transparency.

You can apply the opacity mask to other objects in your design in two different ways (both give the same results).

Applying using the clipboard

Select the object which is to be the mask and copy it to the clipboard. Then select the object, photo, or group to which you want to apply this mask and select "**EDIT**" > "**PASTE OPACITY MASK**". There are two options, the first will position the opacity mask into the center of the selected object. The second option 'Paste opacity mask in place' will paste it into the selected object based on the original position of the mask.

Apply directly

Place the object to which you want to apply the mask behind the object(s) that you want to apply as a mask. Then select both the mask object(s) and the object to which the mask is to be applied, and invoke "**ARRANGE**" > "**APPLY OPACITY MASK**".

The backmost object is taken as the target for the mask and all other objects in the selection make up the opacity mask. So if you want to apply a mask to multiple objects this way, you need to group them first and place them behind the mask objects.

You now have a special type of group called an 'Opacity mask group'.

You can use select inside (Ctrl+click) or the **PAGE & LAYER GALLERY** to select the opacity mask object(s) inside the opacity mask group. Then you can edit or move the object inside, to modify the mask.

Editing inside an opacity mask

It can be difficult to make changes to the masked objects or to the masking objects as they appear on the canvas. So you can edit either of these in a separate sub-document view, just as you can edit inside normal groups. Right click on the opacity mask group and choose **OPEN OPACITY MASK GROUP** to edit just the objects that are being masked (or just double click on the opacity mask group). Or choose **OPEN OPACITY MASK** from the same right click menu to edit just the objects that are forming the mask.

Advanced options

Toggle mask clip (Ctrl+Alt+C)

This option makes the opacity mask group become clipped to the outline of the mask object(s).
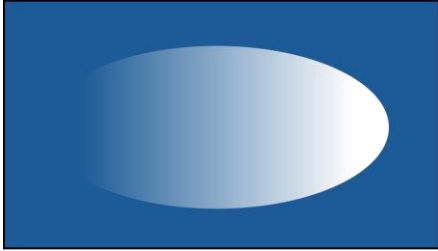
Unclipped (default)   *Clipped to mask object*

Toggle mask alpha (Ctrl+Alt+A)

This makes the rendering of the opacity mask ignore color saturation levels and use only transparency levels in the mask object(s) to set the transparency on the opacity mask group.

Toggle mask invert (Ctrl+Alt+V)

Normally when the colors of the mask object are converted into transparency, black becomes 100% transparent and white 100% opaque. This operation inverts the opacity mask so it's the other way around - black becomes opaque and white transparent.
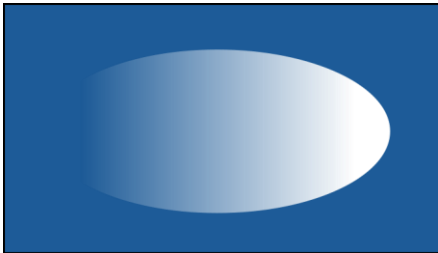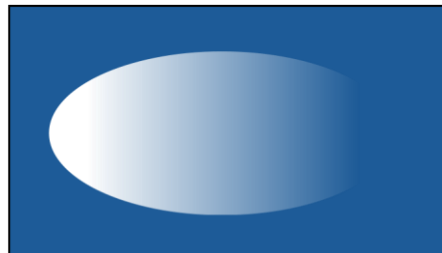
Default   *Inverted*

See the Photo Handling chapter (on page 269) for an example of opacity masks in action and for other tips.

Shadows

The Shadow Tool

The **SHADOW** Tool (shortcut "Ctrl + F2") lets you apply, remove, and modify semi-transparent (or "soft") shadows.

The transparency of soft shadows increases towards the edges, which gives a very realistic effect. Shadows are resolution independent so you can scale them without losing quality.

① No Shadow
② Shadow Types
③ Shadow Blur
④ Shadow Transparency
⑤ Profile
⑥ Shadow Position

Xara Designer Pro 7 has three shadow types:

- Wall where the shadow is cast on a wall behind the object
- Floor where the object appears to be standing upright on a surface.
- Glow where the shadow is used to add a halo effect around the object
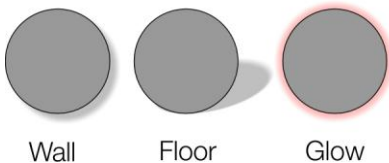
Wall   Floor   Glow

The transparency of soft shadows increases towards the edges, which gives a very realistic effect. Shadows are resolution independent so you can scale them without losing quality.

Applying a shadow

Applying a wall shadow

1. Select the object.
2. Choose the **SHADOW** Tool.
3. Select the **WALL** button on the **SHADOW** Tool InfoBar.
4. You can drag the shadow away from or towards the object to create more or less distance between the object and the imaginary wall.
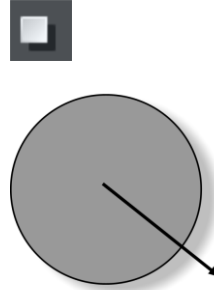
Alternatively to create a wall shadow you can:

1. Select the object.
2. Choose the **SHADOW** Tool.
3. Drag from the center of the object in the direction of the shadow.

Applying a floor shadow

1. Select the object.
2. Choose the **SHADOW** Tool.
3. Select the **FLOOR** button on the **SHADOW** Tool InfoBar.
4. Drag towards or away from the object to change the size or radially to change the direction.
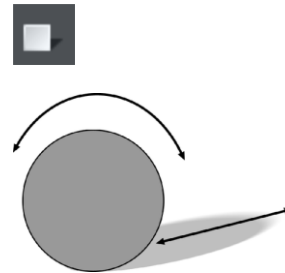
Applying a glow effect

Adding a glow or halo behind an object can create dramatic graphics.

To create a glow effect:

1. Select the object.
2. Choose the **SHADOW** Tool.
3. Select the **GLOW** button on the **SHADOW** Tool InfoBar.
4. Drag towards or away from the object to change the size of the glow.
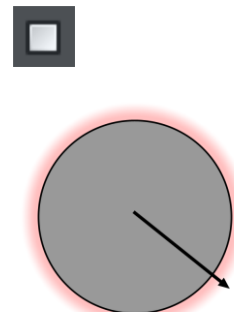
Blur the edges of the shadow

No blur   With blur
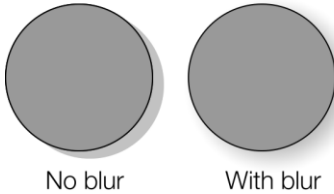
This changes the size of the shadow. A small blur gives the effect of a sharp light source, a large blur, a diffused or distant light source. It is recommended that shadows are always blurred slightly as this is more realistic.

To blur the shadow edge:

1. Select the object
2. Choose the **SHADOW** Tool.
3. On the **SHADOW** Tool InfoBar either drag the blur slider or type a value into the text box on the right.

Change the transparency of the shadow

No transparency With transparency
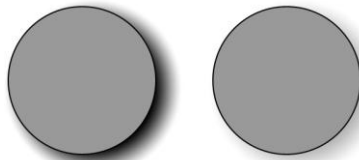
A semi-transparent shadow is more realistic than a solid shadow. But you can change the transparency level of the shadow to suit your needs.

To change the transparency:

1. Select the object
2. Choose the **SHADOW** Tool.
3. On the **SHADOW** Tool InfoBar, drag either the transparency slider or type a value into the text box on the right.

Changing the shadow profile

After applying a shadow, you can change how the shadow transparency changes across the blur. You can have a linear transition (which is the default profile and usually gives the most realistic results) or a profiled transition.

To change the shadow profile:

1. Create the shadow.
2. In the **SHADOW** Tool, click **PROFILE**. This opens the **PROFILE** dialog box.
3. You can either select a pre-defined profile from the dropdown list or drag the sliders to create a custom profile. The top option in the dropdown list (the straight line) creates a linear transition.

Changing the shadow color or fill effect

After applying a shadow to an object, you can change the shadow's color or fill effect. You can apply any of Xara Designer Pro 7's color effects including multi-stage fills.

For more on colors and the Color Line refer to Color handling (on page 156).

- The easiest way is to drag & drop a color from the Color Line onto the shadow (make sure you drop the color onto the shadow and not the object).
- Alternatively, this method is more complex, but you have full control over the color:

   1. Select the shadow using the **SELECTOR** Tool (make sure you select the shadow and not the object).

   2. Use the **COLOR EDITOR** to edit the color.

Converting shadows to shapes

You can convert a shadow into a group containing the shadow and the object (or objects) casting the shadow. The shadow is converted to a simple shape and, after ungrouping, can be edited. Note that after converting a shadow to a shape, you cannot use the **SHADOW** Tool to edit it, as it is no longer a shadow.

To convert a shadow to shapes:

1. Select the shadow or the object (or objects) casting the shadow.
2. Choose "**ARRANGE"** > "**CONVERT TO EDITABLE SHAPES"**.

Or to convert a shadow quickly, right-click on the shadow or the object (or objects) casting the shadow. This opens the pop-up menu. Choose **CONVERT TO EDITABLE SHAPES**.

Removing a shadow

To remove a soft shadow:

1. Select the object
2. Choose the **SHADOW** Tool.
3. Select the **NO SHADOW** button on the **SHADOW** Tool InfoBar.

Copying shadows onto other objects

Once you've got a shadow looking how you want it on one object, you can copy it onto other objects using "**PASTE ATTRIBUTES**". Simply copy the object that has the shadow ("**EDIT**" > "**COPY**"), select the object or objects you want to paste the shadow onto and choose "**EDIT**" > "**PASTE ATTRIBUTES**".

Bevels

The Bevel Tool

The **BEVEL** Tool (shortcut "Ctrl + F3") gives objects an appearance of depth instead of being flat on the page.

Bevels are resolution-independent so you can scale them without losing quality.

1 Bevel type
2 Slider type list
3 Slider and numeric value for selected parameter
4 Outer bevel
5 Inner bevel
6 Join style

You can apply bevels to most types of object. The exceptions are:

- Part of a block of text (such as a single letter)-the bevel is instead applied to all the text.
- To the curve in text along a curve.
- Contoured objects.
- Live effects (the bevel is applied to the object before the effect is applied if the effect is live, or to the bounding box of the effect if the effect is locked).

Applying a bevel

To apply a bevel to a single object:

1. Select the object
2. Choose the **BEVEL** Tool.
3. Choose the bevel shape you want from the **BEVEL TYPE** list. Note that **NONE** removes any applied bevels.

Modifying a bevel

You can change the angle and elevation of the light and change the shape, direction and size of the bevel edge.

Bevel direction

Bevels can be inside the object or outside. Outside bevels make objects larger; inside bevels do not change the object size.

To change bevel direction:

1. Select the object.
2. Click either the **INNER** or **OUTER** button.

Changing the bevel light source

The bevel effect is created by a light shining across the object and highlighting the shape (profile) of the bevel. You can change the direction and height of the light and its strength.

1. Select the object.
2. Drag the arrowhead to change the position of the light source.
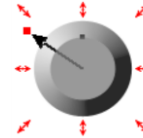
You cannot move the center of the arrow, only the arrowhead.

For precise angles, select **LIGHT ANGLE** from the **SLIDER TYPE** list. Then drag the slider or type into the text box.

| Light Angle | ▼ | 210 ˚ |

If you have several beveled objects selected, light angle changes all bevels. Dragging the arrow changes just the bevel (or bevels) to which the arrow refers.

Changing the light strength (contrast)

To change the light strength:

1. Select the object.
2. Select **CONTRAST** from the **SLIDER TYPE** list. Then drag the slider or type into the text box.

| Contrast | ▼ | 50 % |

If you have several beveled objects selected, any changes apply to all the bevels. The colors used in the bevel affect the contrast. For example, strong (saturated) colors require more contrast than weak colors to get the same effect. For best results, you will probably have to adjust the contrast for each object.

Changing the light elevation (vertical angle)

This lets you move the light anywhere from immediately above the object (90º) to the side of the object (0º).

1. Select the object.
2. Select **LIGHT ELEVATION** from the **SLIDER TYPE** list. Then drag the slider or type into the text box.

| Light Elevation | ▼ | 32 ˚ |

For rounded bevels we recommend a light elevation of 30º. At this angle the bevel blends smoothly with the object.

Changing the bevel size

How to change the bevel size:

1. Select the object.
2. Drag any of the outside arrows to enlarge the bevel.
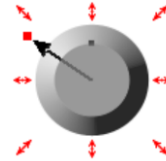
Alternatively:

1. Select the object.
2. From the **SLIDER TYPE** list choose **SIZE**.
3. Either drag the slider or type a value into the text box.

Changing the bevel shape

1. Select the object
2. Choose the **BEVEL** Tool.
3. Choose the bevel shape you want from the **BEVEL TYPE** list.

Changing the bevel color or fill effect

After applying a bevel to an object, you can change the bevel's color or fill effect. You can apply any of Xara Designer Pro 7's color effects including multi-stage fills.

For more on colors and the Color Line, refer to Color handling (on page 156).

How to change the bevel color:

- The easiest way is to drag-and-drop a color from the Color Line onto the bevel (make sure you drop the color onto the bevel and not the object.)

Alternatively, this method is slightly more complex but you have full control over the color:

1. Select the bevel using the **SELECTOR** Tool (make sure you select the bevel and not the object.)
2. Use the **COLOR EDITOR** to edit the color.

Changing the bevel join style

After applying a bevel to an object, you can change the shape of the corners (joins).

Miter join   Round join   Bevel join

How to change the bevel join style:

1.   Select the object.
2.   Click the appropriate join button on the **BEVEL** Tool InfoBar.

1 Miter   2 Round   3 Bevel

Removing a bevel

To remove a bevel:

1.   Select the object(s) from which you want to remove the bevel.
2.   Choose the **BEVEL** Tool.

Choose **NONE** from the **BEVEL TYPE** list.

Contours

The Contour Tool

The **CONTOUR** Tool ("Ctrl + F7") lets you create interesting effects around the edges of objects. The **CONTOUR** Tool creates a series of concentric outlines either on the inside or the outside of a selected shape.

1. Edit distance between steps
2. Number of steps
3. Remove contour
4. Color effect
5. Contour width
6. Outer contour
7. Inner contour
8. Position profile
9. Attribute profile
10. Inset path
11. Join types

Contouring objects

To contour an object:

1. Select the object.
2. Choose the **CONTOUR** Tool.
3. Then:

   - Drag any of the eight handles that surround the selected objects. As you drag, you see the outline of the contour.
   - Or drag the contour width slider.
   - Or type a new value into the text box.
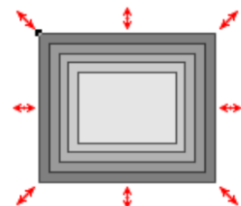
Contours can be either inside or outside of objects (outside contours make the objects larger).

To swap the contour direction:

1. Select the contoured object.

2. Choose the **CONTOUR** Tool.
3. Then:

- Drag any of the eight handles that surround the selected objects (drag the handles inside or outside the objects to swap).
- Or click the **INNER** or **OUTER** contour buttons.

Note that objects cannot have both a contour and a bevel.

Changing the number of steps in a contour

Contours are initially created with five intermediate steps. You can increase the number of steps to make each step less obvious. Alternatively, you can reduce the number of steps so you can clearly see each step. You can either enter the number of intermediate steps or enter the distance between steps.

To change the number of steps in a contour:

1. Select the contoured object.
2. Choose the **CONTOUR** Tool.
3. Select either distance or number of steps by pressing one of the two buttons on the left side of the InfoBar.
4. Type the required value into the steps (or distance, depending on the above selection) field on the **CONTOUR** Tool InfoBar and press "↵".

If required, Xara Designer Pro 7 rounds the distance to give a whole number of steps.

Changing the contour color

After applying a contour to an object, you can change the contour's color.

For more on colors and the Color Line refer to Color handling (on page 156).

How to change the contour color:

The easiest way is to drag-and-drop a color from the Color Line onto the contour (make sure you drop the color onto the contour and not the object).

Alternatively this method is slightly more complex but you have full control over the color:

1. Select the contour using the **SELECTOR** Tool (make sure you select the contour and not the object).
2. Use the **COLOR EDITOR** to edit the color.

Note that you can also select the contour using the **CONTOUR** Tool. Click on the contour to select it.

Changing the contour join style

Mitre join   Round join   Bevel join

After applying a contour to an object, you can change the shape of the corners (joins).

How to change the contour join style:

1. Select the object.
2. Click the appropriate join button on the **CONTOUR** Tool InfoBar.

1 Miter   **2** Round   **3** Bevel

Changing the contour attribute profile

After creating a contour you can change how the attributes (such as color or line thickness) change. You might want a regular rate of change or a more pronounced change towards one end or the center.

To change the attribute profile:

1. Create the contour.
2. In the **CONTOUR** Tool click **ATTRIBUTE PROFILE**. This opens the **PROFILE** dialog box.
3. You can either select a pre-defined profile from the dropdown list or drag the sliders to create a custom profile. The top option in the dropdown list (the straight line) is the default and creates a regular rate of change.

Changing the contour position profile

After creating a contour you can change how the intermediate steps are spaced. You can have regular spacing or closer at one end than the other or closer in the center.

To change the position profile:

1. Create the contour.
2. In the **CONTOUR** Tool click **POSITION PROFILE**. This opens the **PROFILE** dialog box.
3. You either select a pre-defined profile from the dropdown list or drag the sliders to create a custom profile. The top option in the dropdown list (the straight line) is the default and creates regular spacing.

Applying a contour to several objects
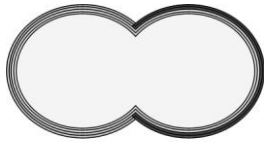
Contour on
grouped objects
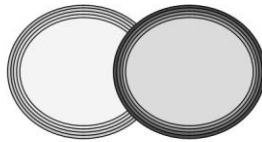
Contour on
ungrouped objects

If the objects are grouped,
overlapping contours merge
together. The contour color is
the same as the rear-most object
in the group.

If the objects are ungrouped, each object has a separate contour. The contour color is
the same as the object color. The contour steps are not separate objects. To make them
selectable, you need to convert the contour to editable shapes (see below).

Using contours to resize objects

You can use contours to change the size of objects by making the outline thicker or
thinner. This has advantages over resizing for shapes like the letter "C":

On the left is the original object. The center letter
is resized using a contour, the right letter is
resized by scaling the object up.

To resize using contours:

1. Select the object.
2. Choose the **CONTOUR** Tool.
3. Give the object a contour of the required size.
4. Click **INSET PATH** on the **CONTOUR** Tool InfoBar. The contour steps disappear and
   the object is now the size of the contoured object.

Converting contours to shapes

You can convert a contour into a group containing all the steps. Each step is converted
to a shape and, after ungrouping, can be edited. Note that after converting a contour to
shapes, you cannot use the **CONTOUR** Tool to edit it as the object is no longer a contour.

To convert a contour to shapes:

1. Select the contour.
2. Choose "**ARRANGE**" > "**CONVERT TO EDITABLE SHAPES**".

To convert a contour quickly, right-click and choose **CONVERT TO EDITABLE SHAPES**.

Removing a contour

1. Select the contoured object.
2. Choose the **CONTOUR** Tool.
3. Click on the Remove button on the **CONTOUR** Tool InfoBar.

Masks

A number of operations can take a mask to indicate which parts of a photo or drawing are to be operated on. The Content Aware photo scaling is one example where you can mark an area of a photo that is to be protected from the stretching operation.

Another example is the photo enhance tool. You can mark part of a photo using a mask shape and then apply the enhance tool only to that part of the photo.

Operations that can use a mask include;

- Content Aware photo scaling
- Cut / Copy / Delete operations
- Duplicate and Clone
- Clipview
- Combine Shapes (Arrange menu)

Terminology – masks versus opacity masks

In Designer Pro the term "mask" when used on its own refers to the practice of temporarily marking part of a photo or design, such that a subsequent operation makes use of that mask in some way, as described in this chapter. Xara Designer Pro 7 also includes the "opacity mask" feature, which should not be confused with masks as described here. An opacity mask is a way of applying transparent effects to objects and is described in the Transparency chapter (on page 269).

Appearance of masks

The mask is shown as a pink semi-transparent layer. You can draw shapes onto the mask to mark areas of interest - either to indicate an area you want to work on, or an area that is to be protected, depending on the operation to be applied.

You can use any of the drawing tools to operate on the mask layer. So for instance it's easy using the Freehand tool to draw around any part of a photo. All masks in Designer Pro are vector shapes and you can use the normal vector editing tool such as the **SHAPE EDITOR** to edit the shape outline.

Think of a mask like a transparent pink film overlaid on your drawing or photo. You can cut holes in the mask, or cut out shapes to overlay areas you want to protect. Not all operations take account of the mask, if you are applying a color fill or transparency to a shape, this will affect the whole shape as usual, irrespective of any mask. However using the mask system it's very quick to make a copy of only part of a shape and then adjust that copied part.

To Create A Mask

First select the object(s) to which you wish to apply a masked operation.

Then select the Mask mode button, below the main toolbar on the left of the Xara Designer Pro 7 window.

Or select the menu option "**WINDOW**" > "**MASK MODE ON**". This will cover the whole drawing area with a pink semi-transparent mask, so you always know when mask mode is on. It also hides all unselected objects, to make it clear which objects in your design are to be operated on using the mask. So for example if you are applying a masked operation to a photo (the most common use for masks), you see only the selected photo and the mask shape(s) while you are in mask mode.

Now with mask mode on and using any of the drawing tools, draw whatever mask shape you require. If you're using the Freehand tool you should create a closed shape, that is where the start and end points are coincident.

The mask shapes are shown as holes in the mask background, and have a dashed 'marching ants' animating effect around the outline of the shapes.

If you select to invert the mask ("**WINDOW**" > "**INVERT MASK**") then the inside of the shapes will be shown in pink.

Important: The pink area is the protected area. The visible, non-pink, parts of the drawing are the areas that will be affected by any of the mask compatible operations listed above.

Clicking the Mask control button again will hide the mask layer, so you can now operate on the document as normal. Doing this just hides the mask layer, it does not remove any object you may have on the mask. Clicking the control again will reveal the mask layer again along with all objects on that layer.

It's nearly always best to select the object(s) you want to operate on before turning on mask mode, as described above, because that makes it clear which object(s) will be affected. However if you don't select the target object(s) first, some operations will try and guess which object you meant to apply the mask to. For example if you draw a mask shape over a photo and apply the photo enhance tool, that tool will assume you intend to apply the masked operation to that photo even though you didn't select it first.

Operating On The Mask Shapes

When you've drawn any shape on the mask, it's selected and acts pretty much like any normal line or shape.

- Drawing additional shapes will just add to the mask.
- The status line will indicate whether selected objects are on the mask layer or not.
- Pressing Escape will clear any selection (so there are no selected objects).
- If you have multiple separate objects on the mask layer, you can click on the outline (on the marching ants outline) to select any one particular shape. Or use the **PAGE & LAYER GALLERY** to view and select separate objects on the mask layer.

You can use all the normal drawing tools on the selected shapes on the mask layer. You can copy, cut, paste, delete, duplicate etc. You can use the Freehand and Shape Editor tool to adjust the mask shape outline.

You can copy any shape from another normal visible layer onto the mask layer, or vice versa, using the normal layer operations. To copy a shape from a normal layer, the

easiest way to do this is to turn off mask mode, select and copy the required objects, re-enable the mask layer and then Paste.

Deleting all objects from the mask simply requires a click anywhere on the pink area (selects all parts of the mask) followed by pressing the Delete key.

Clicking through the holes or anywhere on the non-pink parts of a drawing will select the objects under the mask.

Moving the mask objects

Dragging anywhere on the pink mask will move all shapes on the mask layer.

Where you have multiple shapes selected on the mask layer and want to operate on one shape only, clear the selection (press Esc) and then click on the edge of or inside the specific shape you want to select.

Operations That Use The Mask

This section outlines some of the operations that work with masks and refers to other sections of the help for information on others.

ClipView

You can clip your drawing or photo to be inside the mask shape. Select the object(s) you want to clip, switch on mask mode and draw the required shape on the mask. Now when you select "ARRANGE" > "CLIPVIEW" (or press the key short cut "Q") the drawing will be clipped to the visible areas of the mask. ClipViews are live and non-destructive in that the whole drawing is retained inside the Clipview object. See the Object Handling chapter (on page 117) for details.

Cut, Copy, Delete

These operations are useful when used with masks, to cut pieces from photos, but you can use them on any objects. Select the object(s) you want to apply the operation to, then turn on mask mode and draw your mask shape(s). Then perform the cut/copy/delete operation.

This shows a photo with mask on and an ellipse drawn on the mask. After a Cut or Delete the visible part of the photo is cut or deleted, as shown on the right.

On the left example the mask has been inverted. Now when you cut or delete the masked pink area is protected, everything else is deleted.

You can use masks on top of any drawing or photo.

If you have a mask shape selected when you apply these operations, you'll be asked whether you want to apply the operation to the mask shape itself, or to the objects shown under the mask using the mask. This is because you may want to use these operations on the mask shapes themselves and it's not clear from the context what your intention is.

Duplicate, Clone

This will copy only the visible un-masked parts of the drawing or photo. The Clone option places a copy exactly on top of the original.

Content Aware photo scaling

To protect part of a photo from being scaled, switch the mask on, draw around the area with the Freehand tool. Now go into the Content Aware photo scaling tool (Photo tool fly-out bar on the main toolbar).

See the Content Aware Scaling (on page 280) feature for more information.

Photo enhance tool

Use a mask to apply brightness, contrast, saturation, temperature and blur/sharpen changes to any part of a photo. Just draw the mask shape in mask mode, then go into the Photo Tool and start using the enhance controls on the infobar. See the Photo Tool and Photo Handling (on page 245) chapters for more information.

Photo clone tool

The clone tool will take a mask shape and convert it into a clone shape, which copies one part of a photo to another part. See the Clone Tool section (on page 294) of the Photo Tool chapter for details.

Combine Shapes

There are a set of operations under the "ARRANGE" > "COMBINE SHAPES" menu that allow you to combine shapes in a number of different ways. These work with the mask. For

example to slice a piece of a photo out (cookie cutter style), draw your cookie cutter shape on the mask, and select "ARRANGE" > "COMBINE SHAPES" > "SLICE"

Mask Notes: The mask is really a special type of layer. If you open the PAGE & LAYER GALLERY (on page 142) you will see a mask layer appear when you switch on mask mode. You can use the PAGE & LAYER GALLERY layer controls to show, hide, lock or unlock the mask layer. You can also use the PAGE & LAYER GALLERY to find and select objects on the mask layer.

Copying Shapes To The Mask Layer

You may prefer to draw your mask shape while not in mask mode, or to use an existing shape on your mask layer. This is easy. With the mask mode off, select the shape, and copy, or cut it. Now switch the mask mode on, and Paste. Use Paste in Place if you want the shape to appear in exactly the same place it was copied from.

To copy shapes from the mask layer to any other, do the reverse. Select the shapes with the mask on, switch the mask mode off, and paste.

Blends

This operation blends one object into another by a series of intermediate objects. This is sometimes known as interpolation, in--betweening, tweening, or morphing.
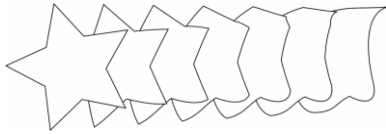
A five-stage blend of a star into an arbitrary shape.

Blends have several different uses. Designer Pro is so fast that it creates the intermediate stages on-the-fly when they are displayed or printed — this means that blends require very little memory overhead. A blend is treated like a group.

Groups are described in Object handling (on page 109).

Uses of blends

- To create a repeating design, such as a series of rules:
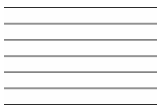
 For this you'd typically create an object, duplicate it to create the end object and then blend between them.

Or a pattern:
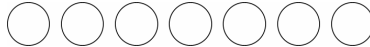
- To transform one object into another. The star to shape blend above is an example of this. By using more intermediate stages you can create complex shading effects.

The blend does not just blend the shapes but also other attributes such as line thickness, line and fill colors and transparency.

Using the Blend Tool

1. Select the **BLEND** Tool ("F7")
2. Move the pointer over a visible part of the start object.
3. Drag the pointer over the end object. As you drag the pointer a "blend line" appears. When over a visible part of the end object, release the mouse button.

For object-to-object blends the blend line is colored black. When blending between control handles, it is colored red.

The Blend Tool InfoBar

① Edit distance between steps
② Edit number of steps
③ Steps in blend
④ Remove blend
⑤ Blend color effect
⑥ Position profile
⑦ Attribute profile
⑧ 1:1 node mapping
⑨ Anti-alias blend steps
⑩ Blend along a curve
⑪ Rotate blend steps along the curve

STEPS is the number of intermediate stages in the blend. At lower settings the individual steps are apparent. This is useful for object transforms. At higher settings the steps merge together. This is more suitable for highlight effects. Experience shows that you rarely need more than 50 steps even in a complex blend. The two objects can have different numbers of control handles and can be different types (for example, shapes to lines). When Xara Designer Pro 7 blends, it has to have a "start" handle on one object that maps onto an equivalent "start" handle on the other object.
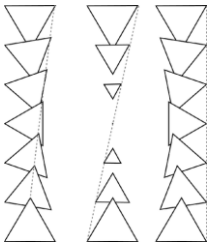
If you create a blend by dragging from the filled interior of one shape to the other, then Xara Designer Pro 7 will automatically choose the bottom-left control handles to match. However, you can force a blend to use any control handle as the starting handle by dragging exactly from one control handle to another. Blending between different control handles gives different blend patterns.

A second way to adjust the blend is to add control handles to one object. The left-hand example is a blend between two triangles. The right-hand example has an extra control handle in the lower triangle. The blend was then made to that control handle.
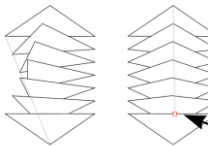
Additional control handle

A third way is using the **1 TO 1 NODE MAPPING** button.

This only has an effect if the two objects have the same number of control handles. Usually Designer Pro adds or removes handles as necessary to transform one shape into another.

Blending with shapes that have the same number of handles (such as copies or duplicates) can produce strange results. In this situation, the **1:1** button prevents extra handles being added. You can still control the start handles by dragging exactly between control handles.
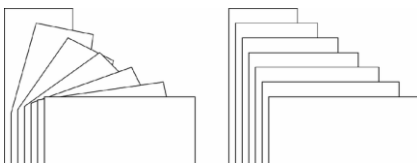
The left-hand example is a normal blend between the rectangles. The right-hand example uses 1:1

Live Effects

Introduction

Live Effects are bitmap effects that can be applied to any object using **XARA PICTURE EDITOR** tools or Adobe® Photoshop® plug-ins. The list of available Live Effects is displayed in the **LIVE EFFECTS** Tool InfoBar by clicking the **NEW** button.

① Add a new Effect
② List of effects applied, in order
③ Edit the selected effect
④ Live effect resolution
⑤ Delete current effect
⑥ Lock/unlock all effects
⑦ Delete all effects
⑧ Configure to find plug-ins

Applying a Live Effect

To apply a Live Effect:

1. Select the object or objects in the usual way.
2. Select the **LIVE EFFECTS** Tool.
3. Click the **NEW** button on the left side of the InfoBar. This displays a partitioned list of available effects in a menu. The first set of effects listed in the menu are **XARA PICTURE EDITOR** effects. The second set are effects provided by the built in Xara Designer Pro 7 **FEATHER** and **SHADOW** Tools. The third set of effects are "New-style" Photoshop plug-in effects and the final set are "Old-style" Photoshop plug-in effects (see below for an explanation of these different types).
4. Select the effect you want to apply from the list.
5. This will display a dialog or tool that belongs to the effect. You can adjust the various controls and you usually get a small preview of the effect in the dialog.

Click **OK** when you're done to return to Xara Designer Pro 7.

Editing shapes

If you apply a Live Effect to a shape or text, the object remains fully editable. Each time you edit it in any way, the Live Effect is automatically re-applied to the object. For locked effects this is not possible, and you must remove the effect using the **DELETE** button on the Live Effect InfoBar, edit the shape, and then re-apply the effect.

Locking effects

When you resize or rotate an object which has a Live Effect applied, Designer Pro takes this to be an edit and re-generates the effect. This may not be what you want, so it's useful sometimes to be able to lock an effect.

Old-style Photoshop plug-ins are **LOCKED** as soon as you apply them. This means the underlying shape can't be edited. You can also lock a Live Effect and then when you resize or rotate the object the effect remains fixed, as if you were resizing/rotating a bitmap.

As an example of this, imagine a plug-in that always applies horizontal ripples (the "Television" Live Effect shown does something similar). Apply this effect to a shape, and you'd then see horizontal lines across it. If you then rotated the shape, would you want the ripples to rotate with it? If so, lock the effect before the rotation. Or would you want the horizontal ripple effect to be re-applied to your now rotated rectangle? If so, leave the effect unlocked.

When a Live Effects is locked the effect rotates with the object (left).

When giving designs to other people to load, if they do not have the plug-ins that are used in the design, then they won't see the effects applied. To get around this problem, you can lock the effects. Locked effects are saved as bitmaps in the document so anyone can see them, even if they don't have the plug-ins that generated the effects.

To lock an effect, select the object or objects and in the **LIVE EFFECTS** InfoBar click the **PADLOCK** icon. To unlock an effect that has been locked this way, just click the **PADLOCK** icon again.

You can still alter the resolution of the effect. For printing, you may want to use a higher resolution than if the work is just for screen use.

Editing Live Effects

The dropdown list shows the effects applied to the currently selected object in the order that they were applied. Select the effect you want from the dropdown list and click the **EDIT** button. This will bring up the controls for that effect-in the case of a Photoshop plug-in this is usually a pop-up window that allows you to alter the appearance of the effect.

How Live Effects work

Because all these effects are bitmap effects, the object to which the Live Effect is applied is first rasterized (converted to a bitmap) and then passed to the plug-in, which

applies the effect and returns a modified bitmap. You can control the resolution of the bitmap using the **LIVE EFFECTS** InfoBar control.

Live Effect resolution

For screen and web use it's best to leave the resolution at the default 96 DPI; the same as the screen resolution. If you require a higher resolution image, for example if you're printing or wanting to export a high-resolution bitmap, then you can increase this to 150 DPI or even higher. The higher the resolution, the longer it takes to generate or re-generate the effect (because it has to work with a much larger bitmap) and the more memory is required.

You can set the resolution of a Live Effect to "Automatic", instead of choosing a fixed DPI value. With this setting, the effect will be automatically re-generated when required, at the most appropriate resolution. For example, if you print a design containing Live Effects, any effects set to **AUTOMATIC** will be re-generated at print resolution if they are not already at that resolution or higher. In a large design with many effects, note that this can make printing much slower as each effect has to be re-generated at high resolution.

You can change the resolution that's used to render effects in **THE EFFECTS & PLUG-INS** tab of the **OPTIONS** dialog. It's set to 96 DPI by default. Once you've modified this setting, all effects you subsequently apply will be at the resolution you selected. Changing this setting will not change the resolution of effects that have already been applied.

For more on the Options dialog see Customizing Designer Pro (on page 447).

To change the resolution of an effect that has already been applied, use the DPI control on the **LIVE EFFECTS** toolbar.

Saving and transferring files

When you transfer a file to someone else, unless they have the same plug-ins installed on their computer, they will not see the effects (this is similar to the problem of fonts; the recipient needs to have all the fonts used in the design to see an accurate representation of the text in the document). In order to guarantee that recipients can see the effects in your design, lock them before saving.

Whenever a design is loaded that uses effects that are not installed, a warning is issued to notify the user that they may not be seeing the design as it was intended by the designer.

Because locked effects are saved in the Xara file as a bitmap, this means the files are much larger than for unlocked Live Effects.

Copying Live Effects

For more on Copy and Paste, see Object Handling (on page 93).

You can copy Live Effects in your design from one object to another using **PASTE ATTRIBUTES**, just as you can copy other object attributes. Simply select the object with the effect(s) you want to copy and select "**EDIT**" > "**COPY**". Select the object or objects you want to copy the effects onto, and select "**EDIT**" > "**PASTE ATTRIBUTES**".

Note that you cannot copy "old-style" Photoshop plug-in effects in this way because those effects do not have the ability to re-apply themselves.

Photo Handling

Photo Objects

In Designer Pro photos (or bitmaps) are just another type of object on the page. You can drag and drop photos onto the page from your file explorer, and then you can resize, rotate, copy and move them around just like any other object. Importantly you can adjust the transparency, even graduated transparency, feather edges and clip and cut shapes out of photos with ease. The transparency feature lets you blend, merge or create composite photos.

Where you might have to use layers in other photo tools, every object in Xara Designer Pro 7 is on its own layer and, just as with any object on the page, you can move it forward to be in front, or backwards to be behind other objects.

Photo Groups

If you edit a photo using some tools such as the integrated Red Eye tool or Clone Tool (on page 294), the photo becomes grouped with other objects that modify the image in some way. For example with the Red Eye tool, the ellipse shapes that are used to modify the red eye areas of the photo are grouped with the photo itself. This is called a **PHOTO GROUP** and you'll see this on the status line when you select such a modified photo.

Just like an ordinary group it keeps the photo together with the other objects that have been added to modify it, but unlike a group it is still treated as if it was an ordinary photo by the Photo Tools and other tools. Normally photo groups are automatically placed inside a clipview object, which clips any objects which overlap the edge of the photo, to the boundaries of the photo itself. That's why when you select a photo group the status line usually shows you have a "Clipped photo group" selected. See the Clipview section (on page 117) of Object Handling for information about Clipviews.

Differences between Photo Groups and Photos:

- Photo Groups collect together a simple photo and some vector edits.
- You can push a photo around in its clipping shape within the Fill Tool but you can't do quite the same thing with Photo Groups (either select inside and move the base photo, or use the right click context menu to select the clipped objects and then drag them in the selector tool).
- Some operations will convert Photo Groups to photos.

If you want to convert a Photo Group into an ordinary photo object, you can use "**UTILITIES**" > "**OPTIMIZE PHOTO**". But note that this is destructive in that thereafter you will not be able to modify any of the photo edits you've applied to the photo. Some other operations such as content-aware scaling and contoning also convert photo groups into flat photos, because these operations aren't able to preserve the photo group structure. When a photo group needs to be converted in this way a warning alert is shown first.

Importing Photos

Xara Designer Pro 7 supports a very wide range of photo or bitmap types including JPEG, PNG, TIFF and RAW digital camera images, as well as many more types. The term "bitmap" is the general term encompassing all types, but interchangeable with the word "photo".
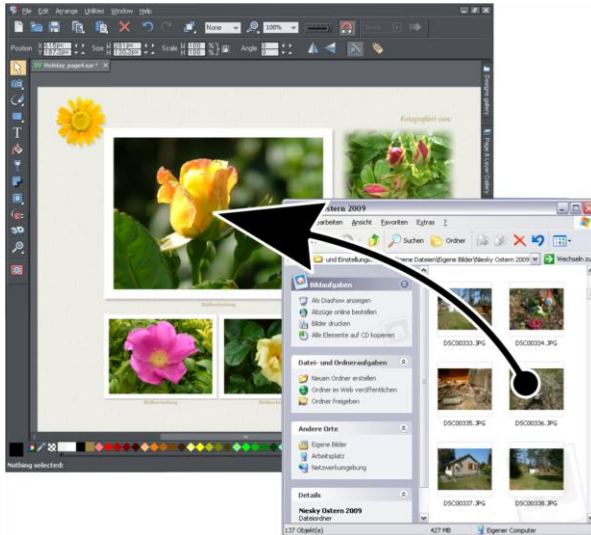
The easiest way to open an image is to drag the photo or bitmap file from your Windows file explorer onto the Designer Pro Window. Or you can select the "**FILE**" > "**OPEN**" or "**IMPORT**" menu options.

You can select multiple photo files in the file dialog by clicking with Shift or Ctrl held down to add to the selection, just as in Windows Explorer, to open or import multiple photos.

If you import a photo which is bigger than 1920 pixels wide (HD screen size) or high, you will be asked if you want to import a reduced sized version, instead of the full sized original. For web use you should rarely need your photos to be bigger than this size, so importing a reduced version is almost always desirable. Using reduced sized photos is recommended to keep the size of your design (.web or .xar) file down and to reduce the amount of memory used when editing and exporting your website.

The photo is imported at the position you drop it. See below for information about the size of imported images.

Replacing photos

If you drag and drop a bitmap file over an existing photo it will replace that photo, but keep the same container or frame size. This makes it very easy to replace photos on templates. You can use the **FILL TOOL** to adjust the size, position and angle of the photo inside its outline. This is not true for photo documents (on page 265), where dropping a photo on the page will always import it as a new photo document.

When replacing a photo or bitmap this way, it is sized to best fit in the existing picture outline.If you hold "Shift" when replacing a photo, the new one will inherit the same scale and rotation as the old photo, instead of being 'best fitted'. This is useful where you've manually adjusted the scale or rotation of a fill and then want to replace the image with another which has the same aspect ratio.

If there are multiple instances of the photo you are replacing in the current document, then by default dropping a new photo onto one instance will replace all the instances of that photo on the current page. Even instances of the photo which are locked or hidden, or on locked or hidden layers, are replaced. If this is not what you want, hold down "Ctrl" when you drop. You will be shown a dialog which lets you choose whether to replace just the single instance of the photo, replace all the instances on the current page, or replace all instances on all pages in the document.

When you drop a new photo onto a Photo Group (on page 245), the entire Photo Group is replaced, leaving you with a photo object showing the new image.

Replacing multiple photos at once

Most of the web templates provided in the **DESIGNS GALLERY** will allow you to replace multiple images at once, by dragging and dropping multiple image files from Explorer onto the canvas. Or use "**FILE**" > "**IMPORT**" and select multiple images in the file dialog ("Ctrl + click" adds to the current selection, "Shift + click" allows you to select a range of files).

The incoming photos are used to replace the images in the document. As when importing single photos, you will be asked if you want to import reduced size versions if your photos are large. Replacement is performed left to right and top to bottom (normal reading order). If you don't drag in enough photos to replace all the replaceable photos, you can go on to import more photo files the same way. Replacement carries on from the next un-replaced photo. Therefore you can quickly fill the design with your photos.

If you import more photos than can be accommodated on the current page, any following pages in your design will have their replaceable photos replaced too, using the remaining incoming photos. If that would still leave a surplus of incoming photo files, then the current page gets duplicated as many times as necessary to accommodate all your photos.

This means you can very quickly build a photo gallery website showing your photos! Just choose a gallery template from the **DESIGNS GALLERY**, then import your set of photo files. The page is copied as many times as required to fit in all your photos. Make sure you choose the reduced size option when importing a lot of large photos!

Using photos as fills

You can also use any bitmap as a fill style for any drawn shape. Simply drag the file over the shape (which can be from your file system, or from the Bitmap or Fill galleries), and hold the "Shift" key down before you drop. This will replace the existing color fill with a bitmap, fitted to the object. Again you can use the **FILL TOOL** to adjust the size, angle and position.

Initial Photo size

When you import a photo into a drawing or web document, by default if it's bigger than 500 pixels wide the photo is automatically scaled down to 500 pixels. This is because it's rarely useful to drop a huge digital camera photo into a drawing document and have it displayed at its full size, so it's scaled down to a more manageable size. You can change this behavior on the **VIEW** tab of the "**UTILITIES**" **>** "**OPTIONS**" dialog:
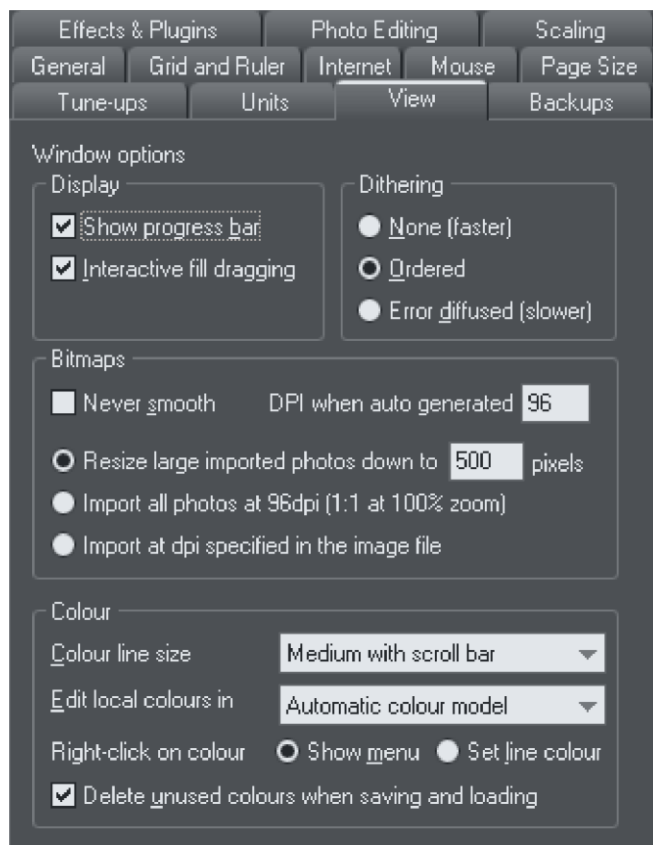
You can choose a different size to which photos should be scaled, or elect for them to be imported at 96dpi (default screen resolution) so that at 100% zoom they are displayed at 1:1. Or you can choose to have photos imported at the dpi which is indicated in the photo file itself. Note that some digital cameras set this dpi value wrongly and so this third option may not always give you the results you expect.

When importing at 96dpi each pixel of the photo takes one pixel of screen, so you're seeing the full resolution image when viewing at 100%.

However because most digital photos are very high resolution, this means you may only see a small part of your photo, so initially Xara Designer Pro 7 will automatically alter the zoom scale to zoom out so you can see the whole image. This also means that a typical digital photo will be far, far larger than your page size (your screen is probably only about 1200 pixels across, and a typical digital photo is 3 or 4 times as wide, sometimes a lot more)

To reduce the size, just drag a corner handle using the **SELECTOR** Tool, or enter a new width in the Selector Tool InfoBar width field.

Photo resolution

One fundamental difference between Xara Designer Pro 7 and other photo tools is that when you resize a photo it retains the full resolution. Scaling an image to be smaller, just increases the dpi or ppi (pixels per inch). In other words no pixels are lost, they are just made smaller.

96ppi image on the left when scaled down to half size becomes twice the resolution, 192 ppi.

The status line shows the resolution of any selected image. Retaining the full resolution is important because it means you can see all the detail when you zoom in, and that when printing the maximum resolution is sent to the printer. Also it means you can enlarge all or part of the image and Designer Pro retains the original maximum quality.

When saving to a website (exporting HTML) or to Flash, Xara Designer Pro 7 automatically converts the photos to the correct resolution required for a web page.

Zero-memory Copies

One of the most revolutionary differences between Designer Pro and other software is that when you copy any photo on the page, it doesn't really make a complete new copy of the original imported photo but instead just displays another 'view' of the original image. Designer Pro's rendering engine is fast enough that it can display any number of copies of the same image 'on the fly' this way. This saves huge amounts of memory and dramatically reduces files sizes.

This doesn't detract or limit what you can do with each copy, and they can be treated as completely separate independent copies. Each copy does not have to be identical. You can manipulate each as required, resizing, rotating, cropping. coloring, feathering, or applying a wide range of photo and transparency effects. All for no memory or native file size increase.

This shows separate copies of the same image, each manipulated in a different way. Each retaining the full resolution of the original imported JPEG, as you can see from the right image. The memory (RAM and file size) is no more than the original JPEG size.

Because they are the same image displayed at different sizes the resolution, that is the dpi or ppi, varies. In the above example the eye is 115dpi, (because the image has been enlarged) while the image on the left is over 1200dpi.

The Bitmap Gallery

The Document handling chapter (on page 52) has general information about galleries.

The **BITMAP GALLERY** shows all the bitmaps or photos used in any document, along with information about its pixel size and file size.
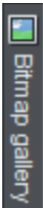
You can open it by clicking it in the Galleries bar, or from within the "**UTILITIES**" > "**GALLERIES**" menu, or "F11".
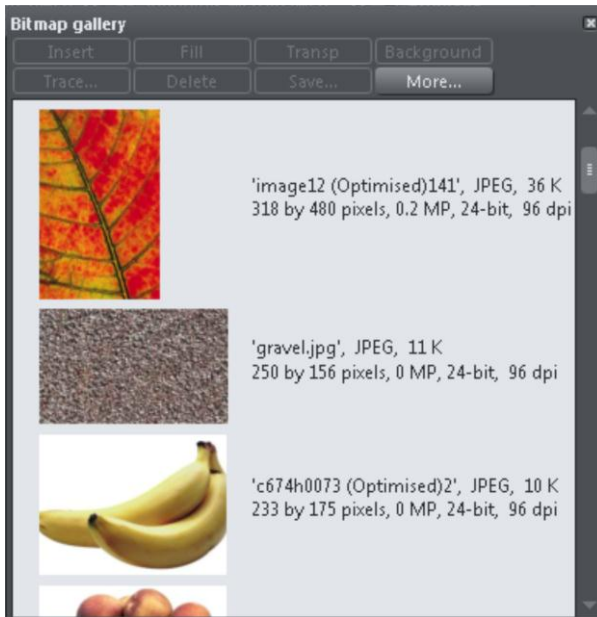
This shows the **BITMAP GALLERY** for the above document, and shows the original JPEG image of the girl which is embedded into the native .web file. As mentioned above, all copies of this image are displayed directly from the one master, so only the single image is shown and not all four variants that appear on the page.

The following useful information is displayed about the original image:

- Filename of the original JPEG
- The file type, in this case a JPEG, and the file size, 1,006K. (This is the original size of the file, and also how much of the .web file will be taken up by this image.)
- The pixel dimensions of the original, the Megapixel size (in this case just under 2MP)
- The color depth, in this case "24 bit" which is sometimes called true color. The Xara image is a 4 bit image.
- The original resolution of the image, in these cases 96dpi

The **BITMAP GALLERY** always contains a default bitmap, with the gray Xara image. This is used as the default bitmap for bitmap fills and in cases where other bitmaps are missing. It's useful to have as a placeholder as well.

As with all galleries, you can drag the objects from the gallery onto the page to create a new copy. Or you can select an image in the gallery and click one of the buttons across the top. The following section details the operation of the **BITMAP GALLERY** controls, most of which are for the more advanced user.

Filling shapes with a bitmap

Select the shape on the page, then select the bitmap in the gallery and click the fill button. Alternatively drag the image from the **BITMAP GALLERY** and drop it onto any shape while holding "Shift". You can adjust the size, angle etc in the **FILL TOOL**.

Setting a Bitmap Transparency

This is for the more advanced user. You can use any bitmap as a transparency mask on any filled shape or bitmap. The lightness of the bitmap affects how transparent the selected object is. The bitmap transparency size, rotation and tiling can be controlled from the TRANSPARENCY TOOL (on page 213) InfoBar.

Deleting images from the Gallery

When you delete a bitmap from the page, it remains in the BITMAP GALLERY. Any unused bitmaps will be deleted from the file when saved and re-opened. However you can force the deletion of any bitmap by selecting it and pressing the DELETE button. If the bitmap is used in the document, it will be replaced by the standard Xara bitmap.

Setting the page background to a bitmap

Select the bitmap in the gallery and click the BACKGROUND button. This will tile the image. When exporting the page as HTML, this image is tiled across the whole visible page background, unless you've also given the pasteboard area a different background.

Save

Select the bitmap and click SAVE to save the original image. In it's an embedded JPEG this saves the original JPEG file. Other bitmap types are best saved as a PNG bitmap type.

Bitmap Properties

The PROPERTIES button will display information about the selected bitmap in the gallery. It also provides a way to stop image smoothing when bitmaps are enlarged. Usually all bitmaps are smoothed when enlarged, or zoomed into, on screen. There is a check-box option in the Properties dialog to turn this feature off, so that individual pixels are visible when you zoom in.

Note that this option only affects scaled up bitmaps. Note also that NEVER SMOOTH in the VIEW tab of the OPTIONS dialog box overrides this check box.

It also provides information about the Animation properties of the bitmap. This is only really applicable to animated GIF images

GIF ANIMATION:

- DELAY (the time this frame is left on screen)
- RESTORE: The Animated GIF Restore setting sets what happens between each frame in an animated GIF. Nothing means no action is taken. Many browsers take this as meaning the same as the Leave As Is option. Leave As Is displays the frames one on top of another - this leaves many frames visible in a stack if some are transparent. Some browsers clear the animation before it loops again, some do not. Background restores the area covered by the graphic to the background color of the GIF (usually white). Restore Previous restores the area covered by the frame to what it was before the frame was displayed. This is interpreted by some browsers to mean that the frame should be cleared to the background before each frame is displayed and by others to mean that the frame should be shown on top of the previous frame. As browsers

interpret these values in different ways, you may need to experiment to achieve the desired result.

Embedded JPEG files

JPEG files are hugely compressed from their original state, being up to 10 times smaller than the original uncompressed image. In the above example, the original uncompressed image requires more than 7mb of memory, but as the BITMAP GALLERY shows, this JPEG file is only 1mb. A very significant reduction. This is why JPEG images are the standard file type for digital photography and use on the web.

When you drag and drop a JPEG file (or use the "Open" or "Import" menu options) the original JPEG is stored in the document, and this is what is saved in the .xar file when you save your document.

It's important to understand how this differs from other graphics tools, both vector drawing software and photo editing programs. Other products will typically un-compress the image and store the un-compressed "raw" image in memory and the native file when you save to disc. What's more each copy you make is typically a complete copy of the original raw image, as mentioned above. Make four copies of your photo and save your file - it will be four times larger. In Xara Designer Pro 7 the file is no larger, no matter how many copies you make.

So by embedding the original JPEG file instead of saving the un-compressed image, that's a file size saving of more than 7:1 compared to other graphics editors. The fact that there are four complete copies of the image means that in this particular case the memory used is more like 30 times less. So this represents a huge file size (and time) saving over other graphics tools*.

This is easy to test. Import a JPEG into your favourite graphics editor, make four copies, perhaps change each one slightly, to be colored or blurred or rotated. Then save the native file and compare it against the original JPEG size, and the equivalent .Xar file. A .Xar native file is about the size of the original JPEG, no matter how many copies of the image are made.

Extracting the original JPEG

Right click on any image in the BITMAP GALLERY and select the SAVE menu option to save the original JPEG back to your file system.

Lossless vs. Lossy

Because everything Designer Pro does with your photos is based on the original image, which remains untouched embedded in your file, everything it does is lossless. There is no re-compression of images when saving the native .xar file.

Of course you can save or export your image as a compressed JPEG file, at any required size, and in this case the image quality and detail will be reduced in a "destructive" manner. Destructive here means that the original data or detail cannot be recovered from a lower-resolution saved JPEG. Xara is a non-destructive editor because the original photo data and detail is never lost, reduced or compressed in a lossy manner in the native .xar file.

Blending & Merging photos

By making copies of photos on top of each other, and applying different effects to the copies, combined with Designer Pro's advanced transparency controls, you can easily create blended photo compositions. For example to selectively blur parts of a photo takes a few seconds.

Original photo   Blurred copy   Apply an elliptical   Blended result
                                              graduated transparency
                                                     to the face
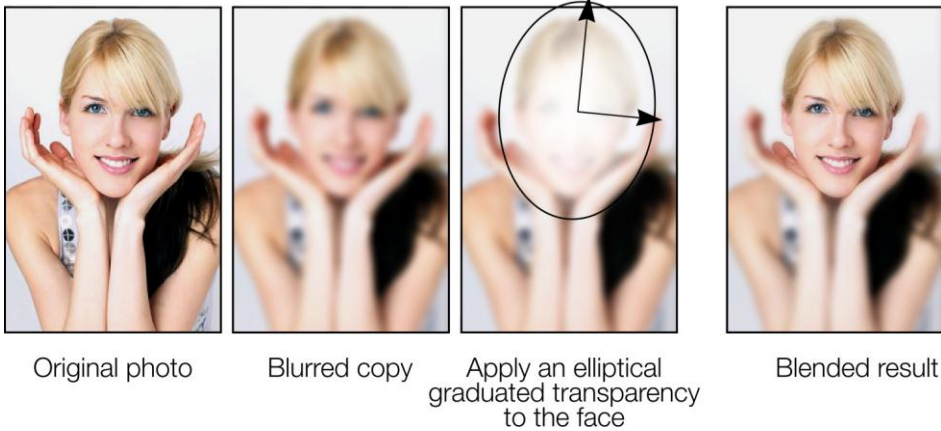
By placing the blurred copy with the 'hole' created by the transparency effect over the sharp original, the blended result shows the sharp face area through.
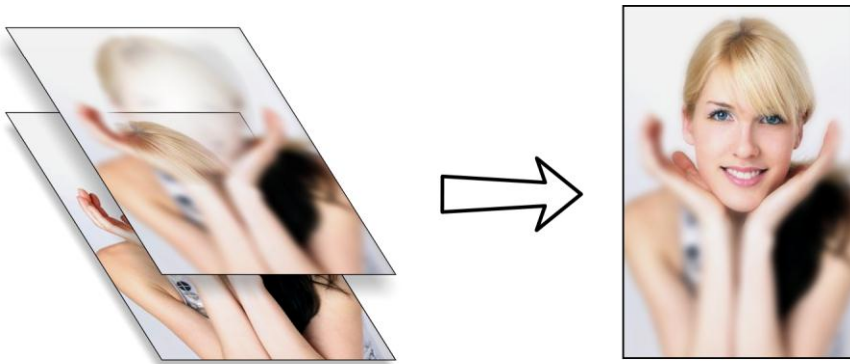
Creating copies of any object requires a single key press, or click (drag with right mouse button). Blurring a photo takes a single drag on a blur slider of the **PHOTO TOOL**, applying a gradated transparency is just another click-drag in the **TRANSPARENCY TOOL**, and finally positioning the photos on top of each other takes a second. So the whole process takes a few clicks, drags and just a few seconds in Xara Designer Pro 7.

Photo display quality

Xara Designer Pro 7 can display photos in one of five useful quality levels. The top two settings smooth the screen pixels so avoiding visible pixels or rough sections along the edges (anti-aliasing). Change the quality level using the **QUALITY** entry in the **WINDOW** menu.

VERY HIGH QUALITY (DEFAULT)	Displays images using bicubic sampling. This displays images at the best quality, particularly for large hi-res images that are scaled down or zoomed out a lot.
HIGH QUALITY	Anti-aliasing on, but images are rendered faster and at lower quality.
FULL COLOR	No anti-aliasing, thus showing individual pixels. This can be useful when you're zoomed in and you need to clearly see the separate image pixels. The downside is that images generally look poor when reduced or enlarged resulting in clearly visible pixelation and jagged "staircase" edges, especially if you rotate the image.
OUTLINE WITH BLEND STEPS	Is particularly useful for seeing outlines of the various steps of a blend. Blends are not supported in Xara Designer Pro 7 but imported .xar files could contain blends.
OUTLINE	Only object outlines are shown. This is useful for finding and selecting objects that are difficult to see due to other objects in front of or behind them.

There is an additional control that allows you to stop all image smoothing or anti-aliasing on images that are scaled up or zoomed in. In other words, instead of a smoothed image, you see all the pixels when zoomed in. Open the **BITMAP GALLERY** and right click on the image and select "properties". In the dialog un-check the "Smooth when scaled up" option. Now, no matter what viewing quality you select the image (and all copies) will always show the un-smoothed pixels when enlarged or zoomed in.

Note: If you use the **PHOTO TOOL** sharpen / blur control then images have to be displayed at maximum quality. So if you think the viewing quality has stopped working, it's almost certainly because you have sharpened or blurred the image with the **PHOTO TOOL**.

Saving & Exporting Photos

Selecting the **SAVE** option will always save a native .xar file file (unless you're editing a Photo document – see Photo Document section below). To save a photo as a JPEG, PNG or other image file type, it's necessary to use the **EXPORT** option, or the shortcut "Ctrl + Shift + E". You may select from a very wide range of file types, such as JPEG, PNG, GIF, TIFF, PDF, PSD, Flash (.swf), BMP, as well as other lesser well known types.

There are two icons available on the top bar that are short-cuts to save the selection as JPG or PNG. These are in the flyout bar shown when you move the mouse pointer over the Export HTML icon.

For photos we recommend saving as JPEG (sometimes called JPG) as this offers the greatest compatibility and the best size / quality compromise.

When you export a JPEG or PNG, there is a **SETTINGS** option on the Save Dialog. Selecting this provides many advanced export options, as well as compare side-by-side alternative settings or even alternative file types such as PNG.

When you export a JPEG, an export preview dialog is shown where you can adjust many export options, as well as compare side-by-side alternative settings or even alternative file types such as PNG.

The Export Preview dialog allows you to adjust the size, resolution, JPEG quality and even select from 3 alternative export file types if you so wish. The default values should be fine for all normal purposes and you can just click the export button to save your photo.

Things to remember when exporting:

- First select the object or objects you want to export
- The default exported size of the image will be the size you see on screen at 100% zoom.

The Export Preview dialog (on page 439) is described in more detail here.

> **Tip**: You can control the JPEG quality in the Export Settings dialog on the Options tab. The default and recommended value is 75%
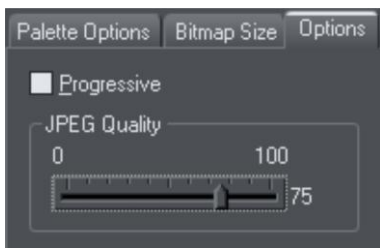
The JPEG system is designed that a setting of 75 is the optimum value. We recommend you do not save JPEGs at 100% quality, as the results are visually identical to the 75% quality, only the file size and memory use is dramatically increased with no benefit.

When saving for use on the web it's quite possible to reduce the quality below 75 to increase page view speed. The preview window shows the quality of any value you select.

Tip: If you expect you may want to perform any further edits on your exported image, for example to create the image again at another size, we strongly recommend saving the .web file as well. This will preserve the lossless master image along with all its edits and changes.

Photo Edit Attributes

All edits performed using the **PHOTO TOOL** (on page 272), such as any altering of the brightness, contrast, color, blur or sharpen values, or even the more advanced levels adjustment, are all just stored on the photo as attributes. See the terminology section (on page 16).

Just as you can alter the color of a shape or line without altering the underlying shape, so Photo Tool attributes alter the visible appearance of the photo without affecting the original image (this is called non-destructive editing). Another way of looking at this is that Xara Designer Pro 7 just stores a list of edits applied to your photo, and you can

change, remove or add new edits. You can always recover the original untouched photo, even after the brightness, resizing, even clipping or cropping.

Attributes can be copied and pasted between objects. Not only does this apply to traditional attributes such as line color and thickness, it also works with all the **PHOTO TOOL** attributes including the **LEVELS** settings. So this means you can easily copy all the enhancements made on one photo to any other using the copy / paste attribute feature. For example to apply the same white balance adjustment (made using the levels control) to another photo, just copy the edited photo to the clipboard and then select the "**EDIT**" > "**PASTE ATTRIBUTES**" menu on any image to which you want to apply the same corrections.

This also applies to some other attributes of the photo, such as line width and shadows, etc.; all these can be copied from one photo to another using the same technique.

Editing the outline of Photos

You can use the **SHAPE EDITOR TOOL** to directly adjust the outline shape of a photo. Similarly you can apply outlines the same way as for any shape, and shadow, etc.

Using the **SHAPE EDITOR TOOL** you can push or pull on the sides. This example also has a black outline and soft shadow added. To restore the image back to it's original rectangular shape, select the "Un-clip" in the clip mode of the **PHOTO TOOL** InfoBar.
When photos are edited this way, they are treated like any normal vector shape, containing a bitmap fill. This is why you can use the normal line and shape editing features, and indeed you can use the **FILL TOOL** to adjust the size, angle and position of the photo "fill" inside the shape.

Cropping photos

The easiest way to crop a photo is to just drag on it when in the **ENHANCE TOOL**, or you can just drag one of the 8 control handles around the outside to adjust the edge of any selected photo.

For more advanced cropping control, select the **CLIP BUTTON** on the **PHOTO TOOL** flyout bar which provides aspect ratio control and precise numeric clipping control.

This also provides an Un-clip button that will remove any clip rectangle and restore the original image.

One important feature is that this crop feature is really a dynamic clip, in other words it's a non-destructive crop, and you can adjust the crop boundary afterwards to reveal hidden parts of the photo. If you want to really crop - i.e. make this a destructive crop, that really removes the invisible parts of an image then use the Optimize Photo feature.

Cropping photos with a mask

If you want to make non-rectangular photo shapes or cut pieces out of a photo, use a mask. First select the photo and then turn on Mask Mode.

Turn on Mask Mode by clicking on icon in the top bar.

The view turns pink. Now use any of the standard drawing tools to draw onto the mask layer over your photo, just as you would draw onto a normal drawing layer. Then select the photo underneath, or clear the selection (press "Esc"). Now if you copy ("Ctrl + C") you will copy just the unmasked part of the photo to the paste buffer. Hit "Delete" and you'll delete the unmasked part. Or press "Ctrl + X" to cut it. You can also use the mask to apply a Clipview or use the "**ARRANGE**" > "**COMBINE**" shapes operations with it.

See the Mask chapter (on page 234) for more information on using masks.

Screen Capture utility

This utility offers some advantages over the method above, including the option to capture the mouse pointer in the image. Open it by choosing "**UTILITIES**" > "**SCREEN CAPTURE**".
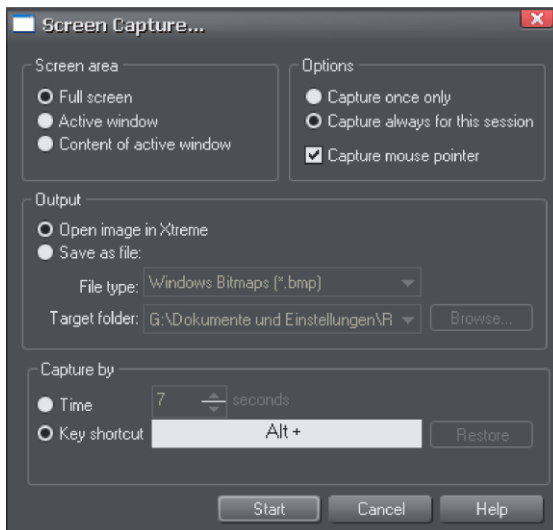
SCREEN AREA: Here you can choose the screen area you would like to capture. You can capture the full screen, the active window in its entirety, or just the content of the active window without the window border.

OPTIONS: Here you can choose whether or not the mouse pointer is included in the screenshot. Also choose whether you just want to capture one screenshot or whether to keep the utility turned on for the session so you can take successive shots each time you press the assigned key shortcut.

The output section lets you choose how to handle the captured screen image. By default it will be directly inserted into the current Xara Designer Pro 7 design. Alternatively you can also save a BMP (Windows Bitmap) or PNG file for each screenshot into any folder. The files created are named "ScreenCapture", "ScreenCapture1", "ScreenCapture2", etc. Choose the TARGET FOLDER for the files using the BROWSE... button.

You can define almost any hot-key combination (Shift, Alt, Ctrl + key) to trigger the screenshot. Just click in the key shortcut field and then press the desired key combination, e.g. "Ctrl+S". The chosen shortcut appears in the key shortcut field. If it clashes with any defined Designer Pro shortcut, you'll be warned with a message appearing at the bottom of the dialog, but this doesn't matter if you will have other windows active when taking the screenshots. Press RESTORE to return to the previous selected shortcut.

Instead of using a shortcut key to take the screenshot, you can instead use the TIME option. This is useful in cases where any keyboard activity can change the display you want to capture, such as a pop-up tooltip which may disappear if you were to press a key. Select the time option and enter a delay value in seconds. The screenshot will then be taken for you automatically once the specified period of time has elapsed. The timer starts as soon as you click the START button.

Pressing the START button closes the Screen capture dialog and activates the system-wide hotkey. Switch to the window you want to capture and press the chosen key combination, or wait for the chosen time period to elapse if the timer option was chosen. The screenshot is taken and inserted into Designer Pro or saved to file, depending on the option chosen. If you selected the "Capture always" option you can take additional screenshots by pressing the key combination again (this is unavailable with the timer option). To deactivate the utility if you chose this option, close down Xara Designer Pro 7 to end the session. Alternatively return to the Screenshot dialog, choose the "once only" option and take one more screenshot.

Coloring photos

With any photo selected just click on the Color Line to apply a color to any photo. Clicking the white color patch will turn the image black and white. Technically this is called a "contone" (it's a continuous tone from black to white), or sometimes a "duotone".

Simply click a pale yellow color on the color line to create a yellow contone picture.

Or, right click on the Color Line which shows a context menu for you to apply the selected color as either the light or dark color.
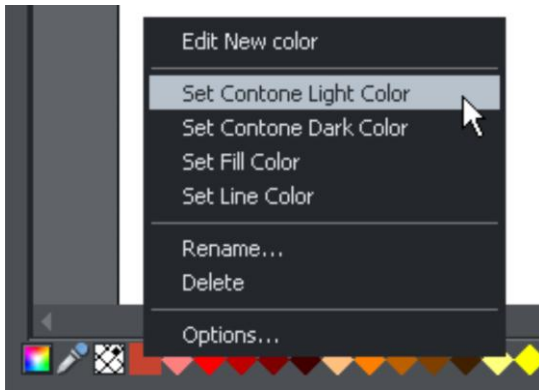
You can also use the color editor to select any color as either the light or dark contone colour. Right click the photo and choose "**CONTONE**" > "**LIGHT**" to display the color editor ("Ctrl + E"). Select the light or dark contone from the dropdown menu at the top of the color editor.

You can restore the original color of a photo by clicking the cross-hatched "no color" patch on the left of the Color Line, or right clicking on it and selecting the "Restore color" option.

Resize, rotate and position a photo within its frame

Photos in Xara Designer Pro 7 are treated like a "bitmap filled" rectangle. The shape of your photo is really a fully editable outline around the image contained inside. So when you crop, or edit the outline shape, you're not affecting the fill, which is clipped inside the shape.

Photos and bitmaps on the page are always contained within an outline shape. Not only can you change the shape of the outline, you can also adjust the size, angle and position of the photo within its frame using the **FILL TOOL**. Just select the photo, go into the **FILL TOOL** and you will see fill arrows at right angles from the center (or you can go into **FILL TOOL**, and click on the photo to select).
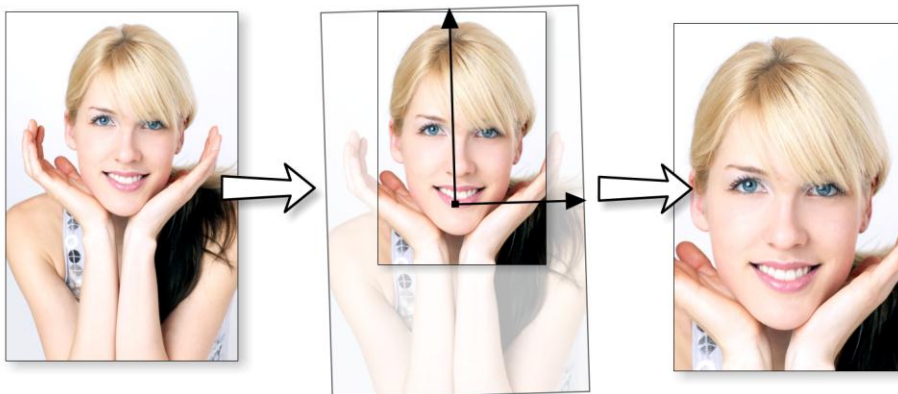
For example, to enlarge and rotate the image on the left inside its frame, select the **FILL TOOL** and drag on one of the arrowheads.

- To resize drag on one of the arrow heads away from the center. You can hold "Ctrl" to constrain the angle.
- To rotate the image, drag one of the arrowheads around the center.

- To re-position the image, drag anywhere on the image.

On the InfoBar of the **FILL TOOL**, you can select the "repeating tile" option which makes the image a tiling bitmap fill. By dragging the fill handles you can now resize and rotate the image tile dimension. There is no better demonstration of the speed of Xara Designer Pro 7 than to do this with a huge multi-megapixel image.

If you have a Photo Group instead of just an ordinary photo object you can't use the **FILL TOOL** as described above to scale and rotate the image in its frame. If you want to convert a Photo Group into an ordinary photo object so you can adjust it using the **FILL TOOL**, you can use "**UTILITIES**" > "**OPTIMIZE PHOTO**" to do this. But note that this is destructive in that thereafter you will not be able to modify any of the photo edits you've applied to the photo.

Horizon Straighten

Using the **FILL TOOL**, as previously described, means it's easy to straighten the horizon of an askew picture.

- Select the Fill Tool and click on any photo. This will show the fill handles, which are arrows showing the extent of the fill inside the shape.
- Drag on the end of one of the fill arrows to resize, and rotate as required.

The following shows a landscape (created using the panorama stitching feature of Designer Pro) that has a sloping horizon.
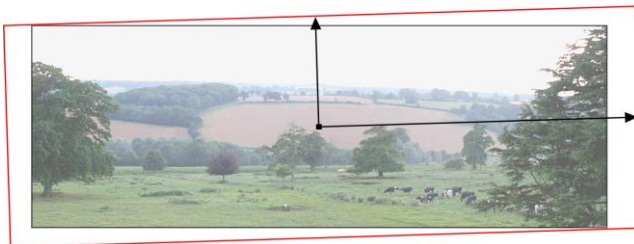
In the **FILL TOOL**, drag on one of the arrowheads to rotate and resize as required. You can re-position the photo by dragging on the center handle of the fill arrows, or holding "Shift" and pushing anywhere on the image.

Viewing a scaled photo at its full size

The **ZOOM TO 1:1** button on the **PHOTO TOOL** infobar adjusts the zoom so that the selected image is shown at full size, which is where each pixel of the image is mapped to each screen pixel. This is useful if you want to edit an image that's been scaled down on the page, but want to see it at its full size while you work on it.

Making a photo its full size

The **SCALE PHOTO TO 100%** button on the **PHOTO TOOL** infobar takes the currently selected photo and scales it to its full size on the page. So for example if the selected photo is scaled down to 500 pixels wide, but the original imported photo was 1000 pixels wide, the photo on the page will be scaled up to 1000 pixels wide. When the document zoom is 100%, that means that each pixel of the image is mapped to each screen pixel.

Optimizing Photos and Bitmaps

With the ever increasing resolution and file size of digital camera JPEGs, if you have a document containing many images, the file size can quickly become very large. For example, a multi-page document containing 20 full resolution JPEGs, each of 5mb, would produce a .xar file of over 100mb*.

Furthermore, these photos are often unnecessarily high resolution. Reducing a photo from a 8 megapixel digital camera to be 2 inches (5 cm) wide on the page will result in this image being around 1500 dpi. Whilst a very high resolution image gives greater flexibility for printing (and you can zoom in, or enlarge small parts of the photo), this is far higher than required for even the best quality commercial printing, and even more so for web graphics or HTML production.

If you clip to a small part of the image, or cut-out only a small part of your photos, there could be large parts of hidden image outside the visible area. For editing purposes this "live crop" is a great feature, as you can un-crop, alter the size, position and scale and everything remains as sharp as possible. But for finished documents you may want to remove the invisible parts.
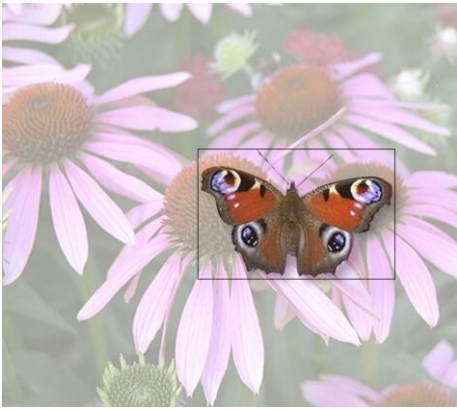
The cut-out butterfly image still has the rest of the photo attached. If you go into the **FILL TOOL** you can easily see this by resizing the fill inside the outline. So the parts of the image outside the butterfly will probably be superfluous in your final document.

Right click a photo and choose **OPTIMIZE PHOTO** or choose "**UTILITIES**" > "**OPTIMIZE PHOTO..**".. This dialog performs three important functions:

- Removing invisible parts of photos
- Reducing resolution of photos
- Converting PNG or bitmaps to embedded JPEGs to optimize file size

Selecting this menu option for any bitmap will display the **OPTIMIZE PHOTO** dialog.
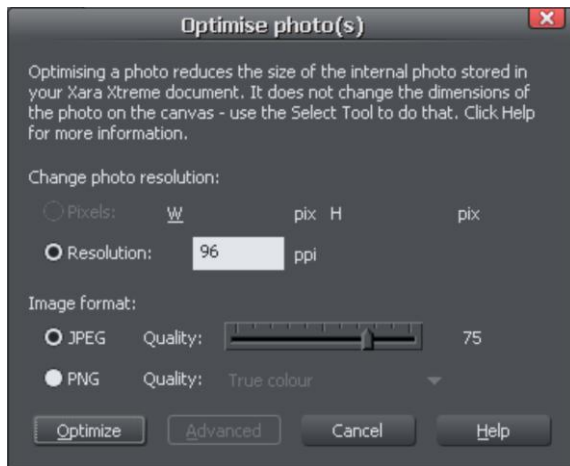
By default the settings are such that the photo will be optimized to a 96dpi (normal screen resolution) JPEG at the size that it appears on your page. This is normally what you will want for photos in your website.

You can change the resolution used in this dialog, by either choosing the physical size you want for the optimized image (width/height in pixels), or by entering a different dpi (eg. perhaps 150dpi if you want print quality).

If you choose the dpi option the value you enter is remembered and becomes the default just for the current session. You can also maintain the photo's current resolution by choosing CURRENT from the PPI list.

You can also choose to optimize as a PNG (produces much larger images, but better quality for graphics and text images) or change the quality used for JPEG optimization (higher quality means larger JPEG sizes).

If your photo is cropped, only the visible part of the image is preserved in the optimized image.

For printing, a photo resolution of 150dpi gives very good results, whilst 300 dpi will provide the highest quality commercial printing (most people cannot tell the difference between 150dpi and 300dpi, but the 300dpi requires four times as much memory or file space).

Note: The optimum JPEG quality is 75%.WE DO NOT recommend saving JPEGs with a quality at 100% - they are virtually indistinguishable from JPEGs saved at 75%, but use considerably more memory and file space.

Warning: "OPTIMIZE PHOTO" is a "destructive" operation. When you save the file the parts of the image removed are lost, and the resolution changed permanently (you can of course undo the changes while the file is open for editing).

You can optimize multiple photos at once if you want them to all have the same DPI. Select the photos you want to optimize and then choose the OPTIMIZE operation as described above. If your photos have different dimensions, the option to optimize by pixel size is disabled and you must just choose the required dpi.

Or you can use the "UTILITIES" > "OPTIMIZE ALL JPEGS" facility to optimize all the JPEG photos in your document in one operation. Again in this case the optimize dialog appears so you can choose the dpi to be used for the optimizations.

Note that after optimizing the original unoptimized and now unreferenced photo remains in the BITMAP GALLERY. This means it is still in memory and so the memory requirements of your design will not have been reduced. Simply save your design and reload after optimizing, to eliminate the original large images.

Converting objects or drawings to bitmaps

You can easily create a bitmap from any object, or part of your drawing, including from other bitmaps. The bitmaps can be any size or resolution and can contain transparency. You can also create bitmaps with reduced numbers of colors which can be useful for web use.

To create a bitmap from objects:

1. Select the object/s on the page.
2. Right click and choose CREATE BITMAP COPY or choose CREATE BITMAP COPY from the ARRANGE menu ("Ctrl + Shift + C").

3. In the dialog box, select the color depth, the size and other options.

For maximum quality select a color depth of true color, or if you want transparency to be included select "true color + alpha" (alpha transparency is the technical term). You can create bitmaps with fewer colors by selecting a color depth of 256 colors or less. This also provides control over the dithering and palette options. These options are described in the section on exporting bitmaps (on page 439).

Note this always creates PNG images, which are the highest quality image type. However for full color photo purposes, these require a lot of memory and file space. Use the optimize photo option to convert PNG images into embedded JPEG images to reduce the file size.

Photo Documents

Sometimes it's useful to work on one photo alone, rather than as "objects on a page". This is called a photo document or "photo mode" in Designer Pro, and it behaves more like a traditional photo editor. You can create a photo document in a number of ways:

- Drag a photo file from your file explorer onto the title bar or toolbar of Designer Pro
- Select "**FILE**" > "**OPEN**" and select a photo file
- Create a blank photo document by selecting "**FILE**" > "**NEW**" > "**BLANK PHOTO**"

Photo documents are characterized by the following behavior differences:

- There is no visible white page. In fact the page dimensions are set automatically to match the photo plus any other objects you've added.
- Photo documents have a 1 pixel grid by default and snap to grid is turned on. This makes it easier to get pixel-accurate crop or clip regions.
- The Pasteboard (the area around the photo) is a darker color. This makes it easy to distinguish at a glance between photo documents and drawing documents.
- The document zoom is set so that the photo fills the view and the **PHOTO TOOL** is automatically selected as the current tool.
- Dropping additional photo files on top of an existing photo just adds a new photo to the document instead of replacing the photo in its frame. And the view will zoom out so you can see the whole image.
- Images are not resized to be 500 pixels on import as they are in normal documents, but are imported at 1:1, so that at 100% zoom you're seeing the image at full size.
- The pixel smoothing options are altered. By default it selects "Very high quality" display mode, which is best for images scaled down or zoomed out. It also has pixel smoothing turned off when zooming in, so you can see the pixels are large zoom factors.
- If you've opened a JPEG photo file as a photo document, when you save changes your JPEG file will be overwritten. See Editing Photo Files below for details.

In all other respects Photo Documents behave like normal Xara Designer Pro 7 documents. You can use all the normal drawing and text tools as usual. If you want to create a photo document of a given size, you can alter the "canvas" or page size by selecting "**UTILITIES**" > "**OPTIONS**" and the "**PAGE**" tab and entering the required dimensions.

In Photo Documents two extra controls become enabled. The **PREVIOUS** and **NEXT** button will move onto the Previous or Next image in the folder from which this image was opened.

Editing Photo Files

You can use Xara Designer Pro 7 to easily edit your JPEG photos and save back the modified JPEG. And unlike with most photo editors, you can do this multiple times without loss of quality, even though the JPEG format is a lossy format (see Lossless versus Lossy earlier in this chapter). That's because Xara Designer Pro 7 is able to save your edits in a lossless way, along with the original photo. Here's how it works.

First open the JPEG, using "**FILE**" > "**OPEN**", drag and drop, or in Windows File Explorer right click and choose Xara Designer Pro 7 from the "open with" list. The photo is opened as a Photo document.

Edit the photo using the photo tools as described above.

If you then do "**FILE**" > "**SAVE**" ("Ctrl + S"), the JPEG file you loaded will be overwritten with the modified image. However by default Xara Designer Pro 7 also saves your photo in its native .xar format. This file is placed into a "Masters" folder alongside your JPEG file. It has the same name as your photo file but with a .web extension. The .xar file includes within it your original photo without the modifications applied, and of course details of your edits.

In future if you load the modified JPEG file in order to edit it further, Xara Designer Pro 7 will look in the Masters folder to see if there is a .xar file available for that photo. If so, the .xar file is loaded instead of the JPEG file and you can continue editing from where you left off. When you next save, the JPEG file is again overwritten and an updated .xar file also saved into the Masters folder.

Of course if you don't want to overwrite your original JPEG file with your changes, you can use "**FILE**" > "**SAVE AS**", to save the modified photo elsewhere, or use the many export facilities to export your photo into different formats.

You can get hold of the original photo from the .web file by opening it, opening the **BITMAP GALLERY**, right clicking on the photo and choosing the **SAVE** option.

In the Photo Editing tab (on page 459) of the "**UTILITIES**" > "**OPTIONS**" dialog you can choose to change the saving behavior described above. You can choose to not have a .xar file automatically saved for you into the Masters sub-folder, or you can choose to have the original photo file saved there instead.

Note if you turn off this original photo preservation, you'll lose the original photo when you do a Save!

Tracer

"**UTILITIES**" > "**BITMAP EDITOR**" allows you to trace a bitmap, converting it to editable vector shapes. The tracer is typically used to trace two types of artwork-photographs and simple line art or logos. The tracer can be used for either type of work and selecting the correct trace mode is the easiest way to control this.

① Original bitmap
② Traced output view
③ Bitmap name
④ Trace mode

Initially, the tracer shows:

- If there is a selected bitmap or, if you copied a bitmap from the **BITMAP** or **FILL GALLERY**, that bitmap.
- Otherwise, the default bitmap.

You can select a different bitmap:

- From the dropdown list,
- From the **BITMAP GALLERY** (click the "**TRACE**" button), or
- By clicking on any bitmap in any Designer Pro document.

By default, the tracer does a "photographic" trace. That is, it produces a drawing with lots of colored shapes to simulate the photographic bitmap being traced. If you want to trace a black-and-white scanned bitmap, such as a logo or symbol, select one of the

other trace modes such as monochrome or 256 colors. These are optimized for producing simpler but generally more precise tracings.

Click "**INSERT**" to copy the tracing into the document.

Click "**TRACE**" to start the trace operation.

Press "**ESC**" to abort a trace operation.

Trace mode

This lets you specify the maximum number of colors in the final object:

- Monochrome-2 colors.
- Grayscale-256 shades of gray.
- 256 color-256 colors.
- Photographic-16 million (24 bit) colors.

Selecting more colors than exist in the original bitmap is usually not beneficial. The only time increasing the colors is useful is when tracing a heavily dithered 256-color bitmap and you want near-photographic quality.

Each of these modes can have different settings for passes, color tolerance and so on.

To restore the settings to their saved defaults click "**RESET SETTINGS**".

To make the current settings the default, click "**SAVE SETTINGS**".

To restore the settings to the factory defaults, click "**DEFAULTS**".

Passes

(Range 1-5)

The greater the number of passes, the longer the trace operation takes and the greater the resultant file size, but the final result is closer to the original.

With each pass, the tracer attempts to more closely match any shading in the original bitmap. Obviously, this increases the memory required for the final object. You may require an object with minimum shading and just broad areas of color. Use one pass for this.

Alternatively you may require color shading to closely match the bitmap. Use multiple passes for this.

Remove noise

If you scan a photograph you often scan small specks of dust sticking to the photo's surface. These produce "noise", or small, unwanted areas of a different color.

Also many bitmaps try to improve the look by "dithering" pixels and this introduces unwanted noise (especially common for 256 or fewer color bitmaps).

When tracing 256-color bitmaps that are heavily dithered, you should set remove noise to high (if you zoom into the bitmap in the document, you can see if it is dithered).

This control removes noise and dithering by ignoring very small areas of color.

Minimum area

Areas smaller than the size set in this control are ignored (size is in pixels). Examples are scanned photographs with a lot of fine detail such as blades of grass.

Initial and final color tolerance

Color tolerance is how great a color change is required before the tracer considers two areas to be of a different color.

Initial color tolerance is used for the first of multiple passes. It is similar to the broad brush strokes used to create the underlying colors on a conventional painting.

Final color tolerance is used for the last pass. It is similar to merging the edges of color transitions to simulate shading.

On multiple passes, the tracer gradually reduces color tolerance from the initial value to the final value. Thus, initial color tolerance should always be set higher than final color tolerance. On a single pass, only the final value has any effect.

Accuracy

This controls how accurately the tracer follows the outlines of the original bitmap. The more accurately it traces the outlines, the more control handles are required on each shape and hence the more memory is required for the final object.

This option has no effect on corners, only on smooth curves.

Smoothing

This controls how accurately corners (sharp changes of direction) are traced. Increasing the smoothing takes longer to trace the image but can reduce the final file size.

Opacity Masks

The Transparency tool allows you to apply either flat or graduated transparency to any object or group. But sometimes you need more advanced control over the transparency (or opacity) of an object. The **OPACITY MASK** system takes any object, or group of objects, and uses the color (usually black to white shading) of these objects to define which parts of any other object are transparent or opaque.

The process is quite simple. First draw the shapes you want to define the opacity. It can be anything from a simple shape, or blend, to a complex grouped drawing. Any black color will become 100% transparent, while white will be 100% opaque and shades in-between will create varying degrees of transparency. Select this object and copy it to the clipboard - this will become the opacity mask.

Now select the object, photo, or group to which you want to apply this mask and select "EDIT" > "PASTE OPACITY MASK". There are two options, the first will position the opacity paste into the center of the selected object. The second option 'Paste opacity mask in place' will paste it into the selected object based on the original position of the opacity mask.

This creates a new type of group called an 'Opacity mask group'.

Use the Page & Layer Gallery (on page 142) to select the opacity mask. Once the opacity mask is selected you can manipulate this object 'inside' the opacity group.

Tip: You can use a little known trick to move the selected object without having to click and drag on it. Hold the Alt and Ctrl key down and now start dragging anywhere on the page - it will drag the selected object. Once you've started dragging you can let go of the keys and it will carry on dragging.

Say I want to produce a soft variable transparent mask around this girl.

First I draw a shape around the girl, blend it to larger one.
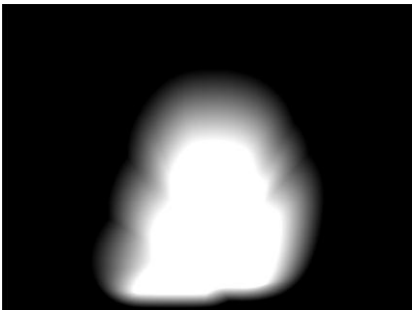
This is the final mask image. There is an inside white shape drawn with the Freehand tool, blended to a black version that is larger. The blend is set to have 50 steps to produce a smoother white to black blend.

A black rectangle is then drawn behind this and then grouped. This is copied to the clipboard.

The photo is selected and the menu "EDIT" > "PASTE OPACITY" mask was done.

The result is the black regions are now completely transparent, the white areas opaque.

Opacity masks can be used on any shape, photo or drawing. As with nearly everything in Xara Designer, this is resolution independent, vector based. You can un-group the

Opacity mask group, or use the Layer & Page Gallery to access the items in the Opacity Group.

You can edit either the opacity mask objects or the masked objects in a separate sub-document view, to make editing them easier. Just right click on the group and choose **Open Opacity mask** or **Open Opacity mask group** respectively. See the Opacity Masks section of the Transparency chapter (on page 213) for more information.

The Photo Tools

Using the Photo Tools

To access the **PHOTO TOOLS**, move your mouse pointer over the Camera icon in the main toolbar on the left of the window. A flyout bar appears with icons for each of the available photo tools.

If you're in the Selector Tool a double click on a photo will switch into the **PHOTO TOOL**.

Common photo functions

The following buttons are available on the infoBar when you are in the **ENHANCE**, **CLIP**, **RED EYE** or **CONTENT-AWARE SCALING** photo tools.

Rotate by 90° controls

The two rotate icons will rotate the selected photo or photos by 90 degrees anti-clockwise or clockwise.

Previous & Next

When you 'open' a photo using Xara Designer Pro 7 the photo is loaded into a new Photo Document, because Designer Pro assumes you want to edit or view the photo itself rather than use it as part of a drawing or other document. When you've opened a photo you can use the 'Previous' and 'Next' buttons on the **PHOTO TOOL** infobar to close the current photo document and open the next (or previous) photo in the same folder as the current photo. This allows you to browse through the photos in a folder, without having to open and close each one individually. If you've made any unsaved changes to the photo you'll be asked if you want to save the changes when you press previous or next.

See Photo Handling for more information on Photo Documents.

Zoom 1:1

Select a photo and click the Zoom 1:1 button.

The **ZOOM TO 1:1** adjusts the zoom so that the selected image is shown at full size, which is where each pixel of the image is mapped to each screen pixel. Use this option if you want to work on a photo at full size in a document where you have scaled the photo down.

Scale photo to 100%

The **SCALE PHOTO TO 100%** operation takes the currently selected photo and scales it to its full size. It also puts the photo onto the pixel grid.

So for example if the selected photo is scaled down to 500 pixels wide, but the original imported photo was 1000 pixels wide, the photo on the page will be scaled up to 1000 pixels wide. When the document zoom is 100%, that means that each pixel of the image is mapped to each screen pixel.

Enhance Tool

Click the Camera icon to enter the **ENHANCE TOOL**.

The Photo Tool provides a direct and very fast way of cropping, adjusting the brightness levels and sharpening photos, even for ultra high-resolution images. This tool provides:

- One-click auto-enhance your photos; this is particularly good for dull, underexposed images.
- Manually adjust the brightness, contrast, color saturation and blur or sharpness of photos.
- Crop images. This is "live crop" so you can un-crop and adjust the crop at any time.
- Display a brightness levels histogram of your photo.
- Adjust the brightness levels curve for more advanced levels control.
- Correct color casts or white balance.
- A single-click "Compare" function to quickly compare changes against the original.
- Easy copy / paste all photo enhance edits between different images.

All these operations are interactive with live update. As you adjust the values, the image is updated instantly. They are also all non-destructive, meaning that your original image is not altered and you can always adjust or remove any adjustment.

There are three major benefits of this tool:

1. It's non destructive
2. It's very, very fast, even for huge images
3. Photo Edits require no memory.

The **non-destructive** point means that all edits do not affect the original image. You can adjust or remove the edits and the original image remains unaffected. This differs from most photo editors where an alteration makes a permanent change to the pixels of the

photo. In Designer Pro you can adjust the settings as many times as you like in the sound knowledge that you are not altering the real actual original photo data.

Even the crop feature is non-destructive (which is why it's called clip). You you can restore the cropped areas and adjust or enlarge the crop region at any time, even after you've saved a file.

The first six InfoBar buttons to the left (not shown above) are common to all tools and are described above

1. Auto-Enhance
2. Brightness
3. Contrast
4. Color Saturation
5. Color Temperature
6. Blur / Sharpen
7. Compare with original

In this tool you can adjust brightness, contrast, saturation, temperature, and blur/sharpen. You can either enter values directly into the text fields or use a small pop-up slider for adjusting the values interactively.

Pop-up slider controls

The pop-up sliders can be used in one of two ways:

1. Click and release the pop-up arrow. The slider control now remains on screen and you can adjust the values as many times as you like by dragging the slider control. Alternatively, if the mouse is held over the control, the mouse-wheel can be used to make small adjustments up or down. The slider will hide when you click anywhere else in the document.
2. Or you can click & hold the mouse button down, and drag over the slider bar to adjust the value. When you release the mouse the pop-up vanishes. This is a quicker more direct way, since it requires only one click & release to alter the values.

Auto Enhance

Clicking the "ENHANCE" button will analyze the overall brightness and contrast of the picture and automatically adjust the enhance values to obtain the best image. It is particularly effective with under-exposed (dark) images. After applying automatic enhancement to a photo you can adjust the values that were chosen, using the controls to the right of the "enhance" button. Clicking the "COMPARE" button will restore the original, clicking it again restores the last enhance values.

Brightness/Contrast/Color Temperature/Saturation

 Brightness **Contrast** **Saturation** **Color Temperature**

The image is altered as you adjust these values. The saturation alters the color intensity. At the minimum setting of -100 this will make a picture black and white. The Color Temperature control makes a picture more 'warm' or 'cool'.

Blur/Sharpen

This control blurs images if it's taken below zero, and sharpens images above 0. For sharpen it's recommended that only small values be used, and typically only on images that have been reduced in size a lot. You can enter blur values larger than the -100 maximum value available on the slider. E.g. entering -400 will produce a very blurred image.

Using Enhance on parts of photos

When you have a photo selected, the enhance controls apply to the whole photo. If you want to apply them to just part of a photo, draw a mask shape first.

 Go into mask mode, draw around the area of the photo you want to modify, then return to the Photo Tool and start adjusting the enhance controls.

The changes are applied only to the unmasked areas of the image. See the Mask chapter (on page 234) for more information on this.

Easy crop

While in the Enhance tool you can drag on the handles shown around the edge of the selected photo to quickly adjust the cropping of the photo without needing to go into the Clip Tool.

Cropping or clipping images

The simplest way to clip a photo is just start dragging on or across the photo with the **ENHANCE TOOL** selected. The clipping is performed instantly after releasing the mouse. The resulting clipped photo has clip handles around it, where you can adjust the clip borders afterwards.

This is a non-destructive operation meaning that you can both adjust the clip region after you've copped the image and even un-crop to restore the whole image. A way to look at the process is that it just adjusts the picture outlines, but the whole picture remains

clipped inside the rectangular outline. This is why it's called a clip, and not crop, although it serves the same goal as a traditional **CROP TOOL**.

You can select different photos while using the photo tools by just clicking on them. This also works for photos inside groups.

Clip Tool

Alternatively you can enter **CLIP TOOL** by selecting the Clip icon on the **PHOTO TOOL** fly-out bar. This provides a range of addition crop options. You can enter exact pixel values, and select from various crop aspect ratios

 For interactive clipping and some more options regarding aspect ratio, enter the **CLIP TOOL** with the **CLIP TOOL** button.

This alters the InfoBar to look like this:

As you drag over the photo, the clip rectangle is highlighted.

- You can adjust the region by dragging on the corner or side handles
- You can push the region around by just dragging inside the clip region
- Select the **CLIP** button or just double click inside the clip region to perform the clip operation.

You can tell whether a photo has been clipped or not from the status bar which will describe it as a "clipped photo".

Clear

Press the "**CLEAR**" button, or just click outside the marked clip region to clear the current clip rectangle.

Rule of Thirds

There's a photography guideline that helps the composition of many photographs called the "rule of thirds". Put simply this involves placing key objects in your photos at thirds across your picture. For example it's often better to position the horizon one third of the way down a picture rather than being across the center. When you drag a clip region across your photos lines are displayed at thirds across and down the image to help position objects to follow these composition guidelines.

Tip: Search for "rule of thirds" on Google for more information.

Un-clip

Press the **UN-CLIP** button with any clipped photo selected, to restore the original photo. This restores the clip rectangle, which you can adjust or clear by clicking outside it.

The **UN-CLIP** button in the **CLIP TOOL** will change the outline of any clipped photo, and also arbitrarily formed shapes with a bitmap fill, to that rectangular outline of the complete photo or bitmap used as the fill. You may have to select the Clear button to clear the crop rectangle (or click outside the rectangle).

Adjusting the clip region

Because the un-clip button restores the clip rectangle (showing the area outside faded), you can easily make fine adjustments to a clipped photo. Just select the photo, press the Un-clip button and adjust the sides of the clip rectangle as required. Double click inside the photo to clip it again.

Width / Height

After drawing a clip rectangle, you can enter values directly into the width and height fields on the InfoBar to set the clip rectangle dimensions to exact values.

Lock Aspect

Select the "**LOCK ASPECT**" check-box to constrain the clip rectangle to a specific aspect ratio as you drag. The radio buttons to the right of the check-box determine the aspect ratio used. Select "**CURRENT**" to maintain the aspect ratio to that of the photo before the clip. Note that the clip rectangle automatically changes between landscape and portrait orientation as you drag a corner of the rectangle. So if you drag sideways it tends to create a clip in landscape orientation. If you drag downwards more, then it will create a clip region in portrait orientation.

The common preset crop aspect ratios are available of 4:3 (most consumer digital cameras and old-style TVs and monitors), 3:2 (that of traditional film cameras and higher end SLR digital cameras), and 16:9 (aspect ratio of widescreen TVs).

You can override the lock-aspect option by using "Ctrl" while dragging. So if you're dragging out a clip rectangle (or adjusting one) without aspect ratio lock, then holding "Ctrl" will lock the aspect to the last selected aspect ratio. Similarly if you have lock aspect option on then "Ctrl" will temporarily un-lock the aspect ratio.

Clipping in Photo Documents

In photo mode, there is a one-pixel grid applied to the photo (when at 96dpi, the default resolution) and the clip rectangle snaps to this grid. This makes it very easy to get pixel exact clipping. For highly accurate or exact pixel snapping, it's recommended to operate in photo mode and to zoom in so you can see the pixels clearly.

See Photo documents (on page 265) for more information.

Photo Tool Notes

1. You can select different photos while using the **PHOTO TOOLS** by just clicking on them. This also works for photos inside groups.
2. If you click and drag, while in the **ENHANCE TOOL**, it will start a crop on the photo that you started dragging on. Or, if you start dragging on the background, the crop will be applied to the first photo you touch during the drag.
3. The **UN-CLIP** button in the **CLIP TOOL** will change the outline of any clipped photo, and also arbitrarily formed shapes with a bitmap fill, to that rectangular outline of the complete photo or bitmap used as the fill. You may have to select the Clear button to clear the crop rectangle (or click outside the rectangle).
4. All photo operations can be fully undone. Unlike traditional photo or pixel editors, the original photo is never altered. So this means you can make as many changes as you like, as often as you like, and save and load .xar/.web files as often as you like, and there is no degradation of the image (all edit operations are non-destructive and loss-less) and give no increase in file size.
5. All the **PHOTO TOOL** options, including the levels control, operate on bitmap filled objects, as well as stand-alone photos.
6. Opening a photo with Xara Designer Pro 7 (using "**FILE**" > "**OPEN**") opens it as a Photo Document. After editing it, you can overwrite your photo file by just doing a "**FILE**" > "**SAVE**" ("Ctrl + S"). A .web or .xar file is also saved into a Masters folder alongside your modified photo, preserving your original photo and edits. See the Photo Handling chapter (on page 245) for more details.

The Red Eye Tool

Select the **RED EYE TOOL** from the **PHOTO TOOL** flyout bar.

The **RED EYE TOOL** allows you to quickly remove red eye effects from faces in your photos.

Click the **RED EYE TOOL** to enter red eye mode. Then:

- Zoom into the red eyes in your photo using the **ZOOM TOOL (ON PAGE 32)** or just using "Ctrl + Mousewheel".
- Click and drag from the centre of the red eye outwards, to drag a circular red eye patch. The red color is removed from the area within this circle.
- Repeat the above for each red eye in your photo.
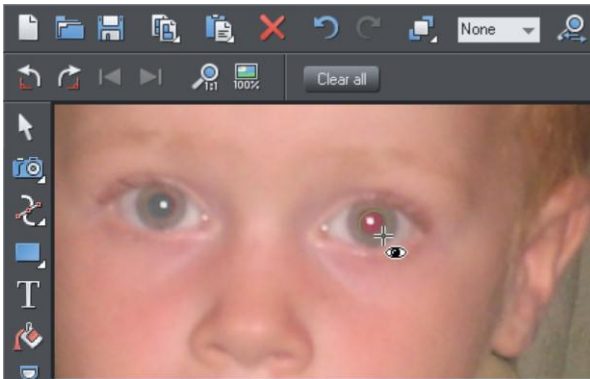
You can select any red eye patch you've applied to a photo by just clicking on it while in the **RED EYE TOOL**. Then you can hit the delete key to remove the selected red eye patch.

Or go into the **QUICKSHAPE TOOL** and you can edit the selected red eye patch just as you edit normal ellipse shapes in your documents.

Therefore if required you can make the red eye patches elliptical if that makes them fit the red eye area better. See the **QUICKSHAPE TOOL** section for information on using this tool to edit ellipses. However for most photos the default circular red eye patches are good enough for removing red eye effects.

The edge of the red eye ellipse has a 3 pixel feather applied by default, so there is no hard edge to the area from which the red is removed. You can easily adjust this feather value by selecting the red eye ellipse (as above) and adjusting the feather value with the main feather control (on the right hand side of the top bar), in the same way that you edit the feather values of ordinary shapes.

After applying the **RED EYE TOOL** the red eye patches are grouped with the photo inside a **PHOTO GROUP**. This is so that as you move the photo around in your document, or otherwise transform it, the red eye patches move with the photo. Note that this means if you want to select a red eye ellipse when you are not in the **RED EYE TOOL**, you need to hold "Ctrl" down while clicking on the ellipse (which is called a 'select inside' operation). See the Photo Handling chapter for information on Photo Groups (on page 245).

Click the **CLEAR ALL** button on the **RED EYE TOOL** infoBar to delete all red eye ellipses from the current selected photo.

Content Aware Photo Resize

Designer Pro includes the ability to stretch photos using a new technique that retains the proportions of key aspects of the photo. The human eye is particularly sensitive to changes in aspect ratio of everyday objects, and most people can tell something is wrong with images that are even slightly squashed or stretched.

Here is an example photo of the famous Torii Gate in Japan. Clearly the gate itself is the main subject of this picture.

Here the photo has been stretched using the normal stretching method of the SELECTOR TOOL. Even with this moderate stretching it's obvious the proportions of the gate have been badly distorted.

Stretching using Content Aware Scaling. The gate proportions are intact, even at this extreme stretch, which is twice as wide as the original. The stretched coast line remains looking natural.

Preparing Your Photo

The content aware scaling feature is part of the **PHOTO TOOLS**.

Select your photo and from the Photo Tool fly-out bar. Select the **CONTENT AWARE SCALING BUTTON**. The right end of the InfoBar will now show a set of buttons.
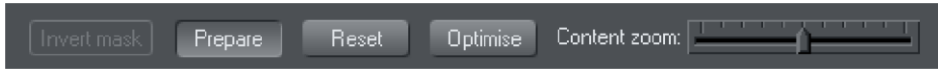
Select a photo, go into the **PHOTO TOOL**, and the InfoBar should look like this;

First click the **PREPARE** button to prepare the photo for the scaling. This starts an analysis of the photo to calculate which parts of the image can be stretched and which parts should be kept. This process can take some time depending on the resolution of the photo, and how many processors your computer has. For really high resolution images it's recommended that the image resolution be reduced if you do not require the maximum resolution. Do this before you select the Prepare buttons. To reduce the resolution of your photo select the **OPTIMIZE** button and enter a pixel width or dpi resolution into the dialog. The image size on the page will not change, only the resolution or number of pixels inside the photo changes. Once you've prepared the image, new resize arrows will appear on the sides of the photo. Just drag on these to stretch or squash the image in the desired direction.

Optimize

Photos that have been prepared to enable Content Aware resizing have a lot of additional data stored alongside them, to enable further adjustments. When you save a document this additional data is saved also, meaning that you can load such a document and continue to adjust the width or height without having to do a new Prepare operation.

When you've finished scaling the photo you are recommended to 'fix' the changes by using the Optimize feature. This will convert the stretched image back to an embedded JPEG image, at any required resolution, and so make a substantial file size saving.

If you want to Optimize the image at the same resolution as the selected photo, just make a note of the resolution (the dpi figure is shown on the status line), and in the Optimize dialog, on the Bitmap Size tab, enter the same resolution.

Reset
Clicking the 'Reset' button will restore the image back to its original state, removing any stretch, and removing any mask that might have been applied.

Using Masks With Content Aware Scaling

Using the mask feature you can provide further control by protecting areas of the picture from being distorted. Masked areas will not be distorted at all. See the Masks (on page 234) chapter to find out more about masks, but here's a brief summary of how to use masks with Content Aware Scaling.

To protect one or more areas from being distorted, select the mask at the bottom of the main toolbar on the left of the Xara Designer Pro 7 window, or the menu "**WINDOW**" > "**MASK MODE ON**".

Selecting the mask control turns on mask mode

This covers the entire drawing area in a pink colored mask layer. You can now use any of the drawing tools to cut holes out of the mask. The easiest way to protect an area of the photo is to use the **FREEHAND TOOL** and just draw around the object, making sure it's a closed shape (you end the drawing on the start point).

The pink areas of the mask are the 'protected' areas, and so this mask needs to be inverted (you are trying to protect the area you drew around, not the outside area), so click the **'INVERT MASK'** button on the InfoBar or select "**WINDOW**" > "**INVERT MASK**".

Now when you use the **PREPARE** button this area will be protected from distortion. You may need to select the photo to enable the **PREPARE** button. In the **PHOTO TOOL** you can do this just by clicking on the picture.

Note: You can't mask more than half the image. The prepare operation will give an error.

Adjusting a mask, or adding a new mask

You can't add a mask to an image that has already been stretched. Instead, if you want to add a new mask or adjust an existing one, you have these options:

1. Click the **RESET** button and draw a new mask
2. Click undo as many times as necessary to get back the mask, and then use the normal drawing tools to adjust the mask shapes.
3. Or, before you select the **PREPARE** buttons, copy the mask to the clipboard. If you want to use this later, perform a **RESET** on the image, then re-enable mask mode and past the shape back onto the mask layer.

There is another alternative to 'fix' a stretched image using the **OPTIMIZE** feature, and then apply a new mask. This is not recommended in most cases because it will produce lower quality results than resetting the image and applying a mask to the original image.

Content-aware photo zoom

An alternative to content aware scaling is the whereby the photo remains the same size and the content is intelligently zoomed inside it. Here's an example of the effect.

Use the zoom slider on the Infobar to control content-aware photo zoom.

The picture remains the same size, but the program automatically detects and scales (zooms) the 'interesting' content. Note this is not just a crop of the girl, but that every element, cloud, and grass that appears in the original is still there in the zoomed version. The program automatically detects the girl is the 'region of interest' and enlarges her only.

Alternative Content Aware Scaling

When stretching photos there are two alternative ways to scale the image. The method of just dragging the size arrows sometimes works not so well with some image types. However by holding the "Alt" key when dragging one of the side handles in the CONTENT-AWARE SCALE TOOL performs a different intelligent scale using an alternative algorithm.

Content Aware Scaling notes

- You can only compress an image to half its initial width or height
- If you save a document with a photo that has been prepared for Content Aware resizing, then it saves the resizing information in the document. The advantage of this is that you can later re-adjust the photo using the Content Aware feature. There is a significant file size overhead of saving photos like this.

The Brightness Levels Dialog

 Click the Levels Tool icon on the Photo Tool fly-out bar.

The LEVELS TOOL provides detailed control over the brightness levels of photos. It's a very powerful, multi-purpose tool that not only shows a histogram of the brightness levels of the photo, but provides a greater degree of control than the simple brightness or contrast controls. It can lighten shadows without affecting other parts of the picture. It can adjust the white balance of a picture and also the black and white points.
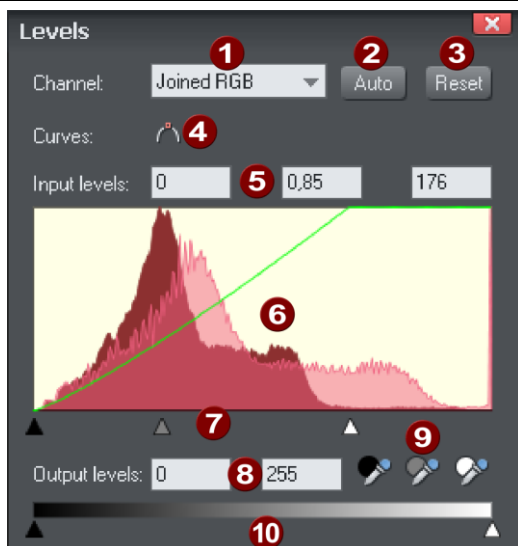
1. Channel selector
2. Auto (= Auto-Enhance in the **ENHANCE TOOL**)
3. Reset
4. Toggle curve
5. Input levels and Brightness value (Gamma)
6. Histogram
7. Visual input levels and brightness adjust (black point, brightness, white point)
8. Output levels
9. Black/gray/white point picker
10. Visual output level adjust

The red histogram graph shows the distribution of brightness levels in the selected picture, ranging from the blackest shades on the left to lightest (white) shades on the right. The height of the red graph indicates the amount (i.e. the number of pixels) of each shade used in the picture. Typically a correctly exposed photograph would show a spread of brightness levels across the range, dark to light, as in the above example. Here are some pictures and example histograms.
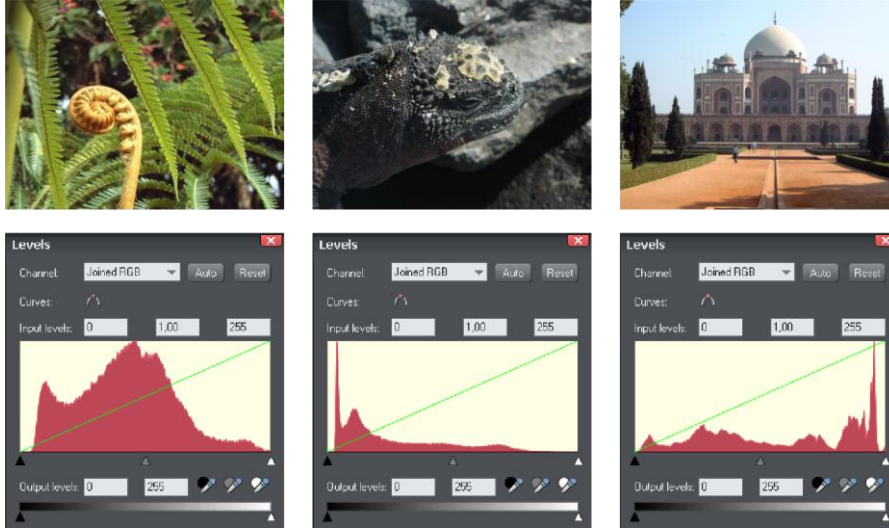
1. The first image shows a good spread, from the darkest to lightest shades, with a predominance of mid-brightness shades.
2. The second image is obviously very dark, and the histogram reflects this with peaks at the dark (left) end.
3. The third image has peaks at the bright (right) end which are typical for images that have a bright sky. There is nothing wrong with this and the overall exposure is about right and you can see a good distribution of shades across the histogram.

Adjusting brightness

Dragging on the center gray triangle adjusts the brightness (technically this is altering the gamma). It does the exact same thing as the brightness slider on the InfoBar.

The brightness slider alters the darker shades in a picture more than it does the lighter shades, so it is particularly good for revealing details in shadows.

Selecting the black, gray and white points

The three eye-dropper icons can be used to pick the black, gray or white points on the photo, and adjust the three controls for you automatically. These tools have the advantage that they also adjust the white balance or color cast that your photo might have.

• Click and drag one of the icons from the levels dialog over your photo. As you do this you see the photo change. Release the mouse when you're happy with the change.

So to set the black point automatically you'd drag the black eye-dropper over the blackest part of your photo. Similarly, you'd drag the white eye-dropper over the whitest part of your image.

Note: These are buttons which can be dragged - they do not work by selecting the button and then clicking again on the photo. Instead you must drag them over the photo. These are interactive, so as you drag the picture is changed.

Color cast - fixing the white balance

The middle of the three eye-droppers sets the gray point and this is mostly useful for altering the white balance of your photos. You drag it from the **LEVELS** Dialog, like the others, but drag it over any point in the picture that is meant to be gray. In doing this the balance of colors is altered to try and make the item under the mouse pointer a pure shade of gray, and thus alters the color balance of the whole picture.

If you have a photo taken with the wrong light setting, they will come out orange or blue. This control can help fix this, although in bad cases it will never be perfect.

Tip: If there are no gray objects in the picture, find anything that is meant to be white and look for an area that's in shade or less than bright white.

Tip: If you have multiple pictures taken with the same color cast, you can copy the correction from one to another using the Copy / Paste Attributes feature.

Here is an example, a snow scene, that is badly under-exposed, and with a strong blue cast. Its histogram on the right shows the white levels are poor.
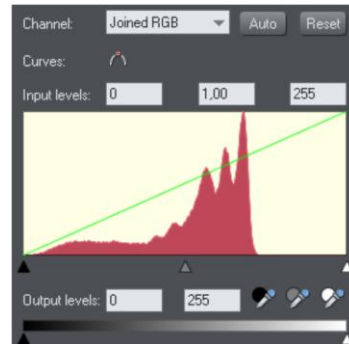
By dragging the white eye-dropper from the Levels dialog over the whitest part of the image, it not only restores a better overall histogram, but also corrects the blue cast so that the white snow really is white.
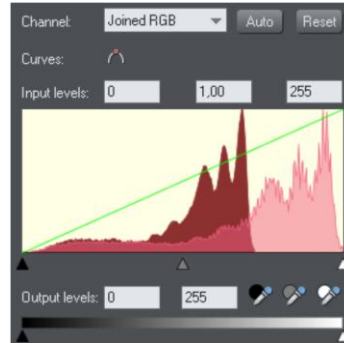
The corrected histogram now shows a much better balance (it's largely at the white end, but that's to be expected in a snow scene).

Auto Levels

The **AUTO** button will automatically adjust the white and black points to correspond to the lightest and darkest shades in the selected picture. This works better for some images than others (the above snow scene works perfectly, so in fact this can be corrected with a single click).

Reset

The "**RESET**" button will reset all levels parameters back to their starting values. The "**COMPARE**" button on the Photo Tool's InfoBar also does the same thing, but has the advantage that pressing it again restores the altered settings.

Advanced Levels - The Green Line

For the more advanced user, the levels control is really mapping the range of input brightness levels to an alternative set of output levels. Overlaid on the red histogram is a green line that represents the mapping function.
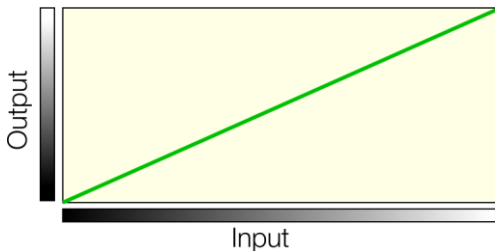
The default straight line means no change, so dark shades are mapped to dark, and light to the same light shades. But as you alter the controls the green line is altered to reflect the new mapping. So, for example, increasing the brightness or gamma control will change the line like this;
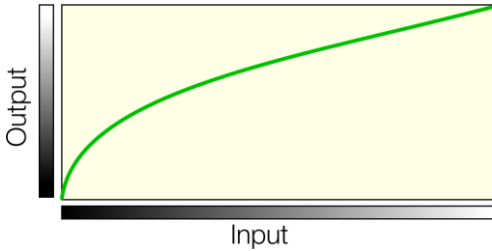
You can see now that it's no longer a straight line mapping, and that the darker input shades will be mapped to corresponding lighter output shades.
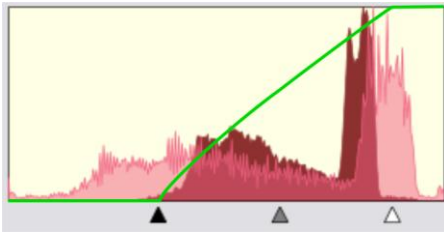
Using one of the low contrast examples above, this is the altered histogram, showing the before, after and altered green mapping function line.

You can see the black and white points are moved inwards. This is reflected in the green line which shows that mid-shades are now mapped to dark, and the lightest white points (about 80% along the horizontal) are now mapped to white. Thus the narrow range of input shades is mapped to the full dark-to-light range of output shades.

Joined RGB - or separate Red, Green and Blue

When altering the overall brightness or contrast, this operation is performed equally across the RGB component colors that make up the full color image. In other words the color balance is not altered (all colors are affected equally), it just alters the overall brightness levels. The dropdown menu at the top of the dialog shows "Joined RGB" to reflect this. However, you can adjust the levels of each red, green or blue component (channel) separately, by selecting from the dropdown list. And each of these color components has its own set of controls that work independently of the "Joined RGB" controls. By adjusting the curves of one color component only, say blue, you will affect the overall color balance. So this is a way in which you can manually add or remove more red, green or blue to any picture.

Note that when you use the "Auto" button or drag the black, gray, or white eye-dropper pickers, these functions alter the separate RGB components, rather than the "joined RGB" controls. This is how they correct the color balance. The side-effect of this mean the joined RGB controls appear not to have changed.

Output Levels

The two lower controls adjust the minimum (black) and maximum (white) final output levels. Adjusting these reduces the contrast.

Tip: It is usually recommended that for printing purposes the photos do not contain pure white, but instead have a maximum "whiteness" of around 90%, especially when printed in black and white. The histogram makes it easy to see if there is a lot of pure white (peaks at the far right end), and by adjusting the white output level slider you can easily control this.

Dragging the "White output level" slider inwards slightly alters the green line, so that the maximum white value is brought down slightly.

Brightness Curves

In the Levels dialog you can create a manual brightness curve which provides very detailed control over brightness levels for any photos. To create a manual curve just click or drag on the histogram area, and you will see a control point added and a curve. Right click on a control point to delete it.

Use the **TOGGLE CURVE BUTTON** to temporarily disable the curve.

The Curves control is used in combination with the other Levels controls, such as the central gamma control, and the black and white input and output levels. This means you can have both a manually entered curve, and still make general adjustments such as adjusting the gamma, or even the contrast on the main Photo Tool Infobar.
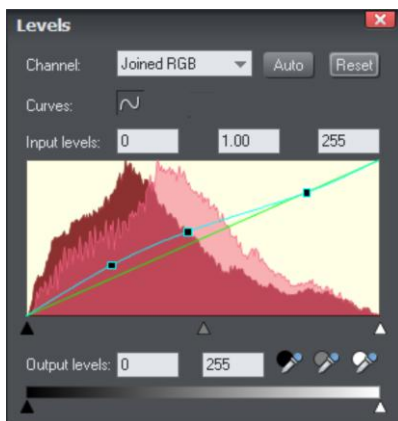
This example shows a manually entered curve with three control points. The mid to dark shades have all been lightened, but the brighter shades of the photo (right side) have not changed.

The histogram graph shows both the original histogram (dark red) of the unmodified photo and the modified histogram (pale red overlaid) that is the result of the adjusted curve.

Applying the same Levels correction to multiple images

It's common that photographs taken together under the same conditions suffer from the same exposure or color cast problems. It's easy in Xara Designer Pro 7 to copy any levels adjustment from one image to any other. Just copy the source image to the clipboard in the usual way ("Ctrl + C"), and then select "**EDIT**" > "**PASTE ATTRIBUTES**" ("Ctrl + Shift + A").

Levels Tool notes

1. The **LEVELS** dialog works in conjunction with the **BRIGHTNESS** and **CONTRAST SLIDERS**. You can use both sets of controls together or separately. All will alter the overall brightness levels, and all changes are reflected in the histogram and green mapping line.
2. The **LEVELS** dialog is non-modal, which means that while it's on screen you can continue to use Xara Designer Pro 7 as usual. It will update to show the histogram levels of any photo selected, and will show blank if none, or multiple, photos are selected.

Compare & Restoring the original

The **COMPARE** button can be used to reset all the **ENHANCE** and **LEVELS** Tool values back to their defaults, returning your photo to its original state. Press the compare button a second time, your previous values are reinstated. Therefore you can use the compare button to quickly toggle between your edited photo and the original photo so you can see the effects of the changes you've made.

Because all the enhance and levels alterations are non-destructive, pressing compare simply removes the enhance attributes, so restoring the original image. The compare button can be used at any time after an image has been altered.

Panorama Stitching

Xara Designer Pro 7 includes a tool that can automatically stitch together up to 6 photographs into a single wide, high-resolution panorama.

Creating high-quality panoramas can be a very complex and technical process, often requiring special equipment or lenses and accurately exposed and aligned photographs. The panoramic stitching feature built into Xara Designer Pro 7 requires none of these, and can use an every-day digital camera so that anyone can create outstanding quality panoramic images in a few minutes.

This tool features:

- No high end camera required, and no tripod required
- Automatic estimation of the focal length to warp the images to reduce fisheye effects
- Automatic barrel, pin cushion and vignette adjustments
- Automatic exposure correction
- Automatic detection of shared overlap points and seamless blending of joins
- Automatic cropping of the final result.

To create a panorama you need to take a series of separate photos from a central position. Ideally each photo would overlap the next by approximately 30%, although it will work with more or less overlap.

The process of creating a panorama is very straightforward:

1. Import each of the photos and arrange them on the page in the correct left to right order. There is no need to try and position the overlaps correctly
2. Select all the photos you want to stitch together
3. Click the **PANORAMA** button on the **PHOTO TOOL** fly-out bar.

It will start the process of stitching and continue as a background process. A popup status window shows the progress through the various stages, although you can continue using Xara Designer Pro 7 like normal while this happens. When the process is complete the resulting panorama image is imported onto the page. Note that it does not replace the original images, which you can delete if you no longer require them.

Three example photos of a landscape. Each overlaps the other (in this case a bit more than necessary).

The resulting single panorama image, with seamless integration.

Optimizing images

Xara Designer Pro 7 will always stitch photos at the full resolution, even if you reduce the size of the image on the page. This is often a desirable thing since it produces the maximum quality, highest resolution results. But it does mean that the stitching process can take a few minutes. So sometimes you may prefer to reduce the resolution of the images before you stitch them together, especially if you only require a medium resolution final result, perhaps for the web.

To reduce the resolution of any image, reduce its size on the page to the required size and then use the "UTILITIES" > "OPTIMIZE" option. Select the "BITMAP SIZE" tab and the required resolution from the dropdown menu. 96dpi represents the same resolution as the screen, but sometimes it's beneficial to have a higher a resolution (such as 150dpi). This will replace the photo with a lower-resolution JPEG.

Note that the panorama stitcher works better with higher resolution images (it's easier for it to find matching points on the photos).

When you get the stitched image back, this is stored as a PNG image in Xara Designer Pro 7. This is the highest quality, but takes a lot of memory and file space, especially if

it's a high-resolution panorama. (The **BITMAP GALLERY** will show you how much).
Therefore you can usually benefit from reducing the resolution of the final image and
converting it to a JPEG instead. Again use the "**UTILITIES**" > "**OPTIMIZE**" option for this.

Notes:
- The panorama stitcher expects the images to be the same resolution and size.
- Try to avoid taking pictures with moving objects in. These can confuse the system
  since the same object might appear in different places, or not at all.
- Try to keep the horizon at the same approximate position on each photo

Hint: By taking photos in a portrait orientation, you can get maximum vertical coverage.

Perspective Correction Tool

This tool is available on the Photo Tool fly-out. It's designed to be a simple
one-click way to automatically correct common perspective effects.

The image on the left, taken inside a very large Basilica building in Rome, shows the
common perspective effects of photos taken with a camera close to the ground. To get
a 'straight on' photo would require it to be taken from a height of probably 30 feet. The
perspective correction tool can create a similar effect automatically (right example).

Simply select the photo, and then the Perspective Correction tool. The process can take
some time, depending on the resolution of the image.

Tip: The resulting corrected photo is in a raw BMP format which can take a lot of
memory and so you are recommended to optimize your photo to be a JPEG format to
reduce the memory and file size. Select the menu "**UTILITIES**" > "**OPTIMIZE PHOTO...**"

Advanced users: This utility provides no user interface or controls. However there is a
stand-alone program that does provide more control over the perspective correction
parameters. This is program available from inside the installed files folder of Designer
(e.g. C:\Program Files\Xara\Xara_Designer_Pro_7\ShiftN)

EXIF Tool

EXIF   With the EXIF button in the Photo Tool fly-out bar you open the EXIF dialog. This dialog shows the embedded EXIF values of an JPEG photo.

EXIF - iStock_8026115Large ... ▼ ✕	
Camera model	Canon EOS DIGITAL R...
Aperture	f/2.8
Exposure	1/640 sec
ISO	100
Focal length	51.0mm
Date/ Time	14 Dec 2008 03:01PM

This dialog is mostly transparent (so it doesn't get in the way too much). By clicking the small down arrow on its title bar you can configure which actual EXIF values are shown and how transparent the dialog is.

EXIF data is now preserved on export of JPEG photos and across an Optimize Photo operation.

Photo Clone Tool

This is a tool (on the Photo Tool fly-out) that rapidly and effectively erases objects from images. The **CLONE TOOL** allows you to either copy or 'clone' parts of a photo and replace the unwanted objects with the cloned area, effectively erasing the objects.

You can either automatically clone parts of the same photo (by allowing Designer Pro to choose the most suitable area of the photo to clone) or manually (by choosing the area from the same or another photo yourself).

1. In the **CLONE TOOL** draw a freehand line around the area you want to erase, which is shown as a 'marching ants' dotted outline surrounded by 8 resize handles.
2. To automatically clone an area of the same photo to replace this selected area (or 'clone area'), click the Magic erase button in the **CLONE TOOL** Infobar.
3. Designer Pro replaces the clone area with another part of the photo. Drag on the resize handles to increase or decrease the area you want to replace. If you move the mouse pointer over the clone area, the **CLONE TOOL** displays an 'M', indicating that you have used Magic erase (which disables the ability to drag on the clone area to choose another portion of photo – see step 5).
4. If you don't like this replacement, just click the Magic erase button again to see another replacement. You click the Undo button in the standard toolbar (or press "Ctrl + Z") to go back to the replacement you prefer.
5. To manually clone an area of the same or another photo, in step 2 drag anywhere on the photo outside the clone area to pick the new source for the clone area, which updates to display the portion of the photo you have just dragged on. You can also now drag within the clone area to pick a new part of the photo.
6. To accept the changes, click anywhere outside the photo in the Clone Tool or select another tool.

Clone Tool Infobar

1 **OUTLINES ON OR OFF**
With outlines on all clone shapes on the selected photo are shown with a dotted outline. The current or selected clone shape is shown with an animated 'marching ants' outline, resize handles and an arrow pointing from the source point.

2 **SIZE SLIDER**
This allows the clone shape to be enlarged or reduced. This is particularly useful if you use a larger feather value (which blends the edge of the clone shape inwards) in that you can compensate by enlarging the clone shape.

3 **FREEHAND SMOOTHING**
After you've drawn your freehand clone shape, you can adjust the smoothness of the line. This is exactly equivalent to the Freehand tool smoothness control. This is only active immediately after you've drawn the clone shape. If you edit the clone outline using the other tools such as the Shape Editor, this control become disabled.

4 **MAGIC ERASE**
Click this button to allow Designer Pro to automatically select areas of the same photo to copy and clone into the clone shape. Continue to click to view all other possible automatic replacements.

5 **FEATHER CONTROL**
This pop-up slider adjust the blending of the edges of the selected clone shape. It replicates the main feather tool.

Clone Tool Operation Summary

To erase a part of a photo, select the **CLONE TOOL** and draw around the area you want to erase. Then either:

- Click the Magic erase button in the **CLONE TOOL** Infobar to allow Designer Pro to automatically select areas of the same photo to clone into the clone shape.
- Drag outside this area on the same or another photo to set the source point for the copy.

> You can switch on or off visible outlines for the clone shapes with this icon on the **CLONE TOOL** Infobar.

- You can adjust the feather of the clone shape using the Infobar's feather control slider and the size of the clone shape by dragging on one of the resize handles.
- A click on a clone shape will select it. The selected clone shape is shown with an animated dotted outline (assuming outlines are on using the above control), 8 resize handles and an arrow indicating the source point of the cloned area (if you chose it manually rather than clicking Magic erase). .

- You can push the contents of the selected clone by dragging on the clone shape (if you selected the copied/cloned area manually). This is an alternative method of adjusting the fill position or fill source point for manual cloning.
- When setting the source point of a clone shape manually, if you drag over another the photo you can copy regions of one photo onto another.
- Dragging on the 8 resize handles around the shape will enlarge or reduce the clone shape size
- Dragging the feather slider control on the Infobar, or the main feather control on the top bar, will adjust the edge blend.
- You can delete a clone shape by selecting it and pressing the Delete key
- The clone copy will always be of the original base photo, and will ignore any clone or enhance edits you may have performed on this photo.
- Clicking on the background photo will de-select all clone shapes so allowing you to draw a new clone shape if required.
- Clone shapes are normal vector editable shapes, and once selected you can switch into any of the normal line or shape editing tool to make further adjustments of the outline.
- A photo with clone edits, is stored as a new 'Photo Group' structure. This acts like a normal photo for many purposes (you can resize it, rotate it, enhance it etc, and it will act as a single photo object). But using 'select inside' (Ctrl+click) or using the Page & Layer Gallery to view the group structure, you can select and edit the individual clone objects within the Photo Group.

3D Extrude Tool

Extruding a shape

To turn a 2D shape into a 3D extruded object, go into the **EXTRUDE TOOL** on the main toolbar and simply click and drag on your object to rotate it in 3D space.

Initially, your extrusion is given a default depth. The face color of the 3D shape is determined by the fill color of the original shape and the color of the extrude (or side) by its line color. After creating an extrude in this way, move your mouse pointer around over the 3D object. You'll see that the mouse pointer changes as follows to indicate what will happen if you click and drag at any point:

This is shown when the mouse pointer is over the front or back face of the object. Clicking and dragging rotates the object in 3D space.

This is shown when the mouse pointer is over the extrusion (the side) of the object. Clicking and dragging changes the depth of the extrusion.

This is shown when the mouse pointer is over the extrusion and "Ctrl" is held. Clicking and dragging changes the bevel size (see below)

You can also rotate an extrusion by holding down the Alt key while dragging on the extruded side. This is useful when only the side of an extrude is visible and so you aren't able to drag on the face in order to rotate it. As when dragging on the front face, Ctrl and Shift can also be used to constrain the rotation.

Extrude Tool InfoBar

1 Extrude on/off
2 Slider type list
3 Slider and numeric value for selected parameter
4 Bevel type
5 Bevel size slider and value
6 Lights on/off
7 Gloss/matt
8 Rounded/mitred corner

You can adjust a 3D extruded object by manipulating it directly on the page as described above, or by selecting it and using the controls on the InfoBar of the Extrude Tool.

Turning extrudes on and off

3D **EXTRUDE ON/OFF**

Once a shape or other object has been extruded, there are only limited modifications that can be made to the original object with the extrusion in place. For example, if you've extruded a shape, it's not possible to then edit that shape in the **SHAPE EDITOR TOOL** because it's no longer a simple 2D shape that you can interact with. However, using this control you can temporarily turn the extrusion off, so that you can see and modify the underlying object using other tools, before turning the extrude on again. After making a modification and turning the extrusion on again the extrusion is re-applied to your modified 2D object, with all the same 3D attributes that it had when you turned off the extrude.

Note that in some cases if you dramatically change the form of the object while the extrusion is turned off (such as changing it to a completely different type of object), the 3D extrude attributes you applied may not be preserved. In such cases you should be able to use **PASTE ATTRIBUTES** to copy the attributes from a copy of your original extrude before the modification. See Copying styles: Paste attributes (on page 116).

Extrusion depth

The easiest way to adjust the depth of an extrusion is to simply click and drag on it, as described above. However, you can also use the slider on the left of the **EXTRUDE TOOL** InfoBar to adjust it. Make sure that **EXTRUDE DEPTH** is selected in the dropdown list to the left of the slider (this is the default setting) and then use the slider to adjust the extrude depth. The current extrude depth is shown in a numeric field to the right of the slider, and you can also enter extrude depth values directly into that field to set an exact extrude depth.

Bevel Type & Size

The bevel type determines the profile of the extruded side of your 3D shape and of its edges and corners. By default it's set to rounded which gives a flat side with rounded corners. The bevel type dropdown list contains a large selection of different bevel types you can choose from. You can adjust the size of the bevel using the slider to the right of the bevel type list. To the right of the bevel size slider is a numeric field showing the current bevel size and you can enter exact bevel sizes into this field.

An alternative shortcut to adjust the bevel size is to drag on the side of the 3D object holding "Ctrl" (while in the **EXTRUDE TOOL**).

Lights

LIGHTS ON/OFF

You can adjust the lighting of your shape in 3D space by turning on the lights. There are 3 lights, each of which can be given their own color and position in 3D space around the 3D shape.
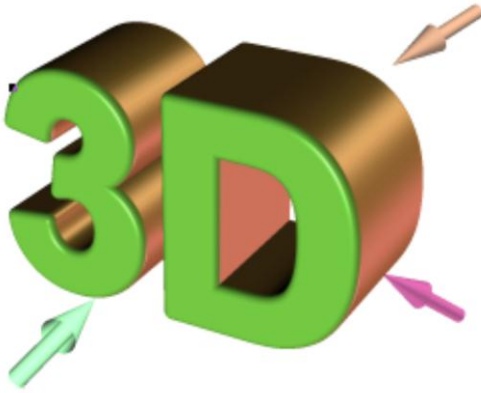
In this example the face color of the shape is set to white. But you can see that it appears green because there is a green light shining almost directly onto the front face of the shape.

By adjusting the colors of the face and extrude and the positions and colors of the three lights, you can enhance the realism of the 3D objects in your design.

Behind the object is a beige / orange colored light and another that is a purple color. Both lights cause reflections down the side, and changing the color, or direction of the lights behind will change the reflected highlights.

To move a light around the 3D object, simply drag on the light arrow. If you happen to drop a light so that it is behind the 3D object and therefore isn't selectable, you can retrieve it by using the left slider on the Extrude InfoBar. Select one of the light angles from the dropdown list to the left of the slider (e.g. "Light 2 Angle 1") and then adjust the slider. The light moves around the 3D object in your design. The various "light angle" options in this dropdown list allow you to move any of the lights in any direction in 3D space to achieve the positions you want. However for most purposes you can achieve good results most easily by dragging the light arrows directly on the page.

To change the colors of the lights, you can simply drag colors from the color bar and drop them directly onto the light arrows. To edit a light color with the color editor, double click on the light arrow you want to change and the color editor opens with that light color selected. You can now edit the light's color. With the color editor open, as you click on the different light arrows, extrude face and extrude sides, the color selected in the color editor dropdown list changes to match your selection, so you can quickly select the different colors on your extrude to modify them.

Gloss / Matt

Use this toggle button to make the surface of a 3D object more or less reflective. With the gloss option on lights placed at the correct position behind the object will "bounce off" the sides to good effect.

Mitred corner / Rounded corner

You can choose either **MITRED** or **ROUNDED** corners for your 3D object. "Mitre" gives square edges, while "Round" produces rounded edges.

Extruding Text

Extrude text the same way that you extrude any shape; just click and drag on the text while using the **EXTRUDE TOOL**. As you would expect, doing this on more than a few words can be rather slow and is not recommended.

Because text is usually black, unless you change the color the extruded result will also be entirely black, so making it difficult to see. So it's recommended that you change the color of the text before you extrude it (although you can change this after by just clicking on a color).

As with other extruded objects, if you want to edit the text, just turn off the extrude using the button on the left of the Extrude InfoBar, edit the text, and then switch the extrude back on again with the same button.

Copying 3D extrude attributes

You can copy and paste the style of the 3D extrusion, from one 3D object to any other. This works the same way as for all Designer Pro attributes. Simply copy the source extruded object to the clipboard, and then select a new one and select "**EDIT**" > "**PASTE ATTRIBUTES**". Note this will only paste the 3D attributes onto another 3D extruded objects. So you will have to extrude any shape first before pasting the 3D attributes.

This will copy all the 3D attributes such as the extrude depth, light colors, bevel type as well as the face and outline colors.

Web Graphics and Web Sites

What Makes Designer Pro Different

Traditional web authoring tools are really just HTML editors - they are often aimed at programmers, and provide features such as HTML and script editing. They provide few, if any, graphical capabilities. This is despite the fact that the vast majority of websites are primarily graphical designs, where the text element plays only a minor part.

Xara Designer Pro 7 is different. It is primarily a graphics tool and takes a new approach to web design. It allows you, the web author, freedom to place anything anywhere on the page - text, photos, graphics. You create your page in a WYSIWYG page layout way (What You See (in Designer Pro) Is What You Get (on the final web page)). It provides all the graphics features you are ever likely to require. No other software required.

It makes it easy to create interactive effects, such as pop-up photos, graphics, or mouseover effects that are common on the web You can even create and include animated Flash. You can repel text around objects, or have non-straight edges to your text - things that are traditionally very difficult, even for advanced webmasters / HTML coders.

And it does all this without a single line of HTML or script. Designer Pro is not an HTML authoring tool - it provides no HTML code view, and no abilities to program Javascript. But it does provide the easiest, fastest way to create great looking websites, with none of the complexities or restrictions associated with HTML authoring. And it includes a wide range of pre-designed web templates (whole pages and collections of individual items such as buttons, text panels, etc). Designer Pro also offers the professional designer a true object oriented, vector based composing environment. It produces cross-browser XHTML compatible, CSS layer based designs (Designer Pro layers map directly to CSS layers).

Website Toolbar

The **WEBSITE TOOLBAR** provides convenient access to the main web functions.

1 Preview
2 Link
3 Website Options
4 Export

Move your mouse pointer over a button in the flyout bar to see a tooltip describing the button.

Creating a website

There are two ways to create a new website. Either by starting with a pre-designed template and then customizing this with your own text, photos and color scheme. Or by creating a website from scratch, placing all the required elements, text, graphics, photos and placeholders on the page as you require.

Placeholders are graphic objects on the page which are substituted in the final website for elements such as Flash animations, YouTube videos, Interactive Maps, HTML snippets and 'widgets' of all kinds. See later sections in the corresponding chapter of the pdf manual for more information on placeholders.

Using Templates, Clipart & Widgets

Open the Designs Gallery by clicking the Designs Gallery tab in the Galleries bar or select "**FILE" > "NEW FROM DESIGNS GALLERY"**.

The "Web Theme" folders in the gallery contain collections of website designs and associated graphic files that each follow a specific theme. There are also folders of widgets, like forms, e-commerce facilities, web gadgets, and many other features. Browse through the folders and double click to open any file as a new document.

Each theme section has a collection of alternative page layouts and some other useful page elements such as buttons or expanding text panels. Each theme generally also contains a complete website template and several 'color schemes'. You can change your entire site to a different color scheme (on page 164) by just dragging and dropping the scheme from the gallery onto your page, or by just double-clicking on it.

Some of the folders in the gallery (most notably the widget folders) are downloaded automatically from Xara's servers when you are online and you open the gallery. Therefore the selection of folders and the items available in the folders will change periodically. Check back regularly to see the latest updates.

See the 'Editing Templates' chapter for information on customizing templates.

Previewing Your Website

When creating your website in Designer Pro, your working document shows an accurate static preview, but to check the behavior of pop-ups, mouseover effects and Flash and other widgets it's necessary to use true Browser Preview.

There are two preview options, in the flyout bar on the web toolbar.

PREVIEW WEBSITE exports all the pages of your site and then brings up the preview window. So all the pages and links in your site should be working.

The navigation buttons in the top bar of the preview window allow you move back or forward, just like in a web browser, and the Home button returns you to the page you started the preview on.

PREVIEW PAGE exports and previews only the current page. So it's useful if you have a large site which takes some time to export as a whole. You can just quickly preview the page you are working on, without exporting the rest of the site.

You can preview your website or web page in full screen mode by clicking the **VIEW FULL SCREEN** button at the top right of the preview window (press "Esc" to exit or "F11" to enter and exit full screen mode). When you close the preview window and next reopen it, Designer Pro displays the last mode you chose for the window, i.e., normal, maximised or full screen.

If you've not yet exported your site, these previews export to a temporary folder on your computer. Once you've exported, the same export location is used each time you preview, so your exported site is continually updated as you preview.

Choose your preview browser

Although this internal preview uses a simplified version of the Internet Explorer browser by default, you can choose one of the five most popular browser types to view your page or website from the preview window.

To preview your website in your favorite web browser, click one of the following from the bar at the top of the preview window:

Note: These buttons are only enabled if you have installed the browsers on your PC.

Previews your page or website in Google Chrome

Previews your page or website in Mozilla Firefox

Previews your page or website in Internet Explorer

Previews your page or website in Opera

Previews your page or website in Safari

When you click on one of the above buttons, the browser opens in the page that you are currently viewing in the preview window.

If you want to preview your pages in a browser other than these types, you can right click on the exported .htm file and select **OPEN WITH**..., or you can just drag and drop the file onto an open browser window. Once you have exported then each time you click the Preview buttons, the export is updated as well, and so it's just necessary to click the Reload button in your browser (or press "F5").

Exporting a Website

To save your website, that is the HTML and associated files for publishing to the web, use "**FILE" > "EXPORT WEBSITE**" or click this button on the top bar.

This saves a .htm file for each page and a folder alongside these which contains all the graphic files that make up your website.

When you export a website, all the pages are exported together, and each page has **_1**, **_2** ... appended to the end of the name you give when you export. The **_FILES** folder contains all the graphics and other files that go to make up your website. You can name each page individually if you wish using the **PAGE** tab of the **WEB PROPERTIES** dialog, or using the Page & Layer Gallery.

The default name given to your website is index.htm as this is the usual name for the first page of a website.

You can preview your saved website in any web browser, by dragging the index.htm (or any .htm) file from your Windows File Explorer onto a browser window.

Stretchy Objects

Many of the graphic objects, such as buttons and text panels, can automatically adjust their size depending on the size or length of text. For example some of the buttons are called 'stretch buttons' which means that the length of the button adjusts to accommodate the label text on the button. Most template sets, and all of the buttons in the Button folder in the **DESIGNS GALLERY**, have both fixed width and stretchy versions. It's recommended that if building a set of navigation buttons (typically either a horizontal or vertical collection of links or buttons) that you use fixed width so they are all the same size.

Similarly many of the side or text panels in the templates, and sometimes the main text area, can also adjust their vertical, and sometimes their horizontal size. In the case of text panels you can adjust the width of the column in the TEXT TOOL by dragging on the left or right end of the column indicator.
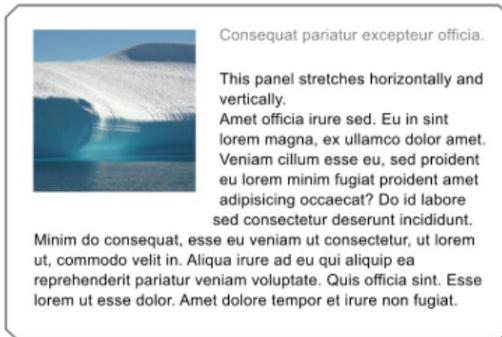
Links, Buttons & Navigation Bars

You can add a web link to any object, a button, graphic or some text.

Select the object and just click the link icon on the top bar to enter the web address that you want to link to.
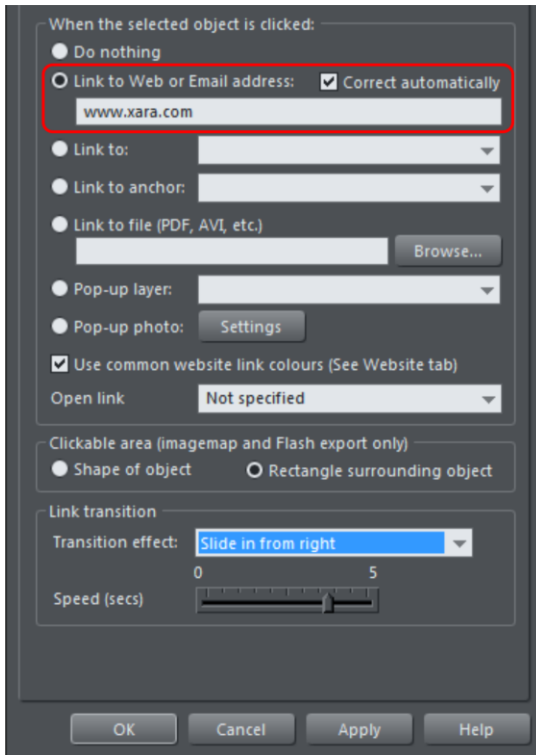
Enter the web address you want to link to in the highlighted field. You can also apply an animated transition which the website will display when it opens.

The Link tab of the Website Properties dialog allows you to control what happens when you click the linked object on the page. You can jump to any other web page (you can quickly select to link to any other page within your website by using the **LINK TO** drop down) and you can control whether this opens the page in a separate window and/or with a timed transition effect. You can also link to any pop-up layers or the previous or next presentation step (presentation websites only) if you have created these; see Linking to next/previous step (on page 363).

So to set one of your buttons to be a link, just select it (click on it in the **SELECTOR TOOL**), click the icon, and enter the web address, or just select one of your pages from the drop- down list and click **APPLY**. That's it.

Note: If you link to a page that has already had a transition effect applied to it, any transition specified on the link takes precedence and is used instead of the page's own transition. If you don't want to apply an animated transition effect when your link is clicked, choose **INSTANT** (default selection) from the Transition effect drop-down list.

Button Bars (NavBars)

Most websites, and so most of the template designs we provide, have a row or column of buttons to navigate around the website or to other places. This is called a Navigation

Bar and Xara Designer Pro 7 includes special support for these bars. To edit a navbar, double click on it, or right-click and choose EDIT NAVIGATION BAR from the context menu. The Navigation bar dialog opens. Here you can change the button labels, links and tooltips, add and delete buttons, re-order and even add menus and sub-menus.

When you double-click on the URL field in the dialog, a Link dialog opens which is the same dialog used to set links on normal objects, as described earlier in this chapter and in detail in the Web Properties Dialog chapter. Because you can't apply a transition effect to a navigation bar link, the Link transition controls are grayed out.

In the Navigation Bar Properties dialog you can also turn on the SITE NAVIGATION BAR option. This makes your bar automatically appear on new pages you add to your site and buttons/links are added to the bar automatically for each new page. However you can't edit your bar on canvas when this option is turned on – you can only edit it using this dialog.

To update a navigation bar across all pages, if it's not an automatic site navigation bar, just right click and choose REPEAT ON ALL PAGES. This will make the button bar a repeating object and copy it from the current page onto all other pages.

Read the Navigation Bars Chapter (on page 345) for full details about Navigation Bars.

Layers, Mouseover (Rollover) & Pop-ups

As mentioned earlier all objects have a stacking order on the page - from the backmost to the frontmost item.

In addition, all items can be placed into named layers. Each layer can have any number of objects, and has the ability to be turned on or off. When the layer is turned off all objects on that layer become invisible.

The layers are controlled from the PAGE & LAYER GALLERY in the Galleries bar. See the Layers & Page & Layer Gallery (on page 142) chapter for full details.

In website documents layers are used to provide mouseover (sometimes called rollover) features on your website. These include highlighting buttons (they highlight when you move the mouse over them) and also other pop-up effects such as effects such as a text panel containing a detailed product description.

You can also apply a transition to a layer, so that it appears on your web page in an animated way.

Mouseover Effects

There are two types of mouseover effect you can control. Firstly the one used by mouseover buttons, where any object with a web address can display an overlapping graphic object that appears on a layer called **MOUSEOVER**. See below for more detail.

There is a more powerful mouseover ability where you can make the contents of any layer appear as your mouseover, or click any object on your page. This pop-up layer can contain text, graphics, photos or any combination of these things. More below.

The MouseOff and MouseOver Layers

All the main objects on your website are placed on the bottom layer, usually called **MOUSEOFF**. Buttons that highlight when you move the mouse over them on the web page have an alternative graphic on the layer called **MOUSEOVER**.
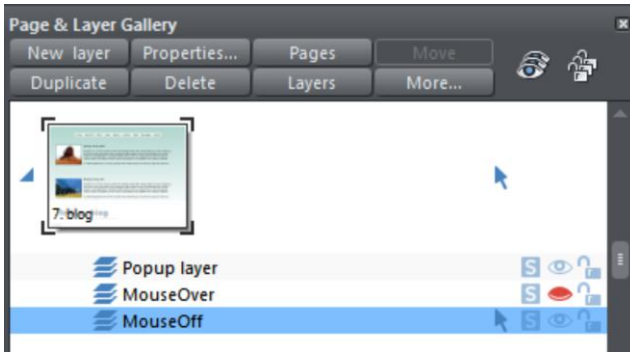
If you open the **PAGE & LAYER GALLERY** you can show or hide any layer by checking or un-checking the visibility icon (the eye symbol). This is a way of showing what your MouseOver elements will look like on your page. The current layer is always highlighted in the **PAGE & LAYER GALLERY** - the MouseOff layer in the above diagram - and this is the layer that all new objects are drawn on. To place objects on any other layers just click the required layer in the **PAGE & LAYER GALLERY**, ensure the eye and the lock icon are open for that layer.

Note: The MouseOver layer must always be above, that is on top of, the MouseOff layer, as shown in the above example.

To edit the objects on a layer both the 'eye' and 'lock' icons have to be open - this means you can see and edit the layer (as shown above in the MouseOff layer).

Mouseover (Rollover) Buttons

Almost all the ready-made buttons from the **DESIGNS GALLERY** have a mouseover effect in Designer Pro. These are created by having two versions of each button, the main one on the MouseOff layer and a 'highlight' one on the MouseOver layer.

Normally you do not need to know or care about this because both buttons behave as one - the changes you make to one, such as editing the label text, are reflected on the other version. If you move, drag or resize a button on the MouseOff layer, the other

version on the MouseOver layer will change as well, even if you can't see it. This is done using Soft Groups (on page 112).

Creating Your Own Mouseover Buttons

You can create your own mouseover buttons from scratch by drawing the necessary elements from rectangles, text, etc. Just draw the main parts of the button on the MouseOff layer (remember to group it) and place the corresponding 'highlight' version on the MouseOver layer. As long as the MouseOff version has a web address link, then the MouseOver version will automatically be displayed as you move the mouse over it on the web page. (The MouseOver layer must be on top of the MouseOff layer).

In other words, you give the main object a web address using the link option, and then select the MouseOver Layer in the **PAGE & LAYER GALLERY**, and place the required mouseover versions of your button on this layer so it overlaps the linked object.

Technical note: Any graphic object on the MouseOver layer will be displayed as long as at least 50% overlaps with the object on the MouseOff layer. The two versions of mouseover buttons are kept in sync by using the Soft Groups feature. When you select the button on one layer, it automatically selects the Soft Grouped version on the other layer, even if the layer is switched off. When you edit the text of the button on one layer, it's automatically synced with the other version of the button.

To ensure the text on both the Off and Over states changes when you edit either, Soft Group the buttons on both layers. To do this you will need to enable both layers in the **PAGE & LAYER GALLERY**, and lasso select around both buttons. The status line should tell you if you have everything selected. Select "**ARRANGE**" > "**APPLY SOFT GROUP**". Now when you edit the text on the Off layer it will also change on the over layer, even if it's hidden. (Note this only works if the Off and Over text are the same to start with, and relies on the objects being Soft Grouped).

Once you have a working button, you can easily turn it into a navigation bar. Select the button (along with its MouseOver state if it has one) and then choose "**ARRANGE**" > "**CREATE NAVIGATION BAR**". The navigation bar dialog appears allowing you to configure your bar. See the Navigation Bar chapter (on page 345) for more information on this, including how to have different first and last buttons in your bar.

Layer ordering in website documents

If your website document has mouseover effects, popup layers and perhaps even mouseover effects on those popup layers, there are some important rules you need to follow in terms of how you order the layers in your document. If you don't follow these ordering rules, you may find that some of the effects don't work on your website.

Considering the layers in turn from background to foreground (which is working upwards in the Page & Layer Gallery), first you must have all the **static** layers. These are layers which are always visible and are not used as popups. In most designs there will only be one – the "**MOUSEOFF**" layer. But some designs may have several, in which case they must be the first layers in the layer stack.

Next comes the **MOUSEOVER** layer, if there are mouseover effects on the static layer(s). This contains the mouseover states for all your mouseover buttons. This must be

followed by the "**MOUSEDOWN**" layer, if you have mousedown effects on the static layer(s).

Next you may have a popup layer. If the objects on this popup layer have mouseover effects, then the next layer following the popup layer must be the layer holding those effects. It must have a name that begins with "MouseOver", E.g. "MouseOverPopup1". And then if the popup layer also has mousedown effects, a layer whose name begins with "MouseDown" must follow containing those effects.

Then you can have another popup layer, followed again by any mouseover and mousedown layers for that popup layer. And so on - you can have as many popup layers as you like.

So to summarise the above, in general the layer ordering needs to be as indicated by the following list, which is shown in the same order as displayed by the **PAGE & LAYER GALLERY** (foreground to background). All layers are optional and the layer names can be anything you like, except for the characters shown in Bold, which identify the special mouseover and mousedown layers.

MouseDown popup n
MouseOver popup n
PopUp layer n
...
MouseDown popup 1
MouseOver popup 1
Popup layer 1
MouseDown
MouseOver
Static layer n
...
Static layer 2
MouseOff

Note that you only need to be concerned with these ordering rules if you are building complex pages with multiple popup effects! If you are just using the template designs provided in the Designs Gallery, you should not have any problems with layer ordering.

Applying transitions to popup layers

You can apply a transition to a popup layer to control how the layer appears, whether it's triggered by a mouse-over action or a click. So for example if you apply a fade transition, when the popup layer appears it will fade in instead of appearing instantly.

1. Click the layer in the **PAGE & LAYER GALLERY** and click the **PROPERTIES** button at the top of the gallery.
2. Click the **WEB TRANSITION** tab of the Layer properties dialog.
3. Choose an effect from the **TRANSITION EFFECT** drop-down list and move the slider to set a speed for the transition in seconds.
4. Click **APPLY**.

Note: There are fewer transition effects available for layers compared to links and pages.
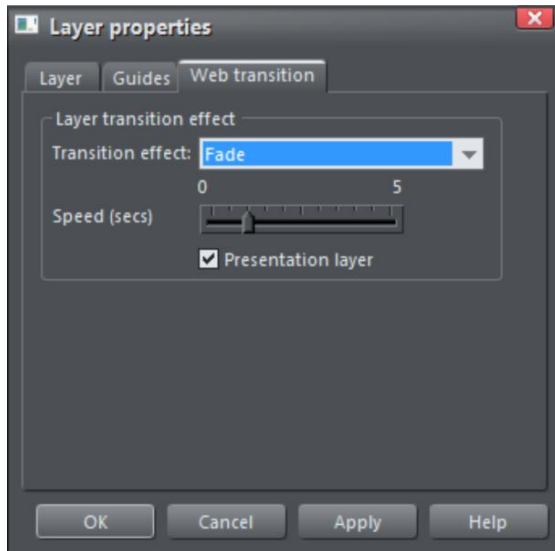
Pop-up Layers

A more powerful alternative allows you to display the contents of any layer as a result of mousing over, or clicking, any object. This can be used for a range of different pop-up effects such as pop-up photos, menus or detailed object descriptions.

To do this, place all the objects you want to pop-up on a new layer (in the Page & Layer Gallery click **NEW** - don't use the MouseOver layer), then set the Mouseover property (**WEB PROPERTIES** dialog) of the original object to trigger the display of this layer when you mouseover any other object. For example you can make a pop-up, like this, appear as you mouse over some text:

This is a pop-up that appears as you move over the highlighted word. This a great way of adding more details or an explanation of a feature, or product, without cluttering the main Window

This is some text with a pop-up on some highlighted text
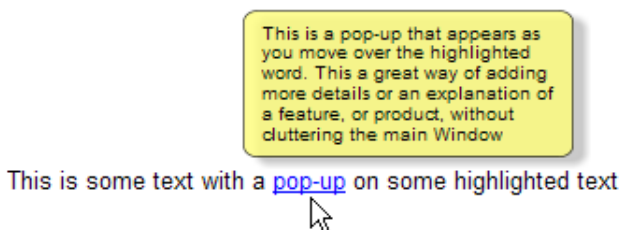
Here are the steps to create a pop-up text block like this:

1. Select a layer in the **PAGE & LAYER GALLERY** and click **NEW** to create a new layer.
2. Draw a rounded rectangle with the **RECTANGLE TOOL**, click a (pale) color patch on the **COLOR LINE** to give it a fill color. For good measure give it a soft shadow (select the **SHADOW** tool and just drag on the rectangle).
3. Create a block of text on top of your rectangle. Select the **TEXT TOOL** and drag diagonally across the rectangle. Type your text. You probably want to hide the pop-

up layer now, so click the eye icon against your new layer in the Page & Layer Gallery.

4. Back on the base (MouseOff) layer (click it in the **PAGE & LAYER GALLERY** to set this as current layer) now select the text you want to trigger the pop-up, using the usual method (in the Text tool). Then open the **WEB PROPERTIES** dialog (Ctrl+Shift+W) and on the **MOUSE-OVER** tab select the new layer from the '**SHOW POPUP LAYER**' drop down menu. Click OK.

5. Preview and test your mouseover effect.

> Note: The mouseover layer appears and disappears as you move the mouse pointer on and off the triggering object.

If you want the pop-up to only appear when you click, then select the same option on the **LINK** tab of the same **WEB PROPERTIES** dialog instead.

> **Note:** The mouseover layer appears and disappears as you move the mouse pointer on and off the triggering object. If you use a click method to display the layer (from the Link dialog), then the layer is revealed by a click on the object, and is hidden when you click anywhere else on the page.

Thumbnail Photos With Pop-ups

You can very easily create small thumbnail photos (just resize it to be tiny), that when clicked will show an enlarged version. Simply resize your photo to be small, the usual way using the **SELECTOR TOOL**.

Select the small thumbnail photo, and select the **POP-UP PHOTO** option in the **LINK** tab of the Web Properties dialog (click the **LINK** button in the **WEB TOOLBAR**).

Click the **SETTINGS** button next to the popup photo option, to change to the **IMAGE** tab of the Web properties dialog.

There you can change how your pop-up appears. One option allows you to place a title above each pop-up photo. Set the title for each photo using the **TITLE** field. You can also optionally show a caption below each popup photo. Just set the **IMAGE CAPTION** (Alt text) for the thumbnail on the same dialog. See the popup photo section of the Web Properties Dialog chapter for full details of the options available.

In Internet Explorer the Image caption ("ALT"-Text) will be also shown in a tooltip pop-up as you mouse-over the image. To show different text, typically something like 'Click to

enlarge' as you move over the thumbnail image, go to the **MOUSE-OVER** tab and set **SHOW POP-UP TEXT** to be **CLICK TO ENLARGE**.

Page Background Layer

When you set the page background color by dropping a color onto the page as described above, this actually adds another layer to your document, which you can see if you open the **PAGE & LAYER GALLERY**. It's called the **PAGE BACKGROUND LAYER**.

This layer is normally locked, so you can't select and edit its contents. But you can unlock it in the **PAGE & LAYER GALLERY** in order to perform some limited editing of it, to customize your page background. Just click on the lock symbol next to the "Page background" layer to unlock it.

Now if you click on the page background, you'll see a rectangle becomes selected (see status bar). This rectangle covers your whole page - it's used to set the page color. You can now do some limited editing of this rectangle, such as give it a graduated fill using the **FILL TOOL**, or give it rounded corners using the **RECTANGLE TOOL**.

Note: You must also set the pasteboard color too, before you can give your page anything other than a flat color.

Web Properties Dialog

The Web properties dialog is a multi-tabbed dialog which allows you to add and configure most of the web related features in Xara Designer Pro 7 and set different web properties on objects, on pages and on your whole website. Open it by right clicking an object and choosing **WEB PROPERTIES** or by using the "**UTILITIES" > "WEB PROPERTIES**..." menu option (shortcut Ctrl + Shift + W).

Each tab of the dialog is also directly accessible using the buttons on the Web Properties flyout bar, available on the Website toolbar.

1. Link Tab
2. Website Tab
3. Page Tab
4. Image Tab
5. Mouse-over Tab
6. Placeholder Tab
7. Publish Tab
8. Create/Edit Navbar

The dialog is modeless, so you can leave it open while you select different pages and objects in your document. This makes it easy to quickly set properties on different objects and pages in your website. Use the **OK** button to apply your changes and close the dialog, or the **APPLY** button to apply your changes without closing.

Note that when you have an animation design as your current document, the **WEB PROPERTIES** dialog appears in a modified form, with some controls different and many others disabled because they don't apply to animations. Refer to the Flash chapter (on page 375) for information about using this dialog with animation designs.

The following sections cover each tab of the dialog in turn.

Link Tab

The settings on this tab apply to the selected object(s) or selected text. Typically you use this tab to add a link to an object on your web page (eg. a button or photo), or to some text, so that when a visitor to your site clicks on the object/text, they are redirected to another page. You can add links to other pages in your website, to a URL (web address) or even cause a pop-up window to appear.

You can also apply transition effects to links so that the page linked to (whether it's an external site or one of the pages in your site) appears with the page transition that you select. Link transitions can only be used when the link is opening a new page, and are disabled otherwise.

To add a link to just some of the words in a paragraph of text, go into the **TEXT TOOL** and drag over the text you want to link, to select it. Then setup the link in this tab.

The main section of this tab allows you to choose what should happen when the selected object or text is clicked.

Link to web address

Enter a web or email address to link to that address. If you leave the "**CORRECT ADDRESS AUTOMATICALLY**" checkbox selected, your address will be adjusted if required when you click **OK** or **APPLY**. For example, if you enter "www.xara.com" it will correct it to "http://www.xara.com/".

You can put an email address in the Link address field, in which case clicking the link will launch the reader's email program with the To: field filled in. You can also optionally specify the subject line to be used, add CC or BCC email addresses to be copied on the email and even specify the default body text to be used. For example this sets the To email address and all four optional parameters:

yourname@wherever.com subject:Email from website cc:another@wherever.com bcc:yetanother@wherever.com body:Auto-generated email

Technical note: Xara Designer Pro 7 encodes your email address to reduce the likelihood that SPAM robots will find your email address from the web page. This requires Javascript to be enabled in the browser (currently >95% of browsers).

Link to...

Select this option to link to another page in the current website, or if you are in a presentation document, to link to the next or previous presentation step. The drop-down list allows you to select which page or step to link to.

TIP: If you have many pages in your website document, giving each one a name makes it much easier to set up and maintain your page links, because the page list will show the page names instead of just "Page 2", "Page 3", etc.
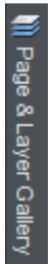
See the **PAGE TAB** (on page 321) section below for details of how to setup page names, or edit the names in the **PAGE & LAYER GALLERY**.

In addition to an entry for each page in your site, the dropdown list also contains the special entries **NEXT PAGE/PRESENTATION STEP** and **PREVIOUS PAGE/PRESENTATION STEP**.

Next/Previous page

Use these to add a link which leads to the next or previous page in your site. For the purposes of such links, the page order is determined by the order of the pages as they appear in Xara Designer Pro 7. A "next" link on the last page links to the first page and a "previous" link on the first page links to the last page.

Next/Previous presentation step

Use these to add a link which leads to the next or previous presentation step in your site, if your website is a presentation document. The presentation order is also determined by the order of the steps as they appear in Xara Designer Pro 7, similarly to next/previous page.

Link to anchor

This option allows you to jump the visitor to a specific part of any page in your website.

To setup an anchor point, first go to the page and object you want to be jumped to. Select the object and add a name to it by right clicking and choosing the **NAMES**... option. Then select the object to which you want to add the link and choose the anchor name you added from the list provided with the "Link to anchor" option.

Note that when you link to an object which is a long way down a web page, the web browser automatically scrolls the page down so that your anchor object is visible.

NOTE: You cannot apply a transition to a link to an anchor.

Link to File

This link option is useful if you want to add a document, movie or any other file to your website to make it available to your visitors. For example you may have a PDF document that you want to make available.

Select the object or text that you want to link. Then turn on this Link to file option and use the **BROWSE** button to browse for the file on your computer. The name of the file appears in the text field to the left of the Browse button. Click OK and your link is applied.

As well as applying the link, Xara Designer Pro 7 has now taken a copy of your file and placed it in the support folder for your design. This is a folder next to your .web or .xar file. If your design is called "MySite.web", the support folder will be called "MySite_web_files" alongside it. All the files in the support folder get published along with your website and so that means your file will be published with your website and so the link you just added will work. See the Document Handling chapter (on page 43) for more information on support folders.

Note: Because there is a separate copy of your file held in the support folder for your design, you need to update that copy whenever you modify the file and want to publish the modified version. Or you can just go through the above linking process again and browse for your updated file. Also if you move or copy your website design to another computer, or give a copy to someone else, you need to make sure the support folder accompanies the design file, since it now contains an important part of your website!

NOTE: You cannot apply a transition to a link to a file.

Popup layer

You can add any content you like to a separate layer on your page and have that content shown as a popup only when your visitor clicks on a link. For example you could add some descriptive text about a photo on your web page and have that text only shown to the user if they click on the photo.

The Popup Layer section above includes some step by step instructions on adding layer popups.

Note that all the content on the popup layer is loaded as soon as the visitor visits your page. So if you want to provide a lot of popup photos, use the Popup Photo feature described below instead.

Note: You cannot apply a transition to a link to a pop-up layer. However you can apply a transition directly to a layer (on page 310) to achieve an animated effect when the layer contents appear.

Pop-up photo

This option gives you a very easy way to add pop-up photos and other photo gallery features to your website, without adding any layers! Simply import your photo and use the SELECTOR TOOL to scale it right down so it appears as just a small photo thumbnail on your webpage. Then select it and choose this "POP-UP PHOTO" option.

Click the SETTINGS button next to this option to go to the IMAGE TAB, where you can set the size of the pop-up photo, add a title and caption, and choose from many other options. See the Image tab section below (on page 326) for details. Selecting the pop-up photo option on this Link tab, also selects the pop-up photo checkbox on the Image tab – both turn on the same pop-up behavior.

Use common website link colors

This option lets you choose how the selected text links should be displayed. It is selected by default, meaning that the text link will show with the link color you have defined for the whole website. You can set this color on the Website tab (see Website Tab section).

If you uncheck this option, then the selected text link will keep the color that you give it on the page. So you can give different links different colors if desired.

Open link in

This option does nothing if either of the "Pop-up layer" or "Pop-up photo" link options are selected. But for other links it allows you to tell the web browser how the target web page should be loaded. By default it is set to "Not specified" which usually means the browser will open the link in the same browser window and frame as the link.

The dropdown list contains four options that cause the browser to do special things. You can select one of these options, or type in the name of a frame:

NEW WINDOW (_BLANK) Open the link in a new browser window.

SAME FRAME (_SELF) Open the link in this frame (the frame that contains this object).

PARENT FRAME (_PARENT) Open the link into the parent window or frameset that contains this frame.

SAME WINDOW (_TOP) Open the link into the main browser window, replacing any existing frames.

If you want the link to be loaded into a specific frame in the browser, type the name of the frame in this field.

Clickable area

This option lets you specify what area of the object must be clicked on to invoke the link. However it is not supported for HTML websites (the rectangle surrounding the object is always used), it works only when exporting to Flash.

SHAPE OF OBJECT: The user must click inside the exact outline of the object to invoke the link.

RECTANGLE SURROUNDING OBJECT: The user can click anywhere in the rectangle surrounding the object (the bounding box) to invoke the link.

Link transition

This option allows you to apply a transition effect to a link so that the page linked to (whether it's an external site or one of the pages in your site) appears with the page transition that you select. Link transitions can only be used when the link is opening a new page, and are disabled otherwise.

Note: If you apply a link transition to a link that goes to a page with its own transition set using the Page tab (on page 321), then the link transition is used. So the link transition overrides the page transition for a given link.

TRANSITION EFFECT: Choose your animation effect from the drop-down list.

SPEED (SECS): Set the duration of the effect in seconds.By default objects will only slide in/out to the edge of the web page. If you would like objects to start from the browser window edges, rather than the web page edges, deselect the **CLIP TO PAGE** edges checkbox in the Website tab (on page 323) of the Web Properties dialog.

By default when a transition is applied, objects will only slide in/out to the edge of the web page. If you would like objects to start from the browser window edges, rather than the web page edges, deselect the **CLIP TO PAGE** edges checkbox in the Website tab (on page 323) of the Web Properties dialog.

Note: This option is grayed out if **LINK TO ANCHOR**, **LINK TO FILE**, **POP-UP LAYER** or **POP-UP PHOTO** are selected.

Page Tab

The options on this tab apply to the current page, not to the selected object(s). The current page is indicated with black angle lines just outside each corner of the page. All fields on this tab are optional; you do not necessarily need to fill in these fields for every page of your site.

If you want the same title, description and keywords on every page of your site, you can set these just once on the Website tab instead of setting them on every page here.

PAGE FILENAME: Use this field to set the name you'd like to be used for this page when it is exported. So if you want the page to be exported as "home.htm", set this field to "home".

It's usual to make the first page of a website "index.htm" or "home.htm", because if a visitor specifies a URL consisting of just a domain name with no page name (eg. "www.xara.com") this is usually automatically mapped by the web server to the index.htm page if it is present. Note that characters entered in this field are automatically converted to lower case and accented characters and some non-alphanumeric characters are not allowed. This is to reduce the chances of compatibility problems with different web servers when you publish your website.

PAGE TITLE: You can optionally choose a title for your page. If set, this is used by web browsers to show a page title in the browser window frame, or tab. For example at the time of writing the www.xara.com home page has the title "Graphics Software by Xara" which you can see is shown by the web browser if you visit the site.

Advanced: The title is inserted into the page header using the '<title>' HTML element.

PAGE DESCRIPTION: This page description text can be shown by search engines within their search results when visitors find your page with an internet search. The page description may also be displayed by browsers and other web services.

Advanced: The description is inserted as metadata into the page header
('<meta name="description" …..).

PAGE KEYWORDS: Here you can enter keywords which you want to be picked up by search engines to help visitors find your site. Enter words which potential visitors are likely to search for if they are looking for pages or sites like yours.

For those familiar with HTML, the keywords are entered into the page header as metadata:-

Advanced: The keywords are inserted as metadata into the page header
('<meta name="keywords" …..).

HTML CODE (HEAD): Click to open the HTML Code (head) dialog, where you can paste or type large amounts of HTML code directly into the head of your web page. The code is inserted unmodified just before the closing "</head>" tag.

HTML CODE (BODY): Click to open the HTML Code (body) dialog, where you can paste or type large amounts of HTML code directly into the body of your web page. The code is inserted unmodified just before the closing "</body>" tag.

These dialogs must be used with care because inserting invalid code or script into your page may cause serious problems to the web page as a whole.

If you need to insert exactly the same code on every page of your site, you can use the HTML code (head) and HTML code (body) buttons on the Website Tab of this dialog, instead of entering it for every individual page using the Page Tab.

TRANSITION EFFECT: Choose a transition effect that will display when a visitor opens your web page. So for example if you select a fade transition for a page, when the visitor to your site clicks a link to that page, instead of loading normally the page will fade in. You cannot however apply a transition effect in this way to an external page and should use Link transition (on page 320) in the Link tab to do this.
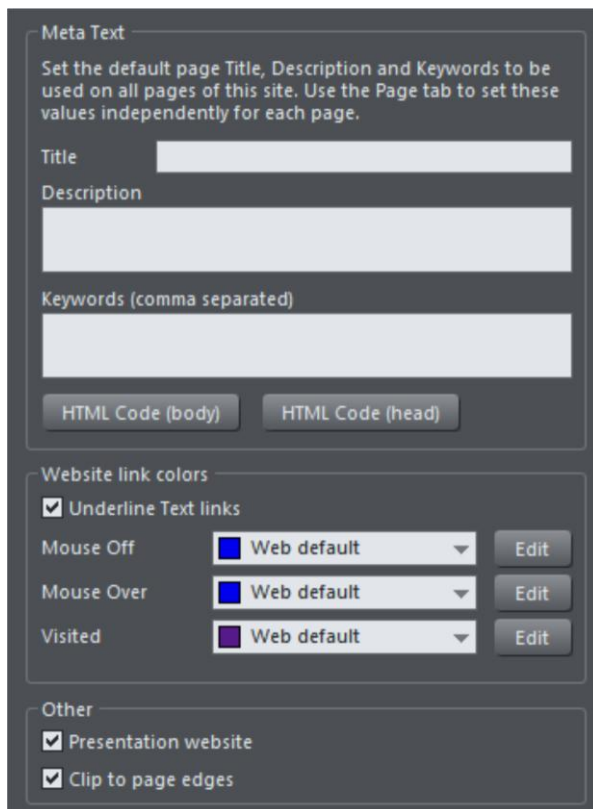
SPEED (SECS): Drag the slider to choose a transition speed from 0 to 5 seconds.

By default when a transition is applied, objects will only slide in/out to the edge of the web page. If you would like objects to start from the browser window edges, rather than

the web page edges, deselect the **CLIP TO PAGE** edges checkbox in the Website tab (on page 323) of the Web Properties dialog.

Technical Note: Page transitions work by first loading the target page into a hidden iFrame and then revealing that iFrame with the visual effect. Then the target page is loaded again normally. This second load of the target page is usually not noticeable, but depending on the speed of the viewer's machine and the browser version they are using (particularly older browsers), sometimes the page is seen to flash briefly at the end of the page transition.

Website Tab

The settings on this tab apply to the entire current document/website, so it doesn't matter what object or page is selected.

TITLE, DESCRIPTION & KEYWORDS: These fields are just as described in the Page Tab (on page 321) section above. You can optionally set these fields here so that they apply to every page in your site, unless overridden by the Page Tab settings for a page. So for example a page that doesn't have its own title set in the Page Tab will get the title you specify here.

HTML CODE (HEAD) AND HTML CODE (BODY): These buttons serve the same purpose as the HTML code (head) and HTML code (body) buttons in the Page Tab, and allow you to enter and edit large amounts of HTML code to either the head or body sections of all your website pages.

If code is specified here in the **WEBSITE TAB** it is included in every page of your site **in addition to** any code specified for each page in the Page Tab. This allows you to have some code included on every page, while also adding other code to those pages that need it.

Website Link Colors

This section of the Website Tab allows you to control how text links appear on your website.

UNDERLINE TEXT LINKS: Underlining is commonly used to highlight clickable links in text, so this option is selected by default. Uncheck it if you don't want your text links underlined.

MOUSE OFF: Here you can choose the color you would like to be used for all your text links. You can either choose a named Theme Color from the dropdown list (if there are any in your current document) or click the Edit button to open the Color Editor so you can choose any other color.

MOUSE OVER: Text links will change to this color when a visitor moves the mouse pointer over them.

VISITED: Text links that point to a page which the visitor has already visited will display with this color instead of the Mouse Off color.

CLIP TO PAGE EDGES (enabled by default): If you have objects in your website that overlap the web page borders, click this checkbox to crop these objects so that only the portion on the page is visible. Deselect this checkbox if you would like the object to flow over the page edge, so that even the portion that overlaps the pasteboard is displayed.

Web Presentations

Click the **PRESENTATION WEBSITE** checkbox to convert an existing website into a presentation.

Note: If you created your presentation document by choosing **955 PIX PRESENTATION** from the **NEW** menu, the **PRESENTATION WEBSITE** check box is automatically selected.

CLIP TO PAGE EDGES (enabled by default): If you have objects in your website that overlap the web page borders, click this checkbox to crop these objects so that only the portion on the page is visible. Deselect this checkbox if you would like the object to flow over the page edge, so that even the portion that overlaps the pasteboard is displayed.

Note: If you have transitions applied to a layer or presentations step transitions that slide in from the sides, top or bottom of the page, disabling this checkbox causes the transition to come in at the edge of the browser window, rather than the page edge.

Mouse-over Tab

The options on this tab specify what should happen when a visitor moves the mouse pointer over the selected object. So for example you can pop-up some text or a whole layer of content when a visitor hovers their mouse pointer over a photo on your web page.

By default when a pop-up layer is triggered it will appear instantly. But you can apply a transition effect to the popup layer so that it appears with an effect, such as fading in or sliding in. Open the Layer properties (on page 151) dialog for the popup layer (select the layer in the **PAGE & LAYER GALLERY** and press the **PROPERTIES** button) and go to the Transitions tab where you can select the effect and effect speed for that layer.

SHOW POP-UP TEXT (TITLE): Here you can specify the "pop-up title" text for an object. Web browsers show this as a small pop-up tool-tip when the visitor moves the mouse pointer over the object. For example, if you have a photo thumbnail which brings up a larger version of the photo when clicked (see the Image tab section for how to do this), you may want to set the pop-up title text to "Click to enlarge". Then when the user moves their mouse pointer over the photo thumbnail, they will see this tooltip.

SHOW POP-UP LAYER: Just as you can add a layer to your design which is shown only when a user clicks on an object (see the Link Tab section), you can also specify that a layer should be shown when the mouse pointer is moved over an object. When the mouse pointer is moved off the object, the pop-up disappears again. Simply select this option and select the layer you want to pop-up, from the list provided.

For example you can use this feature to pop-up a larger copy of a photo when the visitor moves their mouse pointer over it. However note that all the content on the pop-up layer is loaded as soon as the visitor visits your page. Therefore this method of showing pop-up photos is not recommended if you have a large number of photos you want to show. In this case use the Pop-up Photo (on page 312) feature described in the Link Tab section.

Image Tab

Photo pop-up

This section of the **IMAGE TAB** lets you add pop-up photos and other photo gallery features to your web page easily. Simply import your photo and use the **SELECTOR TOOL** to scale it right down so it appears as just a small photo thumbnail on your webpage. Then with the photo still selected, select the Pop-up photo checkbox on this tab. Choose the size you would like for the pop-up photo by entering a value in the pop-up width field (default 500 pixels). Preview your page and click on the photo thumbnail on your page, to see the pop-up photo appear.

When you turn on the pop-up photo feature here in the **IMAGE** tab using the checkbox, the corresponding option on the **LINK** tab is also automatically selected for you. That's because a click on the photo will show the pop-up photo, so you can't also set any other clickable link on the same object. So any link you previously setup on the object, using the Link tab, will be removed.

One big advantage of these photo pop-ups over pop-up layers (as described in the **LINK** Tab section above) is that the large photo is only loaded by the web browser when the visitor clicks on a thumbnail. Therefore this method is much more suited to presenting a large number of photos on a gallery page, because only the small thumbnails are loaded initially, making the page load quicker.

Note that this feature works on objects other than photos, such as shapes and groups, but can't be used directly on text. You can put text inside a group (Ctrl+G) to work around this restriction.

Pop-up title

Give the selected photo a title using this field and it is shown above the pop-up photo. Note that you also need to turn on this title option in the Pop-up photo options dialog (see below), because titles are not shown by default.

Popup Photo Options

Click the **OPTIONS** button to bring up the **POP-UP PHOTO OPTIONS** dialog. Here you can choose from a variety of options that change the way your pop-up photos are presented.

Popup Options

The following options change the appearance of the popup photo.

DIM PAGE WHILE POPUP IS OPEN: With this option selected, the entire page is dimmed whenever a popup photo is displayed. This helps emphasize the popup photo, so that it stands out against the darker background of the page.

SHOW SHADOW BEHIND POPUP: This option puts a drop shadow behind the popup photo window, again to help make it stand out against the page background.

SHOW IMAGE TITLE: If you have entered title text (see above) for each of your photos, this option causes that title to be above the popup photo.
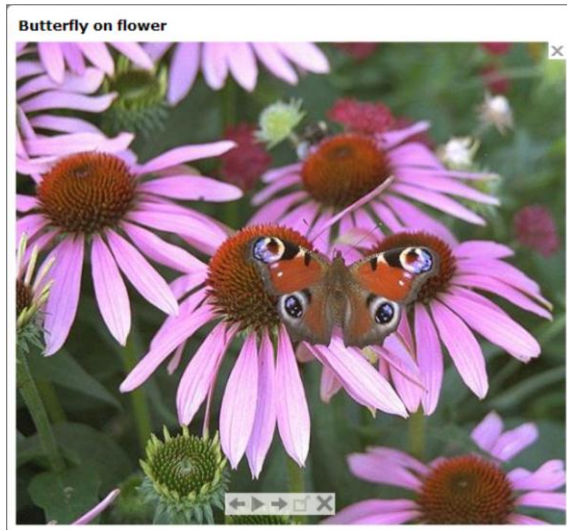
Note that title text is separate to any caption text, which appears below the photo. See below for information on setting caption text.

Gallery Options
The following options turn on gallery features for your popup photos.

SHOW GALLERY BROWSER CONTROLS: Turn this on to show gallery controls on your popup photo.

This appears on top of your photo whenever the mouse pointer is over the photo. It allows your site visitor to view the other popup photos in the current page, without having to close the popup window and click on the thumbnails for the other photos. The visitor can move to the previous or next photo, or start and stop an automatic slideshow where each photo is shown for a few seconds before moving onto the next.

SHOW THUMBNAIL STRIP AT BOTTOM OF PHOTO: With this option on a strip of small photo thumbnails appears below the popup photo window. This allows the visitor to jump to any of your popup photos by just clicking on the thumbnails in the strip, again without having to first close the popup photo window.

AUTOMATICALLY START SLIDESHOW: Turn this on if you want a slideshow to start as soon as the user clicks on any of your popup photos. You can also choose how many seconds each photo should be displayed for when the slideshow is playing.

Note that the only photos included in the photo gallery are those photos on the current page which are setup as popup photos. Any other photos on your page will not appear in the gallery, so make sure you use the Link tab of the Web Properties dialog to turn on the popup photo option on any photos that you want to be included in the gallery.

Image Captions

You can optionally show a caption below each pop-up photo. Enter the caption text in this field in the Image Tab.

Note that this feature works on objects other than photos, such as shapes and groups, but can't be used directly on text. You can put text inside a group (Ctrl+G) to work around this restriction.
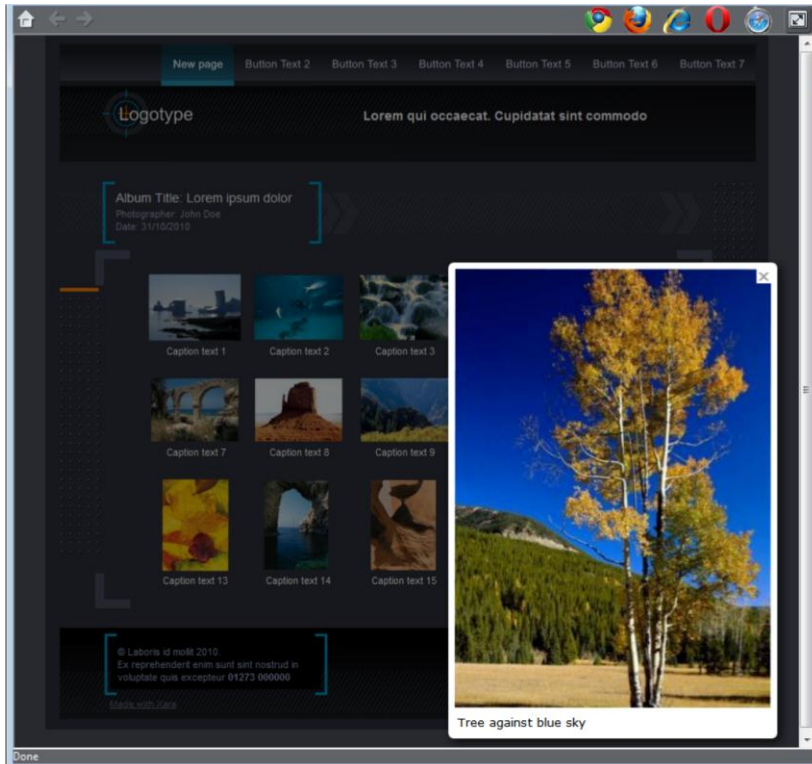
For those familiar with HTML, this text is also used as the "ALT" text on the image that is exported for the currently selected object, whether or not the image also has a pop-up. Web browsers show this text on the page in place of the image, if the image can't be obtained for some reason.

Web image type

Due to the nature of HTML websites, most objects you see and can select on the page in Xara Designer Pro 7 have to be converted to bitmap images during the process of exporting your website. This all happens automatically for you when you preview and export, but the controls on this tab give you some control over how these images are created.

Remember that each group, shape, heading, logo, photo, panel background, etc. is exported as a separate image. By looking at how the objects in your design are grouped, you can control how many images are exported to make up your website. So for example if you have 2 separate shapes in your design which are not grouped

together, they will be exported as 2 separate images. You can group the two shapes (Ctrl+G) and then a single image is exported instead.

This section of the Image Tab lets you specify how the currently selected object should be exported as an image. By default Xara Designer Pro 7 will decide for you. This means that normally photos will be exported as JPEG (which is usually the best format for photos) and other objects as PNG (which is usually best for graphics). Photos which have been rotated on the page, or which have a semi-transparent shadow applied, are exported as PNG because JPEG does not support transparency.

You can force the selected object(s) to export as a JPEG or as a PNG, by selecting the appropriate option. When the JPEG option is selected, you can also choose the JPEG quality to be used for that image. Higher quality means a larger JPEG file size.

Placeholder Tab
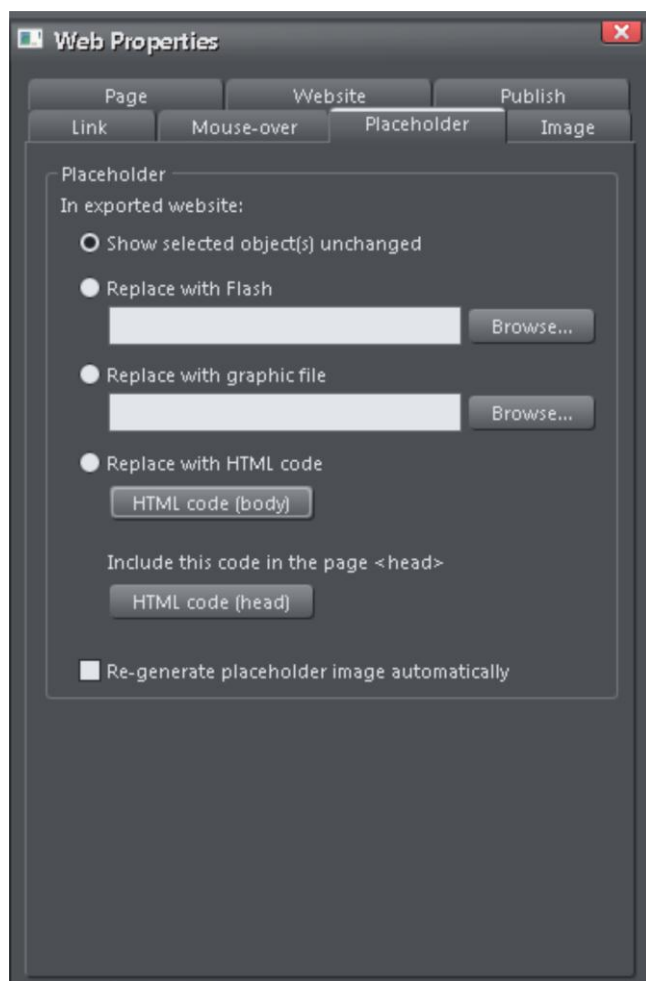
The Placeholder tab is used to add and edit manually editable widgets. These are widgets you insert onto your web page by manually pasting in HTML code for the widget or by importing a Flash or movie file. You won't normally need to use the Placeholder tab on widgets that you've added from the DESIGNS GALLERY, because the code and files that make those widgets function are handled for you automatically. See the Website Widgets (on page 368) chapter for full details.

To turn any normal object into a placeholder for a widget, select it and then open this tab of the Web Properties dialog. Choose whether you want the widget to be based on a piece of HTML code from a widget website, a Flash file or a graphic file. Browse for the file or paste in the HTML code. Click OK and now your object is a placeholder object.

This means the object represents the dimensions and position of the content you've added, but in your exported web page the object is replaced by the actual code or file that you inserted.

However there is an easier way to add files or code to your site. Simply drag and drop Flash or animated GIF files from Windows File Explorer onto your page. A placeholder image is automatically generated for you and is placed on your page. A copy of the file is added to the support folder of your design so that it gets exported and published with your site. When you export and publish your site, the placeholder image is replaced by the actual file you imported.

Similarly if you've copied some HTML code from a third-party widget website, you can simply paste that code into Xara Designer Pro 7 (make sure you are in the SELECTOR TOOL when you do this, not the TEXT TOOL or it will be inserted as text!). Xara Designer Pro 7 detects the HTML and uses it to render a placeholder image which appears on your page. You can also add a placeholder for HTML code directly into either the body or head of a page by clicking the HTML code (body) and HTML (head) buttons, which bring up a scrolling dialog where you can paste or edit large amounts of code, if necessary.

When you export/publish your site the placeholder is replaced by the actual code so that your widget functions. See the Website Widgets chapter (on page 368) for more details.

Replace with Flash

Select this option to replace the placeholder object with a Flash animation. Use the Browse button to locate the Flash (.swf) file you want to use.

The chosen file is automatically copied to the support folder for the current design, so that when you export your website the file will be included in the _htm_files folder along with all the generated images for your site. See the Document Handling (on page 43) chapter for information about support folders.

Replace with graphic file

Select this option if you want to insert a graphic or image into your website in place of the placeholder object (eg. a PNG, GIF or other web compatible image file). Use the Browse button to select the file.

The chosen file is automatically copied to the support folder for the current design, so that when you export your website the file will be included in the _htm_files folder along

with all the generated images for your site. See the Document Handling chapter for information about support folders.

Replace with HTML code

With this option you can paste HTML code which you've obtained from somewhere else into the head and/or body sections of your page; i.e., between the <body></body> tags or <head></head> tags. For example many sites provide widgets that you can add to your page by pasting the HTML in here. Follow the instructions given by the provider. In most cases you need to add body code only, but some widgets also require you to include some code in the head, which is why the head code option is also provided.

As mentioned above, you can just paste the HTML code directly onto your page instead of inserting it in this dialog (while in the **SELECTOR TOOL**). And using that approach automatically gives you a placeholder image that looks just like the actual widget, so it's the recommended way to insert widget HTML code.

Warning: You need to be careful to insert only code which you know is safe and from a trustworthy source. Invalid or broken code will affect your published web page because Xara Designer Pro 7 simply inserts the code as you provide it, unmodified and unchecked, into your page when it is exported.

If you use Xara Modules (www.xaraonline.com) you can paste a module snippet into this field (or directly onto your page) to add your Module to your web page.

If the HTML code that you enter references external files which are expected to be found in your website, then you need to copy those external files into the support folder for your design. See the Document Handling (on page 26) chapter for information about support folders. Once in the support folder, the files will be automatically copied to the _htm_files folder of your website when you export. Therefore you also need to make sure that any references to these files in the HTML code references them at the right location.

Let's take a simple example to make this clearer. Suppose I want to insert a small piece of HTML code which adds an image to my website. The HTML code I add will need to reference the image file somewhere. First I copy the image file, say "myLogo.gif", into the support folder of my document. If the document is "mySite.web", the support folder will be "mySite_web_files". I know that when I export this website, I will export it to the name "mysite.htm". This means that all the generated images for my site, and a copy of "myLogo.gif" which I put in the support folder, will be exported to the folder "mysite_htm_files". Therefore I must make the HTML code I'm inserting reference the image file in that location. So I may insert:-

Note that this references the image file in the exported image folder location (_htm_files), NOT directly in the support folder (_web_files), because only the exported image folder gets copied to the web server along with my web page when the site is published.

Of course if I really only wanted to put an image on my website, it's much easier to just import the image into Xara Designer Pro 7 directly! But this is a simple example that shows how to add HTML code which references an external file.

Check Embedding YouTube, Flash And Other Widgets (on page 340) for more examples!

Adding code to page head

Some code needs to be inserted into the head (<head> tag) section of the exported HTML code, instead of to the body (<body> tag) section as it is by default.

To do this, click the HTML code (head) button in the Placeholder, Website or Page tab of the Web Properties dialog and type in or paste your code.

Placeholder objects

The placeholder object is actually included in your website and it can be shown to the visitor in some circumstances. For example if you've added a Flash animation, if the visitors to your page do not have Flash installed in their web browser, or if they've disabled Flash, the browser will show the placeholder image instead.

Therefore it's sometimes a good idea to make your placeholder object more than just a black rectangle, or an accurate image of the widget that appears on your page. You may decide to use a group as your placeholder object, where the group includes a text message asking the visitor to install Flash so that they can see your Flash content.

REGENERATE PLACEHOLDER IMAGE AUTOMATICALLY: If this option at the bottom of the PLACEHOLDER TAB is selected, then the placeholder image gets automatically generated from the content you have added, whenever the content changes or when you resize the placeholder object.

When you paste code or import files directly onto your page, as recommended above, this option is selected automatically for the placeholder image that gets generated. Sometimes it's useful to turn it off after inserting content this way, if you are happy with the preview image and no longer want it to be re-generated if you change the content in some way.

Publish Tab

You will need a web hosting company to host your website. Quite often your existing Internet service provider will include 'web space' as part of your normal subscription. Also the Profile control in this Publish dialog offers one or more hosting options that you can take advantage of. See below for details. Most companies also offer the ability to purchase your own domain name (e.g. like www.xara.com) and have this set to point to your web pages.

If you want Xara Designer Pro 7 to publish your finished website to your web space automatically, so it's live on the Internet, you need to enter the access details for your web space on this tab.

The first section of this dialog allows you to select a pre-configured profile. The profile list contains two types of profile: those that you create yourself and which are stored on the computer you are using (see Save in profile (on page 335) for details on how to create these); and one or more standard profiles which are installed along with the program and which offer you some different web hosting solutions for you to choose from.

STANDARD PROFILES: When you select a standard profile, a banner should appear immediately below the profile list. This banner is downloaded from the web hosting company (so it will only appear if you are online). Click a button on the banner to find out more about that web hosting solution on the company's website. If you decide to sign up for hosting with one of the suggested providers, you will be given a username and password with which to connect. You enter those details in the FTP DETAILS section of this dialog.

FTP DETAILS: Enter the FTP details you have for your web space here. You need to enter at least the host address and username. You don't need to enter the password at this stage if you don't want to. If it's missing you will be asked to enter it each time you publish your website.

The optional Sub-folder lets you publish your website into a sub-folder, e.g. if you were publishing to the xara.com domain (of course you can't do this) and wanted the web address to be;

xara.com/products/web_designer

Then you'd set a sub-folder of 'products/web_designer'. If you set a sub-folder this way then all the pages in your website will be published to this folder.

WEBSITE URL: Enter the full URL of your published website here if you would like to automatically generate an XML Sitemap, which is a list of the pages on your website, helps search engines find all the pages in your site. When you export your website, a file called Sitemap.xml is also created in the main export folder. If no URL is specified here when you export your website, no sitemap is created.

Note: Because a valid Sitemap must include the full URL of the website, a Sitemap can only be generated if the website URL is available.

INCLUDE MY WEBSITE IN THE USER GALLERY: This option is only enabled if you have added a valid website URL. If you would like your website to be included in a Xara or MAGIX user gallery, click this checkbox. After publishing your site, Designer Pro generates a thumbnail of your website and places it in a gallery of websites created by Designer Pro users. Click the MORE INFO button to learn more.

Save details in current document

The FTP Details you've entered are associated only with the current open document. If you switch to a different document you'll see the FTP details fields become blank, unless you've already entered details for that other document. By default the FTP details are NOT saved with the document. That means each time you load the document and want to publish it, you'll need to either re-enter the FTP details, or select a profile from which the details should be copied.

Select this checkbox if you would like the FTP details to be saved along with the document. That means whenever you load the document, the FTP details will be loaded too and you can re-publish immediately.

Save password in document

If you chose to save the FTP details in your document, this option becomes enabled next to the password field. It controls whether or not the FTP password is also stored in the document, along with the other FTP details. If you choose to do this, you can re-publish the website without having to re-enter the password.

But of course, so can anyone else who gets a copy of your design file! Therefore for normal use it's not recommended that you turn this option on, because of the associated security risk of someone else getting hold of your document and then being able to write to your web space, potentially overwriting or deleting your website.

Save in profile

If you want to publish more than one website document to the same web space, or if you don't want FTP details stored in your design document, you will probably want to have

the FTP details stored on your computer as a profile. Then you can easily add the details to any document in future by simply selecting the profile from the profile list, instead of having to re-enter them manually each time.

Click the **SAVE IN PROFILE** button to save the FTP details shown to a profile. This brings up a small dialog containing an editable profile list. You can either enter the name of a new profile, or choose an existing profile from the list to overwrite that profile. When entering a new name, choose a name that will remind you what the web space is used for. You cannot overwrite the standard profiles. You can of course save multiple profiles where only the sub-folder name varies. This allows you to easily publish to different folders in your web space.

If you don't want the FTP password to be stored on your computer, make sure that the password field is blank when you click **SAVE IN PROFILE**.

Deleting a profile

To delete a profile, select it in the profile list at the top of the Publish dialog and click the **DELETE** button next to it. You cannot delete the standard profiles.

Loading a document containing FTP details

When you load a document that has FTP details saved in it, the FTP details will be shown in the **PUBLISH TAB**. If those details exactly match one of the profiles stored on your computer, then that profile will be shown as selected in the profile list. Otherwise **CUSTOM** is shown in the profile list instead, to indicate that the document's FTP details don't match any profile.

If the document FTP details do not include a password, but all other details match a profile, then that profile will be shown as selected. Also if that profile has a password stored, it will be copied into the document FTP details for you. This saves you from having to re-enter the password each time you publish the document. This behavior means that it may look to you like the password was actually stored in your document! But that can only happen if the **SAVE PASSWORD IN DOCUMENT** option is selected.

Publishing

Once you've set your Publish details, you can then select "**FILE**" > "**PUBLISH WEBSITE**". Your website will be published.

Note: Many web servers use case-sensitive filenames. So, for example, the web address xara.com/products.htm is not the same thing as xara.com/Products.htm. To reduce confusion and the likelihood of errors Designer Pro enforces that all page names are all lower-case and contain only allowable characters. This means that spaces are not allowed in page names. We suggest using an underscore as an alternative separator.

Important: If you have not set any specific page name, then the name you exported to last will be used for all the pages in your website. E.g., if you open a template website, and export this as 'test' to your file system, and now publish this, it will be published as test.htm to your web server, and all additional pages will be test_2.htm, test_3.htm etc.

If you have not set an export filename, when you first publish you will be asked to enter a filename. index.htm is the usual name for the first page of a website.

Re-publish changed files only

By default Xara Designer Pro 7 keeps track of the files that make up your published website and when you come to re-publish after making changes to your site, it attempts to re-publish only the files that have changed. This makes re-publishing much quicker in most cases.

However Xara Designer Pro 7 does not know if you have deleted or modified files in your web space using another tool. Therefore if you have any problems whereby your published site does not match the locally exported copy of your site, you should arrange for the whole site to be re-published. To do this, turn off the **RE-PUBLISH CHANGED FILES ONLY** option at the bottom of the Publish tab. Then the next time you publish, every file making up the site will be published, making sure that your published site is up to date.

Explore web space

When you have completed the FTP host address, FTP username and FTP password boxes, click the Explore web space button to browse, view and delete files you have uploaded to your ftp server.

You can view files and open folders to view subfolder contents. You can also delete individual or multiple files. Select multiple files by clicking and holding down Shift or Ctrl, as in Windows Explorer. Click on each column header to sort files using that column's criteria.
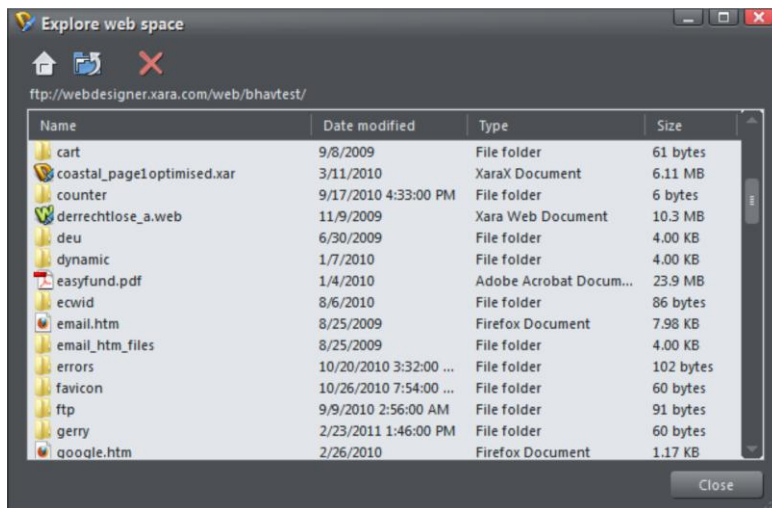
Scroll through a list of files you have uploaded to your ftp server

Returns to the original file view that opened when you launched the Explore web space dialog
Takes you up a folder level

Deletes individual or multiple selected files

Creating Navigation Bars

It's easy to create a navigation bar with or without dropdown menus for your website. You can either choose a readymade bar from the **DESIGNS GALLERY**, or make your own. To make your own, start with a single button design (with or without a mouseover state as mentioned above). Select the button and choose "**ARRANGE**" > "**CREATE NAVIGATION BAR**". The Navigation bar dialog appears. Here you can choose how many buttons you want for the bar, set labels, links and tooltip text and even add menus to your buttons. You can also choose how your bar behaves when button labels are edited and when buttons are added or deleted. For more information see Navigation bars (on page 345).
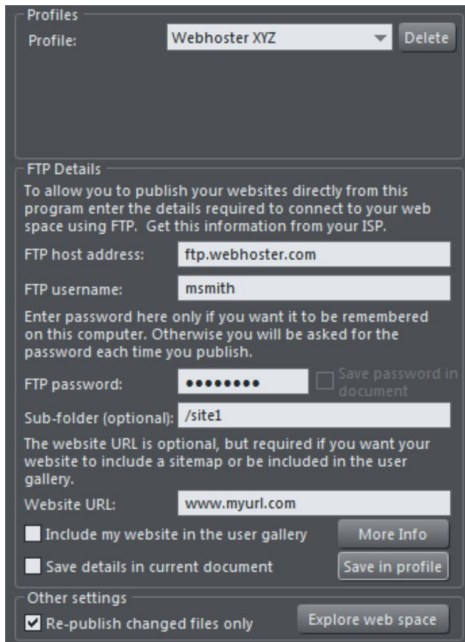
Publishing Your Website

You will need a web hosting company to host your website. Quite often your existing Internet provider will include 'web space' as part of your normal subscription. Most companies also offer the ability to purchase your own domain name (e.g. like www.xara.com) and have this set to point to your web pages.

You require three bits of information in order to publish your website;

- The FTP Host Address. If you have a domain name this is often the same as your domain name. If you choose one of the standard hosting options in the profile list this field will normally be set for you automatically.
- An FTP username
- And associated password

Simply enter these details into the **PUBLISH** tab of the Web Properties dialog.

The optional Sub-folder lets you publish your website into a sub-folder.

E.g. if you're publishing to the xara.com domain (of course you can't do this) and want the web address to be;

xara.com/products/web_designer

Then you'd set a sub-folder to be 'products' and the page name of 'web_designer'. If you set a sub-folder this way then all the pages in your website will be published to this folder.

Once you've set your Publish details, you can then click the **PUBLISH** icon on the top bar (on the Export HTML flyout bar) or use menu "**FILE**" > "**PUBLISH WEBSITE**".

Note: you must have exported your website first.

Your website will be published. A progress bar will show you the progress of the upload of the pages to the web server.

The details you enter into the **FTP DETAILS** section of the dialog are associated with the current document. You can choose on the dialog whether or not these details should be saved with your document. You can also use the **SAVE IN PROFILE** button to save the details on your computer with a profile name, so that you can easily select to use them with any document you want to publish to that same location.

See the Web Properties Dialog chapter (on page 333) in the pdf manual for full details on how to use this dialog.

Note: Many web servers use case sensitive filenames. So, for example, the web address xara.com/products.htm is not the same thing as xara.com/Products.htm. To reduce confusion and the likelihood of errors Designer Pro enforces that all page names are all lower-case and contain only allowable characters. This means that spaces are not allowed in page names. We suggest using an underscore as an alternative separator.

Important: If you have not set any specific page name, then the name you exported to last will be used for all the pages in your website. E.g., if you open a template website, and export this as 'test' to your file system, and now publish this, it will be published as test.htm to your web server, and all additional pages will be test_2.htm, test_3.htm etc.

If you have not set an export filename, when you first publish you will be asked to enter a filename. index.htm is the usual name for the first page of a website.

Embedding Movies, Flash And Other Widgets

You can embed a wide variety of interactive widgets easily; YouTube™ videos, Google Maps, Flash files or any HTML snippet. This is done using placeholders, which are objects (simple rectangles or photos) that have an associated piece of HTML or Flash file that is substituted for the placeholder when saving your website. For full details on widgets and placeholders, see the Website Widgets Chapter (on page 368) in the pdf manual.

The DESIGNS GALLERY contains a frequently updated selection of widgets from a variety of providers. Simply drag and drop these onto your web page. A web browser window appears which takes you to the widget providers site, where you can choose and customize the widget. When you're done you click the INSERT button at the bottom of the browser window and the widget is inserted into your page with an automatically generated preview image. It's that easy!

Or you can find widget sites yourself and just as easily add the code to your site.

Adding a Google Map

Go to http://maps.google.com and locate the map you want to embed. Click the Link icon in the top right of the window, this opens a small window offering some HTML which will embed the map into a website. Copy this HTML.
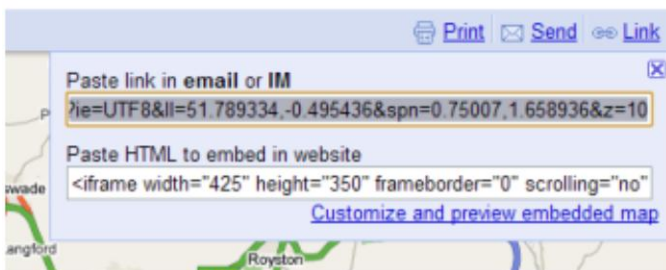
The top right link opens a window showing the HTML snippet for this map

If you click the **CUSTOMIZE** option you can customize the size, and various other options.

Now in Xara Designer Pro 7 go into the **SELECTOR TOOL**. Simply paste ("Ctrl + V") the HTML into the program. It's recognized as being HTML code and a placeholder image is automatically generated for you, with the code attached. The image appears on your page. Position it where you want it and then preview your page. You can see the working Google Map on your page!

Adding a Flash File

Flash Files (with a .swf file extension) can be embedded just as easily. Use "**FILE**" > "**IMPORT**" to import your Flash file. Or just drag and drop the file from Explorer onto your page. A placeholder image is generated for it and placed on your page. Preview your page and you should see the working Flash animation.

There is one important difference with Flash placeholders - you can usually resize them to be any size you like and the Flash will scale to fit the placeholder. Secondly you can have transparent or semi-transparent Flash and this will also work on top of your website. Most other Widgets are fixed size and will always appear at the given size on your web page irrespective of the size of the placeholder.

Whenever you select a Flash file to be associated with a placeholder in this way, the Flash file is copied into a _files folder saved alongside the .web document. If you move or copy the .web file you should also copy the _files folder to ensure the Flash files are copied as well.

Adding an Animated GIF

Adding an animated GIF is just as easy as adding Flash. "**FILE**" > "**IMPORT**" the file or drag and drop onto your page. You will be asked whether you want to import the graphic into your page (which for an animated GIF will put each frame on a different layer) or add as a placeholder. If you just want to display the animation on your site you need to choose the placeholder option. Once inserted, preview your page and you should see the working animation.

Adding an MP4 or FLV movie

Again, use "**FILE**" > "**IMPORT**" or drag and drop the movie onto your page. A placeholder image is generated and as well as your movie file, a movie player is included in your design support folder and it's used to play your movie on your web page. Preview your page to see the working movie player.

Creating animated GIFs

Animated GIFs are an alternative way to present animated sequences in the web. An older, much simpler technology is used, which has some advantages and some disadvantages.

An animated GIF is just a GIF file that contains a sequence of images, rather like frames in a movie. Every Xara Designer Pro 7-frame is one frame in the final animation, just like a flip-book.

The advantages:

- All browsers are able to play back GIF animations out-the-box, there is no additional plug-in necessary as with Flash animations. This results in faster loading times and higher compatibility of your pages.
- GIF animation are used as normal images, there is no additional HTML code necessary as when embedding Flash animations.

The disadvantages:

- Animated GIFs don't 'tween' between the frames. This means, the frames of your Xara Designer Pro 7-animation are translated 1:1 in resulting GIF frames. If you want to phase smooth animations like in Flash you have to provide a lot of frames.
- GIF is a Bitmap format and not a vector format like Flash. It produces far larger output files even for simple geometric forms or text.
- The maximum color depth is 256 colors.
- Advanced Flash features like sequence flow (stop/goto), URL linking or acceleration are not available.

Nevertheless and thanks to their simplicity Animated GIFs are still very popular for advertising banners or as avatar image in forums or instant messengers.

Opening an animation document

To create an animated GIF, you must first open an animation document. To do this choose "FILE" > "NEW" > "ANIMATION". You will then have access to the FRAME GALLERY.

Creating the animation

To create an animated GIF:

1. Choose "UTILITIES" > "GALLERIES" > "FRAME GALLERY", or click the FRAME GALLERY icon on the GALLERIES toolbar.
2. Draw what you want to appear in this first frame.
3. In the FRAME GALLERY, click NEW to create the next frame.
4. Set the background and overlay flags as required.
5. Create the objects you want to appear in this frame.
6. Repeat steps 3 through 5 until you have built up the sequence of frames.

Exporting the animation

To save the animation, choose "FILE" > "EXPORT ANIMATION".

Animation properties

To alter the animation's properties, right click on a frame in the **FRAME GALLERY** and select **PROPERTIES**. You can then change a number of options detailed below.

The Frame tab

In the **FRAME** tab you can set:

- **NAME**: The name of this frame. This is just as a reminder to you, and is not exported with the animated GIF.
- **BACKGROUND**: If this is set, the frame covers all previous frames. This is useful if you want to create a background and then build up an animation on top of this background. Often the first frame in the animation is a background frame. If the first frame is not a background frame, the animated GIF uses the page background as its background.
- **OVERLAY**: If this is set, then the frame overlays the previous frame.
- **LOCAL DELAY**: Set how long the frame is displayed for in the animation.
- **SHOW FRAME**: When checked, the frame will be shown in the animation.

Flash Options

Here are several options for Flash animations, most of them are described above

- Link to be applied to whole animation (on page 392)
- Flash Movie Speed (on page 386)
- JPEG quality (on page 383)
- Area to save (on page 384)

GIF Options

In the **GIF OPTIONS** tab you can set the color usage in GIF animations. (Not available for Flash animations). Click **OPTIONS** in the Export Animation dialog to show the **GIF OPTIONS** tab in the Animation Export Options dialog.

- **PALETTE COLORS**: Set the preferred color palette for your animated GIF. The help guide contains more information on the difference between these options.
- **NUMBER OF COLORS IN PALETTE**: This option is available only when using optimized palettes. For simple graphics you can reduce the number of colors in the palette. This can produce much smaller files without losing quality. You may need to experiment to find the right balance between file size and quality.
- **DITHERING**: You can select between three types of dithering.
- **TRANSPARENCY**: Select this to make the bitmap transparent where there are no objects.

Animation Loop and Speed

In the **ANIMATION LOOP AND SPEED** tab you can alter the animation rate and frequency:

- **LOOP**: Lets you specify how many times the animation should repeat itself.
- **DISPLAY EACH FRAME FOR**: If you want the same delay between each frame in the animation enter a value here. To specify a different delay for individual frames, use

the frame tab (described above). This field reads "many" if the animation has more than one inter-frame delay time.

Preview in Browser

You can select options suitable for the graphic and then load it into your browser so you can preview it:

- **BACKGROUND OPTIONS**: Alter the background of the animated GIF to see which gives the best result.
- **ADDITIONAL INFORMATION**: The preview page will contain useful information such as potential downloading times when placed in a web page.
- **BROWSER PREVIEW**: Press this button to launch a preview in your web browser.

AVI Options

Options: Select from a range of codecs you have installed

Quality: Set the quality value of the AVI (up to 100%)

Key frame every ...: Enable/disable the outputting of key frames and set the frequency.

Transparency: Select to make the AVI background transparent.

Area to save: Setting the area to save to be **DRAWING** will create an AVI animation that is only as large as it needs to be – i.e. the same as the outer bounds of the animation. This can be useful if you don't need a specific page size.

Navigation Bars

Most websites have a navigation bar, either horizontal or vertical, from which all the important pages of the site can be accessed.

Xara Designer Pro 7 includes special support for navigation bars (known as Navbars for short), making it easy to add, edit and delete buttons. The buttons in a Navbar can adjust their widths to match their labels automatically and they are repositioned automatically after any changes you make. You can even add dropdown menus and sub-menus to your bar and opt to have buttons automatically added and deleted as you add and delete pages.

Advanced users can create their own bars from button designs of their own, and modify the button designs used in an existing Navbar and have the new design applied across the whole bar.

Using template Navbars

You can create Navbars yourself from any button design, but most users will simply use the many template Navbars available in the **DESIGNS GALLERY**. If you want to create your own, see the section describing how to do that later in this chapter.

All the Navbar designs in the gallery are associated with a particular theme, and are carefully designed so that they fit nicely into the page designs of that theme. Therefore most websites can be built without ever adding a Navbar manually – they are already built into the page templates of each theme. However every theme also provides its Navbars as standalone elements, so you can add one to your web page by simply dragging it from the gallery and dropping it onto your page.

Changing the colors of a template Navbar is done the same way as changing the color of the other elements of a theme – by applying a new color scheme from the **DESIGNS GALLERY**, or by editing the named theme colors on the Color Line. See the Getting Started chapter for details on this.

Navigation bar properties dialog

The best way to edit the labels, links and other attributes of a Navbar, and to add or remove buttons, is to use the Navigation Bar properties dialog. Double click on a bar to bring up the dialog, or right click on it and choose 'EDIT NAVIGATION BAR' from the context menu.
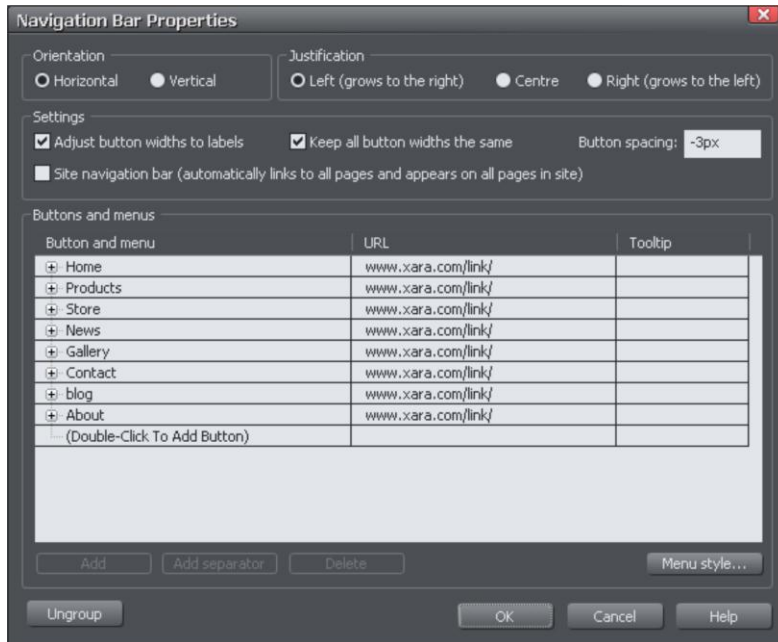
The upper half of the dialog allows you to set various properties of the Navbar. The lower half allows you to add and remove buttons and menus and to edit the labels and links of each button and menu entry.

This is a modal dialog, meaning that you can't interact with the canvas while the dialog is on screen. However all the changes you make in the dialog are immediately reflected in your Navbar on the canvas, so you can see the result straight away. The changes you make in each dialog session are confirmed when you click OK, or they are undone if you click CANCEL.

Orientation

Choose whether you want your Navbar to be horizontal or vertical. For vertical Navbars you will normally want to make all buttons the same width (the width of the widest button), so you get a rectangular bar. See the "ADJUST ALL BUTTONS TO WIDEST LABEL" option below, which controls this.

Justification

Choose how you want your bar to behave when its length changes as you edit labels and add/remove buttons. A LEFT JUSTIFIED horizontal bar will grow to the right as you add more buttons or make the button labels longer. And the left edge of the bar stays in the same place on the page. Similarly a RIGHT JUSTIFIED bar keeps its right edge in the same place and grows to the left. And a CENTER JUSTIFIED bar grows to left and right

equally. Choose the centered option if, for example, you want a horizontal Navbar centered at the top of your page.

For vertical bars, the justification options change to Top, Center and Bottom. As for horizontal bars, the setting determines whether the bar grows upwards (Bottom), downwards (Top), or both (center) when buttons are added.

Adjust button widths to labels

Turn this option on if you want your buttons to be stretchy, so they grow and shrink as required to fit in the label text applied to the button. With this option off, your buttons will remain the same size and so a label that's too long for the button will extend beyond the edges of the button.

All buttons the same width

This option is enabled only if the above 'Adjust button widths to labels' option is on.

Select this option to make all your buttons the width of the widest button in the bar. For vertical Navbars this is almost always desirable so that you get a rectangular bar. For horizontal bars it often makes the bar look neater with each button the same size, but it requires more space and so you may not be able to fit as many buttons into your bar with this option turned on.

Button spacing

Here you can choose to have some space between each button in your horizontal Navbar, if you don't want each button to sit right up against its neighbor. Simply enter the number of pixels of space you would like and see the result on the canvas immediately. Sometimes you may want to make this value negative so that there is a small overlap between your buttons. This is useful if your button design is such that you see an undesirable join line between the buttons when there is 0 spacing.

Site navigation bar

This is a very important option on the **NAVBAR DIALOG**, which turns on automatic linking so that buttons and links are added to your bar for you, as you add pages. And all changes you make to the bar are reflected on every page of the site as soon as you close the Navbar dialog.

Normally you have this option on only if you want your Navbar to appear on all pages of your website. However you can manually delete the bar from pages if desired.

No on canvas editing

Unlike normal Navbars, site navigation bars cannot be edited on the canvas – all editing must be done in the Navbar dialog. When you click **OK** in the Navbar dialog to confirm some changes, your site navigation bar is updated on all pages of your site.

Moving and transforming a site navigation bar

If you move a site navigation bar on the page, the bar is also moved on all the other pages on which it appears. Similarly if you scale the bar to make it larger or smaller using the **SELECTOR TOOL**, again the same transformation is applied to the copy of the

bar on the other pages. No other transformations of a Navbar using the **SELECTOR TOOL** are supported (rotation, skew, scaling in one dimension).

Automatic page linking

Whenever you add a new page to your site, a link to that page will be added to your site navigation bar for you and the new page will be given a copy of the bar, if it doesn't already have one. If your bar has an unused button on it, then the first such button will be linked to your new page. If all buttons are already linked, a new button is automatically added to the end of your bar and it is linked to the new page. In either case, the label of the button is changed to match the name of the new page, if it has a name, or to "New page" otherwise. Normally you will want to immediately edit this new label in the Navbar dialog.

When you delete a page from your website, the button linking to it on your site navigation bar is automatically deleted for you, on all pages of your site.

Turning site navigation bars on and off

When you turn the site navigation option on or off in the Navbar dialog, the change is reflected in all copies of that bar on all pages of your website.

Deleting a site navigation bar from a page

If you don't want the site navigation bar on a particular page of your site, you can simply click on it to select it on that page and hit "Delete". You'll be asked whether you want to delete the bar from just that page, or from all pages.

However after removing the bar from one or more pages, note that if you subsequently turn off the site navigation bar option (perhaps in order to edit the button design, which can't be done with the option on), and then later turn it back on again, the bar will be added automatically to all the pages of your site that don't have it.

Templates & Site navigation bars

All the single page templates in the **DESIGNS GALLERY** have their Navbars set to be site navigation bars when you load them from the gallery to start a new website document. This means you can rapidly build a small website with all pages linked to the bar, without having to add buttons and page links manually. Similarly all website templates have site navigation bars turned on. If you don't want this behavior, simply turn off the site navigation bar option on the **NAVBAR DIALOG**.
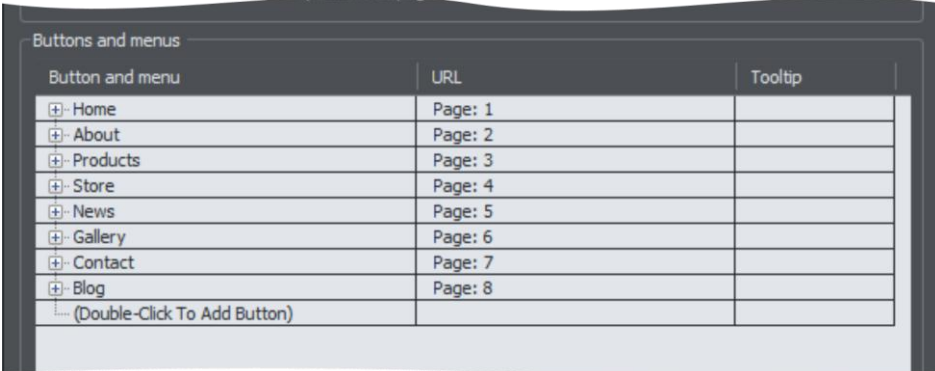
The standalone Navbars presented with each theme in the gallery do not have site navigation turned on by default. This is because any user adding bars manually is less likely to want that bar on every page of their site, with a link to every page. But again, the option can easily be turned on in the Navbar dialog if required.

Other points to note

If you delete a button which points to one of your pages, or change the link on it to point elsewhere, no special action is taken to restore a button link to the page. It's assumed you decided that you didn't want a direct link to that page in your site navigation bar. New buttons and page links are only created when a page is added.

Buttons & Menus

Edit the button labels, links and other button attributes using the table and tree controls in the lower half of the NAVBAR DIALOG. Each row in the table corresponds to a button in the bar, or to an entry in a menu under one of the buttons.

Button and menu	URL	Tooltip
⊞ Home	Page: 1	
⊞ About	Page: 2	
⊞ Products	Page: 3	
⊞ Store	Page: 4	
⊞ News	Page: 5	
⊞ Gallery	Page: 6	
⊞ Contact	Page: 7	
⊞ Blog	Page: 8	
(Double-Click To Add Button)		

Adding & editing buttons

To add a button, double click in the first column where it says "Double-Click To Add Button". A new row is added below the row for the last button. Or click the ADD button at the bottom of the dialog to add a button following the selected button. You can immediately start editing the label for the new button. Press return to complete the label edit, or click away from the label.

You can edit any button label by first clicking the appropriate row to select it and then clicking again in the first column to start editing the label.

To set the link on a button, double click on the URL field, or if the row is already selected you can just single click on it. The WEB PROPERTIES LINK DIALOG appears. This should look familiar as it's the same Link dialog (on page 316) that you use for adding other links to your page, so you have the same link options available. A few options are disabled because they are not applicable to Navbar and menu links, such as the pop-up photo option which only works when applied to a photo.

You can also set the tooltip text for each button using the 3rd column. Edit the text the same way as you edited the label text. In the exported web site the text entered appears as a small pop-up tooltip when the mouse pointer is held over your button or menu entry.

Adding menus and sub-menus

In the first (label) column, you'll notice that there is a plus icon ⊞ to the left of each label. This is a tree control and clicking the plus icon next to a button label, expands that button node, allowing you to add a menu to that button.

Click on the DOUBLE-CLICK TO ADD MENU ITEM text below the button to start adding a menu. Or click the ADD button at the bottom of the dialog to add a menu item below the selected item. A new row appears in the table for each menu entry you add. You set the label, link and tooltip for each menu entry the same way you do for buttons. And you can

add sub-menus to any menu the same way – by first expanding the menu entry node of the tree.
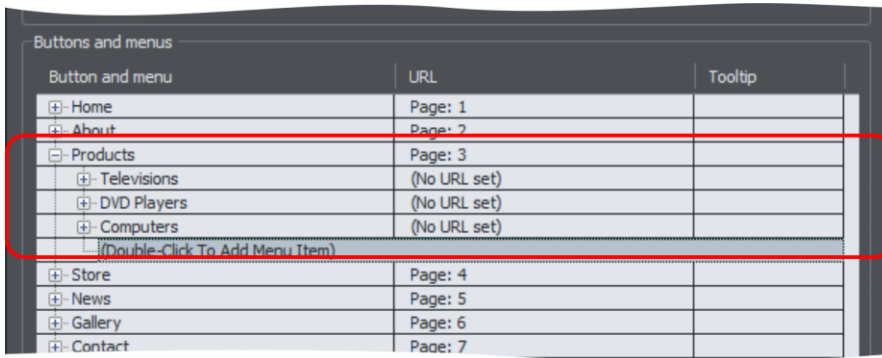
Menu separators

You can add a separator into your menu by clicking the **ADD SEPARATOR** button at the bottom of the dialog. The separator is added following the currently selected menu item. Separators allow you to visually group together related items in your menu.

Menu Styles

Click on the **MENU STYLE**... button to bring up the **MENU STYLE DIALOG**. This allows you to change how the menus appear and behave on your Navbar.
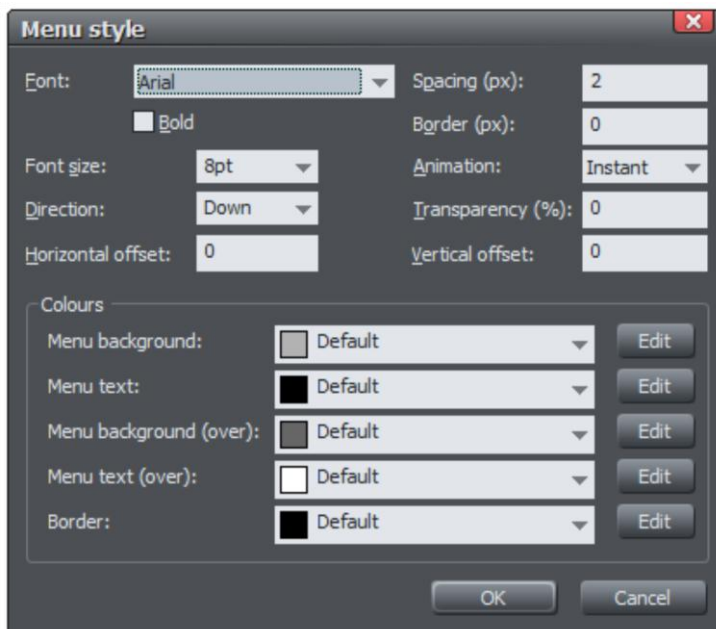
Font

Choose a font to be used for the text on your menus. Only the web safe fonts are listed, which are the fonts that all visitors to your site should have. There is also an option to make the font bold and you can change the font size used.

NOTE: This doesn't change the font used for the button labels of your bar, only the font used on menus. To change the button label font, see the section about this later in this chapter.

Direction
Choose the direction in which your menus should open. For horizontal Navbars you'll normally want this to be downwards and for vertical bars either left or right depending on where on the page your bar is located.

Spacing
With this setting you can add space between the entries in your menu, spreading them out and making the menu larger as a result.

Border
Add a border to the panes of your menus by entering a border width in pixels.

Animation
By default menus will open instantly, but here you can choose to have the menu animating as it opens.

Transparency
You can choose to have your menus semi-transparent, so that your page can be seen through the menu panes. Enter the level of transparency you would like as a percentage.

Horizontal offset / Vertical offset
You can offset the menu panes horizontally or vertically from the buttons. Just enter the number of pixels of offset required.

Updating your Navbar across all pages

As described above, if you have the SITE NAVIGATION BAR option turned on for a Navbar then all changes that you make to the bar on one page are automatically applied to all the other pages too, including the location of the bar on the page.

However if you don't have that option turned on, set the navigation bar object to be a repeating object (right click and choose REPEAT ON ALL PAGES) that appears on every page and all changes you make to any instance of the object automatically update on all pages. See the Object Handling chapter for more information on repeating objects.

On canvas editing

You can edit your button labels directly on the canvas using the TEXT TOOL. Just go into the TEXT TOOL and click in the label text to start editing it.

If the text object is a repeating object (right click and choose REPEAT ON ALL PAGES) all changes you make to one instance of the object automatically update across all instances.

Changing the font on Navbar buttons

You can change the font used for the button labels on a Navbar easily. Select the bar by clicking on it. Then go into the TEXT TOOL and select from the font list on the left of the

TEXT TOOL INFOBAR. As you move the mouse pointer over the different fonts in the list, the Navbar updates immediately so you can see how that font would look. Select the required font. If your bar has a mouseover state, it is also updated to use the same font.

Similarly you can change the size of the font using the font size control which is next to the font selection list.

Importing & pasting Navbars

If you import or paste a Navbar into your document, the site navigation option on that Navbar is turned off automatically, if it was on. This is to avoid any conflicts with any existing site navigation bar in your document.

However if the incoming bar is of the same theme and type as the existing site navigation bar in your site (ie., are part of the same repeating group), it will immediately be updated to match that existing site navigation bar. Hence in this case the bar will not appear on your page in its original form.

If the bar is of a different theme or type (ie., are not part of the same repeating group), it will appear unmodified.

Creating your own Navigation Bars

You can create a Navbar from any button design. The **DESIGNS GALLERY** contains many different button designs, or you can draw your own. See the „Creating your own Mouseover Buttons (on page 309)" section of the Getting Started chapter for information on how to do this.The button may or may not include a mouseover state.

To create a Navbar, select the button and then select "**ARRANGE**" > "**CREATE NAVIGATION BAR**". The **NAVIGATION BAR DIALOG** appears and you can immediately add more buttons to your bar, just as for other Navbars.

You can also create Navbars with more than one button design (so you can have different designs for the first and/or last button in the bar). See the section below, which describes how to do that.

Button design restrictions

There are some rules you must follow when creating your own buttons for use in Navbars.

Stretchy button limitations
In order to get reliable results when your buttons are automatically stretched you are advised to make sure that there are no path control points or graduated fill/transparency control points in the horizontal area occupied by the button label text object.

Text in a button
Each state of the button design must be a group object containing a text object that can serve as the button label. This text object should be a simple text object, not a text column or text area. That is, it should be created in the **TEXT TOOL** by clicking on the page and typing, not by first dragging a text line or text box.

Soft grouping button states

If there are several states in your button, e.g., mouseoff and mouseover, they need to be soft grouped together, so that they stay together when one state is moved or transformed.

Button margins

In this section we refer to the „margins" as being the spaces between the button label and the ends of the button. For stretchy buttons (those with the „Adjust button widths to labels" option switched on) this is determined by the master button from which you create the Navbar. By adjusting the margins on the master button, you set the margins for the other buttons in the bar, which are based on it.

The easiest way to change the margin on the first button is as follows:

1. Open the **NAVBAR DIALOG**
2. Turn off the **ADJUST BUTTON WIDTHS TO LABELS** option, so buttons don't stretch as label text is changed.
3. Change the label on the master button (the first button unless you have multiple button designs in your Navbar – see later section). Choose any dummy label text which is the appropriate length to give you the margins you want on the master button.
4. Turn the **ADJUST BUTTON WIDTHS TO LABELS** option back on again. All buttons get the same margins you set for the master button.
5. Set the master button label text back to what it should be.

| Button Text 1 | Button Text 2 | Button Text 3 | Button Text 4 |

Original bar

| xxxxxxxxxxxxxx | Button Text 2 | Button Text 3 | Button Text 4 |

Bar with a modified smaller margin

| xxxxxx | Button Text 2 | Button Text 3 | Button Text 4 |

Bar with a modified larger margin

If your Navbar has different designs for the start/end (see below for how to achieve that), then the start and end designs have their own margins that can be controlled separately.

Advanced - Editing a Navbar button design

However your Navbar was created, you can modify the button design it uses. For a Navbar where all buttons are the same design, the very first button in the bar is used as the master button from which all the other buttons are copied. Therefore by modifying the first button design, you modify the design for the whole bar.

Editing inside

For some bars you can do some editing of the button design directly on the first button, using select inside. This allows you to select shapes inside the button group. See the

information about the **SELECTOR TOOL** in the Object Handling chapter (on page 88) for details of select inside.

However you cannot do select inside editing, if either of the following options are turned on in the Navbar dialog.

- **SITE NAVIGATION BAR**
- **ADJUST BUTTON WIDTHS TO LABELS**

If either of these options are turned on and you attempt a select inside, you'll be prompted and given the option of opening the Navbar dialog so that you can turn off these options and then try again. With the options off, you can use select inside and modify the shapes that make up your button using the usual drawing tools.

IMPORTANT: Remember that the first button in your bar is the master button for your bar (unless you have different start and end buttons – see below). So you must modify the first button. Then your changes to the first button are immediately applied to the other buttons in your bar. If you modify a button other than the master, the changes will not be applied and will be lost as soon as you modify your bar.

Ungrouping, editing and regrouping

If you want to do any significant editing of a button design, it's best to ungroup the components that make up the Navbar and then regroup them again afterwards.

To ungroup your bar, select the Navbar by clicking on it on the canvas and then do a normal ungroup operation ("**ARRANGE**" > "**UNGROUP**" or "Ctrl + U"). Or click the **UNGROUP TO EDIT GRAPHICS** button at the bottom of the Navbar dialog.

Note: If your Navbar had the "Site navigation bar" option turned on, you'll need to turn that option back on again if required, after regrouping your modified bar.

Once your bar is ungrouped, it is no longer a navigation bar. You are left with a separate button group for each button state. Also, if the "**ALL BUTTONS THE SAME WIDTH**" option was turned on, ungrouping might change the button widths because this option is only effective while the buttons are part of a Navbar. Although you should only make the design changes to the master button(s), you'll normally want to leave all the other buttons on the page. They are used when you regroup your Navbar, to recover all your button labels, links, etc.

If you have a mouseover state, the 2 groups that make up the master button will be „soft grouped" so that they stay together when you drag them around the page. Separate them using "**ARRANGE**" > "**REMOVE SOFT GROUP**" ("Ctrl + Alt + U"). You can then further ungroup each button state on the MouseOff and MouseOver layers ("Ctrl + U"), in order to work on their respective designs. See the "Creating your own Mouseover Buttons" section of the Getting Started chapter (on page 309) for information on how to make buttons.

Remember to regroup each of the button states and then put the soft group back to keep the two button states together once you're done editing. Do this by making sure both layers are turned on in the **PAGE & LAYER GALLERY** (on page 142), select both

button state groups and then "**ARRANGE**" > "**APPLY SOFT GROUP**". See the Object Handling chapter for more information on soft groups (on page 112). It's a good idea to test your button works as expected by previewing your page, before re-assembling the bar. To put your bar back together, select the modified button and choose "**ARRANGE**" > "**CREATE NAVIGATION BAR**".

Navbars with different first or last buttons

Sometimes you may want a bar which has different first and last buttons. For example, perhaps a bar with rounded ends but with rectangular buttons in the middle.
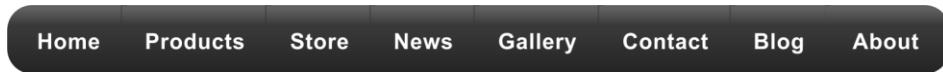
Navbars like this need 2 (if just one end should look different) or 3 (if both ends should look different) button designs. Position the button designs in order from left to right as you would like them to appear in a horizontal Navbar. Or from top to bottom as you would like them to appear in a vertical bar. Then select all 3 button designs (along with their mouseover states if they have them) and choose "**ARRANGE**" > "**CREATE NAVIGATION BAR**".

When you create a bar from more than one button like this, Xara Designer Pro 7 needs to know how you would like those buttons to be used in the bar. Therefore a dialog is displayed, asking you to choose from a range of options.
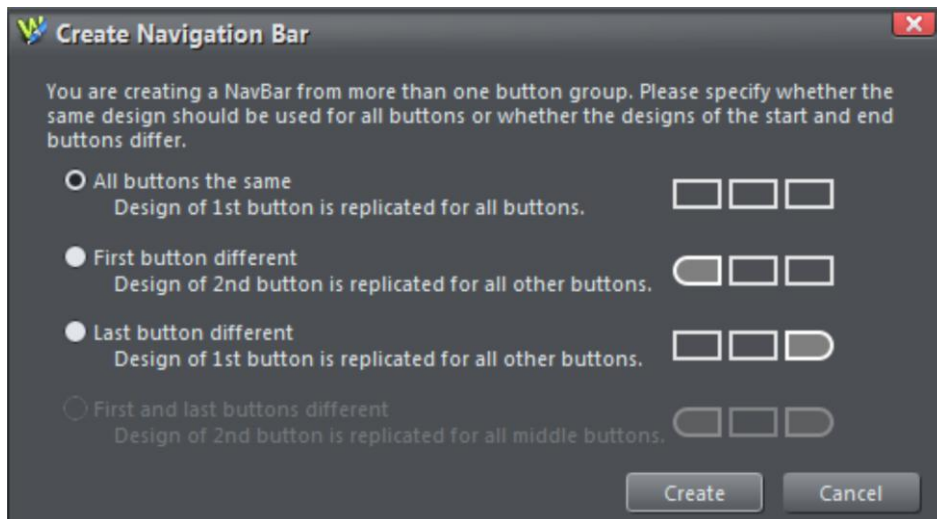
All buttons the same: Choose this option if you want all the buttons in your bar to be the design of the first button you selected. This is the most common type of Navbar.

FIRST BUTTON DIFFERENT: If the first button is to be of a different design to the rest of the buttons in the bar, choose this option.

LAST BUTTON DIFFERENT: If the last button is to be a different design to the rest of the buttons in the bar, choose this option. An example where this is necessary is a bar which shows a divider between each button in the bar. All but the last button would need the divider to appear on the right of the button design.

Home | Gallery | Support | About Us | Contact
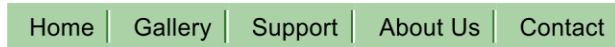
The last button in this example is different, it has no divider at the right border

FIRST AND LAST BUTTON DIFFERENT: This option allows you to specify different button designs for the first and last buttons, to give your bar end caps. Of course you must have selected at least 3 buttons for this option to be valid.

Home   Products   Store   News   Gallery   Contact   Blog   About
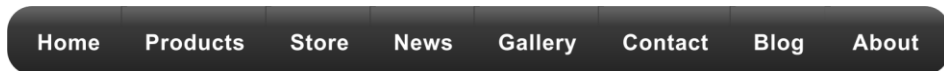
Transitions

Designer Pro allows you to apply a range of transition effects to a link, page, layer or presentation step. When the link (e.g., button) is clicked, or the page, layer or presentation step opens, the new contents/page will appear in an animated way. You can control how long a transition takes by specifying a duration in seconds from 0 to 5.

You apply a link and page transition using the Link tab (on page 316) and Page tab (on page 321) of the Web Properties dialog, and layer and step transitions using the Web Transitions tab of the Layer Properties (on page 151) dialog. See Applying transitions (on page 356) for more information on how to apply transitions to a layer and presentation step.

By default objects will only slide in/out to the edge of the web page. If you would like objects to start from the browser window edges, rather than the web page edges, deselect the **CLIP TO PAGE** edges checkbox in the Website tab (on page 323) of the Web Properties dialog.

Applying transitions

Layers

Apply a transition to a layer using the Web Transition tab of the Layer Properties dialog. See Applying transitions to a layer (on page 310).

Applying presentation step transitions

When you create a step, Designer Pro automatically assigns the Instant transition type to it.

To change a step transition:

Open the Web Transitions tab of the Layer Properties dialog either by clicking the Layer Transition Properties button in the Presentation toolbar or right click an object in the step and choose "**PRESENTATION**" > "**TRANSITION**". Or in the **PAGE & LAYER GALLERY**, right click the step and choose **LAYER PROPERTIES**.

Choose a transition from the **TRANSITION EFFECT** list, drag the **SPEED** slider to choose a transition time between 0-5 seconds, and click **APPLY**.

Applying presentation page transitions

Each presentation page can be given its own transition. To add a transition to a page, open the **PAGE TAB (ON PAGE 321)** of the Web Properties dialog.

Choose or enter the name of the page you want to apply a transition to in the **PAGE FILENAME** box. Then select a page transition type from the **TRANSITION EFFECT** drop-down list and move the **SPEED** slider to apply a transition speed from 0 to 5 seconds.

Then when your website visitor navigates to the page with the animated transition, they see the animated transition.

NOTE: If the link that navigates to the page also has a link transition applied, the link animated transition will display, as link transitions take precedence over page transitions.

A layer within a presentation

Apply a transition to a presentation layer in the same way as a layer, using the Web Transition tab of the Layer Properties dialog. See Applying transitions to a layer (on page 310).

Website Presentations

Xara Designer Pro 7 allows you to create web presentations with Microsoft PowerPoint® slideshow-style effects such as animated step transitions within a page and animated page transitions. Viewers of your web presentation can move through it sequentially, step by step and page by page, using the right arrow and Page Down key to view the next step/page, and the left arrow or Page Up key to move backwards.

You can also add links, for example via a button, to allow your viewers to move to the previous or next presentation step. This interaction defines the difference between a presentation and a website - they are very similar but viewers cannot navigate sequentially through a website using keyboard keys.

See About transitions (on page 356) for a list of transition styles.

Note: A website does not have to be set as a presentation website in order to have animated page and layer transitions. Page and link transitions can be specified on the Page (on page 321) and/or Link (on page 320) tabs of the Website Properties dialog, and will work with normal links to pages. Likewise a pop-up layer that is triggered by a link to the layer on the page can also appear with a transition effect, which can be set using the Web transition tab of the Layer Properties dialog.

Creating a presentation

There are three ways to create a new presentation:

- Start with a pre-designed template and then customize this with your own text, photos and color scheme.
- Create a presentation from scratch, bringing in all the required elements, text, graphics and photos onto the page and ordering the content into the presentation steps and pages you require.
- Convert an existing website/web document into a presentation.

Managing presentation steps

You can typically manage presentation steps by:

- Right clicking an object in a step and choosing **PRESENTATION** then choosing your required option from the sub-menu that appears
- Using the buttons on the Presentation toolbar
- Using the **PAGE & LAYER GALLERY**

Creating a step

Add new content to your page the same way you do with ordinary website documents. Normally since the current layer will be the MouseOff layer, this content will be visible as soon as the page loads. To make objects part of a presentation step, so they can be revealed incrementally:

Select the objects and click the **MAKE NEW STEP** button on the Presentation toolbar, or right-click and choose "**PRESENTATION**" > "**MOVE TO STEP**" > "**NEW STEP**".

Step 1 ▾
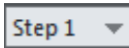
The step list in the Presentation toolbar displays the step number. If there are already several steps on the page, the new step becomes the last step with the highest step number. The default transition for a new step is **INSTANT**. You can easily change this - see Applying transitions (on page 356).

Alternatively in the **PAGE & LAYER GALLERY** select the page you want to add the step to and click **NEW LAYER**. Right click the layer and choose **LAYER PROPERTIES**. In the Web Transitions tab of the Layer Properties dialog, click the **PRESENTATION LAYER** checkbox to select it. You can also use this tab to apply a transition to the new step.
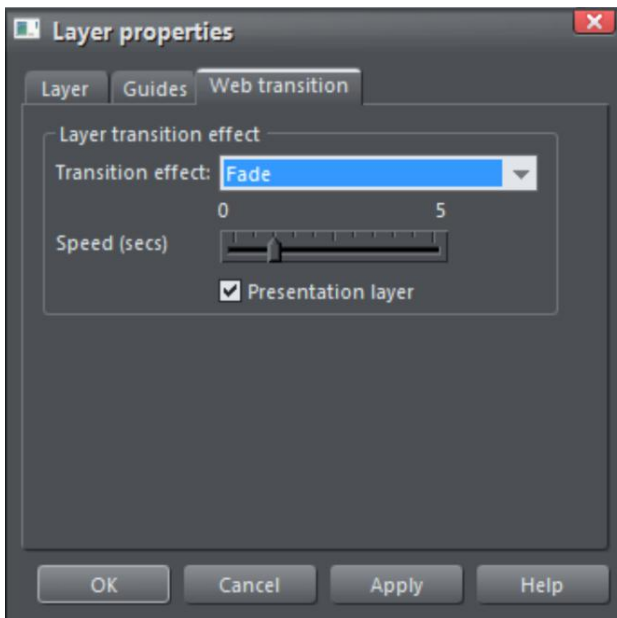
Click **APPLY** and the new layer is now displayed as a step. When this step is the currently selected step, any objects you add to the workspace are automatically added to the step.

Duplicating a step

Perhaps the easiest way of creating a step is by duplicating an existing one.

Make sure Xara Designer Pro 7 is displaying the step you want to duplicate (click an object in the step - the step number is displayed in the Presentation toolbar step list).

Right click and choose "**PRESENTATION**" > "**DUPLICATE STEP**" or click the **DUPLICATE STEP** button on the Presentation toolbar.

Alternatively in the **PAGE & LAYER GALLERY** right click the step you want to duplicate and choose **DUPLICATE LAYER**.

Designer Pro displays the contents of the duplicate step, positioning the duplicated content in a way that retains the pattern of any previous steps. For example, a duplicated bulleted list item retains the spacing of list items already created. Select and edit the duplicated content as you wish. The step number in the Presentation toolbar shows the new step number. The step is placed immediately following the step that was duplicated.

Turning a layer into a step

If you have existing layers in your presentation, you can easily convert a layer into a presentation step:

1. In the **PAGE & LAYER GALLERY**, right click the layer and choose **LAYER PROPERTIES** or click the layer and click **PROPERTIES** at the top of the gallery.
2. In the Web transition tab of the Layer Properties dialog, click the **PRESENTATION LAYER** checkbox to select it and click **APPLY**. The layer name becomes 'Presentation step 1'.
3. Repeat for each layer you want to turn into a presentation step. Each step also keeps any transition effects that you applied to the layer.
4. Now when you preview the presentation, each step can be displayed by pressing the keyboard arrow keys, or any 'next/previous presentation step' links on the page.

Viewing step contents

Sometimes you may want a clearer view of exactly which objects are in a step. The best way to do this is using the **PAGE & LAYER GALLERY**. Click on the "S" (Solo) icon next to the step you want to view, to show only that step on the canvas. Click the icon again to return to normal view. As with ordinary layers, you can click and drag an object to move it from one step to another in the **PAGE & LAYER GALLERY**.

Adding new objects to an existing step

Right click the objects you want to add to a step and choose "**PRESENTATION**" > "**MOVE TO STEP**" then choose the step number. The objects are automatically added to the step.

Alternatively click and drag the objects to a presentation step in the **PAGE & LAYER GALLERY**, or ensure the presentation layer you want to add content to is the current step before you create or add the new objects. All new content is placed on whichever layer is current. See the Steps and the **PAGE & LAYER GALLERY** (on page 366) for more information.

Note: If you inadvertently add objects to the wrong step/layer, you can easily move them to the step you want - see Moving objects from one step to another (on page 361).

Moving objects from one step to another

You can move objects from one step to another step in one of three ways:

- Right click the object(s) and choose "**PRESENTATION**" > "**MOVE TO STEP**" then choose the number of the step you want to move the object(s) to, or

- Right click and choose "**PRESENTATION**" > "**MOVE TO STEP**" > "**BACKGROUND**" if you want to move the objects to the MouseOff layer or "**PRESENTATION**" > "**MOVE TO STEP**" > "**NEW STEP**" to move to a brand new step.
- In the **PAGE & LAYER GALLERY**, click and drag the object(s) from one step to another or right click the object(s) and choose **MOVE TO CURRENT LAYER**.

Replacing existing objects in a step

If you use one of the interactive presentation templates to build your presentation, you will want to replace existing objects in a step with your own content, such as your own images, photos, logos, and text objects.

However if there's only one object in a step then deleting that object will remove the step, and you may want to retain its transition and its order in the step sequence. In this case:

Add your own content to the step (on page 361), then delete the content you don't want (on page 362).

This ensures that the step won't be removed and its order remains unchanged.

Note: If the object you want to replace is a photo, you can replace it by dragging the new photo from the file explorer directly onto the photo you want to replace - see Replacing photos (on page 246).

Changing step order

The order in which steps are revealed is the order in which the steps appear in the **PAGE & LAYER GALLERY**, as indicated by the step numbers. You can change this order either by right clicking an object in a step and choosing "**PRESENTATION" > "STEP ORDER"** then choosing a new step number, or by choosing a new step number from the Presentation toolbar.

You can also click and drag steps above or below each other in the **PAGE & LAYER GALLERY** until all steps are in the order you want.

Deleting objects from a step

Right click the object and choose **CUT** or **DELETE**, or in the **PAGE & LAYER GALLERY** right click the object and choose **DELETE** or click the object then press the **DELETE** button in the standard toolbar.

When you delete an object and it's the only object in a step, Designer Pro automatically deletes the empty step, reordering the remaining steps accordingly. Deleting an object when there's more than one in the step will not remove the step.

Deleting a step

Select an object in the step and click the **DELETE STEP** button in the Presentation toolbar or right-click and choose "**PRESENTATION" > "DELETE STEP"**.

Alternatively in the **PAGE & LAYER GALLERY** right click the layer and choose **DELETE LAYER**.

Note: When the step is deleted, Designer Pro automatically reorders the remaining steps accordingly.

Adding new presentation pages

Right click the Xara Designer Pro 7 pasteboard and choose **NEW PAGE** to add a new blank page or **DUPLICATE CURRENT PAGE** to add a copy of the currently selected page.

Deleting presentation pages

Right click the page and choose **DELETE CURRENT PAGE**.

Linking to next/previous step

You can easily add buttons/objects to a presentation page that display the next step in the page. Just add or create your button, and use the **LINK TO** list in the Link tab (on page 317) of the Web Properties dialog to apply a link to the button/object that will display the next presentation step.

When the viewer has displayed all the steps on the page using a 'next presentation step' link or the right arrow key, clicking the button or key again displays the next page.

Note: If you convert a presentation into a web document (**PRESENTATION WEBSITE** checkbox in Web Properties dialog Website tab), any next/previous presentation step links automatically turn into next/previous page links. You cannot apply 'next/previous presentation step' links to a web document.

Applying transitions to presentation step links

You can apply a link transition to any link object, such as a button, in your presentation page in the same way as you can in a web document page, using the Link tab (on page 320) of the Web Properties dialog. Link options for presentation documents also include next/previous presentation step (on page 363).

Applying presentation step transitions

When you create a step, Designer Pro automatically assigns the Instant transition type to it.

To change a step transition:

Open the Web Transitions tab of the Layer Properties dialog either by clicking the Layer Transition Properties button in the Presentation toolbar or right click an object in the step and choose "**PRESENTATION**" > "**TRANSITION**". Or in the **PAGE & LAYER GALLERY**, right click the step and choose **LAYER PROPERTIES**.

Choose a transition from the **TRANSITION EFFECT** list, drag the **SPEED** slider to choose a transition time between 0-5 seconds, and click **APPLY**.

Applying presentation page transitions

Each presentation page can be given its own transition. To add a transition to a page, open the **PAGE TAB (ON PAGE 321)** of the Web Properties dialog.

Choose or enter the name of the page you want to apply a transition to in the **PAGE FILENAME** box. Then select a page transition type from the **TRANSITION EFFECT** drop-down list and move the **SPEED** slider to apply a transition speed from 0 to 5 seconds.

Then when your website visitor navigates to the page with the animated transition, they see the animated transition.

NOTE: If the link that navigates to the page also has a link transition applied, the link animated transition will display, as link transitions take precedence over page transitions.

Advanced presentation information

You can also use the **PAGE & LAYER GALLERY** to manage presentation steps.

Steps versus layers

The steps within a presentation document are actually just different layers within the document. So when you place an object on a particular step you are really just moving that object to a specific presentation layer within the document. You can see this if you open the **PAGE & LAYER GALLERY** and view the layers in your presentation document – each step of your presentation is actually a layer in your document. Presentation layers are just ordinary layers with the presentation option selected in the Layer properties dialog. Once this option is turned on for a layer, any name the layer had is overridden

with "Presentation step (N)" in the **PAGE & LAYER GALLERY**, where (N) is the step number.
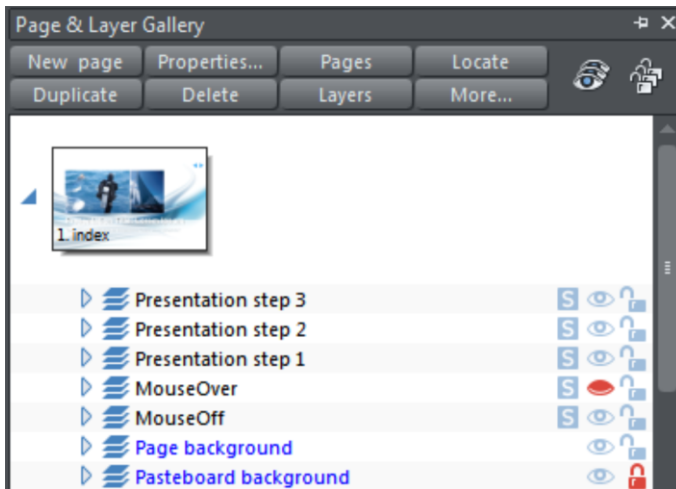
You can re-order the steps in your presentation by re-ordering the layers in the gallery. The step numbers update automatically.

You can mix popup layers and presentation layers in a presentation document, but of course only the presentation layers will be revealed as the visitor steps through the presentation by pressing the arrow keys.

Having both layers and presentation steps is useful if you want to keep features such as popup layers in your presentation. You can change layers into steps (and turn steps back into layers) by toggling the **PRESENTATION LAYER** checkbox in the Layer Properties (on page 151) dialog's Web Transition tab.
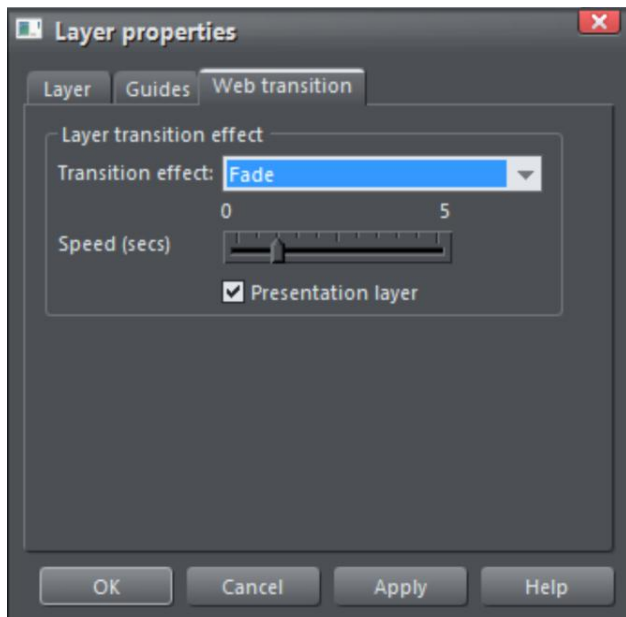
When you create a new step, this checkbox is automatically selected.

If you deselect it to turn a step into a layer, this removes the step from the presentation, even though its contents and any layer transition remain. The converted layer, however, will not be displayed when a viewer navigates through a presentation using either the arrow keyboard keys or a next/previous presentation step link.

Viewing step contents in the Page & Layer Gallery

Click a step to expand it. All of the objects within it are displayed.
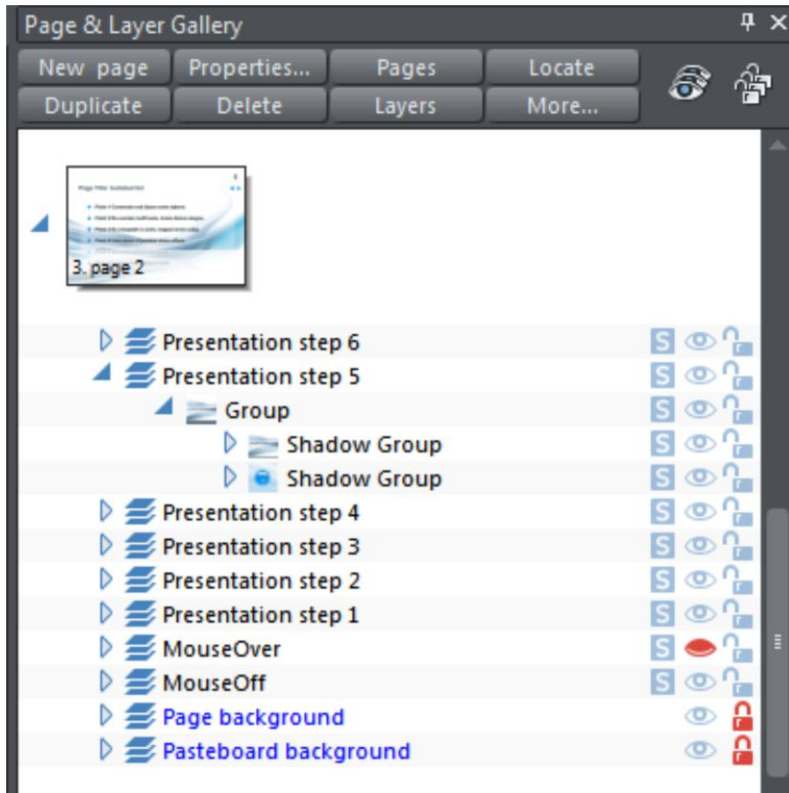
Expand a step in the PAGE & LAYER GALLERY to see its contents

Hosting remote presentation sessions

Once you have a published presentation website that was created by Xara Designer Pro 7 and published on MAGIX Online World, you can use Xara's remote presentation system to remotely control a run-through of your presentation with any number of viewers over the Internet.

With this system, you provide each of the people you want to see your presentation with a unique link, which they access using their normal web browser. They see the opening page of your presentation, but they can't step through the presentation, or interact with it themselves directly. Instead, as you move through the steps of the presentation using the arrow keys, step by step and page by page, all your viewers see their web browser update automatically. Whatever page and steps you see in your web browser, all your

viewers will see too. Typically you would have all your viewers in an audio conference call at the same time, so you can talk through your presentation.

Setting up a remote presentation

Setting up a remote presentation is easy. Just follow these steps:

1. Publish your presentation website on MAGIX Online World, view it using its published web address and make sure you can step through it using the arrow keys on your keyboard. Take a copy of the URL of the first page of your presentation.
2. Select "**HELP" > "REMOTE PRESENTATIONS**...." from the Designer Pro menu and login with your MAGIX Online World registered email address and password. Or click the button to create a MAGIX Online World account if you don't already have one.
3. Enter a title for your presentation and the URL of the first page.
4. You can optionally enter a message that is shown to your viewers prior to the start of your presentation. So you may choose to make the message something like "Presentation starting at 2pm". **Note**: As the presenter, you can't see this message.
5. Click the **CREATE PRESENTATION** button. Your presentation appears in the list on the right. A unique URL is shown for your new presentation. Copy that link address and provide to everyone who you are inviting to see your presentation, telling them when it will take place.
6. When the time comes to start your presentation, login again at http://presenter.xara.com and click the **START** button next to the presentation on the right. You will then see the first page of your presentation, as will all your viewers. When you click the right arrow key to move to the next step or page, all your viewers will see the same thing as you in their web browsers.
7. In the top right corner of the browser window, the remote presentation system shows you how many viewers are currently viewing your current presentation. If you move the mouse pointer over this text, you'll see a list of the names of each current viewer.

Limitations

Only 'next step', 'previous step', 'page down', 'page up' operations, and ordinary web links, are transmitted between the presenter and the viewers. So avoid relying on other events, such as mouse-over events , pop-up photos, pop-up layers, etc., because these won't be seen by your viewers.

Hosting a presentation

If you want to host a presentation, first you need to have a MAGIX Online World account. If you don't have one already, go to the Remote Presentation Manager's introduction page at http://presenter.xara.com and click the **CREATE A MAGIX ONLINE WORLD ACCOUNT** button and follow the instructions. If you already have an account, sign in as described below.

Go to the Remote Presentation Manager's introduction page and type in your email address and MAGIX Online World password, then click **SIGN IN**.

Under **CREATE A PRESENTATION**, type in a title for your presentation and the URL to the web page that your presentation is on.

Note: The URL that you supply has to be to a presentation, and not just an ordinary web page, otherwise the Remote Presentation Manager will not work.

Type a welcome message in the **MESSAGE FOR VIEWERS** box. This message will be displayed at the start of the session, so it's a good idea to include the time and date of the session, plus some brief information on what the presentation is about.

Click the **CREATE PRESENTATION** button.

Your presentation is displayed in the list on the right. The password that attendees will need to enter your session is displayed under **CODE**. Copy and paste this to send to attendees, along with the session URL, which you can generate by clicking the **COPY URL** button. You can also see the URL by clicking **START** to begin the presentation. The URL is displayed in the top left of the Remote Presentation Manager window.

When your session time arrives, click the **START** button next to your presentation. As each attendee signs in (by clicking the URL and entering the password code you sent), you see their name displayed in a list on the top left of the window.

You can navigate through the presentation using the left and right keyboard arrow keys or clicking any next/previous step buttons in your presentation. These buttons are, however, disabled for viewers, so that you can control when the next step or page is displayed. The presentation is synchronized so that all viewers see the current step and page no matter when they join.

Website Widgets

Widgets from the Designs Gallery

The easiest way to add widgets to your site is to choose from the selection provided in the **DESIGNS GALLERY**. Look under the "Widgets, Forms & More (Download)" category near the top of the gallery. The widgets in the gallery are automatically updated from time to time, so that Xara can add, modify or delete the selection of widgets available to you at any time. You will sometimes see the **DESIGNS GALLERY** update when you first open it or when you first open a category folder.

To add a widget, just drag and drop it from the gallery onto your page. What happens next depends on the type of widget. If it's a Web Editable Widget, a browser window will open to allow you to configure the widget on the widget provider's website. If it's a Locally Editable Widget, a placeholder image will appear on your page. Double click on the placeholder and a new document opens within Designer Pro, which allows you to customize the widget.

Web Editable Widgets

When you drop one of these widgets onto your page from the **DESIGNS GALLERY**, a window opens which is actually an Internet Explorer browser running inside Designer Pro. This is similar to the preview window shown when you click the preview page and

preview website buttons on the web toolbar. However this widget window has some additional buttons at the bottom – more about those later.
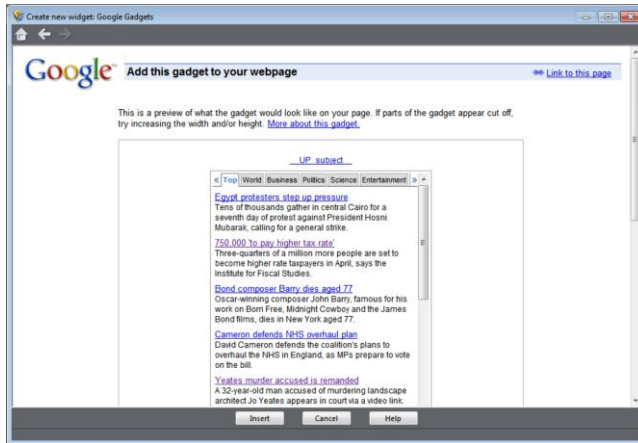
Example widget insertion window, showing Google News gadget.

The browser window opens onto the website of the widget provider. Here you can find out more about the widget if required, provide any data the widget requires and in most cases also customize its appearance. Usually the widget website will also show you a preview of what your widget will look like, complete with any customizations you've applied.

Inserting

Press the **HELP** button at the bottom of the window to see some information to guide you through the process of configuring the widget and inserting it on your page. For most widgets, you need to get to the point where the widget website offers you the HTML code that needs to be inserted into your web page. As soon as this is visible, you can normally click the Insert button at the bottom of the window. Xara Designer Pro 7 will then find the HTML code and will insert it into your page for you.

For some widgets, Xara Designer Pro 7 is unable to retrieve the HTML code from the site directly and you need to first copy the code to the clipboard. Select the code in the browser window and press Ctrl+C. Many widgets make this easy for you by providing a copy button next to the code. Once you've copied the code, click the **INSERT** button.

Automatic placeholder generation

When you press the Insert button, if Xara Designer Pro 7 found the widget code the widget website window is closed and you will see an indication that Xara Designer Pro 7 is busy rendering a placeholder image. After a few seconds an image of your widget appears on your page. For most widgets this is exactly the same size as the widget itself, so you can position it where you like using the **SELECTOR TOOL**.

Now all you have to do is preview your web page and you should see your new widget working on your page!

Widget site membership

Some widgets may require you to open an account with the widget provider, before you can use them. Most are free, but some offer premium services over and above the free offering. See each individual widget and the information on the widget provider's site for details.

Editing existing widgets

At any time you can double click the widget placeholder (or right click and choose EDIT WIDGET) in your Designer Pro's page to return to the widget provider's website so you can easily modify or replace the widget.

Those widget providers who give you an account, will normally also keep a copy of any widgets you've created. This means you can sign into your account while going through the insertion process above and then find, modify and insert a widget that you've created previously. Inserting existing widgets is just like inserting newly created widgets – just click INSERT when you are offered the HTML code, or copy the HTML code for the widget to the clipboard and then click INSERT.

Locally Editable Widgets

Some widgets that you drop onto your page from the DESIGNS GALLERY won't open a browser window as described above for Web Editable Widgets. These are Locally Editable Widgets that you edit directly in Designer Pro using a separate document window.

Editing

After dropping such a widget on your page, double click on it to edit. A new document window opens in Designer Pro (the widget's "editing document"). What that document window shows will depend on the specific widget, but typically you'll see a multi-page document that allows you to conveniently edit and customize all the content for the widget. Normally there will be some specific instructions shown to the side of or above the first page, describing what aspects of the widget you can edit in the document and any aspects that are not editable. In most cases, you can edit the text you see using the TEXT TOOL, but you can't normally change the font or style of the text. You can replace photos by dropping new photo files onto the images from Windows Explorer, just as you replace photos in normal documents. And you can edit the photos using the PHOTO TOOL, adjust photos using the FILL TOOL, etc. Look at each page in turn and customize the text and photos. Some objects may be locked (clicking on them does nothing) which tells you that you can't edit that aspect of the widget, or perhaps it should be modified by changing unlocked objects on one of the other pages. Any locked objects are present as a visual aid, to help make the context of the unlocked editable parts of the design clear.

Adding more content

Some widgets will allow you to add more content to the widget by duplicating the pages shown (right click on the page and choose DUPLICATE CURRENT PAGE). A slide show widget may allow you to add more photos to it this way. After duplicating a page, change its photos or text as required. The instructions in the widget will tell you whether or not you can duplicate pages in this way to add content.

If you make any changes that the instructions say should not be made, usually those changes will be ignored. However you may cause a widget to malfunction so please change only the aspects of the design that the instructions say can be modified.

Resizing

Locally Editable Widgets are not normally resizable, so don't change the size of the placeholder object on your page, nor the page dimensions in the widget's editing document.

Saving changes

When you've finished customizing, close the document and you'll be asked whether or not you want to save the changes you've made back to your website document. Alternatively, just hit "Ctrl + S" and the changes you've made will be saved and the editing document closed, returning you to your website document.

The placeholder image that represents your widget should update, so that it reflects the first page of the editing document. Preview your page to see the effects of your changes on the working widget.

Adding movie & animation files

Xara Designer Pro 7 includes direct support for some types of file that you are likely to want to add to your website. For these files you can simply drag and drop them from Windows Explorer onto your page, or use "**FILE**" > "**IMPORT**".

On import the file type is identified, an appropriate placeholder or link is added to your page, and the file is copied into the support folder for your design. The support folder is a folder which lives alongside your design file and is created automatically. If your design file is called „MySite.web", its support folder is „MySite_web_files". The contents of this folder are included along with all the image files for your site, whenever the site is exported and published.

MP4 & FLV movie files

Import an MP4 or FLV file and Xara Designer Pro 7 inspects the file to determine the aspect ratio and other information about the movie. It then inserts the movie file, and some other files for a Flash movie player, into the support folder of your website. A placeholder image resembling the movie player appears on your page.

Position and resize the placeholder using the **SELECTOR TOOL**, and then preview your page. Click on the movie player play button to start the movie (you need to have Flash installed). That's it! The movie player includes basic controls for adjusting volume, starting & stopping and for jumping to any point in the movie.

Other movie formats

Xara Designer Pro 7 doesn't support other movie formats directly, but visit this web page http://rdir.magix.net/?page=H1Q9XX0777AR on the MAGIX website for information on how to easily convert movies into a format that can be added to your web page.

Flash files

To include a Flash animation on your website, import the Flash (.swf) file. The Flash file is copied into the support folder of your design, so it will be exported and published with your website. And a placeholder image is rendered and placed onto your page.

You can resize Flash animations, so simply use the **SELECTOR TOOL** to resize the placeholder image to the required size, and position it by dragging it around.

Preview your page to see your working Flash animation on your web page. Obviously you must have Flash installed in order for it to play successfully.

Animated GIFs

Add an animated GIF to your page just the same way as for Flash files. Import or drag and drop the GIF file onto your page. It gets copied to your design's support folder and a static placeholder image is generated for it. Resize and position the placeholder, then preview your page and you're done!

PDF Files

You can import PDF files into a web document in two different ways. Either import it so that the contents of the file are copied onto your page (as when importing a photo). Or you can link to a copy of the file in your website and have the file published with your site. When importing a PDF file a prompt is shown to let you choose between these two options.

When adding a link, the PDF file is copied into the support folder of your design, so it's exported and published with the rest of your site. And a link is added which looks like this on the page:

Clicking the link on your exported page normally opens the PDF file, but the exact behavior varies depending on the user's browser settings.

Widgets from other widget sites

There are hundreds or thousands of sites offering widgets of some form or another and the **DESIGNS GALLERY** offers only a tiny subset of what is available on the web. Just about all widgets are provided to you in the form of a small piece of HTML code. The widget provider will normally give you some simple instructions on how to insert the code into your web page, but with Xara Designer Pro 7 it really is very simple.

Copy the code from the widget provider to your system clipboard, just as you copy text in a word processor. Sometimes the widget provider may even provide a 'copy' button which copies the code for you.

Then in Xara Designer Pro 7 go into the **SELECTOR TOOL** and then do a normal paste operation (Ctrl+V). You'll see that Xara Designer Pro 7 recognizes the HTML code and immediately starts to render a placeholder image, just as it does when inserting a widget from the **DESIGNS GALLERY**. The placeholder appears on your page, usually with the most appropriate size for the widget. You can then preview your page to see your working widget!

You can also paste widget code into both the head and body of your page using the Placeholder tab (on page 332) of the Web Properties dialog.

NOTE: If you are in the **TEXT TOOL** when you paste the code, it will be pasted as text instead of producing a placeholder! And once you've pasted the contents of the clipboard as text once, it will continue to paste as text even if you switch to the **SELECTOR TOOL** and paste again. If you get into this position, return to the widget website and copy the code again. Then do the paste while in the **SELECTOR TOOL**.

Resizing widgets

You can resize the placeholder images for Flash, MP4 movies and animated GIFs to similarly resize the content as it appears on your page, because this type of content is scalable. But most other widgets don't support this and will always render the same size.

For these widgets the placeholder object merely determines the bounds of the area in which the widget can render, so making the placeholder too small for the widget will mean that the widget gets cropped in your web page. The placeholder image gets regenerated whenever you resize it, so it will reflect any cropping of the widget too, as shown in this example.
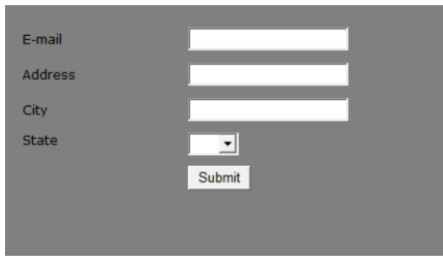
Placeholder with default size   *Placeholder with reduced size*

This is an example of the PayPal e-commerce 'Buy Now' button which enables you to sell goods or services from your website. This Widget is one available from the **DESIGNS GALLERY**. Similarly making the placeholder larger for such widgets will merely result in empty space around the widget, on the page and in the placeholder image. For widgets like these which don't resize correctly when you resize the placeholder, it's best to stick with the original default size.

There are some widgets which can be improved by resizing the placeholder, even if the widget itself doesn't scale. Some widgets will fill the container into which they are inserted, which may mean they come out much bigger than required, with blank areas filling the space. You can experiment by resizing the placeholder for such widgets in each direction and this may make the widget smaller without losing the key parts of the widget.

For example this Form widget has rendered much too wide and tall and so there is wasted space below and to the right of the form controls. Resizing it down doesn't change the size of the form controls, it just results in the form being cropped. The result is a much neater form placeholder taking up much less space on the page.

Placeholder with default size   *Placeholder made narrower and shorter*

Turning off placeholder re-generation

The placeholder image will be regenerated whenever you resize it or change the code or file it's attached to. Sometimes you may want to turn off that regeneration so that the placeholder image won't change again. You can do this by deselecting the checkbox at the bottom of the **PLACEHOLDER TAB** in the "**UTILITIES**" > "**WEB PROPERTIES DIALOG**".

Adding widget placeholders manually

If you don't want Xara Designer Pro 7 to create a placeholder image automatically, you can set one up yourself. First create a placeholder object (perhaps a rectangle of the appropriate size or an imported image that you want to use to represent the widget on your page). Select the object and then open the Placeholder tab in the "**UTILITIES**" > "**WEB PROPERTIES**".

 Or press the placeholder button on the Web properties flyout bar on the top bar.

In this dialog you can choose to associate the selected object with a Flash file or other file, or with HTML code that the dialog allows you to paste into the head or body of the web page. See the **PLACEHOLDER TAB** section of the Web Properties Dialog (on page 330) chapter for details on this dialog.

Normally you don't want to select the "Re-generate placeholder" option if you want to keep the placeholder object you've created yourself. Selecting the option will cause your placeholder to be replaced with an image generated from the code or file you have specified in this dialog.

More Information

See the website at xara.com/widgets http://www.xara.com/widgets for more information on widgets. And of course, keep an eye on the **DESIGNS GALLERY**, which is regularly updated with new widgets.

Animations

Introduction

Xara Designer Pro 7 takes a traditional animator's approach to Flash animation. You create key frames (or "snap-shots") of your animation through time, and Xara Designer Pro 7 automatically creates all the in-between frames for you, a process called 'tweening'.

An example start frame

The next key frame has the star shape moved, rotated a little, reduced in size, and changed to a different color.

Xara Designer Pro 7 will create a smoothly animated Flash file automatically creating the interim frames. This process is called "tweening".

What Flash can and cannot do

The Flash format does not support some of the advanced effects that Xara Designer Pro 7 offers, for example complex graduated transparency, feathering and most of the advanced color fill types.

However, it does support a range of effects that include simple transparency. So, for example, if you fade the star on the 2nd key frame above to be 100% transparent, you'll get an animation where the star moves, reduces in size, and then fades.

The same example, showing in-between frames, but with a transparency change.

Like Xara Designer Pro 7, Flash is vector graphics-based, which means that you can enlarge objects with no loss of detail. It also means that Flash files can be very compact, which is of course ideal for the web!

To illustrate just how small and compact Xara Designer Pro 7 Flash animations can be, the previous example animated over one second with 24 frames (so the movie plays at a smooth 24 frames per second) creates a Flash file that's only 700 bytes.

The 6 core types of animation

In order to keep Flash files very compact, the types of shape tweening supported by Flash are limited to six basic types of animation. These are sometimes called the 6 core transforms, because these are the main ways you can transform an object from one key frame to the next.

1. Move: Move objects from one position to another.
2. Scale: Enlarge or reduce objects in size.
3. Squash or skew: Squash or skew objects.
4. Rotate: Rotate objects.
5. Transparency: Adjust the overall (flat) transparency of the objects.
6. Color changes: Change the fill (flat) color of objects.

The last item, color changes, can be applied to contoned (colored) photos. You can't transform a full color photo into a contoned one, but you can change a photo with one contone color into another color.

Note: the above six transform types are absolutely key to all Flash animations.

If you look at Flash animation examples on the web, you'll find that almost all consist of just these effects. Objects fade in and out; they whiz from one position to another. They sometimes spin, grow or shrink. That's the basis for almost all Flash animations, and it's very easy to produce such animations in Xara Designer Pro 7. It is also possible to tween shape outlines and some **PHOTO TOOL** attributes in Xara Designer Pro 7, but these are less common and only applicable to specific types of object.

One thing that isn't possible is to change the shape of an object between key frames.

It's not possible to change the shape between key frames.

Because the shape changes (i.e. it morphs from one shape to another), this is not possible in Xara Designer Pro 7 Flash animations.

What you can't do with Xara Designer Pro 7 Flash

Xara Designer Pro 7 is not designed to be an advanced, all-encompassing **FLASH TOOL**. Instead, we feel it brings a new, innovative, very easy to understand approach to Flash animation. Combined with Xara Designer Pro 7's vector drawing tools and slick ease-of-use, it allows you to create really compact Flash animations more easily than other tools.

Because of this simplified approach, Xara Designer Pro 7 does not support more complex Flash features such as scripting (programming), audio, or embedded movies.

Additionally, since Flash vector rendering is relatively primitive compared to Xara Designer Pro 7's, there are advanced Designer Pro effects such as feathering that cannot be used in Flash. These are detailed in the "What Xara Designer Pro 7 Features Does Flash Support? (on page 389)" section towards the end of this chapter.

Core Principles

In your animation you are likely to have some objects that remain static between key frames (i.e. no tweening is necessary) and other objects you will want to animate.

To tell Xara Designer Pro 7 which objects you want to animate, it's necessary to give each object a name (via the **ADD NAMES** button on the **SELECTOR TOOL** InfoBar).

For more information on naming objects, see section "Naming Objects" in the "Document Handling" chapter.

Here is an overview of the typical process to create a new animation from scratch, which this chapter will guide you through:

1. Decide what size you would like your animation to be and set the page size accordingly (see "**FILE**" > "**PAGE OPTIONS** (on page 456)").
2. Draw your first frame. Name the objects that you want to animate.
3. Create a new key frame (usually done by copying the earlier frame).

4. Move and transform the objects as required.
5. Preview the results.
6. Repeat steps 3 through 5.

And so you can then build up your animation.

The **Copy Frame** button on the **Animation** button bar.

Xara Designer Pro 7 provides an easy one-button way to create new key frames which are a copy of a previous frame. The **FRAME GALLERY** allows you to view any key frame, and you can adjust the frame order and display period for each key frame. The **FRAME GALLERY (ON PAGE 380)** is described in depth later in this chapter.

For those familiar with the animated GIF features of Xara Designer Pro 7 (or its predecessors), the whole process will be very familiar. The difference is that with Flash files Xara Designer Pro 7 can automatically create all the tween steps to produce smoother, much more compact animations than animated GIFs can offer.

> **Note:** Objects that you want to animate from one frame to another need to have a name. All other objects will remain visible (but static) for the display period of the frame until the next key frame. So to delete an object from an animation, just delete it on the first key frame on which you no longer need it to appear.

Exporting a Flash File

To export your animation as a Flash file:

Select "**FILE**" > "**EXPORT ANIMATION**" and then choose Flash under **SAVE AS TYPE**.

Or click the **EXPORT ANIMATED FLASH** button.

This will save the finished SWF file into the location you choose.

Previewing a Flash Object in Xara Designer Pro 7

To view your animation as it would look in a web page, click the **PREVIEW FLASH** button to instantly see a browser preview.

The preview page will show your finished animation as well as useful information, such as the animation's dimensions, file size, etc. It also includes simple instructions on inserting your animation into a web page.

Inserting a Flash Object in Xara Designer Pro 7

For those using Xara Designer Pro 7 you can simply drop the Flash file onto your web page to insert it into your website. A static placeholder image is automatically created

and placed on your page. Preview your page and you should see your working Flash animation!

Alternatively you can create a placeholder object manually. On your web page, create a placeholder object, which can be anything such as a simple rectangle or an image or screen grab even. Position and size your placeholder where you want your Flash animation to appear.

Then in the **WEB PROPERTIES DIALOG** ("Ctrl + Shift + W") select the **PLACEHOLDER TAB** and the **REPLACE WITH FLASH** Browse options to locate the required .SWF file. Click **APPLY**.

Now when you preview your website, the placeholder is replaced by the Flash animation.

With either option above, the .swf file gets copied into a support folder next to your .xar file, so that there is a copy of the file with your .xar file. Therefore if you subsequently change your animation and export an updated .swf file that you want to use instead, either brow**SE FOR THE NEW .SWF FILE USING THE "UTILITIES" > "WEB PROPERTIES" > "PLACEHOLDER TAB**" as above, or manually replace the file in the support folder with the updated file.

See the Support Folders section (on page 43) of the Document Handling chapter for more information.

Inserting using a different web authoring tool

To place your SWF animation into your HTML click the **VIEW HTML** link on the Flash preview screen to get code that you can paste into your web page using your preferred HTML editor.

Note: You must change the SWF file name in the code to match the actual name of your exported SWF file. You must also place your SWF file into the same directory as your web page for the code to work. If you place the SWF file in a different directory, you will need to change the HTML code accordingly.

Exporting animations as AVI

As well as exporting animations as animated GIFs and Flash animations, you can also export in the .AVI file format.

In an animation document, choose **EXPORT ANIMATION** from the **FILE** menu, and choose **AVI ANIMATION (*.AVI)** from the Save As Type drop-down list in the Export File dialog. Click the **OPTIONS** button to choose the export settings, or just click the **EXPORT** button to use the current or default settings.

AVI options

Codec selection

Use the dropdown list to select from the range of codecs that you have installed. This determines how your AVI is encoded and compressed. Or choose the "uncompressed" option if you want to export an uncompressed AVI. Note that this will give you a very large file size!

Key frame every N frames

The default value is provided by the selected codec and it's normally best to keep that value. Reducing the number will tend to result in higher quality but larger files, increasing it in lower quality smaller files.

Configure

Pressing the **CONFIGURE** button opens a settings dialog specific to the selected codec (if available), which may give you more configuration options. The **ABOUT** button tells you more about the selected codec.

Make background transparent

Selecting this option will make your AVI have a transparent background, which is useful if you want your animation to appear on top of a movie (for movie titling, for example).

When this option is on, the codec list is reduced to show only the "uncompressed" option, because transparency can't currently be supported using a codec. If you export an uncompressed AVI with transparency, it will import into MAGIX movie editing software and some other movie editing applications with the transparency.

Area to save

Choose whether to save a movie that is the size of your animation page or the size of the animated drawing.

Click OK to export the AVI animation.

The Animation Frame Gallery

By default the **ANIMATION FRAME GALLERY** is displayed open on the right hand side of the Designer Pro window (next to the **PAGE & LAYER GALLERY**) when you open or create an animation document.

To toggle display of the **FRAME GALLERY**, choose "**UTILITIES**" > "**GALLERIES**" > "**FRAME GALLERY**", or click the **FRAME GALLERY** icon on the **GALLERIES** toolbar.
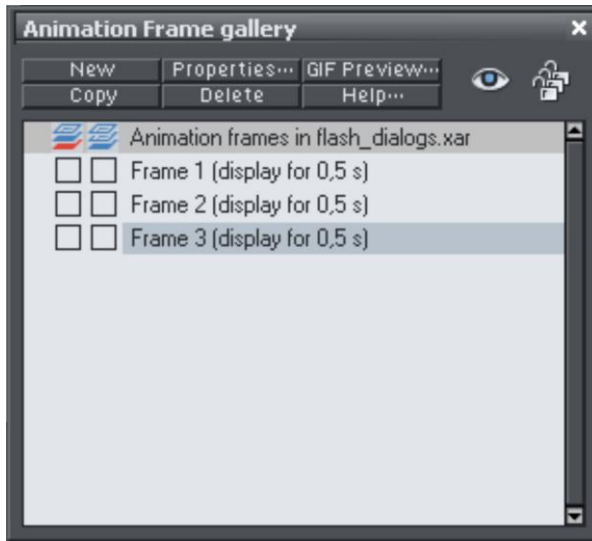
This shows a list of the key frames in your document. To view any key frame just click its name in the gallery.

The **ANIMATION FRAME GALLERY** shows frames from the top down, so the first frame is at the top and the each new frame you add gets put at the bottom of the list. You can re-order frames by dragging them. There are buttons to perform the main operations of deleting frames, copying the selected frame (it will always get added to the end) and creating new blank frames.

A typical FRAME GALLERY. Frame 3 is selected and thus visible.

The **PROPERTIES** button is very important, since it shows the **ANIMATION PROPERTIES** dialog which controls many aspects of not just the selected frame but the whole animation.
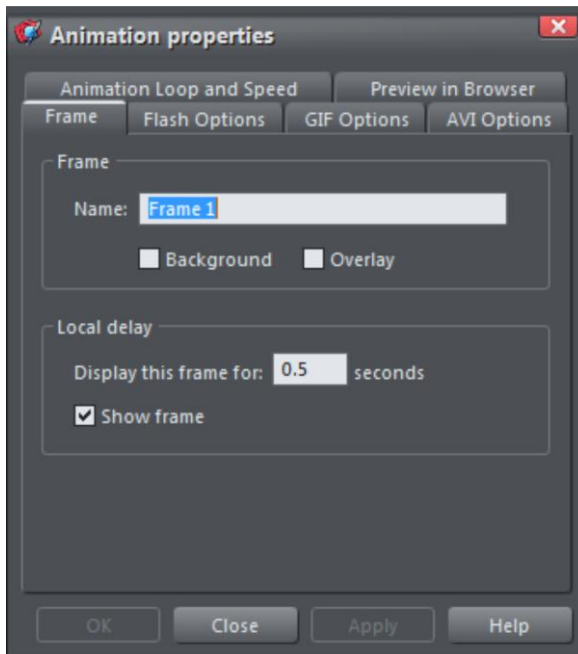
The Animation Properties dialog

A shortcut to display the Animation Properties dialog is to simply double click on a frame name in the **FRAME GALLERY**

The **ALL FRAMES VISIBLE** (the eye) and **EDIT ALL FRAMES** (the padlocks) buttons on the **FRAME GALLERY** are useful because they allow you to view or edit all frames together, one on top of the other.

This is particularly useful if you want to select objects that are on multiple frames.

Note: When you copy a frame, it always copies the selected frame and places it at the end. So in order to insert a new frame, say between frames 4 and 5, select frame 4, click the **COPY** button, and then drag the new copy from the end to the desired position between frames 4 and 5.

Note: Frame names do not matter and can be anything you like. They do not have to be Frame 1, Frame 2, etc. Animations always play the frames in the order top to bottom, irrespective of the names.

Copying Objects

You can copy objects from one frame to another in the usual way (i.e. copy the content, select the new frame and then paste into the new frame). The "**EDIT**" > "**PASTE IN PLACE**" option ("Ctrl + Shift + V") is particularly useful when doing this, as this will always paste objects back to the exact position they came from but on the new frame.

When you copy an object its name is copied with it, but be careful not to have more than one object with the same name on a given frame; doing so will generate errors.

Photos

Because Flash files usually consist of vector shapes, and the transforms are relatively simple, the files can be very small. Photos and bitmaps can be embedded into Flash animations, but unless you are careful it will result in huge animation files. You can perform all core Flash transforms on bitmaps or photos (i.e. you can move, scale, squash, rotate, fade and re-color.).

Flash files can include both PNG and JPEG images just as .xar files do, and Designer Pro automatically creates photos of the right resolution when creating the Flash file. So for example you can load a hi-res digital camera image, size this down to be say 200 pixels, and this means that a 200 pixel image will get included, and not the full hi-res JPEG.

When higher resolution photos are converted down for inclusion in Flash files the JPEG compression setting (Animation Properties dialog, Flash Options tab) can be used to control how compressed your JPEG images are. See below.

When tweening bitmaps or photos, only one copy of the bitmap is stored in the Flash file, so you can perform transformations of the bitmap with little overhead. In other words, just because the bitmap appears on frames 1, 2 and 3 of your animation, this does not mean three copies of the bitmap are embedded in the Flash file.

Non-JPEG Bitmaps

Other types of bitmaps, for example, BMP, TIFF, or PNG bitmaps, are usually a lot larger and thus less suitable for use in Flash animations (for photos JPEG compression is a lot better than PNG). However if you include a low resolution PNG image (that is one of 96dpi or less – the status line shows you the resolution of any selected image) then this is kept as a PNG image in the Flash file. Higher resolution images (>96dpi) will be converted into a JPEG (transparent JPEG if required) .

You can control the compression used for this automatic JPEG conversion using a slider in the **FLASH OPTIONS** tab of the **ANIMATION PROPERTIES** dialog. The usual compression value is 75%, but you can vary the quality, preview the animation and quickly see the quality and size savings.
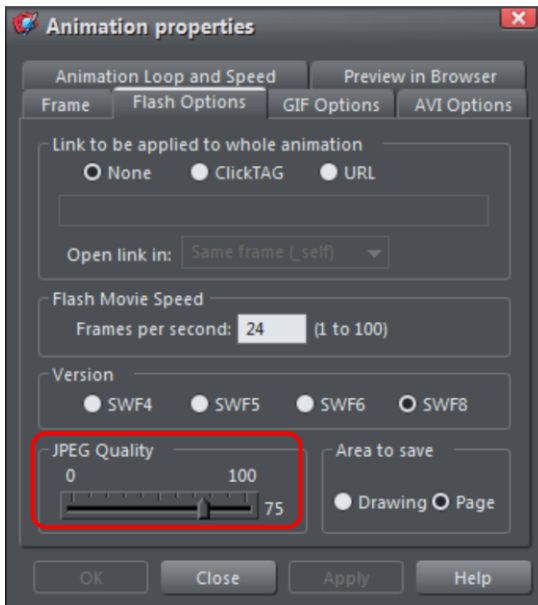
256 color or less bitmaps (such as GIF) are not encoded as JPEG and will be embedded using PNG compression, which is usually the best compression type for these types of images

Bitmap Quality

Flash Player version 8 and later has higher quality bitmap display. This is particularly evident when rotating or scaling bitmaps and photos, whereas older versions of the player tend to produce pixelated, and rather jerky movements.

You can tell which version of the Flash Player you have by right clicking on any Flash animation in your web browser and looking at the About menu.

It's therefore recommended to export your Flash animation as Version 8 if you're using bitmaps or photos. You can control this from the **FLASH OPTIONS** tab of the **ANIMATION PROPERTIES** dialog.

Animation Frame Rate and Tween Steps

Flash animations run at a fixed frame rate. The faster the frame rate, the smoother the resulting animation and the larger the Flash file. Xara Designer Pro 7 animations default to showing 24 frames per second, but you can change this.

When you create each key frame, you determine how long the period is until the next key frame. For example, if a frame period is set to half a second, this means the animation from that key frame to the next will take half a second. At 24 frames per second this means there will be 11 intermediate steps generated by Xara Designer Pro 7 in the Flash animation, so 12 frames in all. (These intermediate "tween" frames are not ever seen in Xara Designer Pro 7 and are only generated when you create the Flash file.)
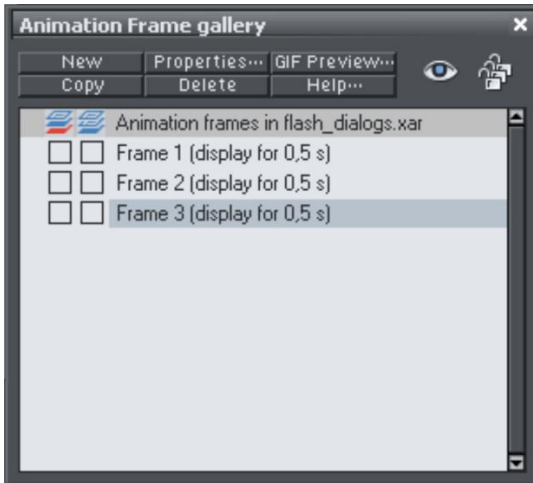
The **FRAME GALLERY** always shows you the display period for each key frame. In this example three frames are displayed for half a second each, so the whole animation lasts 1.5 seconds before repeating.
To create a longer tween effect (in other words to slow the animation down) increase the display period using the **ANIMATION PROPERTIES** dialog.

The easiest way to alter the display period for any frame is to just double click on the frame name you want to alter to bring up the dialog, enter the new period in seconds, and click **OK** or **APPLY**.

Cropping, Clipping and Animation Size

Before long you'll start to consider creating some Flash animations like you see on the web, say with some wording or a photo that whizzes in from one side.
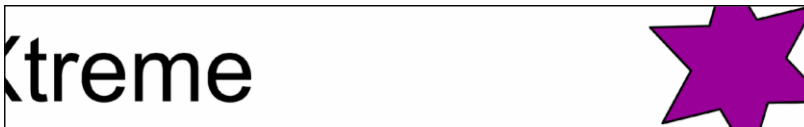
To create an animation like this, all you need to do is set the page size in Xara Designer Pro 7 to the size you want for your flash animation. So if for example you want a Flash banner which is 468 pixels wide and 60 pixels high, set the page size in your animation document to 468x60. To set the page size, go to the **PAGE TAB** of the **OPTIONS DIALOG** (on page 456) (or choose "**FILE**" > "**PAGE OPTIONS**") and set the Width and Height fields accordingly.

When exported or previewed, the flash animation is automatically clipped to the page size you have set. So it's easy to arrange your animation so that objects glide in and out of the visible animation. E.g. by placing an animating object to the left of the page on one key frame and to the right of the page on the next key frame, in the animation the object will be seen to slide in from the left side of the design and disappear off the right side.

You can also change the page dimensions by going into the **SELECTOR TOOL** and dragging on the bottom edge or right edge of the page, to change the page height or width respectively. See Changing the page size (on page 34) in the Document Handling chapter for details.

Note: When opening older documents created with earlier versions of Designer Pro, these will not clip to the page (the page size was huge), instead they clip to the size of the drawing. You can control this in the Animation Properties dialog.
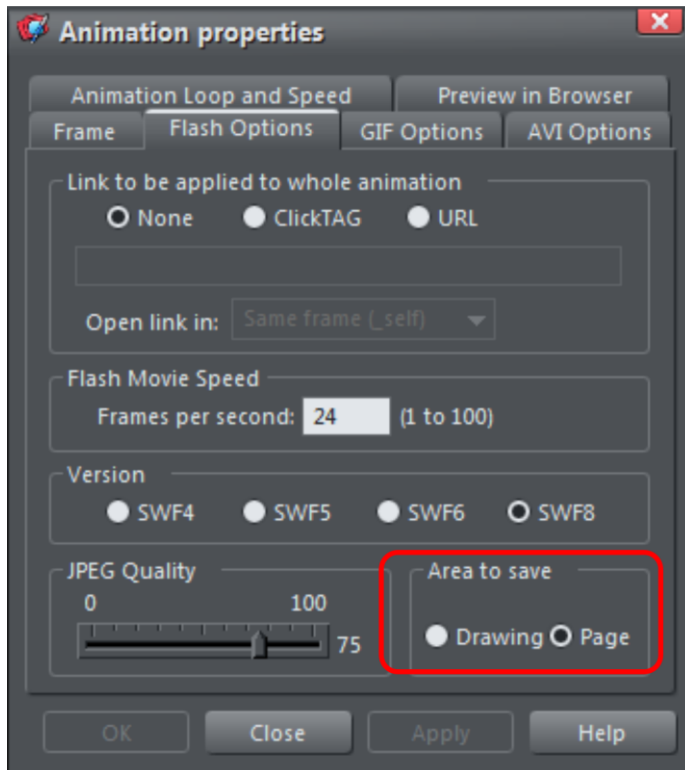
Setting the area to save to be Drawing will create a Flash animation that is only as large as it needs to be – i.e. the same as the outer bounds of the animation. This can be useful if you don't need a specific page size.

Animation Speed

When you create a new keyframe, it defaults to having a period of half a second. The longer you set the period, the slower the animation. To set the frame period for any frame, first select the desired frame in the **FRAME GALLERY** (click on it), and then click the **ANIMATION PROPERTIES** button (or just double click the frame name).
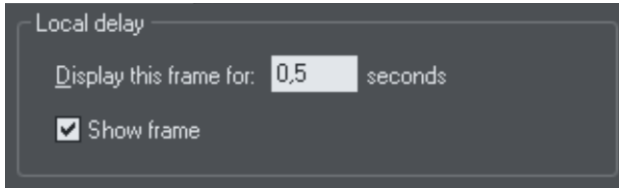
Setting "Display This Frame For" to 2 seconds means the animation will take 2 seconds to tween from this key frame to the next.

Note: The **ANIMATION PROPERTIES** dialog is non-modal and you can keep this on screen all the time. By pressing the **APPLY** button instead of OK, the dialog remains on screen. Its contents are updated as you select different frames, and for each of them you can set the required display period.

Animation smoothness

Flash movies play at a constant frame rate. The faster the frame rate, the smoother the animation. Xara Designer Pro 7 defaults to showing 24 frames per second. To change the rate select the **FLASH OPTIONS** tab of the **ANIMATION PROPERTIES** dialog.
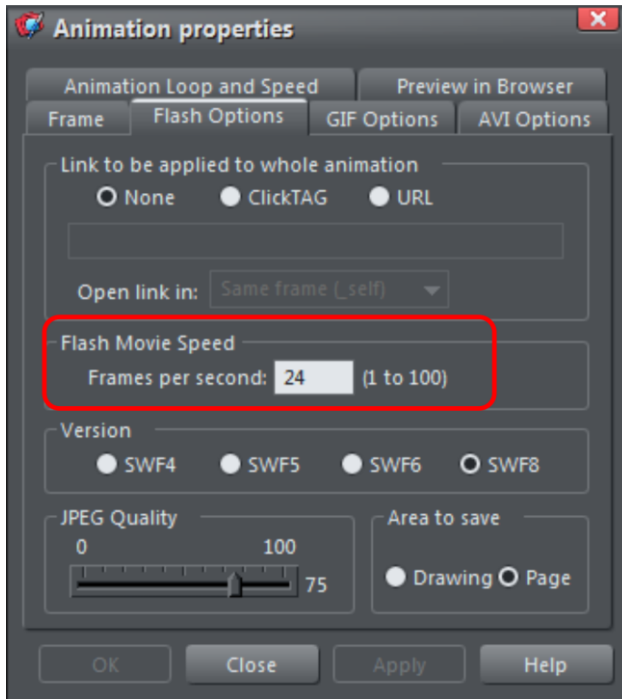
The Flash Options tab, where you can change the movie speed and Flash export version.

Note: The faster the frame rate, the larger the resulting Flash file. You will find that if your animation is mostly objects fading in and out with relatively little fast moving animation, then you can reduce the frame rate to under 24 frames per second. If you have a lot of fast action, it may be necessary to increase the frame rate, but it's rarely necessary to have it above 50 frames per second.

Rotation

Xara Designer Pro 7 calculates and generates the tween frames automatically by working out how to transform the shapes from one key frame to the next. But sometimes it's not possible to know exactly what type of rotation is required.

Take this example. Suppose you tween from the first clock face to the second:
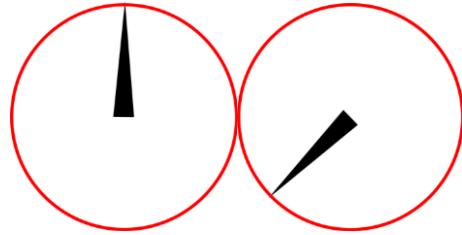
You might expect it to rotate clockwise, but of course it could go counter clockwise:
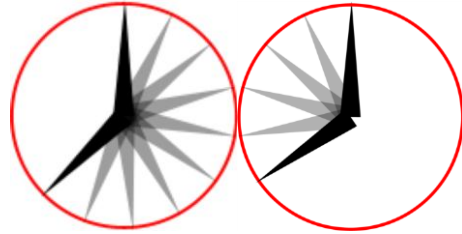
In fact there are other ways it could rotate. The above examples assume the hand rotates around one end, but you could tween from one state into the other by doing a straight line rotation of the center of the object, which would result in this:
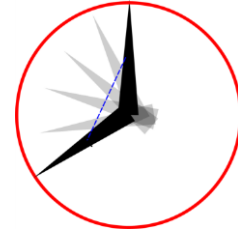
If you look closely, the hand rotates around its center rather than one end, and the center point moves in the straight line from one key frame to the next. By default, Xara Designer Pro 7 rotates objects this way.

The Rotate command

To force the rotation to be around any other point you can use a special keyword "rotate" appended to the front of the object name. Or you can use "rotate +" to force the rotation to go clockwise or "rotate -" to make it go counter clockwise.

To take the simple two keyframes animation example shown on the previous page, where the hour hand needs to move from 12 o'clock to 8 o'clock. If you name the hand object "rotate + hand", you'll get an animation showing the clock's hand moving clockwise. If you name it "rotate - hand", then the hand will rotate counter clockwise.

If there is no rotate command, then the tween takes the shortest direct path between the object on one keyframe to the next, rotating around its center. With a "rotate" command on the object name, it calculates the actual rotation point, which in the above example is the "large end" of the hand.

Note: It's not possible to rotate an object by a full 360° between keyframes if the rotation point is not the center. For example, to do a full rotation of the clock hands in the above example, you would need to create an intermediate keyframe.

What Xara Designer Pro 7 features does Flash support?

The Flash vector rendering is quite primitive compared to Xara Designer Pro 7's, and so you can't use many of the more advanced Xara Designer Pro 7 features such as feathering, complex transparency and fill types, bevels, soft shadows, or contours. Lines (strokes) are limited to be being simple constant thickness, round ended lines. No line dashing is supported. The minimum line thickness is one pixel—so thinner lines in Xara Designer Pro 7 will be displayed one pixel thick in Flash.

There are two aspects to producing Flash-compatible drawings. The first is to limit yourself to use only those features supported directly by the Flash player. Secondly, when producing animations, there is an even more limited set of characteristics that can be tweened or animated.

Xara Designer Pro 7 drawing features that Flash supports:

- All normal line and shape drawings (although Flash is a lot less precise than Xara Designer Pro 7 and so sometimes you may notice inaccuracies in lines and shapes).
- Flat, linear, circular and elliptical gradient color fills.
- Multi-stage gradient color fills, including linear and elliptical fills. Eight color stops maximum.
- Flat transparency. Mix type only.
- Graduated transparency is supported for flat color filled objects (non-graduated). So you can have graduated color objects with flat transparency or flat color objects with graduated transparency, but not both.
- Constant width outlines (stroked paths) with rounded end caps and line joins (version 8 Flash files support the other join and cap types).
- Text, including kerning. You can use any fonts you like. The outlines of the characters of any used fonts are embedded into the Flash file. This is much more efficient than, say, font embedding in PDF documents.
- Text on a curve. Note: the line used for the curve must be made invisible for the animation to work.
- Bitmaps and bitmap fills.
- Contoned (colored) bitmaps and bitmap fills.
- Photo Saturation, temperature color and blur (but not brightness / contrast change).
- Fractal Cloud and Plasma fills will work, but are converted to bitmaps, so not efficient.

So you can't use, amongst other things:

- Any transparency type other than mix.
- Feathering.
- All complex graduated fills (conical, diamond, 3 color etc).
- All complex graduated transparency styles (as above). (You can use linear, and elliptical transparency on flat color filled objects.)
- Live Effects.

The following object types will export in static Flash, but do not animate.

- Soft shadows.
- Bevels.
- Contours.

- Blends.
- Molds.

So while some Xara Designer Pro 7 effects, such as soft shadows and bevels do work in static files, these are exported as bitmaps into the Flash file, so they are not very efficient and not suitable for animating.

What can be animated:

As listed at the start of this chapter, these are the golden rules as to what you can change from one keyframe to the next:

- Move: Move objects from one position to another.
- Scale: Enlarge or reduce objects in size.
- Squash or skew: Squash or skew objects.
- Rotate: Rotate objects.
- Transparency: Adjust the overall (flat) transparency of the object.
- Color transform: Change the fill (flat) color of objects.
- Or any combination of the above.

In addition, there are a few special cases of photo color transformations that are supported by Flash. You can alter the saturation (so you can tween a full color photo into a black and white one), You can also adjust the temperature color control (warm / cool), and also the blur value. The latter enables you to tween a blurred photo into a sharp one. But note this only works for blur values and not sharpen. Also there is a slight difference in the way Flash blurs photos. Flash blurs the whole photo including the edge, whereas the Photo blur in Xara Designer Pro 7 only blurs the inside of the photo and keeps a sharp edge.

Secondly, another special case: you can animate text on a curve. This is special because you can use this to seemingly morph text along one curve into text along a completely different curve. In fact what it does is tween from the character position in one keyframe to the corresponding character's position in the next frame. This can produce some interesting effects.

Note: The line used for the curve must be made invisible for the animation to work.

This is some text fitted along this curve

Finally you can also tween outline thickness between one key frame and the next, but only for shapes with a constant outline thickness (ie. It will not worked for shapes with a stroked outline).

Non-moving Objects

You can add new objects by just drawing them on any keyframe. They will appear in the animation at the start of the frame and will vanish at the next keyframe, unless they appear on that frame as well. So the simplest way to have an object appear static on all frames is to ensure it's copied to all the frames. Xara Designer Pro 7 Flash optimization is very efficient and you'll find that having more than one copy takes hardly any additional file space (this is true of multiple copies of objects anywhere).

Color Transforms—Animating Color Changes

This is what you can and cannot do with color transforms in Xara Designer Pro 7 Flash:

- You can animate simple flat color changes of objects from one keyframe to the next.
- You can change the line color independently of the fill color.
- You can change photo contone colors.
- You cannot adjust the position of gradient fills.
- You can use RGB, HSV or CMYK colors. These are all converted to RGB colors when exported to Flash (which is the only color model Flash supports).

Transparency

As mentioned earlier, you can adjust the flat transparency of objects (not group transparency) and Flash supports this (for both static objects and tweening transparency changes), but Xara Designer Pro 7's graduated transparency is not really supported with Flash. There is just one situation where you can use graduated transparency, and that is on flat color filled objects.
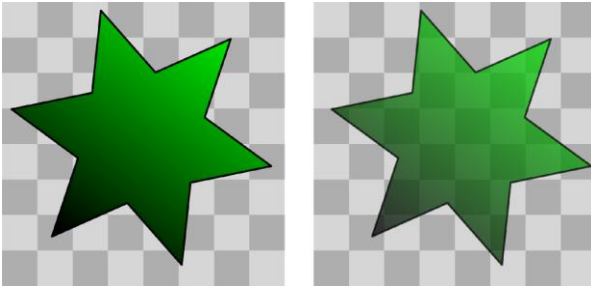
It's possible to adjust, and animate, flat transparency given to all types of objects, shapes, text and photos.
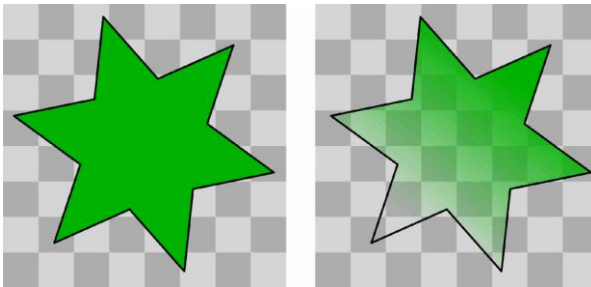
It's possible to give graduated transparency (linear, circular and elliptical) to flat color filled objects, but it's not possible to animate the transparency change. Although you can animate the color change (rule six).

URLs in Flash

To make an object in your Flash animation a clickable link, just select the object you want to make clickable and select "UTILITIES" > "WEB PROPERTIES ("Ctrl + Shift + W").

Enter the required URL. (If you require the link to open in a new browser window or browser frame select the target web frame by selecting from the 'OPEN LINK IN' dropdown menu).

If you want to make text clickable select the RECTANGLE SURROUNDING OBJECT option. This ensures those that viewers of your Flash animation can click anywhere over the text (rather than just on the actual letter shapes).

Making the whole animation clickable

In the "**ANIMATION PROPERTIES**" > "**FLASH OPTIONS**" tab you can set a URL to apply to a whole animation. This is useful for banner ads where you want a click on any part of the animation to go to a given web address.

clickTAG

clickTAGs are often used by advertising networks. Rather than hard-coding a URL into a Flash animation, the clickTAG allows an organization to insert their own URL into the animation, which is particularly useful for tracking advertising clicks.

If you need to use this feature, check the clickTAG option.

Advanced Flash Commands

Accelerating and Decelerating

Usually the tween steps are evenly spaced between keyframes, producing a linear animation from one keyframe to the next. By appending < and > symbols to the front of the object name, you can make objects speed up or slow down. So naming an object >Name means that it starts fast and slows. The opposite, <Name, would start slow and speed up.

You can even use these in combinations. So an object name <>Name would start slow, speed up and then slow down towards the end of the frame period. In traditional animator's terminology this is called 'easing', so you can ease in or ease out, and the command <> would be an ease in/out.

You can control the degree of acceleration or deceleration by using numbers from 0 to 9. So <2Name would be a very gentle acceleration, while <9Name would be extreme acceleration. Similar >2 in front of the name would give a slight deceleration. Using the name >Name (with no number) is the same as >5Name.

Example: there is an example file called Pendulum in the **FLASH EXAMPLES** section of the **DESIGNS GALLERY** (click the **DISC DESIGNS** button on the **DESIGNS GALLERY**). The pendulum group uses a combination of <> and the rotate command. Another example called "Zoom.xar" is also worth examining.

Stop and Goto Commands

You can append **STOP** or **GOTO** commands onto the Frame names (separated by a semi-colon ;) to control the sequence flow. So for example if your first frame was named "Frame 1;Goto Frame 6", then the animation sequence would jump to Frame 6 at the start of Frame 1. This may produce tween errors, but these can be ignored. It also waits for the specified period of the frame with the **GOTO** command on before jumping, but frames with **GOTO** or **STOP** commands do not tween.

Similarly a frame name with ;**STOP** appended to the end of the name would stop when the animation reaches this frame. Why is this useful? Because you can make the animation jump to any other key frame with either a click or by moving the mouse over objects. For example you might have an animation that waits for the user to click on or move the mouse over an object before continuing.

Clickable Buttons & Mouse-over Effects

You can make the animation sequence jump to any keyframe either by clicking on an object or just by moving the mouse pointer over any object.

To do this select the object you want to use as the trigger, open the **WEB PROPERTIES** dialog (Ctrl+Shift+W) and on the **LINK** tab, select the **JUMP TO FRAME** option.
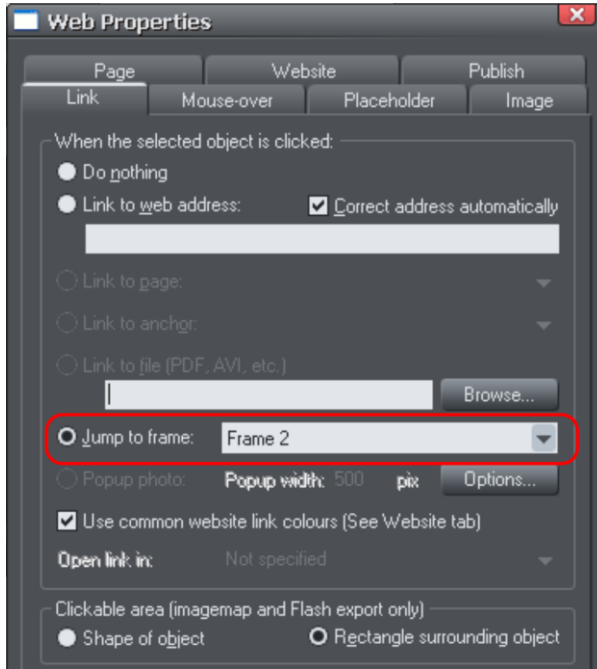
If you want the jump to occur by just moving over an object, select the Mouse-Over tab instead of the Link tab, and select from the similar 'JUMP TO FRAME' option.

Now in your animation if you click or mouseover the object the animation will redirect to the the new frame and proceed from there. See the "River Thames" example file in the **DESIGNS GALLERY**. This uses a Goto command to loop from frame 4 to 3, and a URL frame re-direct to jump to Frame 1 if you click the Replay link in the corner.

"Ctrl + Shift + W" is a quick way to open the Web Properties dialog.

Xara Designer Pro 7 Flash Animation Summary

- Xara Designer Pro 7 keyframes are "snapshots" of your animation at any point in time. Xara Designer Pro 7 automatically produces a smooth blend or tween of objects from one keyframe to the next to produce a smooth Flash animation.
- There is no timeline. Instead, the **FRAME GALLERY** shows your snap shot keyframes though time (top down). Just click the frame name to see and edit that keyframe.
- If you set the Xara Designer Pro 7 frame display time to be 2s then it will take 2 seconds to animate objects from their position at the start of one keyframe to their

positions at the start of the next keyframe. Use the **ANIMATION PROPERTIES** dialog to set frame display period.

- To tell Xara Designer Pro 7 which objects are to be blended or tweened between one keyframe and the next, you name the object you want to tween. For each new object you want to animate click the **NAMES** button on the **SELECTOR TOOL** Infobar and give it a name (or select the menu "**UTILITIES**" > "**NAMES**"..). The object must have exactly the same name on subsequent frames.
- When you create a new keyframe (snap shot) you usually do this by copying the current frame, and this copies all objects to the new frame along with their names. Then just move the objects as required.
- All other (non-named) items appear static for the duration (display period) of the keyframe.
- You can move, enlarge, reduce, rotate, stretch, alter the color or transparency between Xara Designer Pro 7 frames. Transforming objects in this way is very efficient.
- There is an overall frame rate for the whole Flash movie. The more Flash frames-per-second, the larger the Flash file and the smoother the animation.
- Because each Designer Pro frame is a snap shot of the full animation, all objects that should appear at that snap shot should appear in the frame. You can't blend an object from frame 1 to frame 3 without it appearing on frame 2.
- You can change shapes, text or photos as allowed by the six transform rules described earlier (move, resize, squash/skew, rotate, flat transparency and color change). If you change the shape in any other way it won't work.
- The Flash animation is clipped to the page dimensions you have specified in Xara Designer Pro 7.

Printing

Show print borders

The "**WINDOW**" > "**SHOW PRINT BORDERS**" menu shows a yellow and red line around the page (non-printing) showing the print margins and borders. The page boundary is shown by a yellow rectangle and the printing area by a red rectangle. The printing area is determined by the margins on the currently selected printer. Some printers let you adjust the margins, but few let you print right up to the edge of the page.

If any objects on the page lie outside the red rectangle they are unlikely to be printed.

Selecting and setting up a printer

"**FILE**" > "**PRINTER SETUP**" opens the standard Windows **PRINT SETUP** dialog:
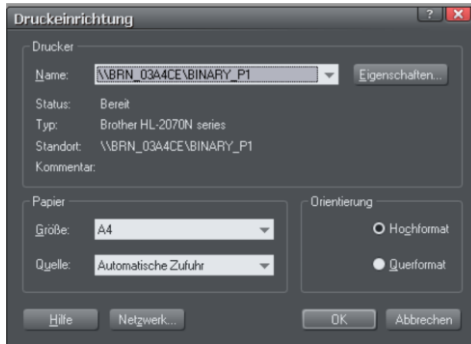
Selecting a printer also selects a suitable paper size and paper orientation. Note that these are the size and orientation of the sheets of paper used in the printer. They are separate from the size/orientation of the document. **PORTRAIT** prints the page without rotation. **LANDSCAPE** prints the page turned through 90° (these buttons are duplicated in the **PRINT OPTIONS** dialog box, described later). We recommend leaving the **LANDSCAPE**/**PORTRAIT** buttons on this dialog box on their default setting.

Please note: We cannot give you advice about installing or configuring printers as these are standard system operations. In case of difficulties, contact the supplier of your printer or computer.

Properties button

This displays a dialog box letting you set options for the selected type of printer. This dialog box is not controlled by Designer Pro.

Network button

If your computer is connected to a network, this lets you connect to shared printers on the network. This dialog box is not controlled by Designer Pro.

The print dialog box

Choose "**FILE**" > "**PRINT**" ("Ctrl + P").
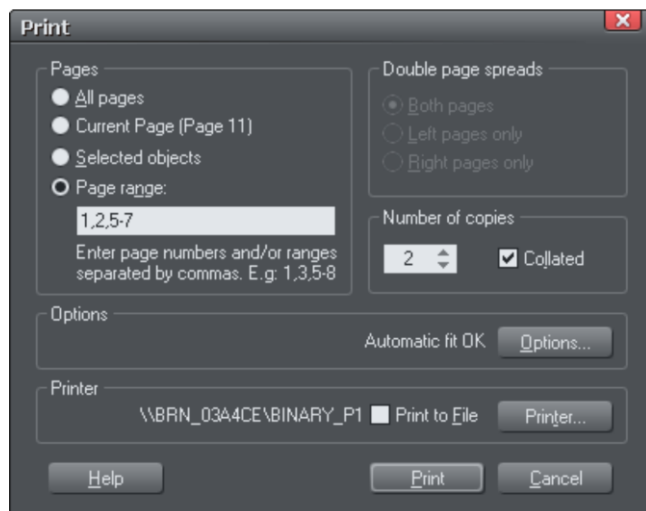
Print button

When you have selected the required options click this to start printing.

Printer… button

This opens the "**PRINT SETUP**" dialog box (described earlier).

Options button

This opens a tabbed dialog box that lets you set additional print options. These are described later (on page 399).

Pages

ALL PAGES: Prints every page of the document.

CURRENT PAGE(S): Prints the currently selected page or spread.

SELECTED OBJECTS: This option is available when any objects in the document are selected. When active, only the selected objects are printed. Note that other objects within the bounds of the selected objects are not printed – only the objects which are actually selected are printed.

Hidden objects, objects on hidden layers and the guides layer never print. See Page & Layer Gallery for more details.

PAGE RANGE: Allows you specific control over which pages you wish to print. You can type specific pages numbers, separated by commas, or page ranges by typing two numbers with a hyphen in between them.

Page range examples:

2 will print just page 2.

1,3,5-7 will print pages 1, 3, 5, 6 and 7.

2,3,6-8,11-12 will print pages 2,3,6,7, 8,11 and 12.

The **Options** section of the dialog will indicate if your page range is OK or invalid.

Double page spreads

If the document comprises a double-page spread, you can print both sides or just the left or just the right page.

This option is dimmed when the spread comprises a single page (see Document Handling (on page 36) for how to select single or double-page spreads). Or the "**PRINT/EXPORT INDIVIDUAL PAGES**" is active in the Page Options (on page 456), so that the two pages of a double-page spread are treated as individual single pages.

Print to File

You can select the **PRINT TO FILE** option to create a document that you can give to a printing company (if they are able to accept this type of file).

After checking this option, when you click **PRINT** Designer Pro displays the standard Windows **SAVE** dialog box so you can specify a file name and location for the file.

Print files have a default extension of .prn.

If you want to create a PDF file we recommend selecting the "**FILE**" > "**EXPORT**…" option and selecting PDF. This produces a higher quality, and usually more compact PDF file than you'd get from printing to a PDF file.

For more information on exporting as PDF refer to Importing and Exporting (on page 412).

Number of copies

Sets how many copies of the document to print.

Collated

This is dimmed except when printing multiple copies of a double-page spread as two separate pages. With this option selected, pages are printed as left-right-left-right, etc. With this option deselected, all the left-hand pages are printed then the right-hand pages.

Printers that hold a page image in memory take some time to process the image. The printer can then print multiple copies at its maximum speed. For such printers it is often faster to manually collate the pages after printing.

Other types of printers have to process the page for each copy. For these, select collate copies and save yourself the chore of collating.

Print Options: Output tab
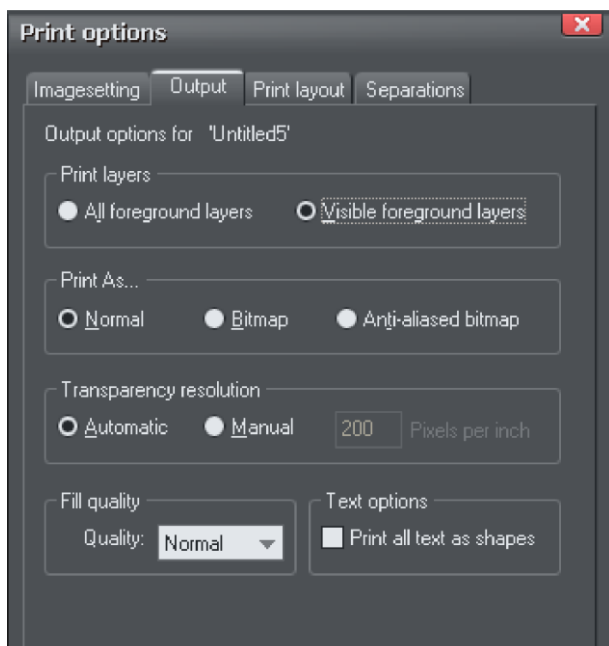
Print layers

There are two options:

- Print **ALL FOREGROUND LAYERS**.
- Print only the currently **VISIBLE FOREGROUND LAYERS**.

Note that only foreground layers are printed. Background layers are never printed.

Print As

NORMAL is suitable for most types of document.

However some printers do not reproduce consistent colors when printing bitmaps or vector objects that are the same color (this is a fault with the printer driver). This is noticeable if objects overlap onto bitmaps or onto objects with transparency applied to them. In this case, select **BITMAP** or **ANTI-ALIASED BITMAP** and retry.

The choice between **BITMAP** and **ANTI-ALIASED BITMAP** depends on the printer and personal preference. Some printers give best results with anti-aliasing turned off especially when printing thin lines. As a rule, using anti-aliasing allows lower resolution printing. For example, 150 DPI bitmap printing is usually good enough for all uses-even typesetting. Without anti-aliasing, higher resolutions may be needed which gives much slower printing.

Transparency resolution

When printing, Xara Designer Pro 7's transparency effects are created using bitmaps.

This option controls the resolution of those bitmaps when sent to the printer. Automatic is suitable for most drawings, and means Xara Designer Pro 7 automatically selects a resolution suitable for the current printer. This might be unsuitable if printing to a very high resolution printer such as image setting devices. In this case you may wish to control the print resolution manually by entering the desired value.

Note that modern printers often claim to be able to print at over 1000 dots-per-inch, but this is not the same thing as "pixels-per-inch", which is what you see on screen. Generally, it's never necessary to print at more than 600 pixels-per-inch, and typically 300 pixels per inch produces perfectly adequate print results, especially if anti-aliased.

Fill quality

Using this option, you can choose how many steps make up the graduated fills in your document when it is printed. The **NORMAL** setting is suitable for most purposes. This option is dimmed for PostScript printers.

Text options

If your printer has problems reproducing fonts, select the **PRINT ALL TEXT AS SHAPES** option. All text is then converted to vector shapes before the document is sent to the printer. This may be slower, but will reproduce exactly what you see on screen.

Print Options: Print Layout tab
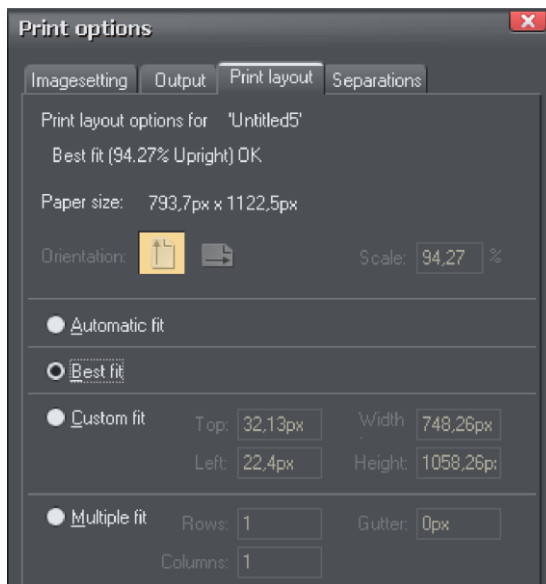
Most options in print layout are dimmed if you have **BEST FIT** or **AUTOMATIC FIT** selected. We recommend using these options as they are the easiest way to print.

However you can choose custom options (see "custom fit" below).

Best fit

Your design will be moved to the center of the page and it will be expanded or shrunk to suit the paper size.

This option is best if you have a large or small design and want it to fit on one page.

Automatic fit

Your design will be orientated as necessary, but Designer Pro will not change the size. We recommend this option if you are having any difficulty getting the orientation right (there are at least four places where you can set the page orientation, sometimes more for some printer drivers).

This option is best if you have a set size for your design and don't want it altered.

Custom fit

Allows you to have control over your print out, including orientation, size and margins.

The **ORIENTATION** buttons can be used to choose the orientation of the printout. The scale can be altered using the **SCALE** field. The top and left margin fields can be changed (these set where the top left-hand corner of the page appears on the printer's paper).

The **WIDTH** and **HEIGHT** fields give you an alternative way of setting the print scale (when you change one of these settings, the other changes to ensure the page is always printed with a 100% aspect ratio).

Multiple fit

To print multiple copies on one page, choose **MULTIPLE FIT**, enter a value for the number of copies needed across the page (rows), the number down the page (columns), and the distance between each (gutter).

Imagesetting

Spot colors

Normally four colors are used when printing, cyan, magenta, yellow and black (key) commonly known as CMYK. But it's also possible to produce spot colors. Spot colors are not normally printed using the CMYK inks, and are instead additional inks.

Spot colors have two uses:

- Many simple jobs use only two or three ink colors (for example a simple newsletter with black text and blue headings). Creating a spot color for each ink color can make the job cheaper to print.
- Some complex jobs require either PANTONE COLOR BRIDGE colors or special inks that cannot be reproduced in CMYK such as gold or silver. These special colors require spot colors.

See chapter PANTONE colors (on page 170) for more on PANTONE COLOR BRIDGE.

Note: As each spot color is an additional ink and printing plate, it does increase printing costs.

Spot colors appear as circles on the **COLOR LINE** and **COLOR** Gallery.

Spot colors are always Named colors.

Technical notes on color separations:

- Tints based on a spot color output on that spot separation. So if you require a lighter shade of a spot color, define the color as a Tint (on page 167) of the spot color.
- Shades and linked colors based on a spot color output on the CMYK separations.
- Objects with transparency applied always output on the CMYK separations, not to the spot separation.

For more information on how spot colors are affected by transparencies, fills and blends see "Transparency and Color Separations" later in the chapter.

On screen printer plate previews

The process of printing requires that your artwork is separated into CMYK print colors. It can sometimes be useful to see and understand exactly what inks are printed on each printer plate, especially if using spot colors. Xara Designer Pro 7 can show a simulation of the CMYK separation process on screen, showing a preview of each printer ink color separation. Normally this would be the four CMYK colors, but if you use spot colors you can preview these as well.

To preview any required plate or ink color, select "**WINDOW**" > "**SHOW PRINTER COLORS**" and the required ink color.

Simulating print colors on screen

Because printed colors are often a very different shade to those available on screen, Xara Designer Pro 7 can adjust the screen color to more accurately simulate the printed color. Simply select "**WINDOW**" > "**SHOW PRINTER COLORS**" > "**SIMULATE PRINT COLORS**". See the section "Viewing Print Colors on Screen" in PANTONE Colors (on page 170) for more information.

Imagesetting dialog

The **IMAGESETTING** dialog gives control over printer's marks and film settings.

To open it, choose "File -> Print Options", then select the **IMAGESETTING** tab. Or, from the **PRINT** dialog, click "Options", then select the **IMAGESETTING** tab.
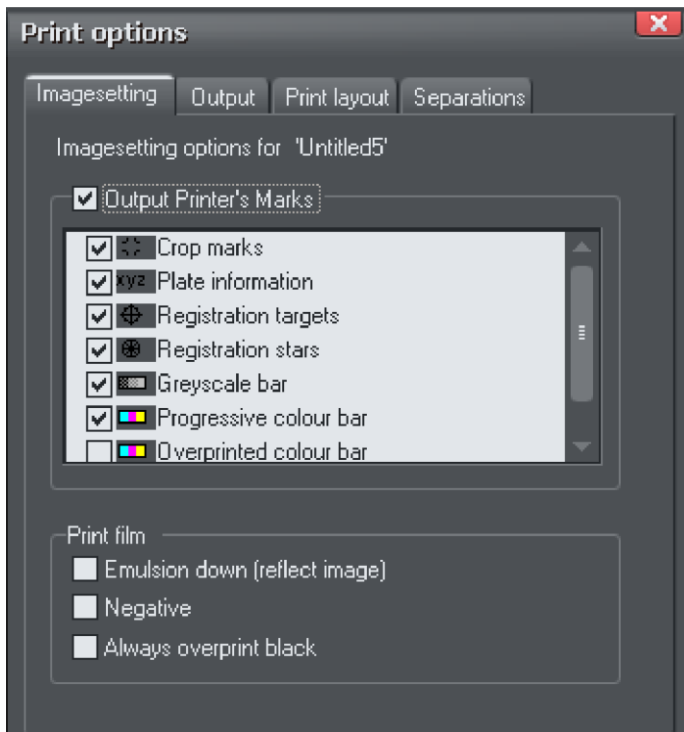
Output Printer's Marks

This switches selected printer's marks on or off in one operation. Printer's marks provide useful information when printing professionally, for example indicating the edge of the document so that it can be cropped to the proper size after printing.

The default options that are then selected will be suitable for most print jobs. Only change them if asked to do so by your print company.

As well as for printing, these settings also apply to PDF/X export if the **INCLUDE CROP AND PRINTER MARKS** option is selected in the **ADVANCED OPTIONS**, **LAYERS** tab of the PDF export dialog.

See PDF Export (on page 423) for more information on exporting as PDF/X.

These are the various printer's marks options that you can turned on or off.
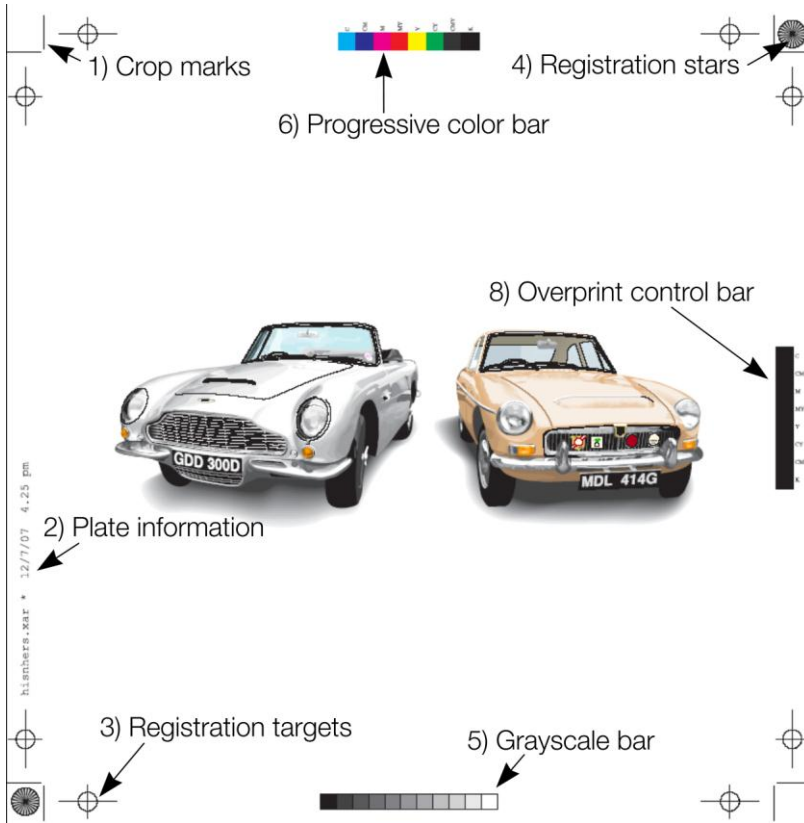
1) Crop marks

These are used for jobs that will be trimmed to size after printing. They tell the print shop where to cut the paper.

2) Plate information

This is information such as plate name, file name and date & time.

3) Registration targets

Registration targets appear in the same position on each separation so the print company can align the separations when making printing plates and when printing.

4) Registration stars

These are a further check that the separations are lined up.

5) Grayscale bar

This shows that the imagesetter or printer has rendered the full range of gray tones from 10% to 100%. It provides the print shop with useful information for monochrome and color.

6) Progressive color bar

Similar to the grayscale bar. Provides the print company with useful information when printing multicolor work.

7) Long registration targets (Not shown in the example)

These are an alternative form of registration targets. Some print companies may prefer to work with this type of target. They replace the registration marks shown (option number three) with this target type:
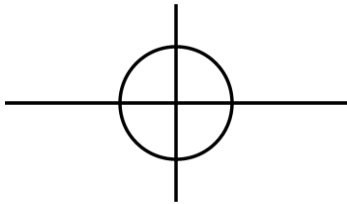
8) Overprinted color bar

Similar to the grayscale bar. If your document uses overprint, this provides the print company with useful information during printing.

Print films

Films used to be used for press printing, but have been phased out by most print companies in favor of PDF/X. But if you need to create films, these settings may be relevant, and again only change them if asked to do so by your print company.

Emulsion down (reflect image): Creates a mirror image. This option, if enabled, will only work when outputting to PostScript printers. The imagesetting material is coated with photographic emulsion on only one side. With this option off, the emulsion is on the top of the film when you can read it normally. This may be known as "right reading, emulsion up". With this option on, the emulsion is on the back of the film as you read it. Called "right reading, emulsion down" or "wrong reading, emulsion up".

Negative: Produces a negative image - only works if outputting to PostScript printers. Leave off if you are asked for "positive" or just "pos". Turn on for "negative" or "neg".

Always overprint black: Overprints any objects that are over 95% Key (CMYK black). Black is a relatively opaque ink and overprinting reduces registration problems. This option is particularly useful if you have a lot of black text. If your document has large

areas of solid black, overprinting all black can cause problems with over-inking on the press.

Separations dialog

The **SEPARATIONS** dialog gives control over separations and PostScript settings.

To open it, choose "**FILE**" > "**PRINT OPTIONS**" then select the **SEPARATIONS** tab. Or, from the **PRINT** dialog, click **OPTIONS** then select the **SEPARATIONS** tab.
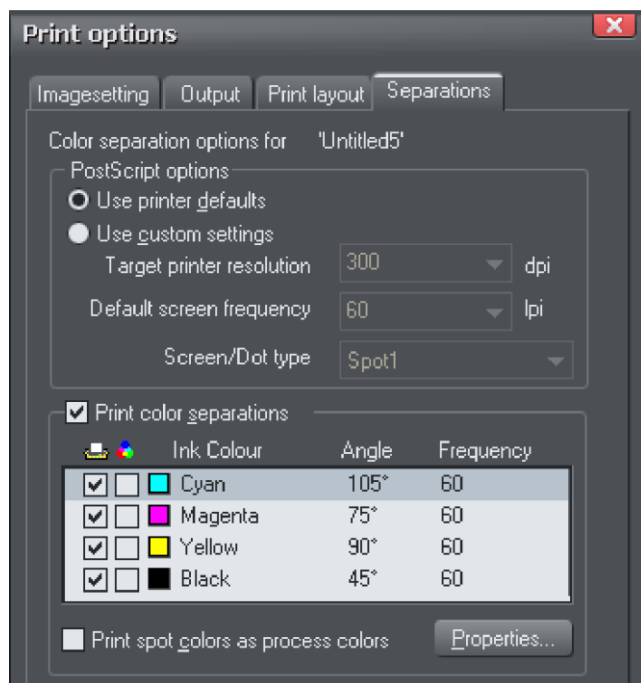
PostScript options

The settings give you control when sending to a PostScript printer. They are ignored by any other type of printer. It is unlikely you will need to change these, but if asked to do so you can change the settings described below.

Use printer defaults: Selecting **USE PRINTER DEFAULTS** uses the standard settings for the selected printer. Generally these give good results, but if you want greater control choose **USE CUSTOM SETTINGS**.

Use custom settings: Selecting **USE CUSTOM SETTINGS** lets you configure the printer settings to suit your requirements. Note: No check is made whether the settings you choose are suitable for the type of printer; it is assumed you know your requirements.

Target printer resolution: Specified in dots-per-inch (DPI).

Default screen frequency: Specified in lines-per-inch (LPI). Tints of the basic ink color are printed as small dots called halftone dots. The dots are arranged in rows and the

number of rows to the inch is the screen frequency. The lower the screen frequency, the larger the individual halftone dots and the more noticeable they are. Your print company may ask for "120 line screen" which would be a screen frequency of 120LPI.

Screen/dot type: PostScript printers can print halftone dots in a variety of shapes. Generally round dots give the best results but some presses work better with a different dot shape.

Print Color Separations

If you want to print all the colors in one pass through the printer, deselect **PRINT COLOR SEPARATIONS**. This full color output is referred to as a composite output.

If you want to produce output separated into the CMYK process colors and any spot colors, select **PRINT COLOR SEPARATIONS**. If you have one spot color, for example, you will get five printouts: one for each of the CMYK colors, and one for the spot color.

Your print company can advise you on whether they want composite or separated files. Separating to a local printer is useful if you want to view each separation.

You can now set options for the individual separations.

To output a separation for an ink color, select the left-hand check box. By default all plates are set to print.

You can also view each separation within Xara Designer Pro 7 with the "Window -> Show Printer Colors" options.

To set an ink color to overprint, select the right-hand check box. Overprinting is described later in the chapter.

To change the screen angle and frequency, click on the ink name to select it then click **PROPERTIES**. This opens the **SEPARATION PROPERTIES** dialog:
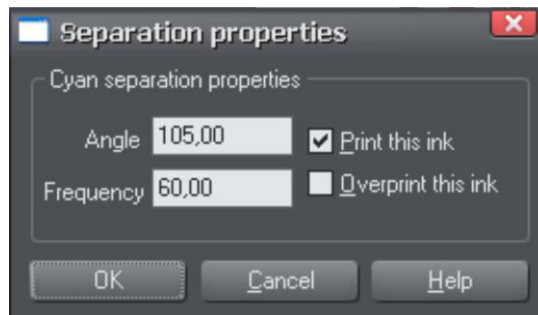
Angle: To change the screen angle for this color, type in a new value in degrees.

Frequency: To change the screen frequency for this color, type in a new value. This overrides the default screen frequency (described in PostScript options earlier) for this color.

Print this ink: This duplicates the check box in the main **SEPARATIONS** dialog.

Overprint this ink: This duplicates the check box in the main **SEPARATIONS** dialog. It protects the selected color from being knocked-out, so works in the reverse to object-level overprinting. Overprinting is described later in the chapter.

Print spot colors as process colors: Desktop printers and some printing processes can only print process (CMYK) colors. Select this option to print any spot colors as their equivalent CMYK color. Note: some spot colors look very different when output as CMYK, and it removes the ability to use PANTONE COLOR BRIDGE colors or any special inks. The main use of this option is when checking your artwork on a local printer.

Overprinting

If you are producing color documents that will be printed on litho printing presses, you may find overprint useful. Printing presses are mechanical devices with the inevitable slight misalignments when they are running. Overprinting lets you overcome these misalignments. For example, your job may have a black circle on a cyan background. When the document is imageset, the circle appears on the black separation and the cyan separation has a non-printing area under the circle (the technical term is that the circle "knocks-out" the background). The knock-out is the same size as the circle.
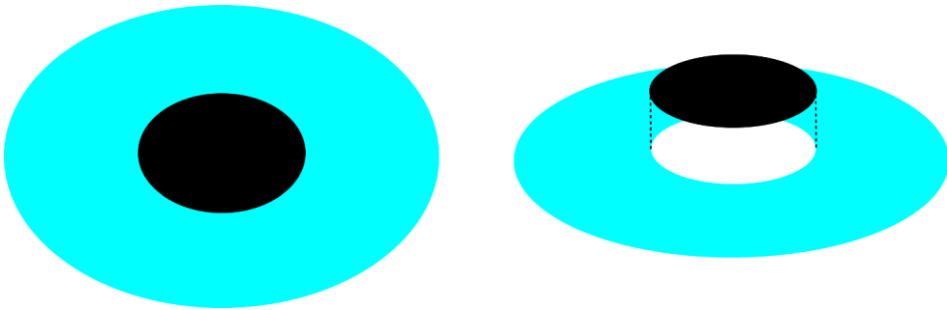
A black circle knocks-out out the cyan background

If the two plates do not line up exactly during printing, the circle will slightly offset from the knock-out (known as "out of register") and a small white gap can appear.
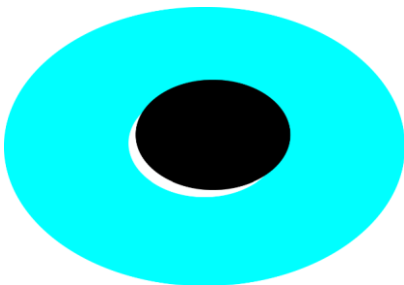
This example is exaggerated to illustrate the out of register printing, but even thin lines can be noticeable with dark colors.

Overprinting compensates for this problem. Xara Designer Pro 7 has two types of overprinting: object level and ink level.

Object level overprinting

You can separately specify overprint for the line and fill colors of an object.

To overprint the line on an object, select the object then:

- Right click and choose "**IMAGESETTING**" > "**OVERPRINT LINE**"
- Or choose "**UTILITIES**" > "**IMAGESETTING**" > "**OVERPRINT LINE**".
- Or right click the object, then choose "**IMAGESETTING**" > „**OVERPRINT LINE**".

To overprint the fill on an object, select the object then:

- Right click and choose "**IMAGESETTING**" > "**OVERPRINT FILL**"
- Or choose "**UTILITIES**" > "**IMAGESETTING**" > "**OVERPRINT FILL**".
- Or right click the object, then choose "**IMAGESETTING**" > "**OVERPRINT FILL**".

To turn off overprint on an object, just select the relevant option again. You can overprint both the line and a fill on an object if required. The object's fill and/or line will then not knock-out the colors any colors below it. Overprinting the fill is most commonly used to overprint dark colored text.

Overprinting the line is the normal way of avoiding out of register printing. The print company can tell you the tolerance to allow (usually 0.5pt to lpt). The line color depends on the background and object colors. Unless you want a specific line color, set the line to the lighter color.

Ink-level overprinting

Xara Designer Pro 7 has two ink-level overprint options:

- Overprint everything, including tints, in the specified ink color. Set in the **SEPARATIONS** dialog box (see above). This option is rarely useful, but works in the reverse of object-level overprinting. For example if you select Cyan to be overprinted, it will cause cyan to not be knocked-out.
- Always overprint black (everything over 95% Key). Set in the **IMAGESETTING** dialog box. Black is a relatively opaque ink and overprinting reduces registration problems. This option is particularly useful if you have a lot of black text. If your document has large areas of solid black, overprinting all black can cause problems with over-inking on the press.

Printing on all plates

PRINT ON ALL PLATES is known in some programs as **REGISTRATION BLACK**.

You sometimes want an object to appear on all separations. To do this, select the object then right click and select "**IMAGESETTING**" > "**PRINT ON ALL PLATES**" or choose "**UTILITIES -> IMAGESETTING -> PRINT ON ALL PLATES**".

The object color changes to black or gray, depending on its original color, to remind you that **PRINT ON ALL PLATES** is applied.

To cancel **PRINT ON ALL PLATES**, select the option again.

Usually **PRINT ON ALL PLATES** is applied only to small areas such as additional printer's marks or lines of text. Do not apply **PRINT ON ALL PLATES** to large areas as this can flood the printing press with excess ink.

Printing & color separating: technical details

Color separating

Xara Designer Pro 7 converts RGB, HSV and grayscale colors to CMYK for printing. Because the inks in printers are not pure color, some color correction is required. For example, theoretically 100% red in RGB is 100% magenta and 100% yellow in CMYK. In practice, less magenta is required to get the right color. Also, in dark colors and grays, black ink can replace a proportion of CMY. Color correction in Xara Designer Pro 7 is entirely automatic.

CMYK colors do not need color correction and so are usually printed without modification. The exception is areas where transparency has been applied. This is described in detail below.

Transparency and color separations

Transparency helps create some outstanding illustration, but can also cause unexpected results when color separating because PostScript imagesetters, and printers do not directly support transparency. Areas covered by objects with transparency applied are output as an RGB bitmap. This bitmap is then color corrected and separated to CMYK. This process happens even to objects with 100% transparency.

This means that in objects under a transparent object:

* CMYK color values change. This is particularly noticeable with black and grays which will then appear on all four separations rather than just the black separation.
* Spot colors (and PANTONE COLOR BRIDGE colors) are separated to CMYK (and color corrected) (see PANTONE Colors (on page 170) for more on PANTONE COLOR BRIDGE).

Watch out for:

Objects under totally transparent objects. Instead of using 100% transparency you can use **NO COLOR** (see The color line (on page 156) for how to apply **NO COLOR**).

* Text under a transparent object. Where possible, have text as the front object so these problems don't occur.

Intermediate colors in blends and fills

This section applies to all blends and multicolor fills. That is, all fill types except flat.

Normally, a graduated color fill mixes colors using the RGB color model. The exception is when both end colors are defined as CMYK. In this case, colors are mixed in CMYK. One advantage of this for grayscale blends. An RGB gray is printed as a mixture of the four CMYK inks. Defining the gray as a tint of CMYK black gives better printed results.

Rainbow and Alt Rainbow mix colors using HSV.

Three-color, four-color, fractal and bitmap fills always output as RGB bitmaps and are color-corrected. This means that any spot colors used in these fill types output to the CMYK separations not to the spot separation.

Special rules apply for spot colors:

- In blends: If either end color is a spot color, you can do fade mixes but not rainbow mixes (the reason is because you cannot alter the hue of a spot color).
- In fills: If either fill color is a spot color, you can do fade mixes but not rainbow mixes.
- In blends: If both end colors are the same spot color (or tints of the spot color), the blend outputs only to the spot separation.
- In fills: If both fill colors are the same spot color (or tints of the spot color), the fill outputs only to the spot separation. Note: this does not apply to three-color, four-color, fractal and bitmap fills which output only to the CMYK separations.

If you blend or fill from a spot color to a non-spot color, Xara Designer Pro 7 creates the requested blend. For example, if you blend from cyan (CMYK color) to gold (spot color) the cyan separation shows a blend from 100% color to no color and the Gold separation shows no color to 100% color. This is approximately what you see on screen (allowing for differences between screen and printer colors).

If you convert the blend to editable shapes, the intermediate shapes lose all spot color information. They separate only to CMYK. Only the final object prints as a spot color.

RGB and CMYK Blacks

Because shades of black and gray that are defined as RGB or HSV colors will separate into a mix of all four CMYK process colors when printed, you can sometimes get less than perfect gray shades. And any slight mis-registration of the CMYK color printing process will sometimes be visible on the edges of black objects.

Although the theory is that an equal mix of CMY inks will give a perfect shade of gray, it does not (and this is why the black "K" ink is added to the mix). So a gray that is defined as an RGB or HSV gray will contain a mix of all four colors to improve the gray color. But the best gray can be achieved by using only the K (black) ink plate. Thus if you require perfect grays it's better to use gray shades that are defined as a tint of a CMYK "pure" black.

When creating documents based on the default templates designed to be printed, such as US Letter or A4, then the shades of gray defined on the Color Line are defined to be tints of pure "K" black. So if you use these gray colors from the Color Line, you will get quality printed grays.

There is a corollary situation that a printed black that is based solely on the use of "K" ink, is not that black. You can get far darker blacks by adding some of the other inks printed on top of the black. So if you require really dark blacks for large objects or areas, then you can define a CMYK color that has 100% K ink and a percentage of the other colors (30% of each of the CMY colors is sometimes used).

Importing and Exporting

Import and Export Supported File Formats

You can change the order of supported import and export file formats in the "**FILE** > **EXPORT**" and "**FILE**" > "**IMPORT**" dialogs by editing the FileFormats.xml file found in the program folder where you installed Designer Pro.

Import formats

It is important that you use the three letter file extensions listed below when you load files into Xara Designer Pro 7.

Bitmap Import Formats

.BMP Windows Bitmap
.CUT Halo CUT (256 color)
.DCM Digital Imaging and Communications in Medicine (DICOM) image format
.DCX DCX
.FAX Fax image from a fax received or created with fax software
.GIF Graphics Interchange Format
.ICO Microsoft Windows Icon (16 color)
.JPG JPEG
.JP2, .JPX, .J2C, .J2K, .JPF JPEG 2000 image format. An improvement to the standard JPEG format that can compress image files using lossy or lossless compression.
HD Photo
.HPD, .WDP,.JXR Microsoft Photo HD / Windows Media Photo/ import (also known as JPEG XR)
.MXB MAGIX Bitmap
.PAI MAGIX Photo Clinic Image
.PBM UNIX monochrome
.PCD PhotoCD
.PCT PICT
.PCX PCX Paintbrush
.PDF (see importing a PDF file) (on page 416)
.PGM UNIX grayscale
.PNG PNG
.PPM UNIX color (up to 24 bit)
.PSD Photoshop (see importing (on page 415) and exporting PSD files (on page 419))
.RAS Sun Raster
.SGI Silicon Graphics Image
.TGA TrueVision TARGA
.TIF TIFF (RGB, RGBA with alpha-channel transparency & CMYK).
Xara Designer Pro 7 supports: fax TIFF files (black and white images. Multi-page faxes will be imported as multiple pages); Mac or PC byte order TIFF files; TIFF with layers and transparency (if saved from Photoshop the rules for blend mode compatibility are the same as for PSD files); JPEG in TIFF (transparency is not possible in this case).
.XAR Designer Pro
.XBM X Windows (2 color)
.XPM X Windows (256 color)

.WBMP Wireless Bitmap Image. Black and white (1-bit) bitmap image format used by mobile devices.
.RAW camera import formats (see RAW photo import (on page 417) for a list of supported file types).

EPS Import Formats

.AI Illustrator EPS
.EPS ArtWorks EPS
.EPS Illustrator EPS
.EPS CorelDRAW 3 & 4 EPS
.EPS FreeHand 3.0 EPS
.EPS Photoshop EPS (For importing data from Photoshop into Xara Designer Pro 7, use PSD files instead of EPS files for best results).
.EPS XaraX EPS

Other Import Formats

.ART Xara Studio
.WEB Xara Webster files
.AFF Acorn Draw
.CDR CorelDRAW (3,4 & 5)
.CDT CorelDRAW Template
.CMX Corel CMX 5 & 6
.DRW Acorn Draw
.HTM, .HTML Graphics on HTML pages, HTML files
.WMF Windows Metafile (16bit)
.EMF/ .WMF Enhanced Windows Metafile
.RTF Rich Text Format
.SVG Scalable Vector Graphics
.XPS (beta level only)
.WIX For internal use by Xara

Palette Import Formats

.CPL CorelDRAW Palette
.PAL CorelDRAW Palette
.PAL Microsoft Palette
.PAL PaintShop Pro Palette
.ACT Adobe Color Table
.ACO Adobe Color Swatch

For information on how to import palettes, see Importing colors and palettes

Note: If you attempt to import the following file formats into Designer Pro, an error message is displayed informing you that the movie format is not supported: AVI, DV-AVI, MPEG-1, MPEG-2, MPEG-4, MXV, MJPEG, QuickTime™, WMV(HD). Click the **MORE INFO** button to go to a MAGIX web page displaying movie conversion options.

Export formats

Bitmap Export Formats (see GIF, PNG, BMP and JPEG export dialog overview (on page 439))

.BMP Windows Bitmap
.DCX DCX
.PCX PCX
.GIF CompuServe GIF
.GIF Animated GIF files (see Creating animated GIF files (on page 341))
.JPG JPEG
.PDF + PDF/X Portable Document Format, High quality PDF files (on page 423). (see Creating PDF files (on page 424))
.PSD Photoshop (see importing and exporting PSD files (on page 419))
.PCT PICT
.PNG PNG
.RAS Sun Raster
.TGA TrueVision TARGA
.JP2, .JPX, .J2C, .J2K, .JPF JPEG 2000 image format. An improvement on the standard JPEG format that can compress image files using lossy or lossless compression.
.TIF TIFF (RGB and CMYK)
.WBMP Wireless Bitmap Image. Black and white (1-bit) bitmap image format used by mobile devices.

EPS Export Formats

.AI Illustrator EPS
.EPS ArtWorks EPS
.EPS Illustrator EPS
.EPS Xara Xtreme EPS

Other Export Formats

.AVI AVI animation (animation documents)
.XAR CorelXARA
.XAR Designer Pro
.WEB Xara Webster files
.WMF Windows Metafile
.EMF Enhanced Windows Metafile
.CMX Corel CMX 5 & 6
.HTM Image map
.HTM, HTML Complete HTML websites and web pages
.SWF Flash (see Flash Animations (on page 375))
.RTF Rich Text Format
.XPS Microsoft XML Paper Specification (on page 421)
.SVG Internet Scalable Vector Graphics
.WIX For internal use by Xara

Importing files

To import a file:

- Select "**FILE**" > "**IMPORT**" - This normally merges the file's contents into the existing document. With some formats you get the choice of importing the document into the current page or adding it as a new page. With some other formats you are given the option of either importing the file data conventionally, or adding a link to the file and including it in your published website.
- Or select "**FILE**" > "**OPEN**" - This opens the file as a new document.

Xara Designer Pro 7 supports drag and drop import of files. If you drag a file from your File Explorer onto an open Xara Designer Pro 7 document it will import the file and place it on the current page, centered on the drop point. Or drag & drop a suitable file from Windows Explorer onto any bar or the title bar of Designer Pro's window - it will open the file as a new document.

Replacing Image Files

You can replace any loaded image or image-filled shape with your own images. To replace an image simply drag your own file (JPEG, GIF, PNG, BMP) from your Windows File Explorer and drop it on top of the picture that you want to replace. Your photo will automatically be scaled appropriately to replace the existing photo. The new photo will be selected and you'll be put into the **FILL TOOL** (on page 201) so that you can easily adjust the position and scale of your photo if desired. You can also replace multiple images using multiple image files with some web templates, in one operation.

See the "Replacing photos (on page 246)" section of the Photo Handling chapter for more details.

Importing a Photoshop PSD file

To import a PSD file, import the file as normal with "**FILE**" > "**IMPORT**", or just drag and drop the .psd file into Xara Designer Pro 7.

Attention: Only Xara Designer Pro can import PSD files with 16bit colors or CMYK color model

The layers in the PSD file, and the layer visibility setting will be preserved and will become Xara Designer Pro 7 layers. You can view them by opening the **PAGE & LAYER GALLERY**.

The Photoshop blend modes Normal, Multiply and Screen are compatible with the equivalent Xara Designer Pro 7 transparency types Mix, Stain and Bleach and will remain editable in Xara Designer Pro 7 using the **TRANSPARENCY** Tool.

Photoshop calls it Opacity, but it's the same thing as Transparency (just the other way around), i.e. a 90% opacity value in Photoshop becomes a 10% transparency setting in Xara Designer Pro 7.

Tip: if you have separate objects in Photoshop that you wish to be able to move and change independently of one another in Xara Designer Pro 7, place them on separate layers in Photoshop before exporting.

TIFF Import

Xara Designer Pro 7 TIFF import supports a much wider range of TIFF file types, including:

- CMYK TIFF files.
- Fax TIFF files (black and white images. Multi-page faxes will be imported as multiple pages into Xara Designer Pro 7).
- TIFF with transparency (if exporting a TIFF from Photoshop (Save As) you can select the **SAVE TRANSPARENCY** checkbox).
- Mac or PC byte order TIFF files.
- TIFF with layers and transparency (if saved from Photoshop the rules for blend mode compatibility are the same as for PSD files).
- JPEG in TIFF (transparency is not possible in this case).

Usually TIFF files have a file extension of .tif.

PDF Import

PDF is a complex vector graphics format that has evolved over 10 years or more and contains numerous sub-formats and options. PDF was designed as a portable document format for viewing and printing only, and was not intended as a file format for transferring data between applications. However Xara Designer Pro 7 should load the vast majority of PDF files.

PDF is now the recommended way of transferring vector files from Adobe Illustrator to Xara Designer Pro 7. Save as PDF and then import the resulting file into Xara Designer Pro 7.

The following points are worth noting:

- Multi-page PDF files are imported as multi-page documents in Xara Designer Pro 7.
- Text in PDF files is typically broken into many separate small text objects in the PDF file. This doesn't stop it viewing and printing, but means when imported what might appear as one or more continuous paragraphs of text is not. Xara Designer Pro 7 tries to re-assemble the lines of text into lines and paragraphs of editable text, but often you will find the text broken into separate text objects.
- In order to make it easier to extract just the text of a PDF file, a new layer is created containing just the text on that PDF page. Use the **PAGE & LAYER GALLERY** to view this layer.
- PDF files make liberal use of clipping. This appears in Xara Designer Pro 7 as ClipView objects, and so it's often necessary to use "**ARRANGE**" > "**REMOVE CLIPVIEW**" in order to edit the objects on the page.
- Any annotations in the PDF file are imported onto a separate layer called "PDF annotations" in your Xara Designer Pro 7 document.

What might not work:

- Many PDF files include embedded fonts. It's not possible to legally extract and install these fonts onto your system. So if you do not already have the fonts used in the PDF file you will find alternative fonts have been substituted.
- Files that are encrypted or password protected cannot be imported.
- Any text in PDF files that use embedded subset fonts will not be readable or editable.

PDF is a highly complex format, and often can't be imported perfectly. The best way to import it may depend on how you intend to use it. The "OPTIMIZE FOR VIEWING" option attempts to make the imported result look as similar to Acrobat as possible, but it may be more difficult to edit (it could have many nested clipviews for example). The alternative "OPTIMIZE FOR EDITING" option strips out some constructs which are difficult to manually edit (for example, nested clipviews).

RAW photo import

You can import RAW digital camera files, either by using the Import menu option or just drag & drop the file onto the Designer Pro window.

Supported file extensions include: *.crw, *.cr2, *.rw2, *.nef,*.mrw,*raf,*.kdc,*.orf, *.dng, *.ptx, *.pef, *.anw, *.x3f
However there are many different extensions used for RAW files by different camera manufacturers, so if you have a RAW file with a file extension not listed above it's worth trying to import it anyway.

Importing images from a website

You can import graphics directly from web pages on the Internet into your document. Notice the difference between this menu option, which loads all the graphics from a web page, and Import, which loads a single graphic from disk.

To import from a web page:

1. Choose "FILE" > "IMPORT GRAPHICS FROM WEB" (or "Ctrl + Alt + W").
2. Type in the web address (URL) of the page or graphic you want to import. If the URL is a page, all the images on that page will be imported.
3. Click IMPORT.

Exporting files

To export a file:

- Right click and choose EXPORT
- Or select "FILE" > "EXPORT".
- Or press "Ctrl + Shift + E".

An EXPORT dialog box will appear. Choose a name for your file, and select the required format from the SAVE AS TYPE dropdown list. Some of the supported formats are detailed below.

Exporting as PDF

The PDF format is an ideal way to distribute your document for a variety of uses. It can be used to supply artwork to a printing company, or it can be used to import in to other programs such as Adobe Illustrator 9 and later. This is described in detail in the next section.

Exporting as Flash

You can export a drawing to Adobe's SWF Flash format (static). This is best suited to vector designs, and can provide very small file sizes. You can then use the SWF in a website, or import it into Flash for use in Flash animations.

You can also create animated Flash. See Flash Animations (on page 375) for more details on Flash export.

Exporting as AVI

Select "**FILE**" > "**EXPORT ANIMATION**" and choose the AVI type from the type list. Click the **OPTIONS** button on the file dialog to change the codec and other settings used for the export.

Exporting HTML

You can easily create multi-page websites with full WYSIWYG (what you see is what you get) using the HTML export option. See the separate chapter Web Graphics & Websites for a detailed description!

You can use "**FILE**" > "**EXPORT WEBSITE**' or press the 'Export website' button on the Website toolbar to export HTML quickly, to save choosing HTML from the long list of export formats shown in the File->Export dialog.

Exporting as Designer Pro EPS

This saves the document as an EPS file. It is the recommended EPS format for exporting to (for example) DTP programs, as all information is retained.

Exporting as ArtWorks EPS

This saves the document so that you can load it into ArtWorks, Computer Concepts' illustration program for Acorn RISC computers. Files in this format cannot be loaded into other programs on the PC. Some features, such as transparency, do not exist on ArtWorks.

Exporting as Illustrator EPS

This is recommended for older versions of Adobe Illustrator (for version 9 onwards we recommend using PDF export, see above).

Exporting as Windows metafiles (.wmf)

Files in this format can be read by Word and several other programs.

Exporting as Extended Metafile Format (EMF)

Modern Windows applications support this enhanced type of vector graphic format. This format is also available to applications that provide a Paste Special menu option.

Note that Xara Designer Pro 7 can contain features, such as advanced fill styles, that cannot be represented in vector formats such as EMF. In this case parts of the image will be exported as bitmaps. Those vector parts that can be exported as vectors are exported as vectors.

Exporting as a bitmap

JPEG, GIF and PNG are universal formats supported by most modern computer applications. PNG is the highest quality. JPEG is better suited to photographic work, but can produce acceptable, compact files (you can control the quality and file size).

GIF format only supports 256 colors, and although common on many websites, PNG is a better format. PNG also supports semi-transparent graphics (use the True Color + Alpha option), but this is not correctly supported by older Microsoft Internet Explorer versions (it is by all other web browsers).

The fewer colors you have in a file, the smaller the file and the lower the quality. However, when using 256 colors or less Xara Designer Pro 7 provides very advanced techniques to simulate a much wider range of colors, and so you can get very high, near photographic quality results using only 256 colors or less.

See also GIF, PNG, BMP and JPEG export dialog overview (on page 439).

Important

Bitmaps are output at the current view quality so for best results make sure that "**WINDOW**" > "**QUALITY**" or the slider on the Standard control bar is set to anti-aliased.

Exporting a Photoshop PSD file

Photoshop is a bitmap editor, so when exporting to PSD format all the vector objects in Xara Designer Pro 7 are rasterized. You can select the resolution (dpi) when exporting.

Always save your work in Xara Designer Pro 7 prior to exporting. Then, if you wish to alter your original objects in the future, just load Xara Designer Pro 7, make any changes and then export the required objects again.

To export as a PSD file choose "**FILE**" > "**EXPORT**" then select **ADOBE PHOTOSHOP** in the **SAVE AS TYPE** list.

Layers

Layers in Xara Designer Pro 7 are retained when exporting to PSD format. Each layer is rasterized as a separate PSD layer, including layer names. Layers visibility is also passed through, so layers set to invisible in Xara Designer Pro 7 will be exported and set to invisible in Photoshop. You can turn the layers on and off in Photoshop using the **LAYERS** palette.

Transparency and layers

The three most common Xara Designer Pro 7 transparency types (Mix, Stain and Bleach) are compatible with Photoshop transparency (blending mode) types (Normal, Multiply and Screen). But because Xara Designer Pro 7 is vector object-based, it's possible for each individual object to have its own transparency type and value. In Photoshop this is not possible, and you can only set the opacity or blending mode for a whole layer. This means that for maximum compatibility and editability in Photoshop, you should place objects that use Stain and Bleach transparency on a layer of their own in Xara Designer Pro 7. This way, when you export, these objects remain as separate editable layers, and with the correct transparency type (or blending mode as Adobe calls it).

If you combine objects that use different types of transparency on the same layer in Xara Designer Pro 7, you will get an alert warning you of this when you export. This may look OK when you export. Transparency types other than Mix, Stain and Bleach are not compatible with Photoshop.

Text

You can export text from Xara Designer Pro 7 to be editable text in Photoshop, but the text must be on a layer on its own (on import you may be asked to update the text objects for them to be editable in Photoshop.)

Text that is on a layer with any other graphic objects will be rasterized into that layer, and thus not be editable.

Export DPI

You will be able to set the DPI of the bitmaps in the exported PSD file.
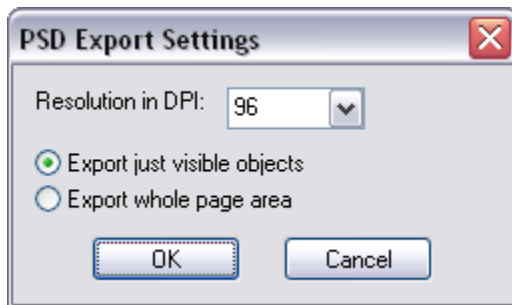
A DPI of 96 is the normal Windows screen resolution, and so exporting at 96dpi will appear in Photoshop at the same size at 100% as it does at 100% in Xara Designer Pro 7.

For print work you should choose a higher DPI.

You can select to export the whole Xara Designer Pro 7 page area or just the areas of the visible objects only.

Summary

In order to get maximum compatibility and editability in Photoshop:

- For the parts of your drawing that you want to remain separate layers in Photoshop, place them on separate layers in Xara Designer Pro 7.

- If you use Stain or Bleach transparency, make sure that those objects are on a layer of their own.
- Do not use any transparency type other than Mix, Stain, or Bleach.
- If you want your text to be editable in Photoshop, place it on a layer of its own, with no other graphic objects.

Exporting as Microsoft XPS (XML Paper Specification)

This is an entirely new "page description" file format invented by Microsoft. Designed for Vista, this is also supported on older versions of Windows by getting a free download. The benefit of XPS format is that it is vector based, and so is ideal as a resolution-independent portable document format. Fonts are embedded into the document and so you are ensured very high quality WYSIWYG documents. If you're using Windows Vista, you can view and print these documents directly. If you're using older versions of Windows, you can obtain a free XPS Viewer download from the Microsoft website, enabling the viewing and printing of these files.

It should be noted that the Xara XPS export does not use the Microsoft standard XPS print system, but writes XPS files directly, which ensures far higher fidelity and far smaller XPS files.

XPS supports advanced vector features such as transparency, CMYK colors and embedded fonts.
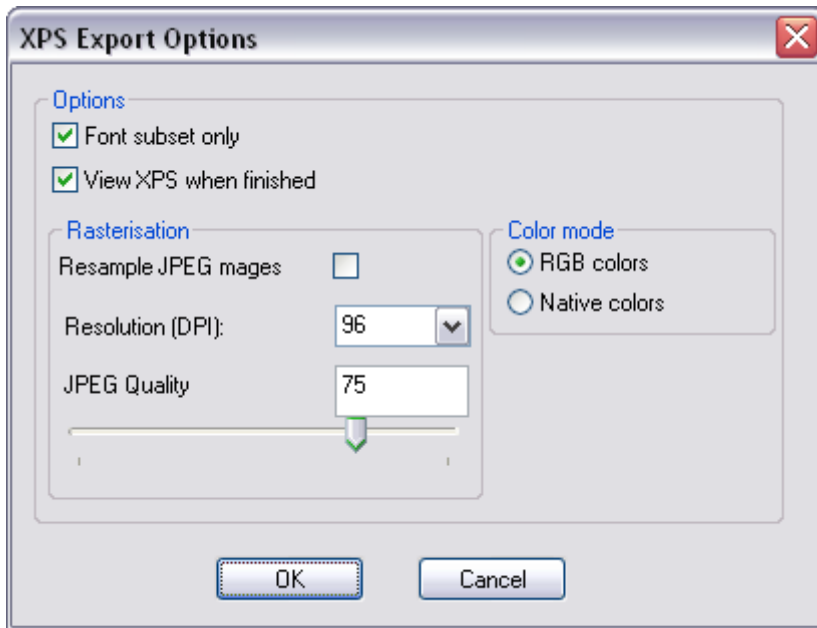
XPS export dialog

Font Subset: Any fonts used in your document are automatically embedded into the XPS document to enable the viewer to correctly display all text. Selecting this option embeds fonts containing only those characters used in the document. This can significantly reduce the XPS file size.

View XPS when finished: This will automatically open the XPS viewer and display the saved file.

Rasterization

XPS is a vector format, but it doesn't support some of the advanced effects, fill and transparency types supported by Xara. Files containing, for example, objects with feathered edges will result in that object being rasterized, that is converted into an alpha-channel bitmap. The resolution of this rasterization process is controlled by these fields.

Resample JPEG images

JPEG photo images contained in a Xara file are usually embedded as the full resolution original JPEG file (and is thus a lossless process). However, for many applications this might be overkill. E.g. a typical modern digital camera can easily create a 4Mbyte JPEG file, 3000 pixel across or more. If this is placed on the page in Xara and scaled to be say 2 inches across, that photo would be at a resolution of more than 1500dpi – way more than is required for any printing application. (The resolution of bitmap object is shown on the Status line in Xara).

You can therefore choose to resample JPEG photos to a lower resolution more suited for viewing on screen (e.g. 96dpi) or printing (typically not more than 300 dpi)., and thus reduce the size of the XPS file. The JPEG quality slider controls the quality of the resampled JPG. The lower the quality, the smaller the resultant XPS file. A quality of 75 is the recommended setting which is actually very high quality image.

Color Mode

XPS files, like Xara documents can contain a mix of both RGB and CMYK colors. However, the XPS viewer shows CMYK colors as color corrected for the printer. Xara on the other hand shows all colors (CMYK and RGB) as screen colors or printer colors (depending on the Show Printer Color menu option). This slightly different approach to displaying colors can result in significant differences between RGB and CMYK version of the same color. In Xara, for example, cyan is shown as the same color on screen whether it's been defined as CMYK or RGB. XPS displays the same color completely differently.

Selecting the RGB colors option will force all colors to be converted to RGB to provide consistency with the way Xara displays colors. Selecting Native colors will export objects using whichever color model you've used in Designer Pro, but this will likely result in color changes where you've mixed RGB and CMYK colors in the same document.

Image slicing

Large, complex graphics for web pages can produce large files which take a long time to download over the Internet. You can reduce this problem by "slicing" the image into sections which can be downloaded separately.

Another use of slicing is optimization. For example, if you have a photo on a plain flat color background, then you can optimize the graphic by exporting just the high detail area (photo) as a JPEG or 256-color GIF, and the other areas as, say, a 2-color GIF. This minimizes the amount of data to download.

To slice an image:

1. Named objects control slicing, so give the part of the image to go on its separate slice (for example, the photo) a name. Use the Name Gallery or the **NAMES** icon on the **SELECTOR** Tool InfoBar. (For more complicated images you might want to name more objects.)
2. In the **NAME GALLERY** choose the export options for the slice. Click **EXPORTS** from the dropdown menu, click on the file type next to the named image, set your export options as you wish for that slice, and then click **APPLY**.

For more on the Name Gallery refer to Document Handling (on page 59).

Export the graphic in slices

You do not need to specify how to slice the image as Xara Designer Pro 7 does this automatically from the information in the **NAME GALLERY**.

1. Select the complete image including any slices
2. Select "**FILE**" > "**EXPORT IMAGE IN SLICES**".
3. Select the file format (this will apply to all areas of the image other than your slice).
4. The file name is the HTML file that contains the HTML code for the sliced image. You can change the file name if required.
5. Click **SAVE**.
6. Select the required save options (these will apply to all areas of the image other than your slice).
7. Click **EXPORT** to save the sliced image.

To prevent specific named objects from slicing:

1. In the dropdown list in the **NAME GALLERY**, select **SLICES**.
2. Names with a check beside them slice the graphic – if necessary, deselect any check boxes.

PDF Export

The Portable Document Format (PDF) provides the best way to transfer drawings and document to others. The free Adobe PDF Reader is very popular and enables anyone to view and print your PDF document.

For very complex vector graphics, PDF can be very slow (sometimes 20 times or more than Xara Designer Pro 7), so drawings that take a few seconds to draw in Xara Designer Pro 7 can take minutes, especially when printing. So sometimes it's quicker to convert complex vector graphics into a bitmap before exporting your PDF.

PDF files are vector graphics files-which means they are resolution independent, and are great for printing on high resolution devices, and you can zoom in to view detail with no loss of quality. Your graphics or document exported as a PDF should look exactly like it does in Xara Designer Pro 7.

There are different versions of PDF, including a specialized version, known as PDF/X which was developed by the printing industry and has become a very popular way of transferring files for commercial printing.

PDF/X creation is only available in Xara Designer Pro

Xara Designer Pro 7 provides very comprehensive controls over many aspects of your PDF output. These are just some of the options and features you can control in Xara Designer Pro 7 PDF output. You can:

- embed fonts in the file which means all readers can be sure of seeing the file exactly as you intend, but this makes the files larger. You can also select to embed only a subset of the fonts (only the used characters) to reduce the PDF file size;
- set it to re-sample all images or photos to be any required resolution so they are not unnecessarily high resolution;
- set it to convert bitmaps to JPEG or remain in their raw state;
- make it so that layers in your Xara Designer Pro 7 drawing are visible and can be switched on and off in Adobe Reader;
- select which version of PDF or PDF/X file you want to create;
- select which pages of a multi-page document are exported;
- make your PDF file password protected;
- even embed the original .xar file (or other files) into the PDF for the ultimate in document portability.

To make life easier all the options have been distilled down to four easy choices. When you export as a PDF you are presented with a choice of the following presets:

- Draft quality.
- Email distribution or Web download.
- High quality.
- Commercial printing (PDF/X). (Xara Designer Pro only)

You can customize the settings of any of these presets by clicking **ADVANCED OPTIONS**.

Exporting PDF files

PDF versions

PDF has evolved over the years as more features have been added. Typically, along with each new version of PDF, a new version of Adobe Reader is released to support the new PDF features. Unfortunately, the version number of PDF Reader and the PDF file do not match. So, for example, Adobe Reader version 5 is required to read PDF versions 1.4.

PDF version 1.4 was the first version to support transparency and so is the minimum generally recommended version to use. Later versions support some of the extra features. For example, if you want to use the Layer feature (so you can switch Xara Designer Pro 7 layers on and off in Adobe Reader), you need to export as a PDF version 1.5, or higher, and this requires Adobe Reader version 6, or higher.

You can export files in PDF version 1.3, 1.4, 1.5, 1.6 and 1.7 formats as well as the following PDF/X standards:

- PDF/X-1a:2001 (ISO 15930-1).
- PDF/X-1a:2003 (ISO 15930-4).
- PDF/X-3:2002 (ISO 15930-3).
- PDF/X-3:2003 (ISO 15930-6).

Objects not supported by PDF

Some Xara Designer Pro 7 features do not exist in PDF, so the conversion to PDF has to simulate these features, usually by converting to a bitmap or bitmap fill.

Transparency

PDF version 1.3 does not support transparency. Any objects containing transparency will be exported as bitmaps, a process sometimes called "flattening". Xara Designer Pro 7 does this automatically. The resulting PDF file should still look correct however.

Transparency Types

Xara Designer Pro 7 supports a number of different transparency types and three of these have direct equivalents in PDF 1.4.

- **Mix:** This is the default transparency type in Xara Designer Pro 7 and it's directly mapped to "normal" transparency in PDF.
- **Bleach:** This is mapped to PDF transparency type "screen".
- **Stained Glass:** This is mapped to PDF transparency type "multiple".

Other transparency types in Xara Designer Pro 7 have no direct PDF equivalents, so they are converted to bitmap in the PDF file.

Fill types

Fill types flat, linear, circular and elliptical are all mapped directly to equivalent PDF types, but the other more complex fill types (Conical, Diamond, Three Color, Four Color, Fractal Cloud fills and Fractal Plasma fills) supported by Xara Designer Pro 7 have to be represented using bitmap fills in the PDF.

ClipViews

The PDF export filter does not directly support ClipViews comprised of lines or text. Convert all lines and text to shapes to ensure that a ClipView that contains these objects is properly converted.

Blends, Moulds and QuickShapes.

Blends and Moulds are not part of the PDF format. They are exported as individual objects. All QuickShapes are converted to simple shapes.

Font embedding

The PDF filter includes support for embedding fonts within a PDF document where permission has been granted by the font vendor for this purpose. Where fonts are not embedded, if readers do not have the correct font on their system, then usually a "best guess" font is substituted by the reading application, resulting in loss of fidelity.

During the export of a PDF file, you are warned about missing fonts or where required fonts could not be embedded. If you intend to distribute your PDF file or submit it to a service bureau for printing it is recommended that you:

Ensure that the target platform has legal copies of any required fonts.

Flash Embedding

If you export to PDF version 1.5 or higher, you can include embedded Flash objects in your document. Recent versions of Adobe Reader will play the Flash animation while viewing the PDF. This feature is not supported by all PDF viewers however.

See the Web Graphics & Websites chapter for information on embedding Flash into your document.

To export a PDF file

1. Choose "**FILE**" > "**EXPORT**" ("Ctrl + ⇧+ E").
2. Select **PDF OR PDF/X (*.PDF)** from the **SAVE AS TYPE** list.
3. Name the file then click **SAVE**. The PDF Export dialog will appear:
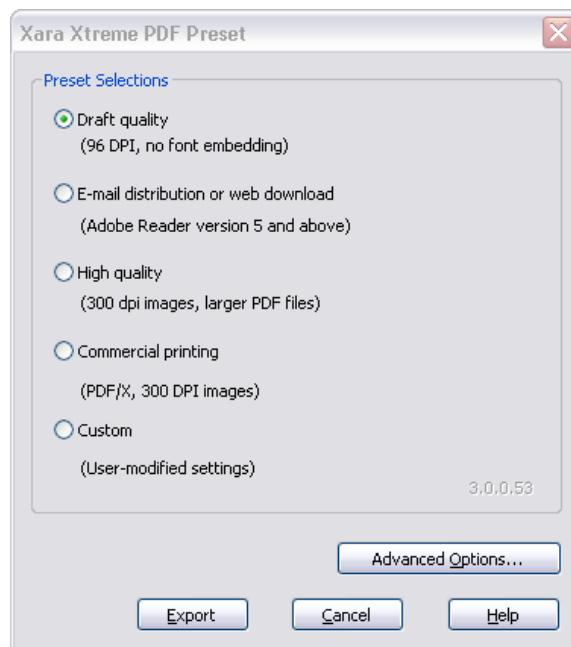
The four preset options will be suitable for most PDFs. They are:

Draft quality (96 DPI, no font embedding)
The draft setting is typically used when proofing a design and offers the fastest mode of PDF generation. The following settings are used:
* PDF version 1.4.
* No fonts are embedded.
* All bitmaps and photos are embedded as JPEG images at 96dpi.

This option will produce the smallest file, but note that because no fonts are embedded, if you give the file to anyone they must have the fonts used installed on their system in order to be able to see the document exactly as you intended.

E-mail distribution or web download (Adobe Reader version 5 and above)
This setting specifies filter options that are optimal for distributing PDF documents
through e-mail and the web. Fonts are included, so you can be sure your document will
be viewed exactly as you intended and all images are medium resolution suitable for
inkjet printing and viewing on screen.

- PDF version 1.4.
- Fonts are embedded, and subsetted (meaning only characters used are embedded
  as fonts).
- All bitmaps and photos are converted to JPG at 150 dpi.

High quality (300 DPI, larger PDF files)
The high quality setting includes options for rendering designs as PDF documents
where full fidelity is required at high resolution. This if most suitable for printing on inkjet
printers or viewing at high zoom. The following are the key settings:
- PDF 1.4.
- Fonts are embedded, and subsetted (meaning only those characters used are
  embedded as fonts).
- All bitmaps and photos are passed through untouched, unless they are more than 300
  dpi in which case they are sampled down to be 300 dpi but retain their existing type
  (they are not all converted to JPG).

Commercial printing (PDF/X, 300 DPI images)
This setting specifies the options required for generating PDF/X documents that will be
submitted to a print company. The following are the key settings used:
- PDF version 1.3 (as required by PDF/X).
- Files are conformant to PDF/X-1a: 2001 (ISO standard 15930-1).
- Fonts are embedded and subsetted.
- Bitmaps are converted to CMYK in native (uncompressed) format according the ICC
  Color Profile "US Web Coated SWOP".
- Bitmaps are limited to 300 dpi (high res bitmaps are sampled down).
- Crop and printer's marks are included if these are switched on in the **PRINT OPTIONS**
  dialog in Xara Designer Pro 7.

Customizing PDF export using advanced options

If you select the **ADVANCED OPTIONS** button you can customize any of the above presets.
Once you have altered any of the preset values, the next time you export a PDF it
remembers the last settings, and the **CUSTOM** option will be shown. The following section
provides an overview of this feature.

While the four presets included in the PDF Export Filter will cover most typical scenarios
for generating PDF output, situations may arise when greater control is required in order
to specify the properties of the resulting document.

To customize the output filter settings:

1. Select the preset that is closest to the desired type of PDF.
2. Click **ADVANCED OPTIONS....**
3. Modify the desired filter settings.
4. Click **EXPORT** to generate the PDF document.

The modified settings will automatically be stored under the **CUSTOM** option for use from that point on.

When the **ADVANCED OPTIONS** button is clicked, the PDF Export Filter options appear in a separate dialog box grouped within the following categories: General, Objects, Document, Layers, Pre-Press (only Xara Designer Pro) and Security.

PDFs for import into Adobe Illustrator (V9 onwards)

PDF is the best format to use if you need to transfer designs from Xara Designer Pro 7 to recent versions of Adobe Illustrator. Vector shapes, bitmaps, text and the simple fill and transparency types will all transfer with no loss of fidelity.

Layers

Adobe Illustrator 9 & 10 fully support editing of layers exported in PDF files. Unselect the **EXCLUDE INVISIBLE LAYERS** option to make sure all layers in your design are included. Illustrator CS & CS2 will not preserve design layering.

Text

In order to edit text in PDF documents in Adobe Illustrator 9 and 10, embedded fonts must be installed on the host system. Also, you must unselect the **USE UNICODE FOR TEXT ENCODING** option in the **SETTINGS** dialog.

Bitmap tiling

Adobe Illustrator 9 and 10 will not read the PDF if tiling is used, so unselect the **PRESERVE BITMAP TILING** option. This is not necessary for CS or CS2 versions.

Groups

Select the **PRESERVE GROUPS** option in the export settings if your document contains groups so that they are maintained in Adobe Illustrator.

Note however that because PDF does not natively support groups, clipping masks will appear as part of imported groups in Illustrator CS & CS2. Therefore, when ungrouping you also need to remove the clipping mask.

PDF Export Filter Settings: General Options
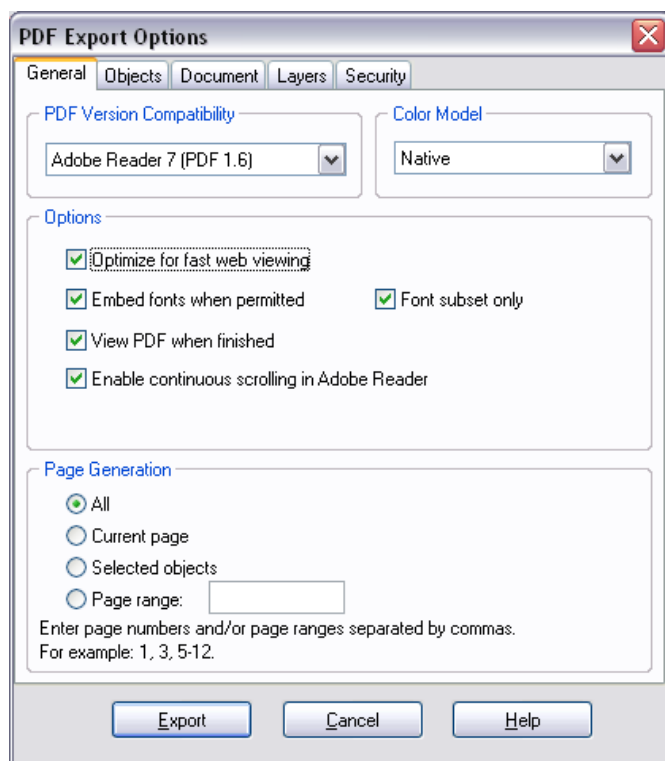
The **GENERAL OPTIONS** tab in the PDF Export Filter provides a range of settings that can be configured to specify PDF document attributes including version compatibility, how content is encoded, and which pages are to be rendered.

PDF Version compatibility

The PDF Export Filter supports versions 1.3, 1.4, 1.5, 1.6 and 1.7 of the PDF format, as well as the most commonly used PDF/X standards to ensure compatibility with a wide range of applications. Unless PDF version 1.3 compatibility is required, select PDF version 1.4 or greater as the output format as this will provide support for transparency.

Color Model

The color encoding standard for the PDF document can be selected from **CMYK**, **RGB**, and **NATIVE**. The **NATIVE** option represents colors in the PDF file as they are specified in the drawing using RGB and/or CMYK.

When CMYK is selected as the color model for a PDF document, an ICC (International Color Consortium) profile can be specified. Please refer to the section on Pre-Press options later in the chapter for additional information.

Note: PDF/X documents are limited to CMYK color encoding.

Note that Adobe Reader (and Adobe applications generally) display CMYK colors very differently from their RGB or HSV equivalents. To preview what your colors will look like when exported to PDF/X select the option "**WINDOW**" > "**SHOW PRINTER COLOR**" > "**SIMULATE PRINT COLORS**".

Options

- **OPTIMIZE FOR FAST WEB VIEWING (LINEARIZATION).** Linearization of PDF files generated by the export filter encodes the PDF for optimal transfer and viewing over the Internet. Be default this option is enabled.
- **EMBED FONTS WHEN PERMITTED.** Select this option to include copies of fonts in the PDF file that are not included in the PDF base 14 fonts supported by Adobe Reader. Note that only those fonts that are not restricted by copyrighting restrictions will be embedded in the PDF file. By default this option is enabled.

Note: PDF/X documents (Xara Designer Pro only) require that all fonts are embedded in the resulting document. When exporting PDF/X with font embedding turned on, all fonts are embedded. However when exporting PDF the 14 base fonts are not embedded as these fonts are generally available to all PDF readers.

- **FONT SUBSET ONLY.** This option can be used in conjunction with the **EMBED FONTS WHEN PERMITTED** option to indicate that only those characters that are used within a typeface will be embedded in the resulting PDF file. Selecting this option can reduce the size of the PDF file that is generated however it will also limit the level of editability. By default this option is unselected.
- **VIEW PDF WHEN FINISHED.** This option can be selected to automatically launch and view the resulting PDF using the default application that is associated with the format under Windows. This option is enabled by default.
- **ENABLE CONTINUOUS SCROLLING IN ADOBE READER.** Choose this option to have Adobe Reader synchronize the scrolling of the PDF document with the movement of the scroll bars in the viewing application. By default this option is selected. Note: this option only applies to PDF documents that contain more than one page.

Page Generation

When generating a PDF document from a multi-page design, Xara Designer Pro 7 optionally allows a range of pages to be specified.

To specify which pages are to be rendered to the resulting PDF document:

- Select **ALL** to export all pages contained within the design
- Select **CURRENT PAGE** to export the currently selected page or
- Select **SELECTED OBJECTS** to print only those objects that are selected.
- To export a range of pages within the design, select **PAGES** and enter the desired range in the edit box. Specify individual pages by their number, separated by commas. To specify a range, enter a starting and ending page. For example, to specify that the first, third page and pages 5 through 12 of a design should be exported to the resulting PDF document enter the following: **1, 3, 5-12**. Note: pages will be exported to the PDF document in the order in which they appear in the original design.

PDF Export Filter Settings: Objects Options
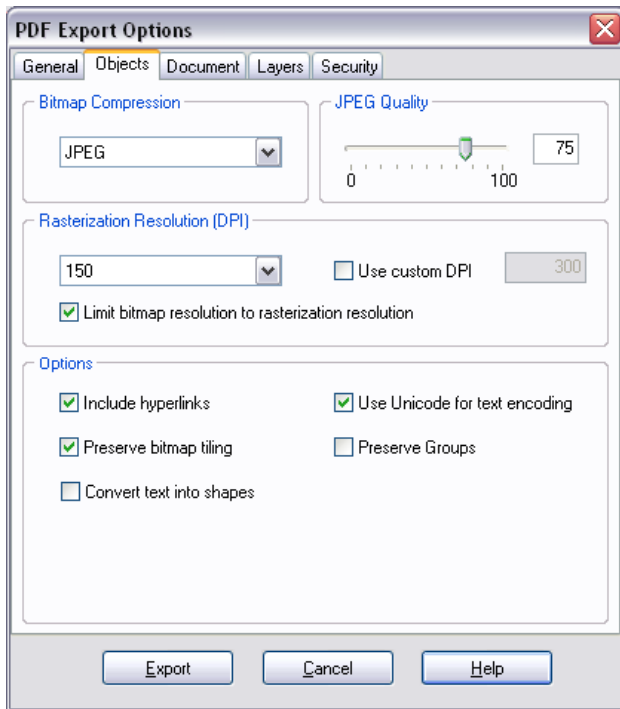
The **OBJECTS** tab in the PDF Export Filter provides a series of settings that can be used to specify how design elements are rendered in a PDF document.

Bitmap Compression

Choose the compression scheme for bitmapped images that appear in the document by selecting from the options in the dropdown list. Supported compression schemes include: **NATIVE** (use the bitmap compression in the document), **NONE** (do not apply compression), **JPEG** and **FLATE**.

Flate is lossless compression, the same compression used in PNG graphic files or zip archives. **FLATE** can give better results if the PDF contains lot of schematic drawings with less colors, but not recommended for PDFs with many photos.

JPEG Quality

Use the slider control to set the JPEG quality index when using JPEG compression for bitmapped images. Values range from 0 to 100, with higher values specifying increased quality and lower values specifying increased compression and the loss of some image fidelity. The default JPEG quality is 85.

Rasterization Resolution (DPI)

For Xara Designer Pro 7 graphic objects that cannot be exported as native vector PDF objects (things like soft shadows, feathered objects, bevels), Xara Designer Pro 7 will automatically rasterize, that is convert to a bitmap. This option allows you to choose the DPI (dots per inch) for the rasterization resolution using the dropdown list, or click **USE CUSTOM DPI** and enter a custom value by checking the **USE CUSTOM DPI** option and

specifying an integer value between 20 and 600. The default preset value for rasterization is 150. The higher the resolution, the larger the PDF file. It is not usually necessary, even for the highest quality printing to use a value above 300dpi.

Options

INCLUDE HYPERLINKS: Select this option to preserve any objects containing hyperlinks in the outgoing PDF file. By default, this option is selected for standard PDF documents. This option is not selected and disabled for PDF/X documents, since hyperlinks are not allowed.

Xara Designer Pro 7 supports a number of different link types and mouse-over actions, which are used mainly when creating websites. Some of these features are also supported in exported PDFs, but others are incompatible with PDF and/or not useful. Of the many features available in the "**UTILITIES**" > "**WEB PROPERTIES**" dialog, only the following are supported with PDF:-

- Ordinary links to URLs (the 'open link in' options do not apply)
- Page links. When viewing the PDF you can click these links to navigate to the different pages of the document, if the PDF viewer supports this.
- Links to anchors
- Popup title text (See the Mouse-over tab of the Web Properties dialog).

The link color, as set on the Website tab of "**UTILITIES**" > "**WEB PROPERTIES**", is also used to color links in the PDF. And you can override the link color for any specific link, by unchecking the 'Use common colors' option on the Link tab and giving the link its own color. However the mouse-over and visited link colors on the Website tab are not supported for PDF.
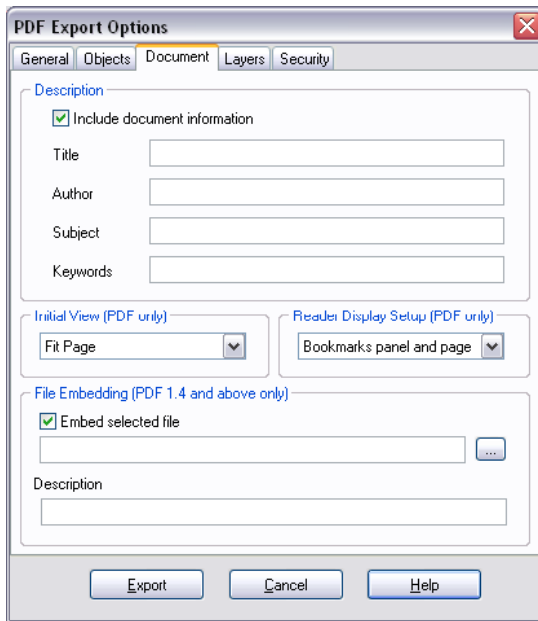
CONVERT TEXT INTO SHAPES: This option can be selected to convert all text content into vector shapes. This option can be specified to preserve the appearance of text when equivalent fonts may not be available on the target system or when font embedding is not permitted. Note that the text in the resulting PDF file is translated into shapes and is no longer editable as text. By default this option is not selected.

USE UNICODE FOR TEXT ENCODING: This option can be used to select the method to be used for encoding text in the resulting PDF document. By default, this option is not selected and text is encoded using the ANSI encoding scheme. Selecting this option specifies that text should be encoded using Unicode.

PRESERVE BITMAP TILING: This option determines the method that the export filter uses to generate tiles in the PDF file. By default, the preserve bitmap tiling option is selected and a series of individual bitmaps are used to fill the corresponding object. This option should be unchecked when the resulting PDF files are to be used in Adobe Illustrator 9 and 10 or in any other application that does not directly support bitmap tiles as fills.

PRESERVE GROUPS: Use this option to maintain groups in the resulting PDF document. Note that because the PDF format does not natively support groups, grouping is emulated using clipping masks.

PDF Export Filter Settings: Document Options

The **DOCUMENT** tab contains items that can be used to specify authoring information and how a PDF document will be opened within Adobe Reader.

Description

Within this section, the title, author, subject and keywords for the outgoing PDF document can be optionally added. Select **INCLUDE DOCUMENT INFORMATION** to embed these details in the resulting PDF file. By default this feature is not selected.

Initial View

Select from among the document viewing options in the dropdown list to specify the magnification level of the resulting PDF file when it is viewed in applications that support this feature. The default magnification level is 100%.

Note: This feature is not available for PDF/X documents.

Reader Display Setup

When generating a PDF file that is intended for display in Adobe Reader, you can select from among the display setup options in the dropdown list to specify how the viewer is configured when the file is opened. Options are included for displaying only the page, the bookmarks panel and page, the pages panel and page, a full screen version of the document, the layers panel and page (PDF 1.5) and the attachments panel (PDF 1.6). The display setup options for showing the bookmarks, pages and the layers panel are particularly useful when generating PDF documents in which layers are used.

The default Reader display setup option is **PAGE ONLY**.

Note: This feature is not available for PDF/X documents.

File Embedding

A unique feature supported by the PDF document format is its ability to embed files at the document level. The Xara Designer Pro 7 PDF Export Filter allows one file of any size and type to be added to the exported PDF. When the PDF document is opened by applications that support file embedding (such as Adobe Reader or Acrobat), the embedded file appears in the attachments list panel. Embedding a file within the PDF document is particularly useful when distributing an illustration or submitting it to a service bureau. Examples for the use of this feature include attaching the original Xara Designer Pro 7 .xar file, a readme file outlining author and copyright information or a high resolution rasterized version of the illustration to the resulting PDF.

To embed a file within an outgoing PDF document, simply click the ellipses button [...] to select a file from within a file open dialog or type in the path of the file manually.

Enable **EMBED SELECTED FILE** to add the file to the PDF document. By default this option is not selected.

An optional description may also be provided for the embedded file. This description will appear as a comment when the attachments panel is viewed in Adobe Reader and Acrobat.

Note: File Embedding requires that the PDF Version compatibility be selected as 1.4 or greater.

PDF Export Filter Settings: Layer Options
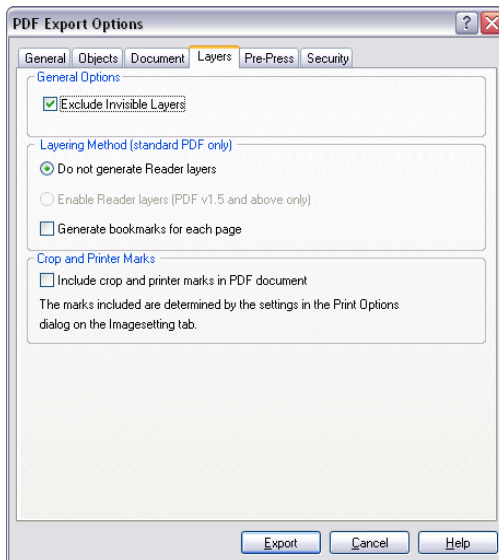
The **LAYERS** tab within the PDF Export Filter provides a means to specify how layers within a drawing are rendered for in the PDF document.

General Options

Exclude invisible layers. This option can be checked to exclude all invisible layers in the outgoing PDF file. To eliminate guide layers from a PDF document, set the layer to invisible in the Xara Designer Pro 7 Page & Layer Gallery and export the drawing with this option checked.

Layering Methods (standard PDF only)

1. **DO NOT GENERATE READER LAYERS:** Separate layers do not appear in the resulting PDF document. This option is enabled by default.
2. **ENABLE READER LAYERS IN A SINGLE PAGE (PDF 1.5 AND ABOVE ONLY):** Layers are rendered within the document on a single page, with layering labels included for display within Adobe Reader's Layer Gallery.
3. **GENERATE BOOKMARKS FOR EACH PAGE:** Select this option to include bookmarks in the resulting PDF document for each page of your document. A bookmark is generated for each page, using the 'Page title' value as defined on the 'Page' tab of the "**UTILITIES**" > "**WEB PROPERTIES**" dialog. If no page title is defined, the 'Page filename' (as defined in the same dialog) is used instead. If there is no page filename set either, then pages are named simply "Page 1", "Page 2", etc. In Adobe Reader you can display the list of bookmarks in the document and then just click on them to jump to each page.

Crop and Printer's Marks

Include crop and printer's marks in the PDF document. Select this option to include crop and printer's marks in the outgoing PDF document. This feature is particularly useful when submitting PDF files to be printed through a service bureau. By default this feature is unselected. Note: to use this feature you must check the **OUTPUT PRINTER'S MARKS** option and select the desired types of marks to be included within the Imagesetting tab of the **PRINT OPTIONS** dialog.

PDF Export Filter Settings: Pre-Press Options
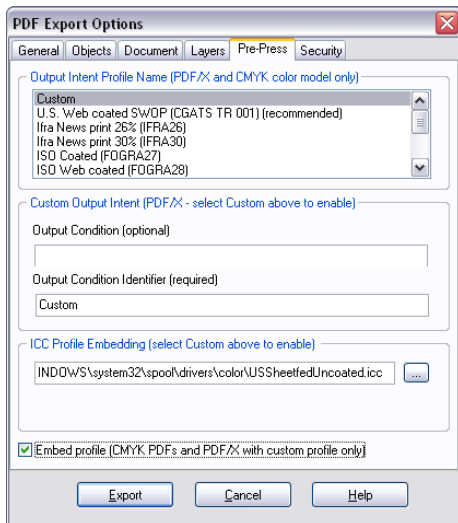
The **PRE-PRESS** tab includes items for specifying characterization settings and the embedding of ICC (International Color Consortium) color profiles for print production.

ICC profiles are files containing data that specifies how colors are to be rendered on a particular output device. The use of an ICC profile is mandatory for PDF/X documents, optional for CMYK-based PDF documents and not applicable for all other types of PDF documents.

Specifying an ICC profile of use in PDF/X documents:

Output Intent Profiles

When generating a PDF/X document for print production, output intent profile settings based on an ICC profile must be specified in order to ensure that the output is rendered properly on the intended output device. Xara Designer Pro 7 includes presets for the most popular output intent profiles used in North America, Europe, and Japan. To specify the use of one of the preset output intent profiles, simply select it from the list.

Custom Output Intent Profiles

If the output intent profile that is required for print production is not provided in the list provide with Xara Designer Pro 7, it is possible to enter the desired output by selecting "Custom" in the intent profiles list. Here you may enter the optional Output Condition and the required Output Condition Identifier that corresponds to the output device.

Note that for PDF/X compliance, Custom profiles must be embedded in the resulting documents. Follow the instructions below for details on how to specify the location of ICC profiles.

ICC Profile Embedding

The Xara Designer Pro 7 PDF filter includes provisions for embedding ICC files within a PDF document. An embedded ICC profile is required for a Custom output intent if the characterized printing condition is not in the registry of CMYK characterizations on the ICC web site (www.color.org).

The output intent profiles included with Xara Designer Pro 7 are not embedded in the resulting PDF/X document as they are readily available in workflow environments.

To embed an ICC profile within a PDF document:

1. Click the ellipses button [...] to select a file from within a file open dialog or type in the path of the file manually.
2. Click **EMBED THIS PROFILE** to include the ICC profile in the outgoing PDF document.
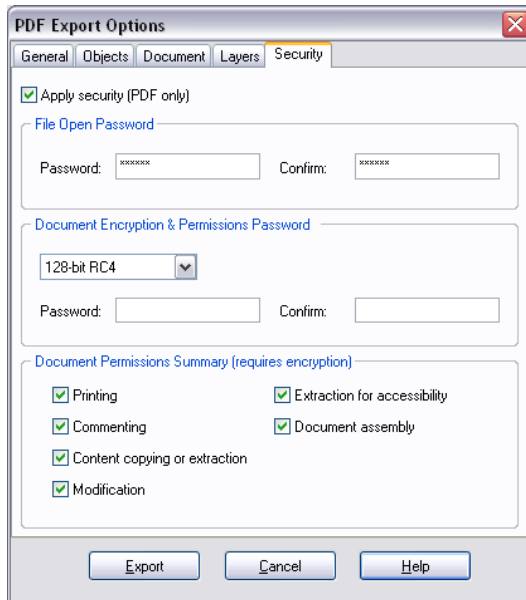
By default the file embedding feature is unselected.

Note: Please be sure to consult with your print service bureau to determine the appropriate settings for all pre-press options.

Specifying an ICC profile of use in CMYK-based PDF documents: When a CMYK color model is selected for standard PDF documents a profile may be specified from the Output Intent Profiles list as a reference when performing the actual color conversion. The output intent profiles included with Xara Designer Pro 7 may be embedded in the resulting PDF document by clicking **EMBED THIS PROFILE**. if you wish to use a profile that

is not included in the list of presets, specify a Custom profile as described above and select whether or not you wish to embed it in the document.

PDF Export Filter Settings: Security Options

The SECURITY tab provides support for specifying security attributes and permissions settings that determine how the PDF document can be used once it is distributed. These options are only available for standard PDF documents and cannot be used when generating PDF/X files.

To include these security settings in the outgoing PDF document, check "Apply security". By default this feature is not selected.

File Open Password

To password-protect a PDF document, specify and confirm a password. This password will be required when a user attempts to open the document for viewing.

Note that it is strongly recommended that a document also be encrypted if a file open password is applied as this security scheme is known to be relatively easy to compromise. As a result, file open passwords should only be used as a means of security to prevent inexperienced users from accessing sensitive documents.

Document Encryption and Permissions Password

To encrypt a PDF document, select an encryption method and specify and confirm a password. This password will be required when a user attempts to make changes to the document, including modifying security and permissions settings. The encryption password is often referred to as the owner or master password and it may also be used to open the PDF document.

Additional document permissions settings (outlined in the section below) may be applied to determine the degree to which a user can interact with the encrypted document.

Four encryption methods are available:

- **NONE:** This setting will not apply any document encryption. This is the default encryption option for the document.
- **40-BIT RC4:** This setting will apply a 40-bit encryption algorithm to the document.
- **128-BIT RC4:** This setting will apply a 128-bit encryption algorithm to the document.
- **128-BIT AES:** This setting will apply the 128-bit AES encryption algorithm to the document. If the PDF document contains confidential or highly sensitive material this method of encryption is considered to be the most effective means of securing the contents. Note: PDF 1.6 is required to support this encryption method.

Document Permissions Settings

The document permissions settings section allows you to specify actions that can be undertaken on an encrypted PDF document when it is rendered or processed by another application.

Within the **DOCUMENT PERMISSIONS SUMMARY** section, check any of the following settings to allow a user to perform the following tasks:

Printing: Selecting this option allows a user to print the PDF document. By default this option is selected.

Extraction for accessibility: Selecting this option allows content to be extracted by applications that assist users with impairments. By default this option is selected.

Commenting: Checking this option allows users to add comments and annotations to the PDF document. By default this option is selected.

Modification: Enabling this option allows users to change the contents of the PDF document. By default this option is selected.

Document assembly (requires 128-bit encryption): Checking this option allows a user to merge or append this document with other documents. By default this option is selected.

Content copying or extraction (requires 128-bit encryption): Selecting this option allows a user to copy or extract elements of the document, including text and graphics. By default this option is selected.

Note: The PDF document must be encrypted in order for these permissions settings to be applied. In addition, the responsibility for respecting these permissions settings is left to the application that is used for processing the PDF document.

JPEG, PNG, GIF and BMP export dialog overview

The Export settings dialog has two preview windows, **IMAGE A** on the left and **IMAGE B** on the right, so you can compare alternative export settings or file types, side-by-side. Just click on the left or right preview window to change the active preview.

Above the preview window is a small dropdown that lets you select from the most common four export type, JPEG, PNG, GIF and BMP.

When you have selected preview **A** or **B** you can then adjust a wide range of export options using the five tabs below the preview. Some options, such as the Palette Options are only applicable to some file types such as PNG and not relevant to JPEG type.

Other options under the **OPTIONS** tab change depending on the file type. e.g. when exporting a JPEG this is where you can set the required quality.

So the process for exporting an image:

1. Select the object or objects on the page you want to export
2. Select the Export menu, or "Ctrl + Shift + E", enter a file name, and select file type from the drop down list. The main export type will display the above preview dialog.
3. In this Preview dialog adjust the settings if you want, or skip this if you're happy with the default settings
4. Click the **EXPORT** button

For most commonly used JPEG and PNG formats, at step 2 you can instead use the direct operations available in the **FILE MENU**: **EXPORT JPEG** and **EXPORT PNG**. The export dialog shown includes a "Settings" button which takes you to the export settings dialog shown above.

Most export settings are remembered for the next time you export. For example if you adjust the JPEG quality, the next time you export a JPEG it will remember the last quality setting.

Exported Image Size
When you export the normal default size is the same as you see on screen at 100% zoom. The pixel size is shown under the preview window. You can adjust the pixel dimensions either by adjusting the object size on the page before you export, or by entering alternative pixel or dpi values in the **BITMAP SIZE** tab.

Preview Controls

These buttons alter the preview of the images, but do not affect the exported file:

- **ZOOM TOOL**: Click on a preview to zoom in. Shift-click to zoom out. Drag over an area of the preview to zoom into that area.

- **PUSH TOOL**: Lets you drag the image around in the preview window.

- **ZOOM TO FIT**: Scales the preview image to fit the window.

- **ZOOM TO 100%:** Scales the image to full-size (100%).

- **ZOOM TO RESOLUTION OF IMAGE** (1:1): Has no effect for GIFs. Scales the image so one pixel in the bitmap is one pixel on screen. This is useful for previewing detail in the bitmap.

The following tool is only relevant to files using less than 256 colors (but you will see the result when you have the **PALETTE OPTIONS** tab selected):

COLOR SELECTOR: Moving the pointer over the image highlights the color under the pointer. Click to select that color in the palette. You can then use **PALETTE OPTIONS** buttons (described below) to alter that color.

PREVIEW: The preview button is available on all tabs of this dialog. It updates the preview windows to reflect any changes you have made to the export options.

Palette Options tab

This tab allows you to alter the color settings of your exported image.

Dithering & Palette

The **DITHERING** and **PALETTE** options only apply when you export with 256 color or less, and affect how the image is displayed and its color palette. It is recommended to always use an **OPTIMIZED PALETTE**. Set **DITHER** to none, which produces smaller files but may be banded, or **ERROR DIFFUSION**, which creates higher quality results, but larger files.

Color Depth

Choose the number of colors your bitmap requires. The more colors, the larger the file (usually), and the higher the quality. The **TRUE COLOR** option supports up to 16 millions colors. **TRUE COLOR + ALPHA** includes semi-transparent features such as soft shadows and transparency. For applications that support alpha-channel PNG files this is the recommended format.

If you choose 256 colors of less, you have the option to use simple transparency (Wine glass icon-see below). This doesn't support semi-transparent pixels, only "on/off" fully opaque or fully transparency pixels, and so can produce jagged edges.

Max Colors

If you select a Color Depth of 256 or less you can control exactly how many colors are used in the file. This provides a high degree of control over quality vs. file size. Just enter the required number of colors and press the **PREVIEW** button to preview.

Buttons

These buttons (except **TRANSPARENT BACKGROUND**) apply when exporting 256 color images or less. These files are created with a limited palette of colors, and these controls provide a great degree of control over those palette colors. See **COLOR SELECTOR** above on how to select a color, or click on a color in the **COLOR PALETTE**).

Lock a Color

You can specify the number of colors you want in the palette of exported bitmaps. You may want to ensure that certain colors always appear in the palette; you can lock these colors. Click on a color to select it, then select the **LOCK** button. A small square appears in the bottom left of the color to tell you it is a locked color.

Make a Palette Color Web Safe

When clicked this button will shift the selected color to be one of the 216 common web browser palette colors. This is a legacy system that is no longer particularly important or relevant, as nearly all computers can display millions of colors, and there's no benefit in restricting web graphics to only this limited palette.

Make the Image Background Transparent

Make any areas not covered by the selected objects transparent. Selecting this option automatically makes one entry in the palette transparent.

Make a Palette Color Transparent

Make this color entry transparent. Note the difference between this option, which makes parts of the selected objects transparent, and **Make The Image Background Transparent** which makes those areas behind the selected objects transparent.

Delete a Palette Color

Delete this color from the palette. Any areas in the bitmap that use the deleted color then use the nearest color in the palette. The fewer colors in the palette, the smaller the bitmap file.

Restore a Previously Deleted Color

Undelete a deleted color.

🖳 **Add system colors**

Adds 28 colors to the palette. These colors are the regular Windows system colors and a number of primary colors. This ensures the palette includes a spread of colors and may improve the quality of the image, particularly if it contains a wide range of colors. You may need to experiment with this option to get the best results.

Bitmap Size tab

With this tab, you can change the size of the exported image.

Bitmap Size and Resolution

You can change the size of the exported bitmap by changing:

- SIZE: Type the required width or height into one of the fields. Note that the aspect ratio of the bitmap is fixed, so changing one dimension automatically changes the other. SIZE is more suitable than SCALE if you want to create a bitmap of a particular size in pixels.
- SCALE: (Dimmed for JPEG & PNG). This lets you scale the bitmap up or down by a percentage. SCALE is more suitable than **Size** if you want, for example, a bitmap 50% bigger than the original.
- RESOLUTION: (Dimmed for GIF & BMP) Type the resolution into the DPI field. If you are exporting an image for viewing on screen (i.e. a website), you do not need a setting higher than 96 DPI. 96 DPI also ensures the bitmap is the same size as the objects on screen (at 100% magnification).

Area to Save

The bitmap can be created using one of these areas of the document:

- PAGE: The whole page area.
- DRAWING: The area covered by objects.
- SELECTION: The area covered by the objects in the selection. Only available when objects are selected.

Anti-aliasing

Anti-aliasing improves the appearance of graphics by smoothing jagged edges:

- MAINTAIN SCREEN ANTI-ALIASING: The exported bitmap uses the exact same positioning as shown on screen, and so has identical anti-aliasing. This can result in the edges of objects being slightly blurred because they do not fall exactly on pixel boundaries.
- MINIMIZE VISIBLE ANTI-ALIASING: This will slightly reposition the objects by fractions of a pixel to minimize the anti-aliasing around the edge of the exported bitmap. If in doubt which option to use, select this.

Put HTML Image Tag on Clipboard

This lets you save out the basic HTML IMG tag information when you save the bitmap. You can then paste the tag into your text or external HTML page editor.

Options tab

With this tab you can alter JPEG compression and turn on progressive/interlacing options if required.

Progressive: (JPEG only) Selecting this option creates a progressive JPEG. This is useful when the JPEG is large and used on a web page. Web browsers will start displaying the image before the JPEG file has completely downloaded.

JPEG Quality: (JPEG only) A low setting will result in a small file with a loss in quality whereas a high value will give only slight file size reductions, but high quality. Note that a setting of 100% will still compress the file. A setting of 75% gives good compression without causing a noticeable loss in quality for most uses.

Interlaced: (GIF and PNG only) This is like progressive JPEG. In the browser the picture first appears as a low resolution image. As more of the file loads, the resolution increases.

Transparent: (GIF and PNG only) This makes any areas not covered by the selected objects transparent. Selecting this option automatically makes one entry in the palette transparent.

Export each layer to a file of its own: Selecting this option when exporting a design that contains multiple layers results in a separate file being exported for each layer. The names of each layer (as set in the **PAGE & LAYER GALLERY**) are used to name the exported files.

Image Map

An image map lets you have "clickable" areas on the graphic when displayed in a browser. Clicking one of these areas jumps to a new web page. If you want to create an image map, use "**UTILITIES**" > "**WEB ADDRESS**" to add web addresses (URLs) to the different parts of your drawing.

Export Image Map to Clipboard: This copies the image map HTML to the clipboard so you can paste it into your text or web page editor. There is an option on the **BITMAP** Size tab to save the HTML IMG tab to the clipboard. Selecting either of these clipboard options automatically deselects the other option.

Export Image Map to File: This copies the image map text to a file. You can either:

- **INSERT IMAGE MAP INTO EXISTING FILE**: This inserts the image map into the specified file. If the file already contains an image map with the same name, the existing image map is replaced. If this is a new image map, it is inserted at the end of the file.
- **REPLACE EXISTING FILE**: This overwrites any existing contents of the file. This option is useful if you want to save the image map text for use later.

Note that opening this file in a browser displays a blank window, i.e. you don't see the graphic. The reason is that the file does not include the IMG tag needed to display the graphic. The IMG tag might look like this: .

Image Map Options

- **NAME:** Image maps are named. (Names must be unique within a document.) If you are merging this image map into an existing file, you can either type in a new map name or the name of an existing map. This lets you replace an existing map with new data.
- **APPROXIMATE CURVES WITH LINES:** Image map polygons are a series of straight lines and this option lets you select how closely any curves in the clickable areas are followed. (Note that circles are a special case in image maps.) **Very closely** gives the best approximation. This increases the size of your web page and so makes it slower to download.
- **SAVE ALL CLICKABLE AREAS AS RECTANGLES:** Ignore the shape of clickable areas. Save all clickable areas as simple rectangles that totally enclose the clickable area.

Other bitmaps Export dialog box

Bitmaps other than GIF, PNG BMP and JPEG (for example TIF) use this **EXPORT** dialog box. Not all options apply to all types of bitmap:
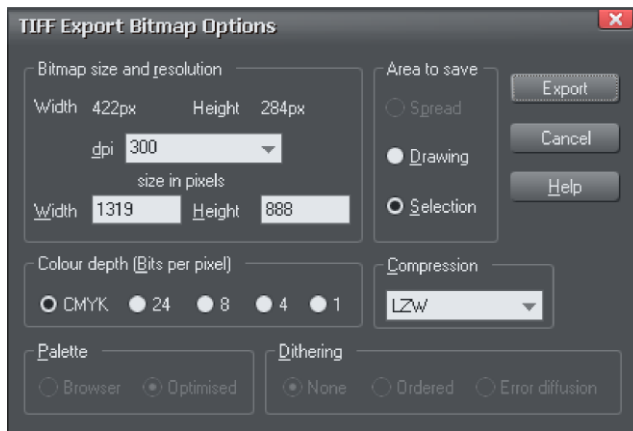
Bitmap size and resolution

Lower resolutions produce smaller files but at reduced image quality. The best resolution depends on where the bitmap will be used. For display on screen a resolution of 96 DPI is adequate. For printing, higher resolutions are required.

Experience shows that it is rarely necessary to output bitmaps at more than 300 DPI (especially when anti-aliased) even for highest quality typeset results.

Enlarging or reducing the displayed image changes the apparent resolution. For example, a 100 DPI bitmap displayed at half size has an apparent resolution of 200 DPI. Conversely, enlarging the image reduces the apparent resolution.

You can also specify the size in pixels. Either choose from the menu or type a value into any of the text boxes.

Compression

The compression options vary depending on the bitmap type. BMP files offer RLE compression. TIF files offer LZW compression, or for monochrome (1-bit) you also get a choice of **HUFFMAN**, **GROUP 3 FAX**, **GROUP 4 FAX, OR PACKBITS COMPRESSION**.

Save Spread/Save Drawing/Save Selection

You can:

- Save the entire area (the spread). This can create very large files especially if you select more than 256 colors.
- Or save the area covered by the drawing.
- Or save the area containing all the selected objects. Everything within the area is saved including any unselected objects.

The Designs Gallery

This gallery lets you easily incorporate clip-art and templates from the library into your document.

To open this gallery:

- Choose "**UTILITIES**" > "**GALLERIES**" > "**DESIGNS GALLERY**".
- Or click the **DESIGNS** tab on the **GALLERIES** bar.

- Or choose "**FILE**" > "**NEW FROM DESIGNS GALLERY**".

The Designs Gallery provides access to thousands of clipart examples and designs provided on the CD, which can easily be imported into any document. You can search using keywords, and sort the gallery contents. See Document Handling (on page 52) for more information on using galleries. If you are online, when you open the Designs Gallery additional free content is downloaded from Xara's servers. These categories are indicated with "(DOWNLOAD)" in the category name and they appear at the top of the gallery. This online content is updated periodically and your gallery will automatically update.

You can also open clipart by double clicking the design thumbnail (for most types of content this will open a new document) or by dragging the thumbnail onto a currently open document. When doing this, templates consisting of a whole page (eg. web page templates, photo albums, etc.) are added as a new page to your document, immediately following the current page. This makes it easy to build up multi-page documents using page templates. Other templates and clipart designs are dropped onto the current page.

You can also right-click on a thumbnail and choose 'Import to new page' to force any design to be imported onto a new page in your document.

The gallery also contains color scheme files, which allow you to change the color of your website design (drag and drop onto your page, or just double click to apply the scheme) and website widgets which add dynamic content to your website.

Customizing Designer Pro

Changing the blank template document

The blank template documents are the options available under "**FILE**" > "**NEW**".

Pre-designed templates are available from the **DESIGNS GALLERY** (or "**FILE**" > "**NEW FROM DESIGNS GALLERY**").

To add a template document:

1. Open an existing document ("**FILE**" > "**OPEN**", or "Ctrl + O") or create a new one with the **NEW** button on the Standard control bar or "Ctrl + N".
2. Make any required changes (these could be changing the page size, adding a logo or adding a message). You can edit the template document just like an ordinary document.
3. When you are happy with the changes choose "**FILE**" > "**SAVE TEMPLATE**" and choose a template name.

To make your new template the default template (i.e. which is there when you first open Designer Pro, and which appears when you press "Ctrl + N") check the **USE AS DEFAULT TEMPLATE** option when saving the template.

Displaying your own icons in browser tabs: favicons

You may want to display your own customized icon, for example, a logo, on your site's page tabs when they are displayed in a web browser. Designer Pro allows you to do this by applying the name 'favicon' to your custom tab icon.

To create a 'favicon', draw or drag on to a web page the image that you want to use. The image can be any size as it will be scaled to the right size automatically when displayed in a browser.

Click it then click the Names button to the right of the **SELECTOR TOOL** infobar.

In the Names dialog, type 'favicon' into the **APPLY NAMES** box and click **ADD** then **CLOSE**.

Preview your website in your choice of web browser. The easiest way is to click one of the Preview icons and in the Xara Designer Pro 7 preview window, and then choose one of the web browsers in the top right of the preview window.

Your web page tab is displayed with the custom icon, as shown in the example below.
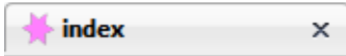
You can only use one favicon per website. Publish your website and view it to see your favicon.

Tip: Internet Explorer and Chrome don't show the favicon if the page is loaded from your local disc, which is normally the case when you're building and previewing your website before publishing it. At time of writing, Firefox does show it even for local pages, so use it to check your favicon. Once your site is published the favicon should work in all popular web browsers.

Options in the Utilities menu

Keyboard shortcut: "Ctrl + Shift + O" or right click the page/pasteboard and choose **PAGE OPTIONS.**

This menu option opens the **OPTIONS** dialog box. This lets you set various options for Designer Pro.

General tab

This page describes the General tab of the Utilities, Options dialog
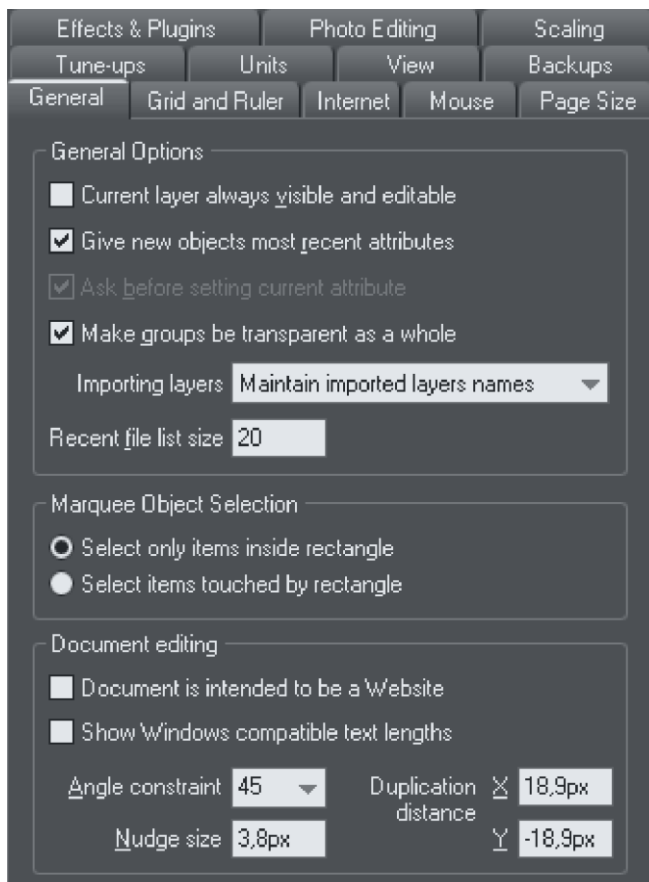
Current layer always visible and editable

With this option selected, selecting a layer in the **PAGE & LAYER GALLERY** automatically makes it visible and editable.

With this option unset, the visible and editable states of a layer remain unchanged when you select that layer.

Give new objects most recent attributes

Examples of attributes are line width, dash pattern, arrowheads, color, fill color and type of fill.

With this option set, new objects take the attributes of the object that was last drawn or selected. For example, you might give an existing shape a red fill and green line color. If you then draw a new shape it will also have a red fill and green line color. See the "Current attributes" (on page 19) section of the Getting Started chapter for a full description of current attributes and this option.

This option is on by default.

Ask before setting current attribute

This applies when changing a current attribute (this happens when you change an attribute with no objects selected). With this option set, you are asked to confirm whether you want to change the attribute. With this option unset, the change is made without confirmation.

Make groups be transparent as a whole.

See Transparency (on page 213) for more on transparencies.

When applying transparency to a group of objects, by default Designer Pro will apply the transparency to the group as if it were one object (i.e. you will not see individual transparencies within the group). Unselecting this option will make Designer Pro add transparency to each object in the group separately.

Maintain imported layer names

With this option set, layer information is preserved when you import templates or other files. With **IMPORT LAYERS INTO THE ACTIVE LAYER** instead selected, all imported objects appear in the current layer and the layering information in the incoming data is ignored. **IMPORT LAYERS INTO NEW LAYERS** will create a layer for each imported layer.

IMPORTANT: Note that you should not change this setting if you use any of the web templates in the **DESIGNS GALLERY**. Most web templates have multiple layers which are used to implement mouseover effects. These typically have layers MouseOff and MouseOver and so when importing these designs it's important that these layers are preserved and merged with the same layers in your document.

Recent file list size

The File menu shows a list of the most recently loaded or saved files in its 'Open recent' sub-menu. This list gives a quick way to reload any of those files. This option lets you change the number of files listed (between 1 and 20 files).

Marquee Object Selection

This option enables you to change the default setting for marquee selection (on page 87) (where you drag a selection rectangle over the objects you want to select). So you can choose to have objects touching the selection rectangle selected or only the objects wholly inside the rectangle.

Document is intended to be a website

This option tells Xara Designer Pro 7 that the document is primarily intended to be exported as a website. It subtly changes the behavior of the program in terms of how it handles links on objects. With this option turned off, if you apply a link to an object which is inside a group, that link will do nothing in the exported website because the whole group is exported as one image and so the link on just one of the group's members is ignored when exporting the website. However with this option turned on, the link is automatically promoted up to the group, just as if it had been applied to the group

instead of to one of its members. So for example if you inadvertently apply a link to the text on a button, instead of to the whole button, with this option on the link is applied to the whole button for you. This option is on by default in all web templates.

Show Windows compatible text lengths

See Browser text compatibility (on page 200) in the **TEXT HANDLING** chapter.

Angle constraint

This applies when rotating or moving an object with "Ctrl" pressed.

You can either select from the menu or type in a value in degrees.

Nudge size

This applies when moving objects using the arrow keys on the keyboard.

This text box defines how far the object moves for each key press. If the document uses scaled units (for example, 1inch to 1mile), this text box shows the distance in the scaled units.

When nudging, "Ctrl" and "Shift" increase the nudge distance by five and ten times, respectively.

Duplication distance

"**EDIT**" > "**DUPLICATE**" (Ctrl + D) creates a duplicate which is offset from the original object. These text boxes set the offset distance.

Positive values create the duplicate above or to the right of the original object.

Negative values create the duplicate below or to the left.

Grid and Ruler tab

This page describes the Grid and Ruler tab of the Utilities, Options dialog
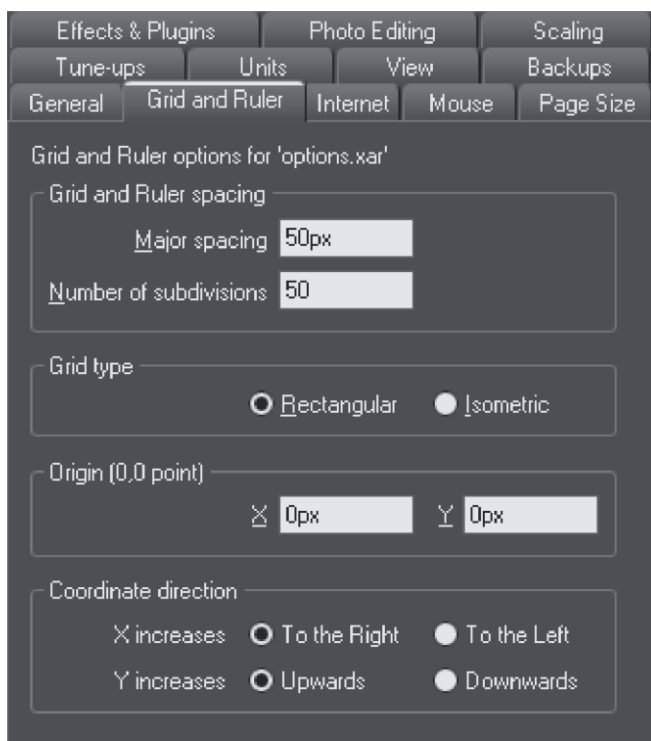
Grid and Ruler spacing

MAJOR SPACING defines the distance between the major grid and ruler divisions. The units used for the grid and rulers are defined by the units you use for the major spacing. For example entering a major grid spacing of **2CM** will set the grid and ruler units to centimeters regardless of the page units specified in the units options.

Grid type

Xara Designer Pro 7 allows the use of a standard **RECTANGULAR** grid or an **ISOMETRIC** grid.

Origin (0,0 point)

Normally, the origin for the grid and rulers is at the bottom left-hand corner of the page. If you wish to move it to a different location, change the origin value.

Coordinate Direction

Here you can change the direction of page coordinates so that, for example, Y values increase as you go down the page. This is useful when you want the 0,0 point to be the top left corner and increase down the page like it does for HTML.

Internet tab

This page describes the Internet tab of the Utilities, Options dialog
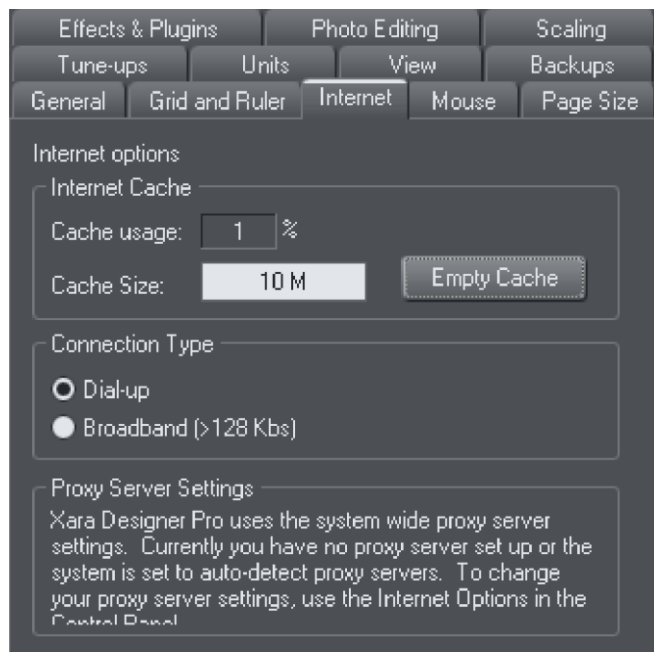
Internet Cache

When Xara Designer Pro 7 downloads gallery items from the Internet, it stores them in a reserved area of disk memory called a "cache". When Xara Designer Pro 7 uses these items in the future, it can load them directly from the cache, which is much more efficient than downloading over the Internet.

CACHE USAGE indicates the amount of cache space currently in use. This gives an idea as to whether the cache size is correct. That is, if cache usage is consistently nearing 100% the cache size should be increased if possible. A larger cache size does not affect the program adversely or take up unnecessary space on the drive. We recommend a cache size of 15 - 20 MB. The minimum cache size is 500KB, the maximum is the free space on the drive when the size is set. Anything outside these limits generates an error. You can type in byte values directly (800000). For kilobytes or megabytes, follow the value with K or M (500K or 8M).

The EMPTY CACHE button removes all files from the cache except a few essential data files needed by Xara Designer Pro 7 (this means that cache usage might not return to 0% after emptying). To use a file that has been removed from the cache, you have to download it again.

Connection Type

Over faster modems, ISDN, and networks, Xara Designer Pro 7 can speed up downloads by using multiple connections. These multiple connections are invisible to you and you just see an increase in speed.

If you connect to the internet using a dial-up modem, select the appropriate speed option. If you are not sure about your modem, use the default setting. If you connect to the Internet using broadband (like ADSL or cable), select dual ISDN or better.

Proxy Server Settings

If your computer is using an Internet proxy, then it will list its details here. This information is not relevant to most users.

Mouse tab

This page describes the Mouse tab of the Utilities, Options dialog
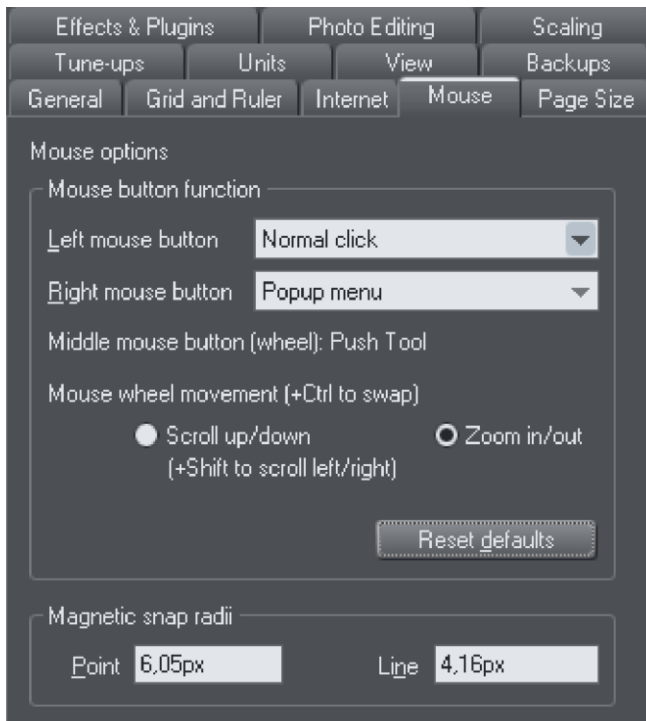
Mouse button function

Designer Pro gives you a range of possible actions when you click either the left or right mouse buttons. For example, if you're left-handed, you may prefer to use the right-hand button as the normal button. You would therefore assign the normal click to the right mouse button (you can also set both buttons to have the same action if you wish).

Possible actions:

- Normal click - At least one button should always be assigned as the normal click.
- "Shift + click".
- "Ctrl + click".
- "Alt + click".
- Display a pop-up menu (see below).

- Toggle full-screen mode (described in Document Handling (on page 31)).
- Zoom in or out -click to zoom in, "Shift + click" to zoom out (described in Document Handling (on page 32)).
- **PUSH TOOL** (as if you pressed "Shift + F8")

The pop-up menu contains options suitable for the object you click on. For example, for most object types the menu contains **CUT**, **COPY**, **PASTE**, **DELETE**, **DUPLICATE**, **CLONE** (these are described in Object Handling (on page 92)).

MOUSE WHEEL MOVEMENT: You can change the mouse wheel action here between Scrolling and Zooming.

Click **RESET DEFAULTS** to return to the original button assignments. This has immediate effect; you don't need to click **OK** or **APPLY NOW**.

The Windows Control Panel also lets you swap the left and right mouse buttons.

Magnetic Snap Radii

Snapping is described in Object Handling.

These text boxes define how close you can drag an object before it snaps to a magnetic object. These are distances on the screen and independent of any document scaling.

Page Size tab

This page describes the Page Size tab of the Utilities, Options dialog
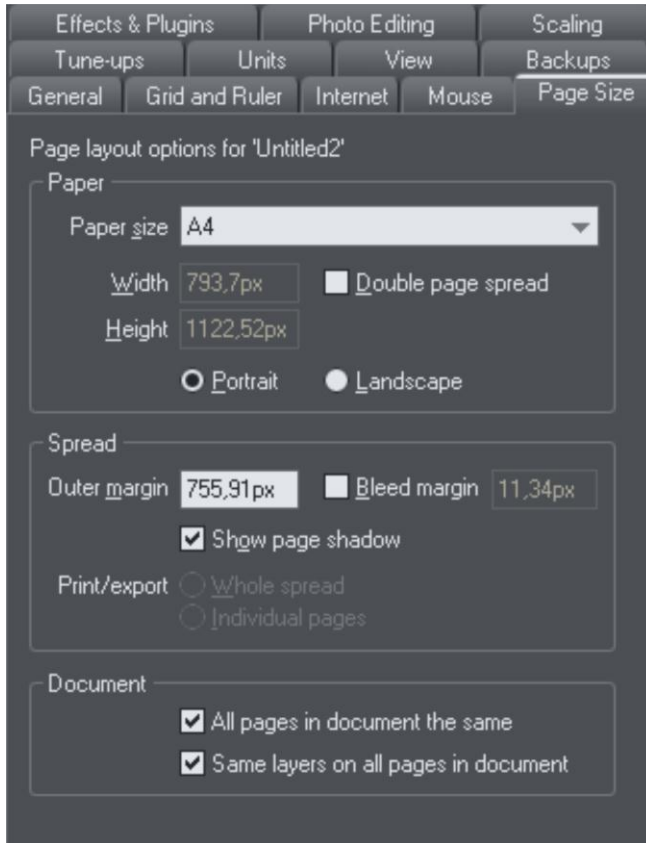
These options apply only to the selected document.

Paper

Options relating to setting the page size (paper, orientation, spread) are described in "changing the page size" in Document Handling (on page 34).

Spread

OUTER MARGIN sets the size of the margin (or Pasteboard) around the page. **BLEED** determines the bleed area size around your document.

SHOW PAGE SHADOW sets whether a shadow is displayed under the page (this is only on-screen, it is not exported or printed).

If you select **DOUBLE PAGE SPREAD** you can create a document consisting of two pages. This option adds a second page to your document.

PRINT/EXPORT WHOLE SPREAD: When this option is selected, each double page spread is printed and exported (for example to PDF) to a single page, just as it appears in Xara Designer Pro 7.

PRINT/EXPORT INDIVIDUAL PAGES: When this option is selected, each double page spread is printed and exported as 2 separate pages, just as if they were designed as separate pages in Xara Designer Pro 7.

Document

ALL PAGES IN DOCUMENT THE SAME: When this option is selected, all the pages in your multi-page document will be given the same dimensions. So if you change the dimensions on one page, all the other pages will update too. This is normally required when working on print documents, because typically each page will need to print to the same paper size. However for website documents this option should normally be unset, because you're likely to want pages of different lengths in your site.

SAME LAYERS ON ALL PAGES: When this option is selected, all pages in your multi-page document will have the same layers. If you add or delete layers from one page, all the other pages are similarly updated. In website documents you need to make sure this option is not selected if you want different popup layers on different pages of your site. See the Page & Layer Gallery (on page 142) chapter for information about Layers.

Backups Tab

This tab allows you to turn the automatic backup facility on and off. This facility saves a copy of all your modified open documents at regular intervals. It's recommended that you work with this backup option turned on, so your work is saved regularly. You can also choose whether you are prompted about unsaved documents when closing the program, or if instead all open documents should be backed up and restored for you when you next start up.

See the Document Handling chapter (on page 44) for full details about these facilities.

Effects & Plug-ins tab

This page describes the Effects & Plug-ins tab of the Utilities, Options dialog
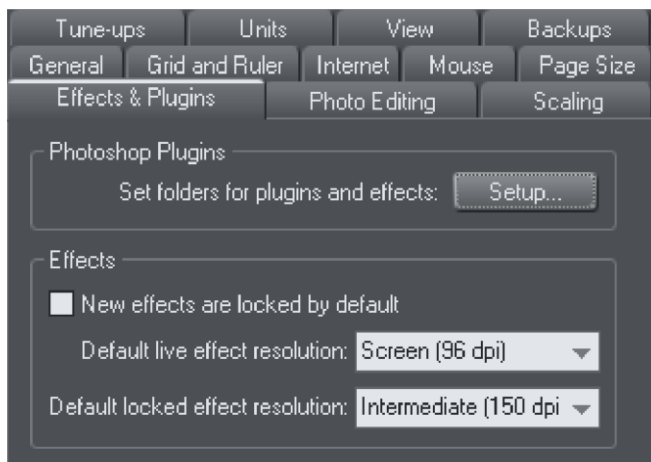
For more on Live Effects refer to Live Effects (on page 241).

Photoshop Plug-ins

Clicking **SETUP** lets you add and remove folders of Live Effects plug-ins.

Effects

Here you can set the default resolution of Live Effects and locked effects.

New Effects Are Locked By Default

This will make any Live Effects you create locked by default, so they will not change if you move or resize them.

Default Live Effect resolution

If a Live Effect resolution is set to **AUTOMATIC**, then any Live Effects on an object will, by default, be produced at screen resolution. If you wish to print your design you can set one Live Effect to a higher DPI and all effects on that object (as long as the other effects are set to automatic) will automatically be rendered at the highest DPI. It won't then be necessary to alter each effect one by one. Or you can set a different default in this window, and all Live Effects will be created at that resolution.

Default Locked effect resolution

This is the default resolution for locked effects. If you wish to change the DPI of a locked effect, you need to recreate that effect. Please note: this only applies to locked effects, and does not apply to a locked Live Effect.

Photo Editing

This page describes the Photo Editing of the Utilities, Options dialog
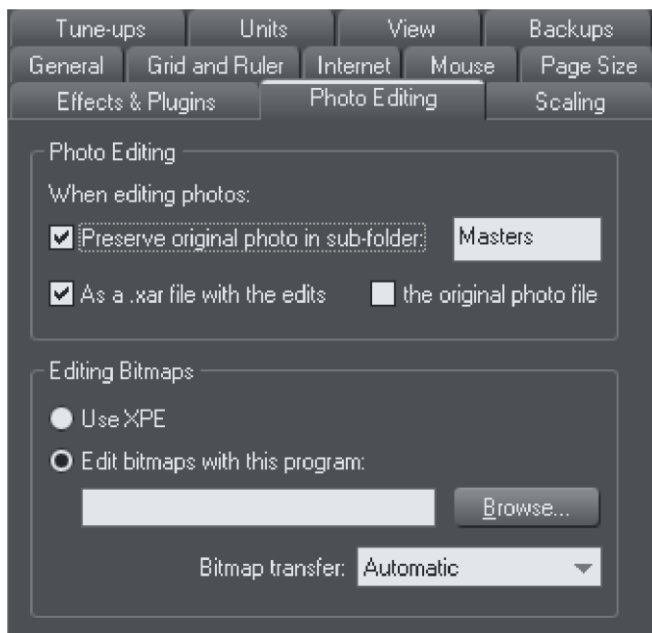
Photo Editing

You can choose what should happen when you save a Photo Document with a modified photo in it. By default the original photo file is preserved in a .xar file in a "Masters" sub-folder and the original opened photo file is overwritten. You can choose to have the original photo file saved in the "Masters" folder instead, or you can choose to not have the original photo preserved at all. See the Editing Photo Files (on page 266) section of the Photo Handling chapter for details.

Editing Bitmaps

Here you can select the bitmap editor that you want to use to edit bitmaps in Xara Designer Pro 7.

See Integration with external Photo Editors in the Photo Handling chapter for details.

Bitmap transfer

Always use bmp
Images will always be transferred as bmp files. This is the fastest way to transfer images to and from the bitmap editor, but bmp does not support transparency. So if you want to edit bitmaps that include some transparency, or you want to introduce some transparency while editing the image, don't use this option.

Always use png
Images will be transferred to the bitmap editor as uncompressed png files, preserving any transparency in the image. Most editors will return images as compressed png files in this case and this may be slow for large images. Use this option if you want to edit 24bpp (opaque) bitmaps, but you want to introduce some transparency while editing in the bitmap editor.

Automatic
This is the default option. Xara Designer Pro 7 will automatically decide whether to use bmp or png to transfer the bitmap to the bitmap editor. If the bitmap does not have any transparency (24bpp) bmp will be used. Otherwise png will be used. This option should be fine for most editing, but if you want to introduce some transparency to your image while editing it, choose the png option instead.

Scaling tab

This page describes the Scaling tab of the Utilities, Options dialog
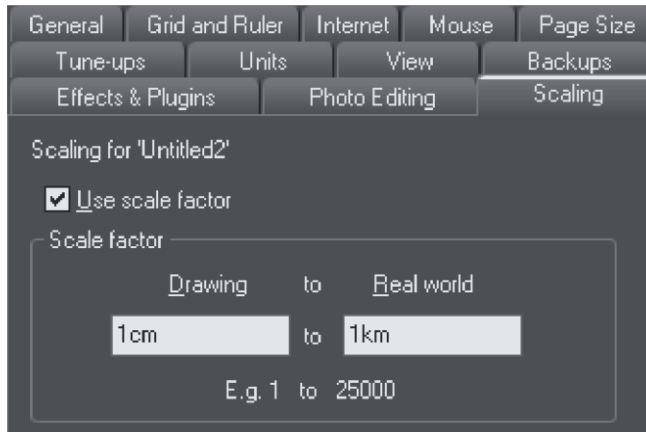
Described in Measurement Units in Document Handling (on page 50).

Tune-ups tab

This page describes the Tune-ups tab of the Utilities, Options dialog
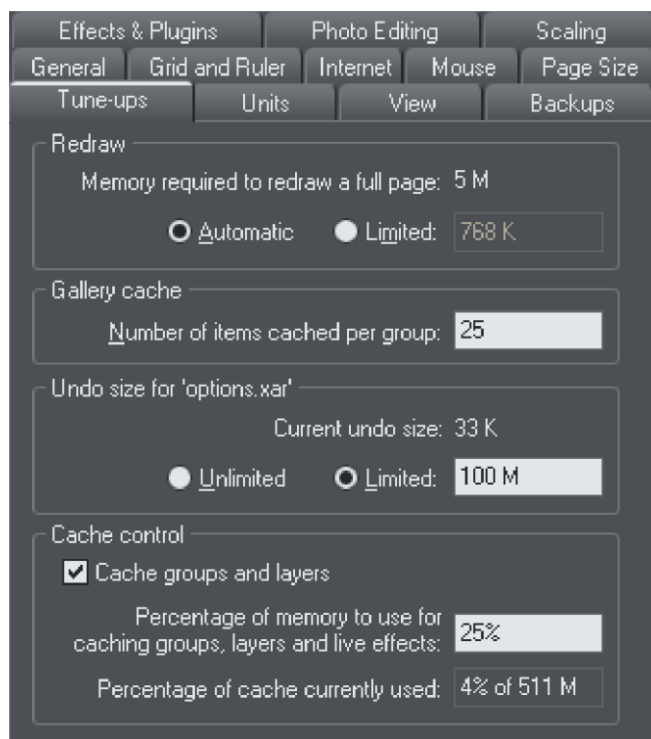
Redraw

The value set in this option is used when redrawing the document on the screen and during exporting and printing. Normally automatic gives the best results, but if you have an old computer with limited memory you can specify a lower value. This may, however, slow down redraws.

Gallery cache

When displaying items in a gallery, Designer Pro reads the information off disk into a cache. This speeds up gallery redraw speed for recent items.

The default value is generally suitable. You may want to reduce it if memory is tight, or increase it if you use galleries frequently.

Undo size

Applies only to the selected document-described in Undo & Redo (on page 63).

Cache Control

Complex objects including layers, groups, bevels, shadows, blends, molds, contours, ClipViews and Live Effects can be cached as bitmaps when they are rendered. This means that the next time these objects need to be redrawn, the bitmap can often be

used instead of re-rendering the objects, making redraws and object drags very much faster. The difference is particularly noticeable with complex documents.

Since caching involves storing additional bitmaps in memory, it has the potential to increase the amount of memory used by Xara Designer Pro 7 significantly. Therefore in this dialog you can turn caching on and off and you can also control how much memory is used for caching when it's turned on. Increase the percentage memory figure to make Xara Designer Pro 7 cache more objects in your design, generally making redraws and object drags faster at the expense of larger memory usage. Or reduce it to lower the amount of memory that Xara Designer Pro 7 uses for caching. In complex designs, some cacheable objects will not be cached if there is insufficient memory to do so.

This dialog also shows you how much memory is currently being used for caching.

Live drag is described in Document Handling (on page 31).

Note: Cached bitmaps will only be used during object dragging if you use LIVE DRAG. If you have LIVE DRAG turned off, then as you would expect you will just see the outlines of objects when moving them.

Units tab

This page describes the Units tab of the Utilities, Options dialog
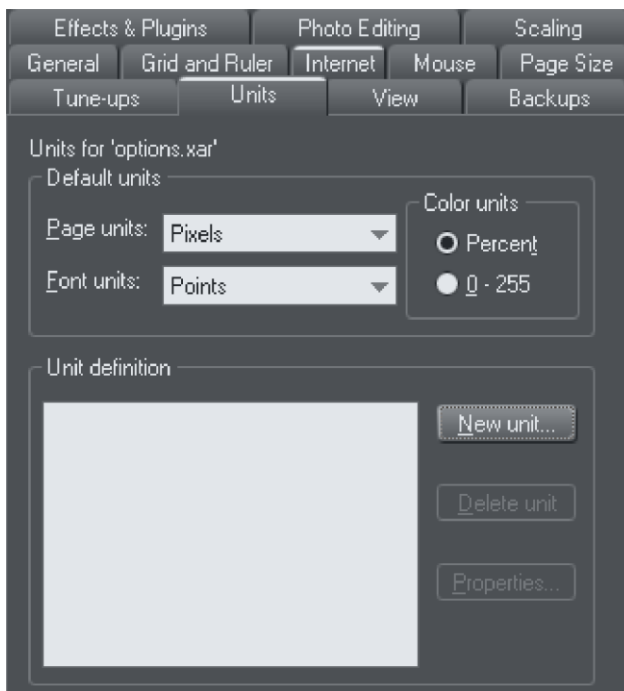
Described in Measurement Units in Document Handling (on page 48).

View tab

This page describes the View tab of the Utilities, Options dialog
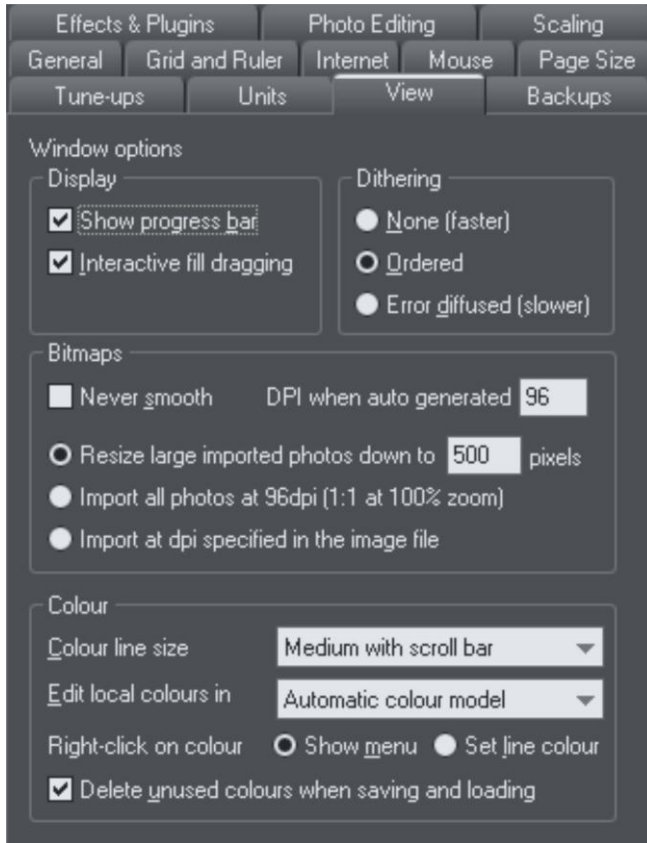
Display

Show progress bar: During long operations Designer Pro can display a progress bar on the status line. If instead you'd prefer an hourglass to replace the mouse pointer until the operation is completed, uncheck the SHOW PROGRESS BAR setting.

The hourglass and progress bar are for information only-they have no effect on the document itself.

Interactive fill dragging: Interactive fill dragging allows you to see how fills and transparencies look as you drag the fill handles. This is on by default.

Dithering

These options set the dithering method used to display your document on the screen.

It is recommended that you leave this on its default setting.

Bitmaps

These options apply only to the current document. They have no effect on any other documents currently loaded.

NEVER SMOOTH: When Xara Designer Pro 7 scales a bitmap, it usually smoothes (interpolates) between the individual pixels to give a smooth look to the bitmap. Usually this gives the best results. Check this option if you if you do not want this effect.

DPI WHEN AUTO-GENERATED: Some features such as shadows and bevels are created using bitmaps. Xara Designer Pro 7 calculates the resolution of these bitmaps when they are displayed. However, when you perform actions on shadows and bevels such as **CONVERT TO EDITABLE SHAPES**, **COMBINE SHAPES**, **EXPORT AS EPS** and **EXPORT AS FLASH**, Xara Designer Pro 7 creates a new bitmap using the resolution you specify here. For on-screen use (such as web page graphics) 96 DPI is the best value. For work that will be printed, you may need a higher value. Changes to this value apply to new auto-generated bitmaps; it has no effect on existing bitmaps.

The 3 radio button group allows you to choose how large photos should be handled when you import them. Given the large size of digital camera photos, often if you're working on a document the photo you import will be many times the size of your page.

RESIZE LARGE IMPORTED IMAGES DOWN TO ... PIXELS: This is the default option. Large images are scaled down to a more manageable 500 pixels wide, or whatever size you set here. The document zoom is not altered.

IMPORT ALL PHOTOS AT 96DPI (1:1 AT 100% ZOOM): With this option the DPI of the image is ignored and it is loaded as if the DPI is 96 (screen 1:1 size). So if an image is 1000 pixels wide, it will display as 1000 pixels wide in Xtreme Pro. Also Xara Designer Pro 7 will automatically zoom out if required, so that the whole photo fits into the view.

IMPORT AT DPI SPECIFIED IN THE IMAGE: With this option, any DPI value specified inside the image itself is read and the image is imported at that DPI. Note that some digital cameras write incorrect or unhelpful DPI values into photos and so this option may not always give you the results you expect.

Note that the above import options do not apply to photo documents. Photos are always imported/opened at their full size in photo documents.

Color

COLOR LINE SIZE: This lets you select the size of the color bar at the bottom of the screen. A scroll bar is displayed when the number of colors is wider than the width of the color bar.

EDIT LOCAL COLORS IN: This affects the color model displayed when editing a local color.

Automatic displays the color model of the original color style that the local color is based upon. For example, the HSV color model for a color style defined in HSV. This is important if you need to ensure your objects are in CMYK, for example.

The other options let you select which of the four color models (RGB, CMYK, HSV, grayscale) to always use by default.

RIGHT CLICK ON COLOR: This option is to turn off the color-line right-click menu (on page 157) and make right click set the line color, as in earlier versions of Xara Designer Pro 7.

DELETE UNUSED COLORS WHEN SAVING AND LOADING: When this option is selected, any unused named colors in your document will be deleted when you save/load. This prevents your Color Line becoming cluttered with named colors which are not used in the design. This is particularly useful when loading older designs, because earlier versions of Xara Designer Pro 7 used to create named colors implicitly. So many older designs contain numerous unused named colors. Load them with this option turned off and it's hard to identify the important used named colors on the **COLOR LINE** from the unused ones.

Integrated key shortcut utility

This utility provides an easy and direct way to configure key shortcuts. It allows you to define a shortcut for a command which doesn't have a shortcut by default, or to change a command's shortcut.

To open the Shortcut Tool, select **CUSTOMIZE KEY SHORTCUTS**... from the **UTILITIES** menu.
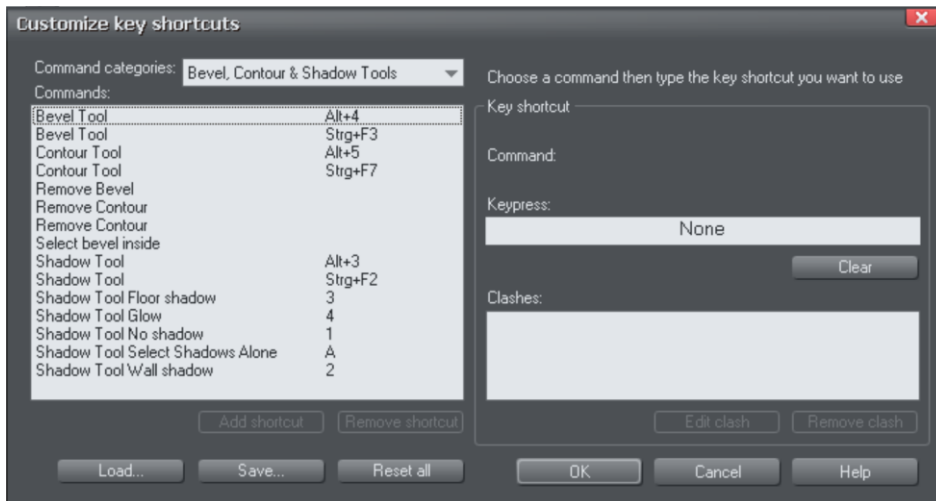
Command categories

There are many different commands which can be assigned to shortcuts and so they are split into several categories to help finding a command easier. The command categories are presented in a dropdown list and the "Commands" list below it lists all the commands in that category. Many categories correspond with the name of a menu (e.g. File, Edit, Arrange), so finding a command that is on one of the menus is easy. Choose "All" to display all available commands in the Commands list.

Commands

The Commands list shows all the commands for the selected category. Where a command already has a key shortcut, that shortcut is shown in the column to the right of the command name. Those commands that don't have any shortcut assigned show nothing in the shortcut column.

If a command has more than one shortcut assigned, then that command will appear more than once in the list of commands, once for each of its shortcuts.

To assign an additional shortcut to a command which already has a shortcut, select the command in the list and press the **ADD SHORTCUT** button.

Press the **REMOVE SHORTCUT** button below the Commands list to remove the selected shortcut assignment from the list.

Key press

Once you've selected a command in the Commands list, assigning a shortcut key to it is easy. Simply press the key combination that you wish to use for the selected command. The keypress you choose will then appear in the Keypress field on the Shortcuts Tool dialog. Note that if the selected command already had a shortcut shown in the Commands list, that shor-cut is replaced by your new keypress.

If you want to add an **additional** shortcut, first use the **ADD SHORTCUT** button under the Commands list as described in the Commands section above.

Pressing the **CLEAR** button below the Keypress field removes the shortcut for the selected command and clears the Keypress field.

After entering a new keypress, check the **CLASHES** list which is shown below the Keypress field.

Clashes

A keypress can be used as a shortcut for one command only. If the keypress you chose for a command shortcut is already assigned to another command, the **CLASHES** list will show you this and will allow you to quickly resolve the clash.

If there is more than one command currently associated with the keypress shown in the Keypress field, the Clashes list shows you all the commands that are currently assigned to it. You need to remove all but one of the shortcut assignments for the keypress so that only one command is associated with it.

To do this simply select one of the clashing assignments shown in the Clashes list and then press the **REMOVE CLASH** button below it to remove the shortcut assignment.

Once only two assignments are shown in the Clashes list, deleting one of them will leave you with an empty Clashes list, because there is then only one assignment for the keypress and so there are no longer any clashes.

Alternatively you may wish to change the shortcut associated with one of the clashing commands. To do this, select the shortcut in the Clashes list and click the **EDIT CLASH** button below it. This automatically locates the command and selects it in the Commands list on the left, ready for you to define a new keypress for it. Once it's selected, enter the keypress that you want to use for that command and once again resolve any clashes shown in the Clashes list.

Once the Clashes list is empty, your new keypress is defined as a shortcut. You can then either select other commands to which you want to assign shortcuts or commit your shortcuts changes by pressing **OK**. You don't need to keep track of all the clashes as you change shortcuts because when you click OK to commit your changes a check is done to make sure no clashes remain.

Reset All

At any time you can press **RESET ALL** to set all the command shortcuts back to the default settings for Xara Designer Pro 7.

Save

Use the **SAVE** button to save the current shortcut definitions as a ".ini" file, without necessarily applying them so they are used by Xara Designer Pro 7 you to setup different sets of shortcut assignments and allows you to share the assignments between different computers or different users. For example, you could setup shortcut assignments that make Designer Pro compatible with the shortcuts of another application and save them in a .ini file so you can share them.

Load

Use the **LOAD** button to load the shortcuts defined in a .ini file. Once they are loaded, you can inspect or modify them in the Shortcuts Tool or apply them to Xara Designer Pro 7 OK button.

Cancel

Press the **CANCEL** button to discard all the shortcuts changes you have made since you opened the Shortcuts Tool.

OK

Use the **OK** button to commit the changes you have made since you opened the Shortcuts Tool. If there are any unresolved clashes, you will be told about them at this point. You are strongly advised to go back and fix any clashes because otherwise your chosen shortcuts may not work. Click the Back button on the warning alert to go back. When you do this the first keypress with clashes is automatically selected for you, so you can quickly resolve it.

If no clashes are reported when you click the OK button, your new shortcuts have been defined successfully.

Example

Here's an example of the process you would go through if you wanted to use "Ctrl + P" to bring up the Print Options dialog.

1. Bring up the Shortcuts Tool dialog by choosing "UTILITIES" > "CUSTOMIZE KEY SHORTCUTS".
2. The Print Options command is in the File menu, so choose the "File" category from the Commands category list.
3. Select the Print Options command in the list of commands.
4. Press "Ctrl + P". You'll see "Ctrl + P" appear in the Keypress field. Also the "Print Options..." command is now shown as having the "Ctrl + P" shortcut in the Commands list.
5. You can also see that a clash has been identified. The Clashes list shows that Ctrl-P is now assigned to BOTH "Print..." and "Print Options...".
6. Select "Print..." in the Clashes list and then click the button below it to remove this shortcut. This eliminates the clash.
7. Now the Clashes list is empty, indicating that there are no clashes for "Ctrl + P".
8. Click OK to confirm your changes.

Now when you press "Ctrl + P" the Print Options dialog appears.

Temporary key shortcuts

Three of the most commonly used tools (Selector, Push and Zoom) have special shortcuts that allow quick temporary selection of the tool, and then return to the previously used tool after use. What's more these shortcuts can be used two ways; either as a toggle (press the key once and it selects the tool, press it again and it returns to the previous) or as a temporary switch (hold key down and it switches to the tool, and release key to return to the previous tool).

The default key shortcuts for these tools are:

- "Alt + Z" for Zoom.
- Space or "Alt + X" for Push.
- "Alt + S" for Selector Tool.

These key combinations are deliberately chosen to be near the left hand to make very easy selection.

Note: If you have a mouse with a scroll wheel or center button, there is a better temporary shortcut to the Push Tool, namely to press and hold the wheel or button. Release it to return to the previous tool.

These three commands are listed at the top of the Tool group and described as Switch to Push tool (Hold Down to Switch and Return), etc. (you can see the full description of the command in the Status line).

Tip: Long term users of Xara Designer Pro 7 will notice that the space bar no longer acts as a temporary Select Tool. This was changed to get a greater workflow compatibility with Adobe software and MAGIX Photo Designer 7 will be used to having the space bar be used as a temporary Push Tool (although we believe the mouse button short cut is much better and is a more standard Windows shortcut— see note above).

To configure the Selector Tool as in earlier versions of Xara Designer Pro 7, select the TOOLS command category and the option SWITCH TO SELECTOR TOOL. Now move the mouse pointer over the KEYPRESS field and hit space. The CLASHES area now reports this key as being also used by the Switch to Push Tool command. Select it from the list and hit the red minus button to remove it. Now the space bar acts as a temporary shortcut to the Select Tool, just as it does in earlier versions.

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