Simon Williams

Documents that do more

In this day and age, printed documents are just not enough. Whether you want to repurpose material for the web, create a PDF file or change something into an e-book, Simon Williams is here to show you how

Desktop publishing is no longer just about producing paper documents. You can redesign the same material for the internet, e-books and multimedia. This reuse of layout and content is generally described as repurposing.

A quick comparison illustrates how simple repurposing can be. A paper publication such as a page of *PC Advisor* consists of text, pictures and graphic elements including white space. An e-book goes out of its way to imitate its paper equivalent,

although there may be less text on the page and the graphics are usually pared down to keep file size small. A web page contains the same elements but usually adds menus, buttons and hyperlinks for navigation.
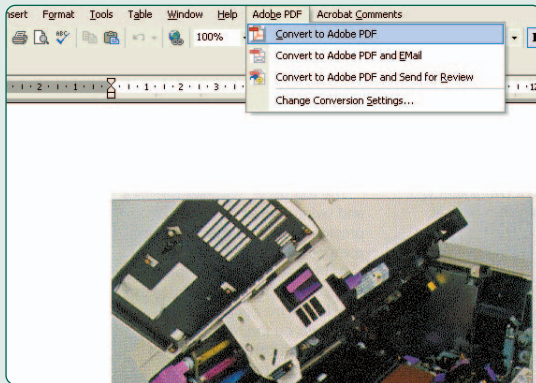
Conversion considerations

Before you decide how to convert a document, you need to consider its target audience and complexity. A mainly text-based document such as a report or essay requires minimal conversion and in its most basic form
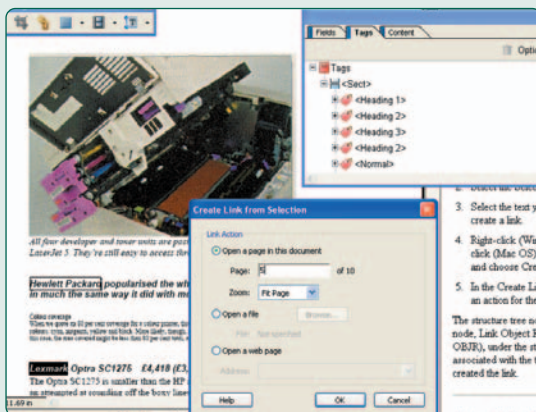
can be supplied as a word or ASCII text file. All you need to do is upload it to your website. Your readers will download the file and view it with their own text viewer or word processor so you don't need to worry about reformatting.

A document containing graphics or pictures and typographic changes such as headlines and callouts may need to be saved as an Adobe Acrobat PDF file. This can be as straightforward as saving or printing to a different destination. If you have
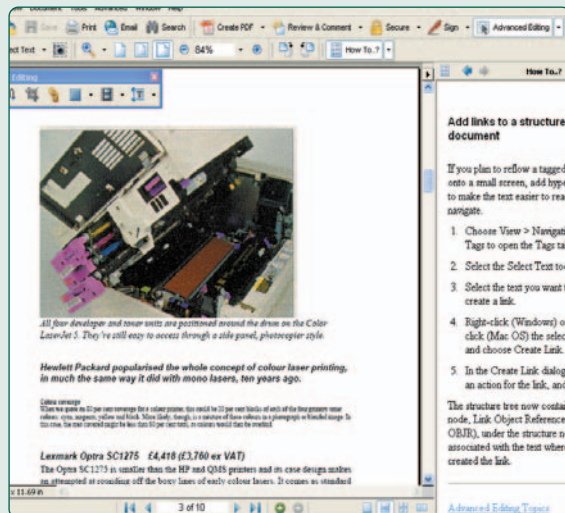
Creating a PDF file with Acrobat 6.0

1 Adobe Acrobat is one of the simplest ways to prepare a document originally designed for paper reproduction. Version 6.0 integrates well with Office applications so you can instigate conversion directly from the Acrobat buttons or the menu bars of Word, Excel or Outlook. The buttons and options are for straight conversion, convert and email, as well as convert and send for review

2 The conversion process is automatic. Acrobat goes through the document and reproduces the format with the same fonts and graphics as the original file in a form which is viewable but not directly editable. At the end, it launches Acrobat and displays the document. At this point you should check converted pages for inconsistencies

3 The converted document is passive. You can move from page to page but to make it interactive you need to add links, either to other points in the document or to external references that provide extra information. Adding links is easy: highlight the text or hotspot as the source of the link and Acrobat opens a dialog box for the action you want it to take when the link is clicked

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Acrobat Distiller, you can print straight to Acrobat from popular programs such as Word. Serif PagePlus 8.0 PDF Edition and Adobe InDesign can also produce PDFs directly. To prepare an e-book you could alternatively use an SDK or e-book publishing program.

The final step is to convert the document into web pages that are accessible via a web browser. This is more complex but the easiest way is to use a DTP program that can produce HTML directly.

Taking a view

In its default mode Word creates DOC files but if you switch to the Web Layout view from the View menu it starts producing HTML instead. Some of its characteristics change too. For example, text wraps to the width of the page, as it does in a web browser, rather than to the set width between page margins.

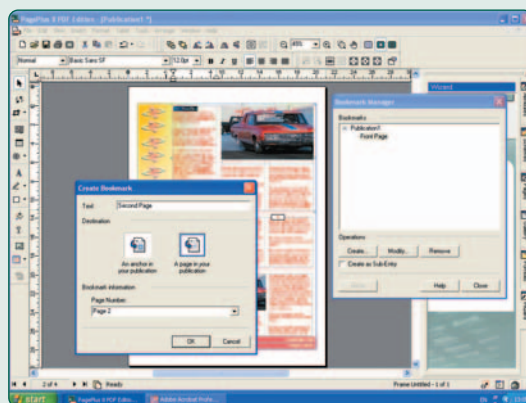You can add all kinds of furniture to a Word web page but the most relevant is hyperlink navigation buttons. These take you backwards and forwards through the document from within a web browser (see *Adding HTML navigation with Microsoft Publisher* on page 145). Any text or object on a Word page can be turned into a hyperlink, which links to a heading or bookmark within a Word page.
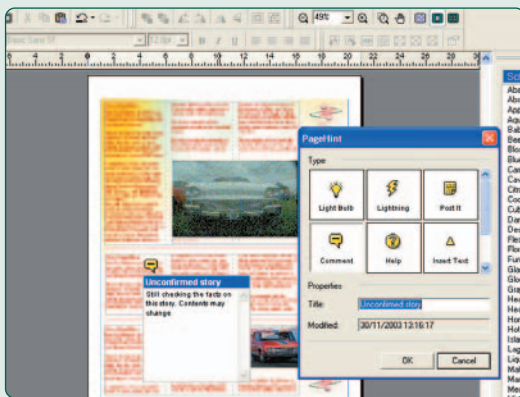
Desktop doesn't mean paper

Most budget DTP programs and some higher-end professional equivalents now support electronic publishing. Serif PagePlus 8.0 can create PDF
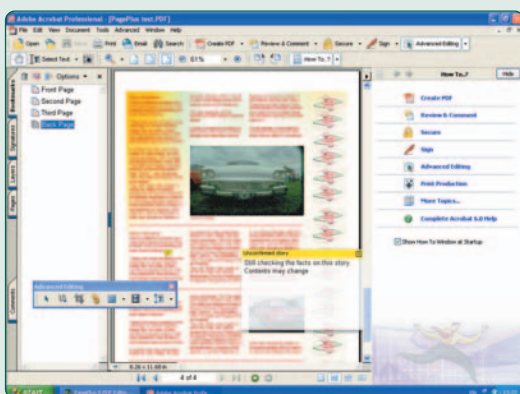
Designing for PDF with PagePlus 8.0 PDF

1 With PagePlus 8.0 PDF you can produce a PDF document directly without using Acrobat Distiller. All the usual design elements are available and in a PDF file you can incorporate hyperlinks, bookmarks and PageHints too. When you insert bookmarks into a document intended for PDF publication the conversion process produces a separate list of them within Adobe Reader so that it's easy to navigate the document quickly

2 You can add PageHints to a document destined to become a PDF. These little pop-up annotations add comments to a document for peer review or extra information to a publication. Select Insert PageHint, give it a title, type in the text and choose an icon. That's all there is to it – you can view the PageHint either before or after PDF conversion

3 Select Publish to PDF from the File menu in PagePlus 9.0 PDF and select the options you need, specifying whether the publication is to be viewed primarily onscreen or printed out as the image resolution will vary. Click ok and PagePlus makes the conversion, displaying the result in Adobe Reader by default. You can then try out the interactive features you built in to the document

and HTML documents. It publishes to PDF internally, creating a file that you can view directly with Adobe Reader. The program also has a Web Design mode and there are plenty of sites maintained entirely in PagePlus.

Microsoft Publisher will rework a document designed for paper for HTML output. You can add hyperlinks, hotspots and furniture such as checkboxes, option buttons and lists. Again, when you come to publish to HTML it produces a single file that you can view in any web browser. You can't edit the HTML directly in either this program or PagePlus – just edit the source file and reconvert.

The more expensive, professional DTP programs such as InDesign, Ventura, FrameMaker and QuarkXPress have more powerful built-in features. InDesign can produce tagged PDF files, suitable for use as e-books, as well as HTML and XML files directly.

QuarkXPress 6.0 can export directly to both PDF and HTML and produces two-position rollovers and shaped image maps, otherwise known as hotspots. Corel Ventura and Adobe FrameMaker, best known for long paper documents, can produce PDFs, HTML and XML.

From books to e-books

Creating e-books needn't be difficult or expensive with the right software. MobiPocket Publisher is free for personal use (go to www.mobipocket.com) and helps you collect all the elements needed to produce an e-book to the Open e-book standard.

Any e-book requires fundamentals such as a cover, title page and table of contents and MobiPocket Publisher helps you create these. You can import files as ASCII text or in Word or PowerPoint formats. You can even encrypt your e-books to sell over the web with a reduced risk of piracy.

Depending on the format of the e-books you choose you can read the electronic publication on your PC and PDA. You can pass it around on the internet by uploading it or attaching it to an email.

Design restrictions

Web documents and e-books do have some constraints if you want your

readers' software to reproduce them correctly. Colours, for example, are severely restricted. A web-safe subset of 256 colours is available in most DTP programs and it's wise to stick to them.

Similarly, most websites use a limited selection of 'common denominator' fonts for the main body of text. Fancy headlines and logos are normally downloaded as graphics. HTML will reflow text depending on the width of the browser it's viewed in anyway, so you can never be sure what effect it will have on your layout.

A program capable of supporting the CSS-1 standard will give you more control over the look of your document. CSS (Cascading Style Sheets) fix HTML and XML pages so they don't reflow in a different width of web browser. Only browsers such as Internet Explorer and Netscape Navigator after version 4.0 are likely to support CSS-1.

HTML supports three graphics formats: GIF, Jpeg and PNG. Others, such as TIF, will be converted to one of these three when you create your HTML file or flagged as an error by your document creation program.

With the choice of graphics comes the problem of resolution. A graphic designed for printing will have a relatively high resolution of 150-300dpi (dots per inch). Displaying it onscreen needs no more than 100dpi: 72dpi is often taken as the norm.
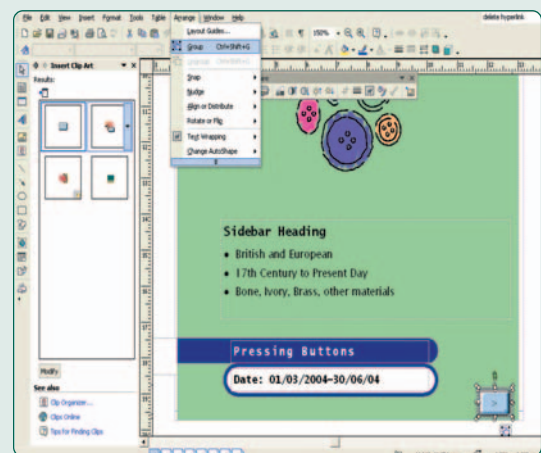
An image's size is directly proportional to its resolution. A 300dpi picture has nine times as many dots as a 100dpi one and will potentially take up to nine times as long to download. Some programs that design HTML automatically reduce image resolution but it's worth checking the size of the files you produce and making any necessary adjustments.
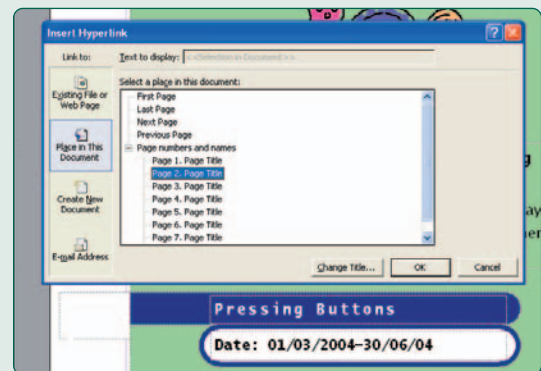
One page beyond
You don't even need a word processor or DTP file to work from. With the latest OCR (optical character recognition) technology, such as OmniPage Pro 14.0, you can scan a printed document and produce HTML, XML or PDF files directly.

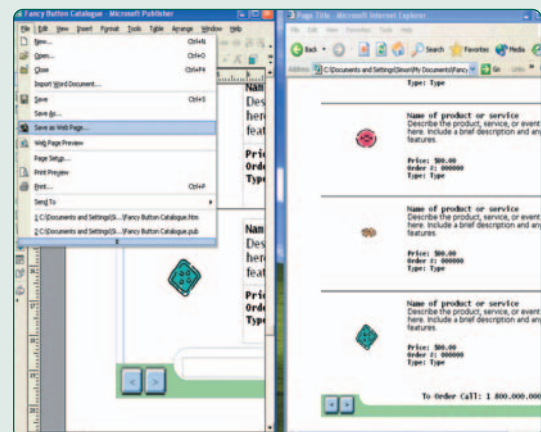## Adding HTML navigation with Microsoft Publisher

1 If you're converting a multipage paper document to HTML, one thing you'll need is navigation. Otherwise your web browser will only be able to access the first page. To create buttons, start with any suitable graphic and overlay it with the button's text, which could be as simple as < and > arrows to move a page back or forward

2 Once you've defined your buttons, place them on every page you want to navigate to and from. Use the Hotspot tool to drag a rectangle around each button. The Insert Hyperlink dialog box opens and you can choose the destination of the link. For simple navigation of a linear document, this will be to other pages. You can create buttons to link to other files or URLs as well
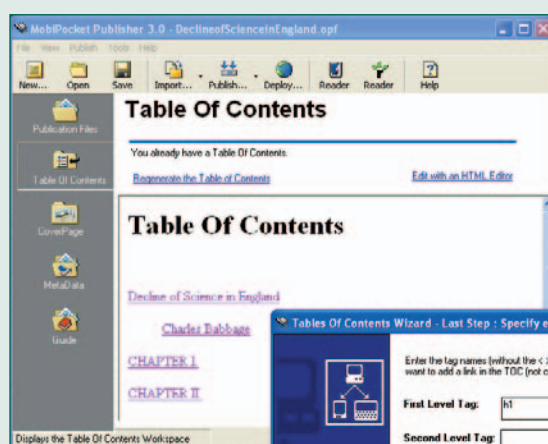
3 Having defined all the links, choose Web Page Preview from the File menu to load a temporary HTML document into Internet Explorer. This enables all the links, so you can check them before finally converting the document to HTML using File, Save as Web Page. This creates a permanent HTML file that you can then upload to your site. To make changes, edit the Microsoft Publisher file and reconvert it
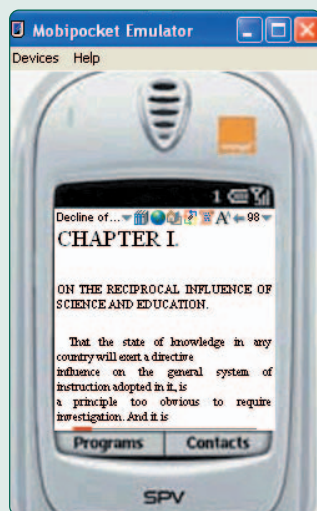
Making an e-book with MobiPocket Publisher

1 To produce an e-book for the MobiPocket or Microsoft readers you need to bring together a cover page, table of contents and any graphics. If you don't yet have a graphical cover illustration the program can create a simple cover with just the title and author. The MobiPocket Import Wizard can import plain text files and Word or PowerPoint documents

2 If the file doesn't have a table of contents, MobiPocket Publisher can look for chapter titles from which to build one. View the source HTML file to check for the codes to search for. Once you have prepared the essential components, including the content file, select your target reader and set the converter going

3 Once the e-book file is created, load it into Microsoft or MobiPocket Reader or copy it to your PDA. You can also use the separate MobiPocket Emulator program – like MobiPocket Publisher, this is free for personal use – to see how it will look on a variety of handheld devices, including those based on Symbian and Palm OS and on Microsoft's SmartPhone

If you have a scanner with a sheetfeeder, you can batch-process the recognition and conversion of the printed copy. The program can reproduce the layout of original pages with remarkable accuracy. OmniPage can also produce Microsoft's LIT format directly and create an e-book that can be read in Microsoft Reader from the paper original.

Great conversion
It's possible to create an electronic document using almost any word processor or DTP file intended primarily for print. Using a third-party conversion app such as Acrobat Distiller, or a document creator designed for both kinds of output, you can switch between formats with very little physical effort but a lot of software muscle. And remember, by far the easiest way to design a document for paper and electronic reproduction is to consider the requirements of both media from the start. ⊠