25 | Sharing Files

Let's say you've been using Microsoft Word 6 to create a lengthy report for work. You've spent days working on it and you're just about done. All you need to finish the job is some feedback and additional information from a colleague who works out of his home somewhere in the Arizona desert. You e-mail the report to him with instructions to make necessary changes and additions right in the file and send it back to you by noon. When he returns it, you'll take one last look at it, print it, and have it on your boss' desk when she gets back from lunch.

There's a problem, though. Your colleague has a Mac, but he doesn't use Word 6. When he attempts to open it with his word processor, all he gets is gibberish mixed in with plain, unformatted text. All the formatting you labored over—fonts and font styles, tables, borders, and graphics—is gone. Even if he adds the missing information to the file, the whole thing will have to be reformatted from scratch. You'll never get it done in time.

This problem isn't uncommon, but it can be prevented. In this chapter, we cover some of the ways to work around the problems of sharing files between different programs.

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Understanding File Formats

(DD/JB)

Text is text, right? Why wouldn't your desert-dwelling friend be able to open a word processing document in whatever word processor he happens to use?

Well, if the file contained just text, he could. Most English-language programs use a standard code called ASCII (see the section "ASCII") to spell out the letters of the alphabet and basic punctuation. Unfortunately, most word processing files don't just contain ASCII text characters—they also include special codes that tell the program how to display and print the information with the formatting you've applied. These codes vary from program to program. As a result, each program is said to have its own file format.

Trying to open a file in a program other than the one in which it was created can cause problems. In some cases, you won't be able to open the file at all. In other cases,

You Also Need the Fonts

(DD)

Even if you've got the right application to open a shared file, it may still look funny when it opens on your screen. If you don't have its fonts installed, the text will show up in the application's default font (usually Geneva, Helvetica, or Times). Your first hint that something is wrong might be a table whose columns don't line up or a headline that doesn't fit its measure.

There are a few ways to make sure this doesn't happen. One is to format any documents you intend to share with fonts you know the other person has. Using the basic fonts that come with the system software is always a safe bet. Most people have these fonts installed, and if they don't, they've usually got them around somewhere.



Adobe Systems sells a product called **SuperATM** (\$80) that solves the problem by creating fonts on the fly that match the metrics of the original document fonts. The product is based on Adobe's ATM (Adobe Type Manager) product, which interprets PostScript fonts for screen display. The Super version adds a database of Adobe PostScript font metrics and installs two Multiple Master fonts (a serif and a sans-serif). With this information, SuperATM synthesizes fonts that match the character widths and essential style of the original fonts. They don't look perfect, but at least when you open the document, your line breaks are right and you get a sense of what the original creator intended.

Another method is to use a document format specifically designed for the electronic distribution of files, such as those described in "Electronic Publishing Tools," later in this chapter. Those programs have ways of making sure that readers who don't have the right fonts will still see something approaching your original design on screen.

you'll be able to open the file, but it will be full of all sorts of extra characters that'll look like gibberish.

ASCII (JB/HN)

ASCII (pronounced "as-key") is an acronym for the American Standard Code for Information Interchange, which is a universal system of numbering characters. Every text character, tab mark, paragraph mark, punctuation mark, and other common text symbol has its own ASCII number, which all Macintosh programs understand. When you press a key, the code is stored in your document, so any other program can match it to the corresponding symbol in any font.

The Mac uses an extended (256-character) version of the ASCII standard. Many other platforms support only the original 128-character version. That's why some characters you can create in a Mac text editor, like é or ©, may not be displayed if you paste the text into an on-line service.

Most applications use ASCII to code the text you type in, adding their proprietary formatting and layout codes around it. If you want to share files between programs, ASCII is always a safe way to get the raw text (and nothing else) across.

Interchange Formats

(ML)

Some file formats, like ASCII, can be read by almost any application. The native formats of the industry's top programs—Microsoft Word and Excel, Claris FileMaker Pro and MacWrite, and WordPerfect, for example—are usually supported by translators in their competitors' programs. There are also a few intermediate or *interchange* formats that are recognized as standard paths between programs. You may lose some formatting when you rely on interchange formats to move a document from one file format to another, but they're your best bet when native formats don't work.

Text formats (DD/HN). For text, ASCII is a sure bet. It can be read by any text-processing program. If all you need is the text, but no formatting (not even bold and italic styles), ASCII is as good as any other format. Its small file size is a bonus.

RTF, or Rich Text Format (sometimes called Interchange Format), preserves formatting instructions, along with the document's contents, as text. Many word processing applications support this format and can interpret its instructions to re-create the formatting. Programs that don't support RTF, however, will just be confused by the extra information.

Microsoft Word offers another option in its Save As dialog box to turn a formatted word processing file into ASCII text without losing its formatting: *Text with Layout*.

File Types and Creators

(JB/HN/ML)

When you double-click a file icon in the Finder, how does the Mac know what program to open?

The Finder keeps track of which programs created which files through a system of four-character codes called *Types* and *Creators*. A four-letter Type code identifies the nature of the file, regardless of the application that created it. All applications have the same Type code, APPL, regardless of the kinds of files they create; all ASCII text documents have the code TEXT; and dozens of different programs can create graphics files of the Type PICT, for example. Some applications, however, use proprietary type codes for their files.

Creator codes tell the Finder which program "owns" the document: They distinguish a text file created with Microsoft Word (MSWD), for instance, from one created with MacWrite Pro (MWPR). This determines which program's icon is displayed for the document and which program is launched when you double-click the file's icon, among other things.

When none of your programs can open a file, you can assign a new Creator to the file using a utility designed for that purpose (see Chapter 13). This will allow you to at least open the file, although the results may not be very satisfactory: You may still end up with gibberish. Changing codes can be useful if you have to get the actual ASCII text from a file and have

no other way to open or translate the file.

If you want to try changing the creator code, there are several shareware programs that'll let you do it: **FixCreator Pro** (free), **FileTyper** (\$10), **File Kit** (\$15), and **Changeling** (\$5). Power users might prefer doing the job with **ResEdit** (free), Apple's resource editing tool, or Norton Disk Editor, which is part of Symantec's Norton Utilities package.



Changeling offers a straightforward way to change the type and creator code of a document.

When selected, Word saves the file as text, inserting spaces to re-create spatial formatting like indents, tabs, tables, and line and paragraph spacing. This makes it possible to have a plain text file with the white space that was present in the original formatted document.

Spreadsheet and database formats (RSR/HN/JB). ASCII is also a standard format for transferring information from spreadsheets and databases, but these programs need more information than just the text. They need to be told what text goes into each field and how to separate groups of fields into records. The standard way to do this is to place either tabs or commas between the fields (or columns), and returns between the records (or rows), in a format called *tab-delimited text* or *comma-delimited text*. Nearly all spreadsheet and database applications, including personal information managers, let you import and export data in these formats.



There are several other standard tabular formats that retain more information than the ASCII formats. SYLK, DIF, and DBF are among the most frequently used. SYLK, the SYmbolic LinK format, is designed to store numbers and is used primarily by spreadsheet programs. It preserves text, numbers, formulas, and text formatting. DIF (Data Interchange Format) and DBF (the format for dBase) are used mostly for databases. They preserve the field names but no text formatting. Most applications support one or more of these formats, but they do not include the formatting and layout information you would get by saving in an application's native format. They are used primarily to get data from one program to another and keep it in the right place.

Graphics formats (AA). As discussed in Chapter 15, graphics programs are generally split into two camps. Paint programs use *bitmapped* graphics, that is, they record images as a grid of colored pixels or bits. Draw programs use *object-oriented* graphics—they store each element of an image as a discrete object that can be manipulated separately. Most graphics programs can save both in their own native formats and in a number of other formats that can be used to transfer images among programs.

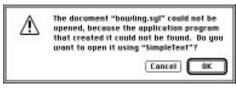
The most common graphics interchange formats on the Mac are TIFF (Tagged Image File Format), EPS (Encapsulated PostScript), and PICT (not an acronym). Each has its own uses and limitations.

- TIFF, the most common interchange format for bitmapped graphics, can contain images of any resolution and color depth. It's supported by every graphics program that works with bitmaps, but because the format has several variations, occasionally an application may have trouble opening a TIFF file created by another program.
- EPS is the standard format for storing high-resolution PostScript illustrations. Unlike pure PostScript files, EPS files usually have two parts: the PostScript language description of the graphic, readable by the *raster image processor* (RIP) on PostScript output devices, and a bitmapped PICT image used for on-screen display. A drawing saved in EPS format can be imported into other documents and scaled and cropped, but its contents would often no longer be editable, even by the program that created it. (Illustrator and FreeHand can open EPS files for editing; Photoshop can too, although it translates EPS into its own, bitmapped format along the way.)
- PICT files are encoded in QuickDraw, the Mac's native graphics language, and can contain both bitmapped and object-oriented graphics. PICT is the standard format for graphics that are cut or copied to the Clipboard and for drawings that won't be output on PostScript printers.

Opening Documents Created With Applications You Don't Have (ML)

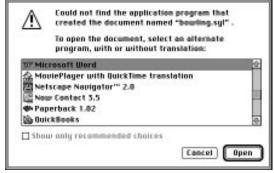
When you double-click an icon for a document created with an application you don't have, one of two things happens, depending on which version of the system software

you've got installed. If you've got any version prior to System 7.5, your Mac may display a dialog box telling you that it can't open the document because the application that created it "could not be found." Sometimes, it'll generously offer to open it with TeachText or SimpleText, which is a satisfactory way to get a look at the contents of a file.



If your Mac is running a version of the system software prior to System 7.5, when you double-click an icon for a document created with an application you don't have, a dialog box like this appears.

If you've got System 7.5 or later and Macintosh Easy Open (which comes with System 7.5) is installed, your Mac will display the Easy Open dialog box, which lets you select an installed application to open the file. In this section, we tell you about Easy Open and similar programs that you can use to open documents created with programs you don't have. We also tell you about some translation programs you can use to change file formats so they open with the programs you do have.



If your Mac is running System 7.5 or later and Macintosh Easy Open is enabled, when you double-click an icon for a document created with an application you don't have, you get a comprehensive list of the installed applications that may be able to open the file.

Macintosh Easy Open

(DC/ML)

Usually called just Easy Open, this control panel ships as part of System 7.5 (it's also available separately for System 7.1 and later). In spite of the name, Easy Open does not actually open or translate any of your documents. What it does is replace the "Application not found" alert with a dialog box that lets you choose an alternate application to open a document for which you do not have the creator application.

You configure Easy Open with the Macintosh Easy Open control panel. In addition to the radio buttons to turn Easy Open on or off and a checkbox to specify whether it

should work with plain TEXT files, there are three Translation Choices Dialog box options:

• Always show dialog box. If you turn this on, you'll see an application selection dialog box every time you try to open a document whose creating application isn't installed on your Mac. The problem with that is that every time



Use the Macintosh Easy Open control panel to configure Easy Open for the way you want it to work.

you double-click a document icon for which you don't have the creator application installed, that box appears. If you leave this option turned off, the dialog box appears only the first time you open a document with that creator. From that point forward, Easy Open tells the Finder to open all documents with that creator using the application you picked the first time.

- *Include applications on servers*. If you turn this on, Easy Open will laboriously search all mounted disks, including file server volumes, for applications which can open the document type. The attached speed penalty will usually cure you of utilizing this capability except in special cases.
- Auto pick if only 1 choice. Although this seems like a logical option to turn on, if the only choice is a bad choice, and the "Always show dialog box" option is turned off, you'll be stuck with it each time you open a document with that creator.

Translation Systems

(JB/HN)

In addition to built-in translation capabilities, many applications let you add extra "plug-in" translators. There are two main systems: Claris XTND and Microsoft External Converters (ECs). When properly installed, XTND and EC translators appear in pop-up menus in the Open and Save As dialog boxes of programs that support them, allowing you to open and save files in any of the supported formats.

XTND

XTND (pronounced "extend"), which was developed by Claris, and is available for licensing from Apple, is shipped with all Claris applications and a variety of programs from other developers. Claris and other developers provide a number of conversion filters that work with the system, and DataViz, the leading commercial developer of translators (see the section "MacLinkPlus"), has adapted its translators to work with programs that support XTND.

Microsoft EC

The Word and Works EC systems were developed by Microsoft and aren't as widespread as XTND filters. Microsoft Word ships with many translators, and you can add converters from other vendors at your discretion. A number of EC translators also come in DataViz's MacLinkPlus package.

As you use Easy Open, you build up a list of document-application relationships that make opening documents created with uninstalled applications just as easy as opening documents created with installed applications. As you add or remove applications, however, this list may become outdated. Unfortunately, you can't just edit the list to get rid of the bad preferences. Instead use the Delete Preferences button to throw away the whole list and start over.



MacLinkPlus (HN/ML)

DataViz, the pioneer developer of format-translation tools for the Mac, has developed filters for more than 1,000 format combinations, including word processing, graphics, database, and spreadsheet formats. The DataViz translators work with Easy Open, Claris XTND, Microsoft EC systems (see the "Translation Systems" sidebar), and DataViz's own translation utility. As a result, with DataViz translators installed, you get more options in Easy Open and the Open and Save As dialog boxes of many popular applications.

There are three versions of MacLinkPlus. The basic version, MacLinkPlus/Easy Open (\$70), includes the full set of filters plus Apple's Easy Open extension. (This version shipped with the System 7.5 upgrade and the System 7.5 software that came with some Macintosh models, such as Performas.) MacLinkPlus/Translators Pro (\$100) adds Macintosh PC Exchange, the Apple extension for mounting DOS floppies on the Mac desktop. The top-of-the-line MacLinkPlus/PC Connect (\$130) adds a serial cable and software for linking a Mac and PC directly.

[My favorite feature of MacLinkPlus is its ability to create drag-and-drop document converters. Once set up, simply drag a document icon onto the document converter to have it automatically convert the document to the format you specified.—ML]



Adobe File Utilities

(ML)

A relative newcomer on the file translation scene is **Adobe File Utilities** (\$130), which combines some older products that may be familiar to Mac users. The file translation component, Word for Word, converts word processing, spreadsheet, graphics, and database files among over 250 Macintosh, Windows, DOS, and Unix formats, as well as Hypertext Markup Language (HTML), the language of the World Wide Web. It maintains character, paragraph, table, and page formatting whenever possible and tags the formatting it can't maintain. DocuComp, an automatic document comparison program, is also part of the package. Both utilities were formerly distributed separately by Mastersoft, which has since become part of Adobe.

Graphics Conversion Utilities

(RSR/HN/Ben Long/Greg Wasson)

Service bureau operators and others who have to deal with a wide variety of graphics files often rely on Adobe Photoshop for translation, since it can read and write so many formats. Dedicated graphics-conversion packages, including Equilibrium Technologies' appropriately named **DeBabelizer Toolbox** (\$290), a streamlined sibling called **DeBabelizer Lite** (\$100), and TechPool's **Transverter Pro** (\$400), offer a broad range of PC and Mac graphics format translations.



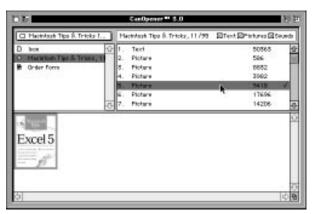
DeBabelizer also supplies tools for batch processing and editing, which you can use, for example, to automatically open a series of scanned images, remove moiré patterns, sharpen each image, and save them all as TIFF files. The DeBabelizer products are designed mainly for bitmapped graphics such as scanned images, while Transverter Pro is oriented toward PostScript art, though it can convert files to other formats.

CanOpener

(HN/ML)



Abbott Systems' **CanOpener** (\$75) is an extremely handy utility for digging text, graphics, and sounds out of files. Although it won't preserve any fancy formatting, it lets you extract the contents of a file—even if the file is damaged and can't be opened any other way. It can also search for a word or phrase inside any file on your disk, making it a good, basic file management tool.



CanOpener makes it possible to view and extract text, pictures, and sounds from files such as this damaged DOCMaker format file.

Built-In Translation

(ML)

If all this talk about file translation utilities is getting you down, don't despair! There's a good chance that you may already have the translation capabilities you need right inside your favorite applications.

Many programs have built-in translators for files created with other applications. If the translator you need is present, you'll be able to open the file with all the information and formatting intact. All you need to do is open the file from within your application, using the Open dialog box's File Type pop-up menu to display the file formats the program supports.

Shareware Alternatives

(JB/HN/ML)

There are some shareware utilities that do some of the same things as Easy Open and MacLinkPlus—and more. Adam Stein's **System 7 Pack** (\$30) and Victor Tan's **SpeedyFinder 7** (\$20 [Australian currency]) both include features that let you associate new programs with file types and pick a new program when the original creator isn't available.

If you need to translate graphics from one format to another, be sure to check out Thorsten Lemke's **GraphicConverter** (\$35) and Kevin Mitchell's **GIFConverter** (\$45). Both packages offer basic translation features, as well as more advanced graphics manipulation features, which make them good general-purpose graphic utilities.

For electronic publishing (discussed later in this chapter), try Green Mountain Software's **DOCMaker** (\$25). It supports formatted text, embedded graphics, table of contents, searching, and hypertext links. The resulting document is an application all its own. You can even create a custom About box, which document readers can open by choosing About... from the Apple menu when the document is open.

Sharing Information

(ML)

Sometimes just opening files isn't enough. Sometimes you need to incorporate information from one file into another file.

As any experienced Macintosh user can tell you, the Copy and Paste commands make it possible to copy information in one document and paste it into another. This works in almost every application and almost every document. But nowadays there are more powerful information sharing techniques, including methods that let you create live links between documents.

Macintosh Drag-and-Drop

System 7.5 improved Macintosh Drag-and-Drop, a feature of the operating system that lets you drag selected text and graphics from one document window to another—even when the two windows are for different applications. The selection is immediately copied to the destination document, leaving the original as is.

Although Macintosh Drag-and-Drop is a big improvement over copy and paste, there's a minor problem: Not all applications support it. Some applications that do support it include SimpleText, Scrapbook, Stickies, Note Pad, ClarisWorks, Claris Emailer, and WordPerfect. If you're not sure whether your favorite application supports Macintosh

Drag-and-Drop, try dragging a selection from its document window to a SimpleText window or the desktop. If the selection doesn't end up where you dragged it, the application doesn't support Drag-and-Drop.



You can use Macintosh Drag-and-Drop to create text or picture *clipping files*. Simply drag selected text or graphics from a document window to the desktop. A tiny clippings file icon appears. You can then drag the clipping document icon into the window of any application that supports Macintosh Drag-and-Drop to insert the text or picture. Think of it as scraps without the Scrapbook. One thing to remember: The Clipping extension must be installed in the Extensions folder inside your System Folder for this to work.

Publish and Subscribe

Copy and Paste and Macintosh Drag-and-Drop have one thing in common: They can take information from one document and put it in another. After the information is pasted or dragged into the destination document, it no longer has any connection with the source document. If the source changes, the destination remains the same.

Publish and Subscribe, a Macintosh feature since System 7, lets you share information between documents while maintaining a link between them. You begin by selecting text or graphics within a source document and choosing Create Publisher from the Edit menu (or a Publishing submenu) to *publish* it as a separate *edition file*. A standard Save As dialog box appears so you can name and save the edition file. You then open a destination document, position the insertion point where you want the contents of the edition file to appear, and choose Subscribe To from the Edit menu (or a Publishing submenu) to *subscribe* to the edition file. A standard Open dialog box appears so you can locate and open the edition file. The edition file's contents appear at the insertion point. That's all there is to it.

While this might seem like just another way to copy and paste information between documents, it's really much more. The source and destination files are linked via the edition file. Any change in the original selection within the source file is carried forward to the edition file, which then passes the change on to the destination file. The result: When the source changes, the destination changes automatically.

Like Macintosh Drag-and-Drop, Publish and Subscribe is only available within applications that support it. Because Publish and Subscribe has been around for years, however, lots of programs support it in one way or another. You can usually set publisher or subscriber options to determine whether the edition file is updated manually or automatically and break the link if necessary.

There's one thing to remember when working with Publish and Subscribe: You must maintain an intermediary file—the edition file. Although the edition file is especially useful when sharing information with others who access the same file server, if that file is accidentally deleted, the link is destroyed.

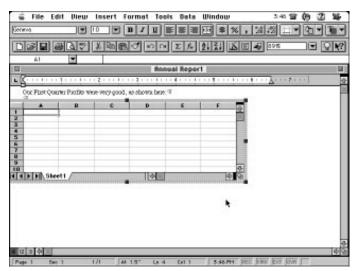
Object Linking and Embedding (OLE)

As you might expect, Microsoft wasn't satisfied with Publish and Subscribe. Instead, it developed its own way to share information between files: *Object Linking* and *Embedding* (OLE).

OLE is similar to Publish and Subscribe in that it lets you maintain a live link between documents. But rather than going through the bother of selecting part of a document to make available as a separate file, OLE lets you embed an entire document. This document, which is called an *object*, can be an existing file on disk or a brand new doc-

ument you create from within the destination application.

Here's an example. Say you're creating a report with Microsoft Word and you want to include a Microsoft Excel worksheet within it. You begin by positioning the insertion point where you want the worksheet to appear and selecting Object from the Insert menu. If the Excel worksheet already exists, you can use the From File button to display a standard Open dialog box that you can use to locate and open the spreadsheet. Be sure to turn



With Object Linking and Embedding, you can embed one kind of document within another—and edit its contents by double-clicking it.

on the Link File checkbox if you want to maintain a live link between the two documents. If you want to create a new Excel worksheet within the Word document, choose Excel Worksheet from a scrolling list of installed OLE-compatible applications and click OK. A worksheet grid appears in the Word document and the menus and toolbars change to offer Excel commands. When you're finished creating the worksheet, click outside the spreadsheet grid to continue working with the Word document.

The main benefit of OLE over Publish and Subscribe is that OLE doesn't require an intermediary file. In addition, simply double-clicking the embedded object opens it

with the application that created it—if that application is installed on your Mac and you have enough available RAM to open it while the document containing the embedded file is open. But like Publish and Subscribe, OLE is only available within programs that support it—such as all Microsoft applications.

Electronic Publishing Tools (ML)

Of course, you can never count on the people you share files with to have the right application to open the files you want to share with them. And you can never count on them to have the file opening and translation tools discussed in this chapter to open foreign files. That's where electronic publishing tools such as QuickDraw GX, Adobe Acrobat, and Common Ground come in. They make it possible to distribute beautifully formatted documents without worrying about applications, fonts, and translators.

Most of these programs work pretty much the same way. You begin by creating a document in your favorite application. Then, to make a version available for distribution, you choose the program's driver in the Chooser (or hold down a special modifier key) and "print" it to disk using the standard Print command. Various preference options determine how files are compressed and what fonts are embedded. The recipient uses a freely distributed viewer application to read the files.

Here's a quick summary of the three most widely used electronic publishing tools available to Mac users.

QuickDraw GX PDD

A component of System 7.5 is QuickDraw GX, which lets you create *portable digital documents* (PDDs). If you've got System 7.5, you've already got all you need to create PDD files that can be read by anyone who also has QuickDraw GX installed.

That's the main benefit of QuickDraw GX PDDs—it's included with the system software. But there are drawbacks. First of all, not everyone who uses System 7.5 opts to install QuickDraw GX, primarily because of compatibility issues. (I'm a good example: I only install it when I need to write about it and I usually deinstall it as soon as I'm finished with it.) So even if you use QuickDraw GX, there's a chance that the Mac user receiving your file won't be using it.

The other drawback, which may or may not be important to you, is that QuickDraw GX PDD files work only on Macs. If you need cross-platform compatibility

(to communicate with the unfortunate souls using DOS, Windows, or Unix), a QuickDraw GX PDD is not the answer.

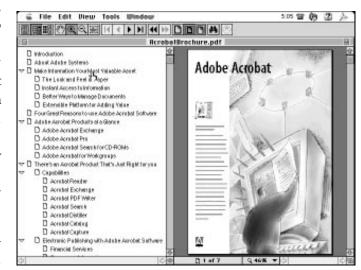
Of course, if you use QuickDraw GX and the people you need to share files with use QuickDraw GX, you can't beat the price or convenience of PDD files.

Adobe Acrobat

What began as yet another entry into the electronic publishing arena has exploded into what some people would consider the industry standard. Nowadays, you'll find Adobe Acrobat *portable document format* (PDF) documents everywhere—on disks and

CD-ROMs, on on-line services, and even on World Wide Web pages. With Acrobat's feature set and widespread availability of the freely distributed Acrobat reader in Mac, Windows, Silicon Graphics IRIX, SunOS, Sun Solaris, and HP-UX versions (wow!), it's no wonder that many organizations and individuals have chosen it to electronically publish their documents.

In addition to being able to distribute your documents with graphics and formatting intact on almost any computer platform, Acrobat PDF files can be



An Adobe Acrobat document can include graphics and text formatting, as well as a table of contents (called "bookmarks") to help readers find the information they need quickly.

searched, annotated, and indexed. You can include links to other documents, QuickTime movies, and uniform resource locators (URLs) for documents on the World Wide Web.

If you set up the Acrobat Reader application as a Helper application for Netscape Navigator, a popular World Wide Web browser, when you click a link to a PDF file on a Web page, Netscape will automatically launch Acrobat Reader to display the file.



My favorite feature of Acrobat is part of its Acrobat Distiller application: I can set up a watch folder and, with Distiller running, any PostScript file I save into that folder is automatically converted to a PDF file while I continue working on other things. Very cool.



The Acrobat family of products is extensive—too extensive to cover in detail here. To get started, you'll need **Adobe Acrobat Exchange** (\$180), which includes Acrobat Exchange and Acrobat PDF Writer to create PDF document files. To create PDF files from PostScript documents, you'll need **Adobe Acrobat Pro** (\$450), which includes everything in Acrobat Exchange plus Acrobat Distiller to work with PostScript files. Both packages also include Adobe Acrobat Reader, Adobe Type Manager, 14 Adobe Type 1 fonts, and an Acrobat CD Sampler. Other packages include Acrobat for Workgroups, Acrobat Search for CD-ROMs, Acrobat Catalog, and Acrobat Capture.

The main drawback to Acrobat (other than the price, which might be prohibitive for the average user) is the system requirements. Acrobat Reader or Exchange requires a Mac with a 68020 or better processor with 2MB of application RAM or a Power Mac with 4.5MB of application RAM. Acrobat Distiller requires a Mac with a 68020 or better processor with 6MB of application RAM or a Power Mac with 8MB of application RAM.

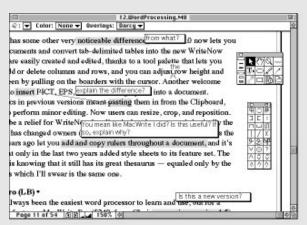
MarkUp: For Detailed Collaboration

(DD)

Mainstay offers an electronic publishing solution for editors and others who want to comment on electronic documents with precision and old-fashioned proofreading marks instead of posted notes. **MarkUp** (\$195) uses the same print-to-disk method as the other electronic publishing apps, and it lets you embed a viewer for recipients who don't own the program.

What MarkUp offers that the others don't are carets, transposition marks, and other symbols dear to copyeditors, along with the ability to add boxes for lengthier comments. Each reviewer's comments are added in a separate overlay, which can be viewed altogether or separately, and marks can be coded with any of eight colors. MarkUp users can also create a change log showing the time of each editing session.

[In reviewing Darcy's comments about MarkUp, I checked it out for



MarkUp offers copyediting marks, a highlighter tool, and text boxes for editing and annotating electronic documents.

myself. Although the product has not changed since the fifth edition of The Macintosh Bible, it's a very cool program that no writer/editor team should be without.—ML]



Common Ground

One of the first entries into the world of electronic publishing was **Common Ground** (\$100). Developed by Common Ground Software (which went by the name No Hands Software back then), its DigitalPaper (DP) format documents can now be distributed among Mac, Windows, or Unix users.

Like QuickDraw GX PDD and Acrobat PDF files, Common Ground DP files retain all the formatting and graphics you put into the original document. Like Acrobat PDF files, Common Ground DP documents can be indexed, annotated, and searched. DP documents can include hypertext links and PostScript format graphics.

But the best feature of Common Ground (at least as far as I'm concerned) is the ability to embed its MiniViewer application right in the DP file. Even though the MiniViewer can be freely distributed among Mac, Windows, and Unix users, by embedding the viewer within the document file, they don't have to have it to read the file.



Other benefits of Common Ground over Acrobat include file size and system requirements. The MiniViewer is less than 600K (as opposed to almost 2MB for Acrobat Reader and its associated files). Both the MiniViewer and Common Ground software will work with a Mac with a 68020 or later processor (including Power Mac) and System 6.0.5 or later. You'll need only 1MB of application RAM for the MiniViewer and 2MB for Common Ground. The free MiniViewer and other related products, such as Web Publisher and CD-ROM Publisher, are also available from Common Ground Software.

Editors' Poll: What Techniques Do You Use to Move Files Created With One Application to Another Application?

SZA: Simple copy and paste whenever possible.

TA: PDF is the god of all file formats. Acrobat Exchange coupled with Illustrator (where you can save a page of the PDF file as an EPS image for importing into other software).

DC: I use file formats that transfer easily, such as plain text, where possible. I stay away from specific product file formats when I can. I also use integrated applications (ClarisWorks and Microsoft Office) where I can.

JC: Import and Export commands built into most programs seem to offer the quickest and easiest method for large amounts of data such as mailing lists. For smaller tasks I still use the copy and paste function but prefer the drag-and-drop ease of clippings files whenever possible.

MEC: Drag-and-Drop, usually between BBEdit, where I do the scripting for a project, and ClarisWorks, where I keep the list of pictures, videos, and so on.

BF: I usually use ClarisWorks (because of its excellent translator set) to move files between programs. If worse comes to worse I'll save the file as an intermediate (such as text), then open it in the other program from the intermediate.

JH: I can't say I move files between applications.

ML: I always try opening a file with the destination application before turning to translators such as MacLinkPlus.

SS: I use Export/Import/Place commands or copy and paste.

BW: Most applications these days save and import files in a variety of formats, so I can usually find a match-up between them. MacLinkPlus translators fill the gap.

KT: I do a lot with ASCII/text files. I try to avoid cutting and pasting between documents or between applications as much as possible—it doesn't leave a good paper trail, for one thing; and it too often doesn't work right, for another.

By the way, the text editor in CompuServe Information Manager (the AOL-like CIS utility that is in many ways very annoying) is a great tool for checking and fixing text files. Because it's inherently cross-platform it seems to pick up quickly on file detritis that might otherwise cause problems if moved to a new setting.

