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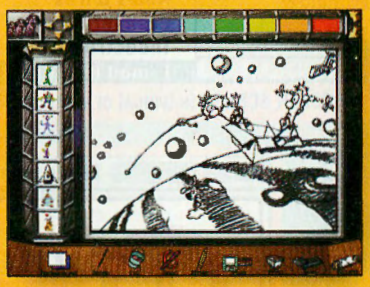

Kids can paint using the fun stamps, colors and backgrounds provided.

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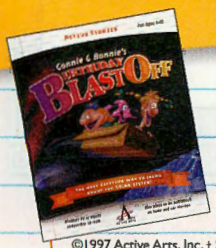

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how to do smart Web searches

We give you the top secrets for finding exactly what you want on the Web.

What we need is White Pages for the Internet. What we get instead is…search engines, those free commercial Web sites that let you seek out Web pages and other Internet content by specifying the words and phrases that you expect to appear in the content. A good search engine is as powerful as a sledgehammer, but a sledgehammer isn't much good if you're looking for needles in haystacks. When you're looking for that one perfect page chockfull of relevant information, you'd better know all the ins and outs of Internet search engines. The more you know, the more likely you are to find the needle. Here's a quick lesson on the basics of Internet search engines and some tips for getting the most out of the popular search sites. —*Joseph O. Holmes*

The 7 Most Popular Search Sites

AltaVista, http://www.altavista.digital.com
Excite, http://www.excite.com
HotBot, http://www.hotbot.com
Infoseek, http://www.infoseek.com
Lycos, http://www.lycos.com
Magellan Internet Guide, http://www.mckinley.com
Yahoo!, http://www.yahoo.com

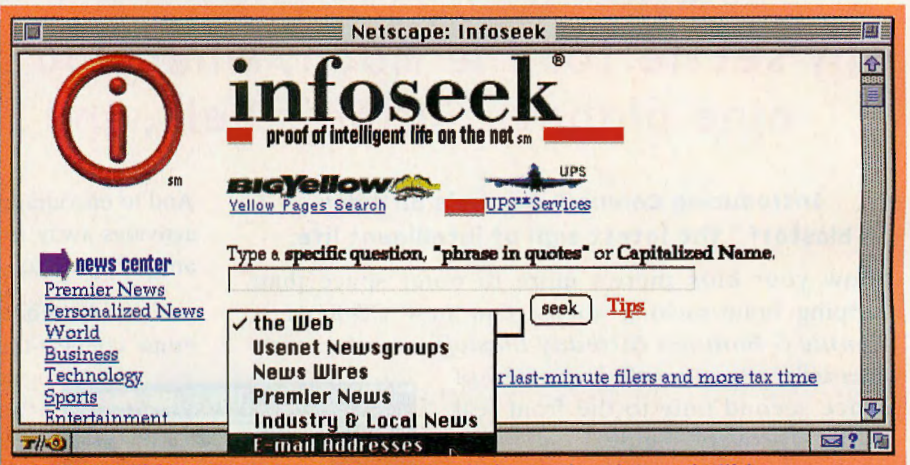
STEP 1 The Basics

The typical search site on the Web offers a text box for entry of a few words, called the *query*, and a button that says something like "Search!" or "Seek!" Press Return after typing your search query, or click the button to see a page displaying a list of the "hits"—that is, the pages that match your query.

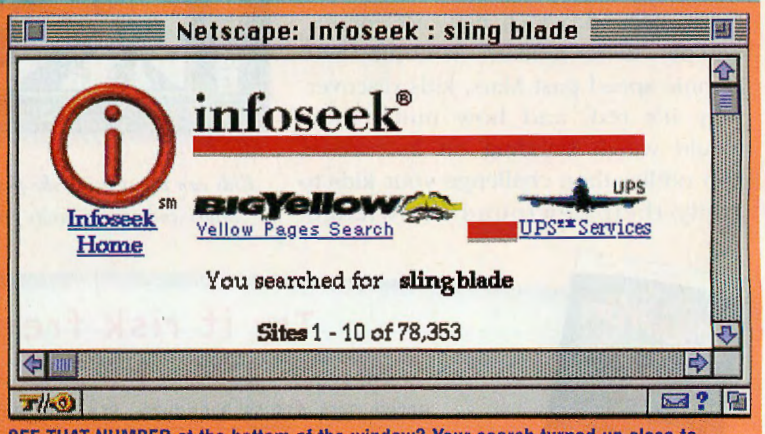
If you're like most people, you type a word or two and hit Return, you get tens of thousands of hits, and then you give up after scrolling through the first dozen or so, which are totally irrelevant anyway.

Guess what? You did the worst possible search.

Don't think of that text box as a place to type a keyword or two. Instead, think of it as a place to ask a question. Your first impulse should be to ask for exactly what you need. Surprisingly, almost every search engine does a respectable job with a query such as, "Where can I buy used Newton MessagePads and software?" That's all most people probably need to know. But you, dear *MacAddict* reader, aren't most people. Read on.



THIS INFOSEEK SCREEN is typical of what you'll see in the search engines on the Web.



SEE THAT NUMBER at the bottom of the window? Your search turned up close to 80,000 hits. Time to narrow the search.

Hot Tip:

Want to find all the pages that link to *your* home page? Infoseek and AltaVista make it easy, with a field search called "link:" that lets you look for links which point to your URL: link: http://yoursite.com/~dir/index.html

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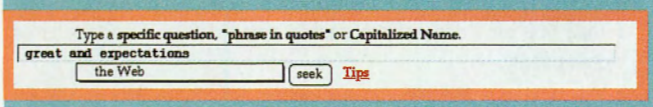
STEP 2 Understanding Booleans

You can make your query more precise if you take a few minutes to learn to use what are known as *Boolean* search commands. A few simple logical operators—the words *and, or,* and *not* are the most common—help specify the target. For example, say you want to search the Web for reviews and criticisms of Charles Dickens' novel *Great Expectations*. First, try a search using the Boolean `and` to ask for all files that contain both the word *great* and the word *expectations*.

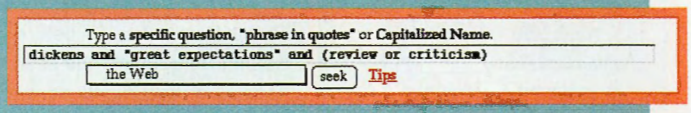
NOTE! Internet search engines don't follow strict Boolean rules. The `and` operator doesn't guarantee that a word will appear in a found document—it simply moves documents that contain the words closer to the top of the list; that is, higher in the *ranking*. To *require* that found documents include a certain word, most sites let you add a plus sign (+) to the word, like so: `+golf`. Similarly, add a minus sign (-) to be sure that the word does *not* appear in found documents.



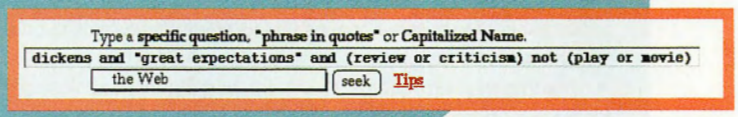
Nice job. Unfortunately, the search result reports that 300,000 Web pages contain both words. Lesson one: Use enough terms to get specific but not so many that you eliminate relevant hits.

Adding the word *dickens* will help a lot. So will putting quotation marks around `"great expectations"`, which shows the search engine that you're looking for an exact phrase, not separate words located anywhere within the Web page.

Now narrow the search even more, to criticisms or reviews of the work, by using a Boolean `or`. Note the use of parentheses to group terms:



That's better. You eliminated a lot of irrelevant material, but the list of hits still includes movie and play reviews. Narrow the search even more with a Boolean `not`:



Now you're getting there! This search would turn up only documents that include the phrase *great expectations*, the word *dickens*, and either the word *criticism* or the word *review*. And it would exclude any document that met all the above criteria but also included the word *movie* or *play*. Just when you thought you were done—you're close. In fact, you probably have *almost* what you need. Now it's time to refine your search.

Hot Tip:

Microsoft Internet Explorer lets you add your favorite search engine to a toolbar button. Just go to the search site's home page, open Internet Explorer's Preferences window under the Edit menu, and click the Home/Search Page tab. Use the pull-down menu to set your Search Page default.

STEP 3 Refining the Results

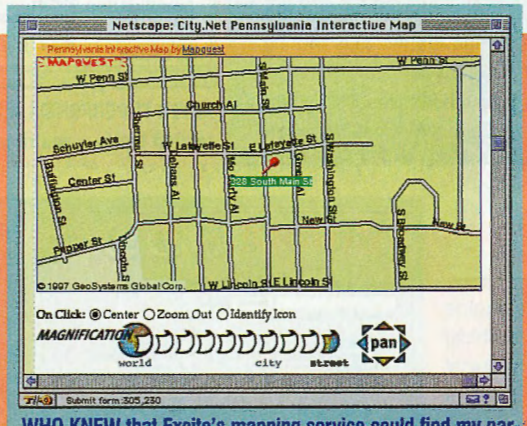
You can be virtually certain that the results of your query will turn up many, many hits, most of which have no relevance at all. Don't despair. There's still a good chance that the first page or two of hits will hold some gems. Remember, the hits are ranked in order of most precise match.

If you flip through the top 20 or 30 hits in vain, it may be time to rethink your query. First, examine the results to see what's going wrong. Look at irrelevant hits and think about how you might eliminate them with a better query. For example, if a query including `Apple` turns up too many orchards, add `not (tree or fruit or orchard)` and search again. Narrow your query by adding more required keywords. Alternately, if a search turns up too few—or no—matches, then broaden the query by eliminating some required terms.

Extra! Extra!

All the search engines we've mentioned offer specialized information in addition to Internet searches. Here are some of the more interesting and useful:

- City maps and travel information. Several sites, including Yahoo, Infoseek, and Excite, offer detailed city guides with full-color road maps. Type your address and get a map of your neighborhood—great for printing party directions!
- Yahoo!'s specially designed area just for kids, with a search engine, directory, cool links, and more. It not only keeps kids farther away from offensive material but also offers a good focus on kid-friendly stuff.
- Search Voyeur. Here's an eye-opener. Check out Magellan's Search Voyeur at http://voyeur.mckinley.com/voyeur.cgi. It displays randomly selected searches being performed as you watch. You'll be surprised (or not) at what people are looking for!
- Specialized access to current news, stock quotes, sports scores, and email addresses. All of these search sites offer these resources—so don't think of them simply as a place for a search!



WHO KNEW that Excite's mapping service could find my parent's house in a little Pennsylvania town, population 3,000?

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how to

Search Tips for the Top Five Search Engines

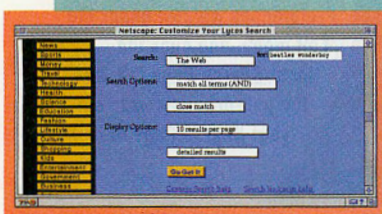
YAHOO LETS YOU CUSTOMIZE a search with this handy interface.

1. Yahoo

- Use restricting "operators" to search titles or URLs only. Put the operator `t:` before a search term to limit the search to titles of documents containing the word. The `u:` restricts the search to URLs containing the word. For example, `t:moonbeams` finds a page titled Moonbeams Become Marshmallows, and `u:apple` finds pages at http://www.apple.com as well as at http://www.smith&jones/~orchards/apple.html.
- Use the wildcard character (`*`) for partial matches. A search for `busi*` finds the words *business*, *businesses*, and *busiest*.
- Go to the Search Options page, and use the time restriction feature to find documents newer than a certain date. From the same screen, you also can use radio buttons to select Boolean search terms.

2. Lycos

- Take advantage of Lycos' ability to search for pictures or sounds. It works remarkably well. To use this ability, click on the Custom Search link on Lycos' home page. Then use the pull-down menu under Search: to choose Sounds or Pictures.

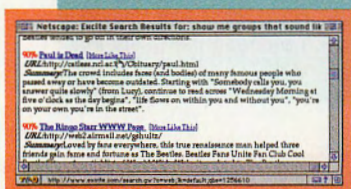


USE LYCOS' CUSTOM SEARCH to use easy, pop-up menus.

- Similarly, click on Lycos' Custom Search button for pop-up menus of common Boolean terms.
- Lycos doesn't need a wildcard to search for variations on a word. It automatically does a "loose" search. To force Lycos to make an exact match, follow the word with a period. For example, `auto.` finds *auto* but not *automobile*.

3. Excite

- When using the Boolean `AND`, `OR`, and `AND NOT` operators, be sure to type them in all caps in Excite.

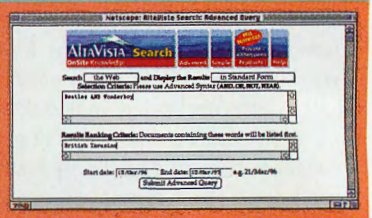


EXCITE CAN BASE a new search on the found page rather than on the original search.

- Use Excite's More Like This option. The phrase appears next to all hits, and it performs another search to find pages like the hit, rather than like your search query.
- Sort your search results by site, using the View by Web Site option. It lets you see which sites have the most hits and makes browsing those hits easier.

4. AltaVista

- Using capital letters anywhere in search words finds only matches using the same capitalization—`NeXT` finds the company and operating system, not the random word *next*. Use all lowercase letters if you want to find all varieties of capitalization.

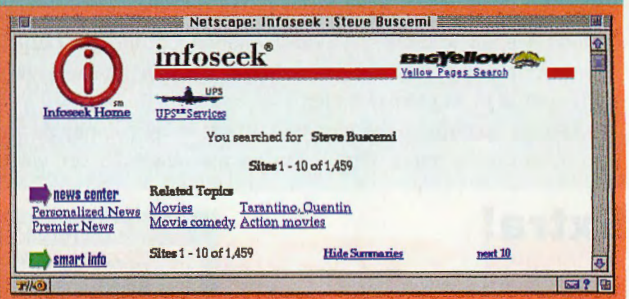


FROM ALTAVISTA'S Advanced Query screen, you can specify several different ways to narrow your search.

- Use AltaVista's Advanced Query for Boolean searches (you'll find it in AltaVista's home page banner). From that screen you also can set the search dates and give certain terms higher priority.

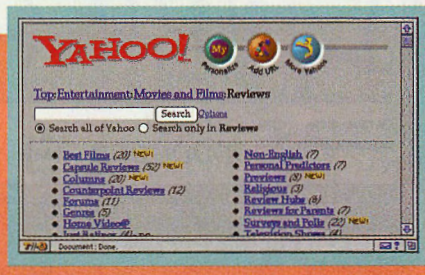
5. Infoseek

- After Infoseek gives the results of your search, check out the Related Topics. One may be just what you want.
- When searching for people or titles, capitalize the words and Infoseek will treat them as a single name or title: `Gone With The Wind`.
- Use a comma to separate names and titles: `Bill Clinton, Newt Gingrich, The Washington Post`.
- Use the "pipe" (`|`) to find hits within a group of hits: `Whitewater | Bill Clinton` searches among the sites mentioning Whitewater to find sites also mentioning Bill Clinton.
- Check out Infoseek's variety of search databases. In addition to the Web and Usenet, you can search Web FAQs, email addresses, company profiles, and several news databases. Find a list of these resources in a pull-down menu next to the Seek button.



AFTER IT PERFORMS A SEARCH, Infoseek lets you view sites on related topics—you're in hyperlink heaven.

Directory Assistance



THROUGH THE MIRACLE of Adobe Photoshop, we removed the banner ad from this Yahoo! screen (and from all our other screenshots in this article). Don't you wish you could really do that on the Web?

You may be turning to a search engine when an Internet directory, a hierarchical listing of sites, would work better. Hierarchical directories start you with a list of general categories such as Entertainment, News, and Computers. Choose a category and click your way through ever-finer subcategories to eventually reach a select list of suggested sites. Because directories list only select sites, your search won't turn up thousands of tiny or irrelevant home pages. Two of the most popular directories are Yahoo! (http://www.yahoo.com) and Magellan Internet Guide (http://www.mckinley.com).

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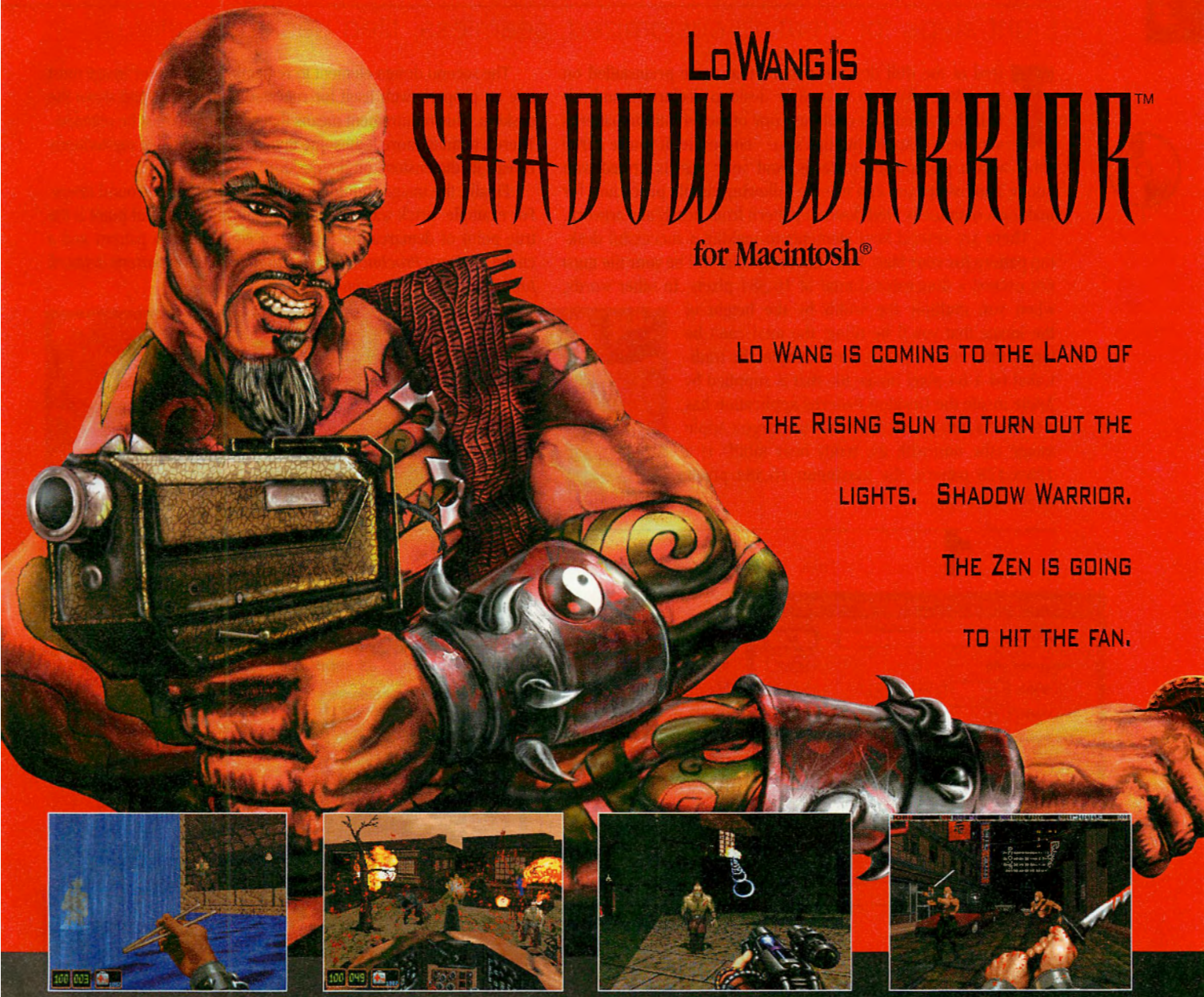

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how to

how to create tiled desktop patterns

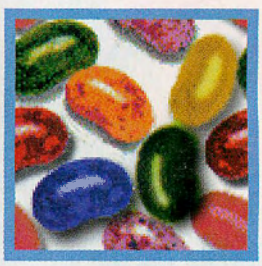
Eight steps for creating customized, seamless, tiled desktop patterns.

Tired of the dull desktop pattern that came preinstalled on your Mac? Want to have your desktop declare its individuality? Granted, you could use one of the 64 built-in patterns supplied by Apple, but that's so…corporate. If you're a true rebel with a passion for patterns, and your Mac is armed with Adobe Photoshop, you can use the following simple procedure for making a seamlessly tiled desktop pattern from nearly any artwork.

There are several keys elements to making a successful desktop pattern for your Mac. First, the image that will be your tile must not exceed a dimensional total of 16,384 pixels. In other words, when you multiply the width by the height of the image that you'll be tiling, the total can't be larger than 16,384 pixels. For example, the traditional 64-x-64-pixel image tile that is supplied by Apple inside the Desktop Patterns application has a total of 4,096 pixels. Likewise, the largest Apple image (the one with the teddy bear motif) is a 128-x-128 pattern, the maximum 16,384 pixels in surface area.

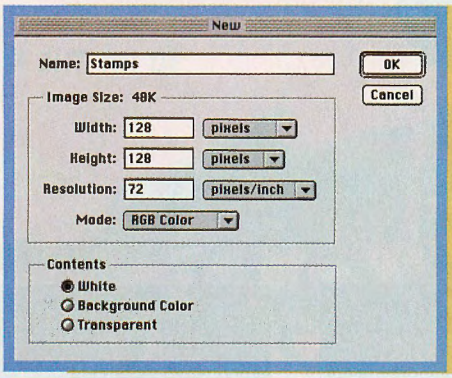
The second design element to remember is that your image must line up properly with itself for repeated tiling across and down the desktop. This requirement means that your image must be seamless. There's nothing more loathsome than a tiled image that mysteriously reveals its dimensions on the desktop.

Finally, the image shouldn't look like a tiled background image. For example, brick walls are a definite no-no. This final point is the true point of demarcation between a good desktop pattern and a cliché. *—Dave Prochnow (with valuable desktop pattern artwork provided by Kathy Prochnow)*



FIND MORE DESKTOP PATTERNS on our Web site and on The Disc.

STEP 1 Start a New File



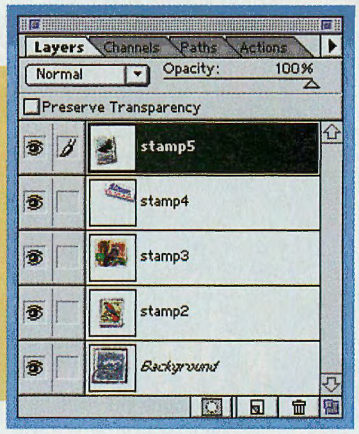
Open Photoshop and start a new file called Stamps. Make this file 128 pixels wide by 128 pixels high. Use a resolution of 72 pixels per inch.

STEP 2 Gather Your Artwork

Import the artwork you want to use as your background. In this case, we scanned five postage stamps and then opened them in Photoshop as separate files.

STEP 3 Create Layers

Create four new layers in your 128-x-128 Stamps file. Now drag each stamp file onto a separate layer (Note: The initial layer is called the background in Photoshop). After filling all the layers, close the five individual stamp files. Return to your main Stamps file, and hide all the layers by clicking the Show/Hide icon in the Layers palette.



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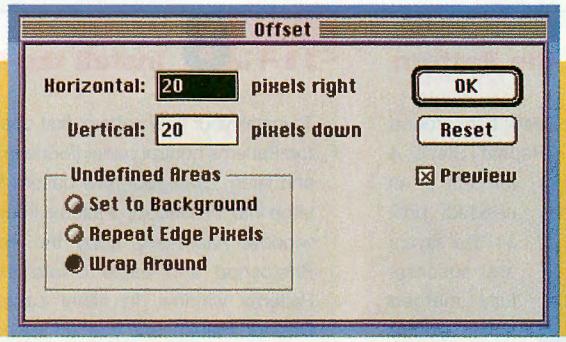
Six Tips for Creating Patterns to Tile

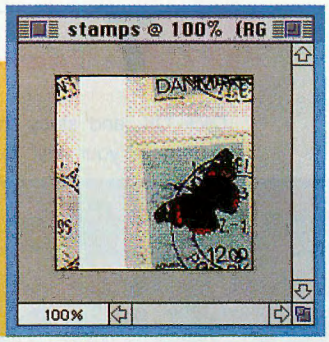
- Choose a theme for your tiled background. Jelly beans, stamps, paper clips, and, of course, ants work great. Also experiment with snowflakes, fall leaves, spring flowers, pasta, and coins for achieving the perfect desktop pattern.
- Use a solid background; black, white, or any color that is different from the color(s) of your selected image.
- Select at least three different images for making into the final composite tiled background image.
- Vary the size of the selected images, remaining within the defined size of the final pattern dimensions.
- Use the Rubber Stamp tool to make image duplicates. This effect helps eliminate unwanted seams from the final pattern.
- Carefully look for seams between your assembled images. Use the Zoom tool to increase your viewing magnification.

how to

STEP 4 Shift the Image

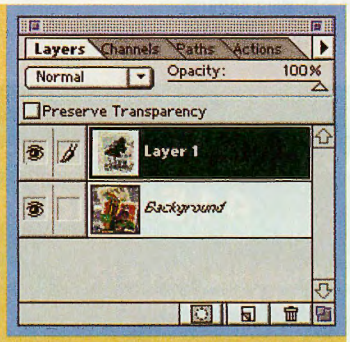
In the Filter > Other menu, click on Offset. In the Offset window, enter 20 pixels right for Horizontal and 20 pixels down for Vertical, click Wrap Around, and conclude with OK. This step shifts the image over and down 20 pixels. This action gives the images a more random effect, one that is more visually pleasing.





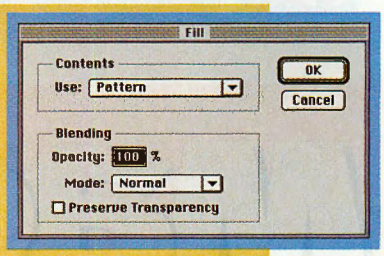
STEP 5 Merge the Layers

On the Layers palette, select Show Layer 1, then move Layer 1 with the Move tool. You should fine-tune this process until you're happy with the placement of Layer 1. When you're satisfied, merge Layer 1 with the Background using the Merge Layers command.



STEP 6 Test the Pattern

To test the background pattern, open a new file that you've given a screen size of 600 x 400 pixels. Now insert the pattern into this new test file. To insert the Stamps file, choose Select All, then click Define Pattern in the Edit Menu. Finally, you must tile this pattern across the test file by selecting Fill from the Edit menu. In the Fill window, choose Pattern for the Contents Use, 100% for the Opacity, and Normal for the Mode.



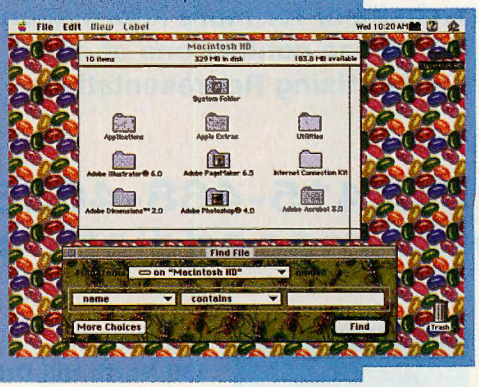
Desktop Pattern Secrets Revealed

Like many of the other utilities that Apple effused into the Mac's lifeblood, Desktop Patterns offers several undocumented features that add more zing to your thing.

- Hold down the Option key inside the Desktop Patterns window to toggle the Set Desktop Pattern button to Set Utilities Pattern. In this toggled mode, any selected pattern becomes the background pattern for all your System utilities.
- Any PICT file can be dragged into Desktop Patterns for use as a pattern. This includes images from SimpleText and ClarisWorks Paint.
- Double-clicking any selected pattern is equivalent to clicking the Set Desktop Pattern button.
- Each 64-x-64-pixel pattern inside the Desktop Patterns application consumes approximately 4.5K to 12K of hard disk storage space. By deleting unwanted patterns, you can recover valuable disk storage space and transform the original unwieldy 64-image pattern library into a manageable customized catalog of 10 to 20 images.

The four patterns illustrated in this article weigh in at approximately 17K each. To delete a pattern, locate it and then select Cut from the Edit menu.

- Patterns are stored in the Preferences folder in the System Folder. Look for the file named Desktop Pattern Prefs. Store this file offline as a backup for your creative tinkering.
- ResEdit, the ubiquitous resource editing utility, can manipulate patterns smaller than 64 x 64 pixels in dimension. Just look for the ppat resource inside the Desktop Pattern Prefs file.



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how to

Yeah, Well Picture This

Trying to locate the perfect image for a desktop pattern can be a formidable challenge for Mac owners who are scanner poor. However, there are numerous excellent sources for ideal pattern images, including the following: ArtBeats, 800-444-9392, http://www.artbeats.com; Artville, 800-631-7808, http://www.artville.com; Image Club Graphics, 800-661-9410, http://www.imageclub.com; PhotoDisc, 800-528-3472, http://www.photodisc.com; and PhotoSphere Images, 800-665-1496, http://www.photosphere.com.

Window Into Your World

Sundial (John Neil & Associates, 415-905-3000, http://www.jna.com/sundial.html) is a CD filled with screen savers of Death Valley and the Golden Gate Bridge, to name just two. Sundial acts as a mirror of the exact time and lighting conditions as found on your Mac. Thus, at sunrise on your Mac, Sundial shows sunrise at Yosemite. (The screen savers are actually full-length movies). One bit of hype that should send a shiver down your spine is the company's claim that "having Sundial on your computer is the next best thing to being outdoors."

STEP 7 Tweak the Pattern

Click OK, and study the tiled background pattern in your test file. Repeat Steps 4 through 6, as needed, until all the layers are successfully merged and you're happy with the pattern.

STEP 8 Install the Pattern

To install your new pattern, first open the Desktop Patterns control panel (found in System 7.5 and later). Drag your new pattern from Photoshop into the Desktop Patterns image selection window. Alternately, copy the image inside Photoshop and paste it into the Desktop Patterns window. In either case, click Set Desktop Pattern, and your art will be tiled!

Dave Prochnow began his interest in desktop patterns following a successful gig in England flattening crops into alien patterns.

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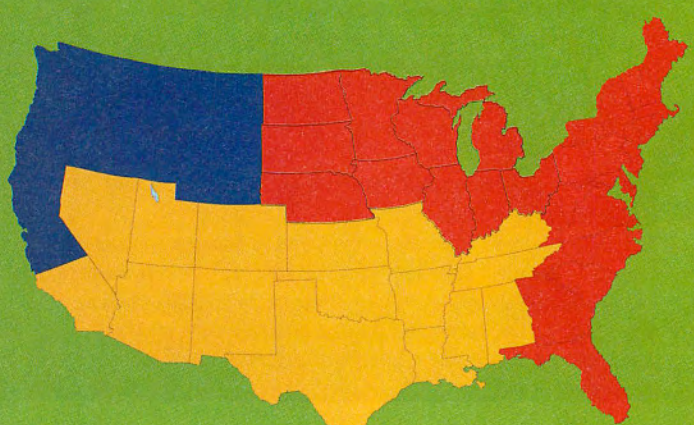

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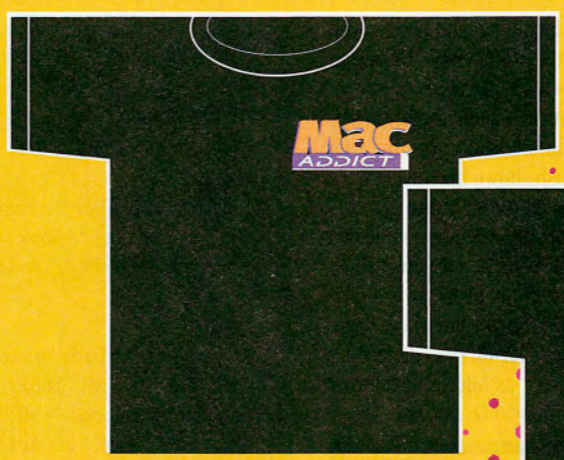

FRONT

BACK

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FRONT

BACK

Order Form

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Cap:	**$18 x Qty ___**	**=**	**$_____**

Subtotal $_____

California residents please add 8.5% sales tax _____

Postage and handling—United States	**$5.00**
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Unified Patents Exhibit 1023

how to run wild with style sheets

Your final lesson on how to use style sheets for creative page design.

Because they bring some true page layout capabilities to Web page design, style sheets are about to revolutionize the design of Web pages. In the last two issues, you learned how to create style sheets and style sheet parameters such as margin settings and <DIV> tags to work with layout in unusual ways. You even learned to create the graphical-looking splash shown here using pure HTML text and no graphics—not even a background image.

To create this design, called Backtext Words, you simply create two style classes, one of which (see "Foretext style text!" in the screenshot) you move up over the other by setting its margin-top property to a negative value—in this case, -50. At right is the HTML for the whole page. If you haven't already typed it into your favorite HTML text editor, do it now, and warm up a styles-savvy browser such as Microsoft Internet Explorer 3.x or Netscape Communicator. *—Joseph O. Holmes*

TO CREATE THIS DESIGN, use two style classes and move one of them up over the other one to create an overlap.

```
<HTML>
<HEAD>
<STYLE TYPE="text/css">
<!--

.backgtext{color: orange;
     font-size: 60px;
     font-family: Arial Black, helvetica,
sans-serif}

.foregtext{color: black;
     font-size: 18px;
     margin-top: -50;
     font-family: Arial, helvetica, sans-serif}

-->
</STYLE>
</HEAD>

<BODY>

<DIV CLASS=backgtext>Backtext</DIV>
<DIV CLASS=foregtext>Foretext style text!</DIV>

</BODY>
</HTML>
```

Using the Line-Height Property

Now let's look at another way to move text around, this time from *within* a single style rather than by overlapping two styles. You're going to add a *line-height* property to the definition of the background text's style. Line-height is the same thing that page layout folks know as *leading* (pronounced "ledding") and what your word processor manual probably calls *line spacing*. It's the distance between the baseline of one line and the baseline of the next, so it controls how close a line of text comes to the line above it.

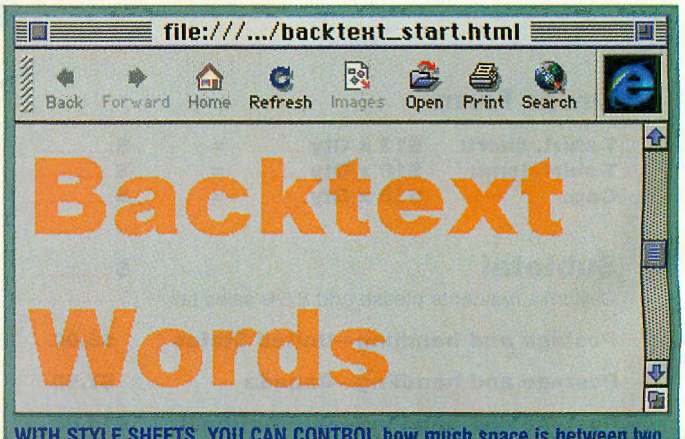
Hot Tip:

**A trick to remember when working with specific layouts like this is to break up lines with a <BR> tag. We inserted a break tag (Backtext
Words) to force the phrase to display on two lines no matter how wide the visitor's window is.**

First, you'll need to change the "backgtext" content from the word *Backtext* to the phrase *Backtext Words* so that it takes up two lines in the browser window. Then you'll need to put a break tag between the words. After the change you should have this:

```
<DIVCLASS=backgtext>Backtext<BR>
Words</DIV>
```

That gives you the two-line look (shown at right) in the browser.



WITH STYLE SHEETS, YOU CAN CONTROL how much space is between two lines of text. Page layout programs call this *leading;* word processors call it *line spacing.* Either way, you can have lots of space between lines or barely any. See the next page for an example of tight leading.

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Now's the time to make the lines much more interesting. Add a line height of 40 pixels to our "backgtext" style class, like so:

```
.backgtext{color: orange;
        line-height: 40px;
        font-size: 60px;
        font-family: Arial Black, helvetica, sans-serif}
```

You can place the line-height property anywhere in the declaration. The result is at right (we left out the foreground text to make the picture clearer). How did we do this trick? Compare the font size (60px) with the line height (40px). By setting the line height *smaller* than the font size, we made the two lines of text overlap. What would be unreadable in body text is positively artistic in a background display headline!

THE LINE-HEIGHT PROPERTY lets you make two lines of text overlap. To do this, make the line height smaller than the font size.

Triple Your Fun

At the beginning of this series on style sheets (Aug/97, p80), we showed you an example of overlapped text in three distinct sections. Don't even think about trying to figure out exactly how many pixels you need to move all that text on the page so that it overlaps just right. Instead, work in three individual <DIV> divisions. That is, get one pair of overlapping text blocks working just how you like them, then repeat it as often as you like, creating distinct divisions on the page for each block.

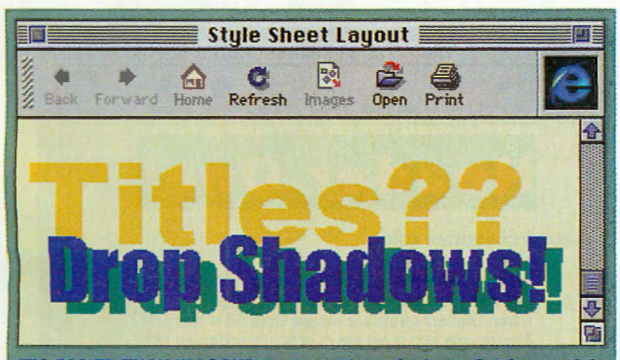
TO CREATE THIS COMPLEX OVERLAPPING EFFECT, you should work in three different divisions.

Here's the HTML that was used in the body of the first example page. Each of the "headinghl" classes in this example has its margin-top property set to -45px to bring it up over the background. Notice that each division essentially is identical to the previous one, except for the content and URL:

```
<BODY bgcolor=ffEE22>
<CENTER>

<DIV ALIGN=CENTER CLASS=heading>HOME</DIV>
<DIV       ALIGN=CENTER       CLASS=headinghl><a
href="home.html">Go Home</a></DIV>

<DIV ALIGN=CENTER CLASS=heading>START</DIV>
<DIV       ALIGN=CENTER       CLASS=headinghl><a
href="start.html"> Start Here</a></DIV>

<DIV ALIGN=CENTER CLASS=heading>EMAIL</DIV>
<DIV       ALIGN=CENTER       CLASS=headinghl><a
href="email.html">Write to Me</a></DIV>
</CENTER>
</BODY>
```

Creating Drop Shadows

Another interesting, if ugly, use for overlapping text is to create a drop-shadow effect in a title. It's relatively simple. Just place two bits of identical text on top of each another, differing only their text color and margins. The shadow text's color should probably be lighter than the foreground's, and the shadow's margin settings should be lower and farther to the right or left. Here's the HTML for the two styles, which we named "shadow," which is the shadow (duh!), and "foreground," which is the foreground (double duh!). The style definitions, as in all our examples, are placed inside the header of our HTML page:



IT'S EASIER THAN IT LOOKS to create drop shadows. But be careful. Drop shadows aren't always pretty.

```
.shadow {color: teal;
        margin-top: -30;
        margin-left: 20px;
        font-size: 50px;
        font-family: Impact, Arial, helvetica,
sans-serif }
.foreground {color: navy;
        margin-top: -68px;
        margin-left: 10px;
        font-size: 50px;
        font-family: Impact, Arial, helvetica,
sans-serif }
```

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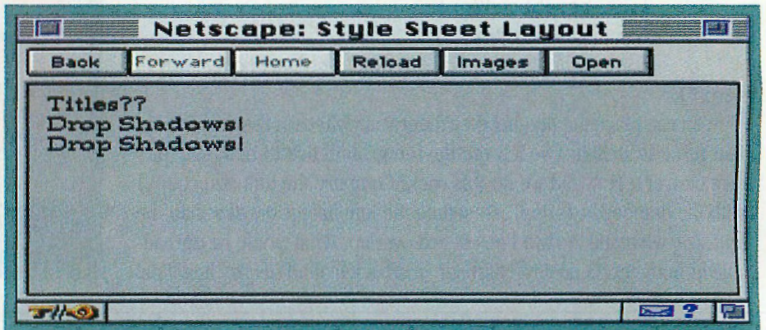
And here's how the classes are used in the body:

```
<DIV CLASS=mast>Titles??</DIV>
<DIV CLASS=shadow>Drop Shadows!</DIV>
<DIV CLASS=foreground>Drop Shadows!
</DIV>
```

This is precisely the same technique used to create our Backtext Words example, only this time we overlapped identical pairs of words and moved one of them only a slight bit relative to the other. As always, the only way to know exactly how much to move your margin-top and margin-right values is trial and error.

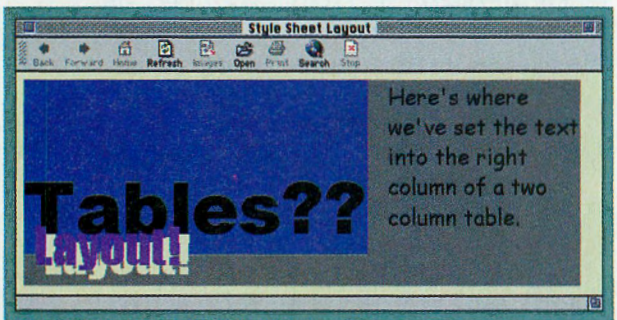
Our sincerest apologies for the icky color choices—you just aren't going to find the subtleties of true page layout in style sheets quite yet. And, as always, remember that many browsers are going to display something completely different from what you see when previewing in your style-sheet-capable browser. This screenshot shows what the drop shadows we created look like to a visitor using Netscape Navigator 3.0.1. It's not unreadable, by any means, but it's also not exactly what we have in mind for visitors to see....



THE DROP SHADOWS WE CREATED will look like this in a browser that does not support the style-sheet standards. They're legible but not snazzy.

Table Hopping With HTML

As you bring style sheets into your everyday repertoire of HTML techniques, remember that you can incorporate any of these style experiments into your usual HTML formatting ideas—inside tables, for example, or inside frames. Below is an example that uses both style sheets and a typical table layout. The fonts all were colored with style sheets, and we assigned a background color to one of the table cells. Also, we set the table width to a specific number to prevent the visitor from changing the layout by shrinking or enlarging the browser window.



AS YOU GET MORE COMFORTABLE using style sheets, you might try to incorporate them in tables and frames.

Here's the body code for this example, showing the table code as well as the styles:

```
<TABLE BGCOLOR=gray CELLPADDING=0 CELLSPACING=0
BORDER=0 WIDTH=560>
      <TR>
      <TD VALIGN=TOP CELLPADDING=0 CELLSPACING=0
      BORDER=3 ALIGN=CENTER BGCOLOR=blue>
            <DIV CLASS=mast>Tables??</DIV></TD>

      <TD VALIGN=TOP>
      <DIV CLASS=text>Here's where we've set the
      text into the right column of a two column
      table.</DIV>
            </TD>
            </TR>
<TR COLSPAN=2>
<TD><DIV CLASS=layer1>Layout!</DIV>
<DIV CLASS=layer2>Layout!</DIV>
</TD>
</TR>
</TABLE>
```

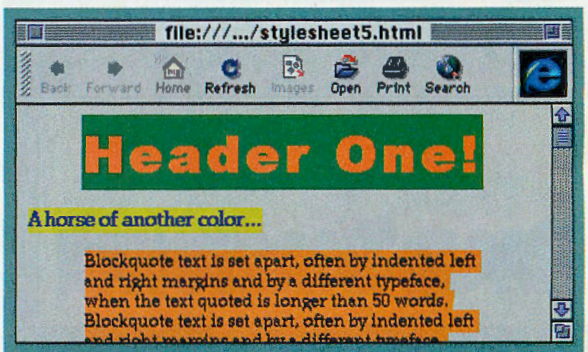
Too Ugly for Words

Here's one final stunt for your bag of tricks. We'll pass it along if you promise not to abuse it. Style-sheet standards allow you to set a background color to be associated with *any element, not just the page background*. Your headers, paragraphs, and divisions all can have their own background color. Using the property background-color, set the value to any valid style color. At right is a Web page in which the header, body, and blockquote styles all have different background colors. Don't say we didn't warn you!

Note that, for some reason, Microsoft Internet Explorer 3.0.1 would not properly display the background-color property. So I resorted to the property "background," which covers all background properties in a single command.

Now that you're armed with a wide array of tips for using style sheets, we encourage you to experiment. But be forewarned: We're not responsible if you create a really ugly page!

Joseph O. Holmes, aka Professor Web, would love to hear your tips and questions on this subject or any other Webmaster topic. Address your email to professorweb@pobox.com, but please remember, he can't personally reply to every message.



WARNING: USE WITH CAUTION! Style sheets let you assign a different color to every element on your page.

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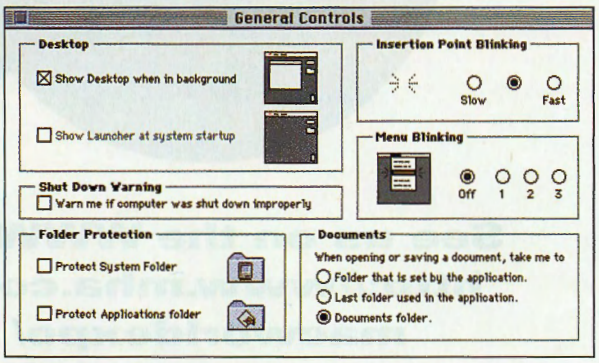
Unified Patents Exhibit 1023

ask us your questions

We answer your technical questions, no matter how simple or complex.

Q My father's Performa has decided that it must save everything to the Control Panels folder. I've tried just about everything I can think of besides reinstalling the Mac OS. Any suggestions?

A I suggest not resorting to anything as drastic as reinstalling until you try something simple first. Open the General Controls control panel. There are three radio buttons in the lower right corner that determine the location shown by default in Open and Save dialog boxes. My guess is that the Performa is set to save to the Documents folder, which was inadvertently placed in the Control Panels folder. Either move the Documents folder to a more appropriate location on the hard drive, or select one of the other radio buttons. I prefer saving to the last folder used in each application, but it's your dad's call. Of course, this setting determines only the default location shown in Open and Save dialog boxes; you can always manually choose a different location once the default is shown.



THE RADIO BUTTON selected in the lower right corner of the General Controls control panel determines the default location used when opening or saving documents.

Q How can I send email with attachments to a friend who owns a Wintel clone?

A If you're sending a text file, open it with a word processor, copy the entire thing to the Clipboard, then paste it into your email message. Your friend can then read it in his email program. If the attachment is anything besides a text file, it must be in a file format your friend could open if you handed it to him on a PC disk. For example, if you're sending a graphics image in JPEG format, your friend needs a program that can open a JPEG file. So first you must agree on a file format that you can both generate and open on your respective systems.

Even though your friend was misinformed enough to buy a Wintel clone, you should be able to agree upon a common format without resorting to strong-arm tactics. Having agreed upon a common format, the trick is picking a compression scheme. Most email programs compress attachments to reduce transmission times. If you both use the same cross-platform email program (such as America Online), it should be smart enough to figure out how to handle attachments automatically. Difficulties arise when you're sending from one email program and your friend is receiving with another. In that case, make sure you're using compatible compression schemes. When either of you receives a compressed attachment, it must be expanded before it can be opened.

The most common compression scheme on the Mac is the StuffIt archive (commonly indicated by the .sit file name suffix). In the Wintel world, the ZIP scheme rules. Pick a scheme that you both can compress and decompress. I recommend buying Aladdin Systems' StuffIt Deluxe, which handles everything you're likely to run across on the Web. Then tell your friends to download the appropriate free decompressing utility for Mac OS, Windows, or DOS at http://www.aladdinsys.com/consumer/expander1.html. Armed with good compression utilities on both sides, exchanging documents with PC users is easy. Just don't send attachments to Wintel users as self-expanding archives (indicated by the .sea suffix). Mac users may appreciate not needing a decompression utility, but Wintel users won't be able to run these miniprograms on their machines. If your email program doesn't allow sending attachments, you can get around this limitation by encoding the binary document into a long string of text using an algorithm such as BinHex, UUencode, or Base64. On the receiving end, if the email program doesn't automatically recognize encoded text as such, it'll look like a bunch of gibberish characters. Nothing went wrong with the transmission. The characters merely need to be saved as a text file and then decoded with the appropriate utility. Again, StuffIt Expander can handle this task.

Q I have an external CD-ROM drive that correctly plays the sound from all my multimedia CD-ROMs, but I can't for the life of me figure out how to get audio CDs to play through the Mac's internal speaker. Can you help?

A Nope, but I can explain why this is so. External CD-ROM drives have two different connectors on the back: a set of SCSI connectors and a pair of RCA output jacks (left and right audio channels). Multimedia CD-ROMs transfer their audio to the Mac's internal speaker over the SCSI bus as digital data. Audio CDs pump their music out the RCA jacks as analog signals. If you want to listen to audio CDs with an external CD-ROM drive, you need to route the analog audio to a set of external powered speakers or a stereo system. Or you can plug headphones into the jack on the front of most CD-ROM drives. But there's no simple way to send this analog audio to the Mac's internal speaker unless your Mac has AV inputs (different from the microphone jack), in which case you

FIND THE SHAREWARE and freeware mentioned on The Disc.

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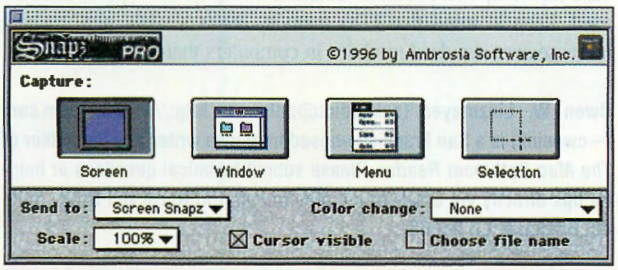
can connect patch cables between the RCA jacks on the back of the drive and your Mac. Internal CD-ROM drives have a separate audio cable that goes to the Mac's logic board so they have no trouble playing audio CDs through the Mac's internal speaker.

Q How can I take a snapshot of my Mac's screen if I want to include a menu that's pulled down? I tried pressing Command-Shift-3, but it doesn't take a picture until the menu closes.

A Built into every Mac is the ability to capture the main screen by pressing Command-Shift-3. If you hear the sound of a camera shutter clicking, all went well. Double-click your startup volume's icon and look for the PICT file labeled Picture 1, Picture 2, and so on. This file can be opened with SimpleText or any graphics program. But as you've discovered, this routine is rather limited because it can't capture open menus, and it always includes the cursor in the image, which is sometimes undesirable. With the introduction of Mac OS 7.6, Apple added a few useful screen capture options. Press Command-Shift-4, and the cursor changes into a crosshair, which you can drag to specify a rectangular area, such as a dialog box, that

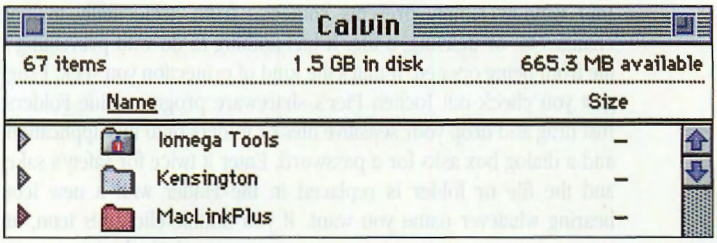


A SINGLE KEYSTROKE brings up the Snapz Pro palette, which allows you to capture, trim, crop, scale, and dither any portion of your screen in the blink of an eye.

you'd like to capture. If you have multiple monitors, press Command-Shift-4-Caps Lock, and the cursor becomes a bull's-eye that you can click on the screen you want to capture. Hold down the Control key in addition to any of these combinations, and the image is placed on the Clipboard instead of saved as a PICT image. As nice as these new features are, they still can't capture a menu when it's pulled down. Shareware to the rescue! Ambrosia Software (716-325-1910, http://www.ambrosiasw.com) makes a great little utility called Snapz Pro that takes screenshots of just about anything, anywhere, at any time.

Q I have a Performa 6400/180, which is supposed to have a 1.6GB hard drive. I recently noticed that it had only 210MB of free space, so I deleted a lot of things I didn't need, freeing up an additional 643MB. The problem is that when I look at the top of my hard drive's window in the Finder, it reports the disk size as only 769.7MB, not 1.6GB. How do I fix this?

A Easy there, big guy; there's nothing wrong with your hard drive, just with your thinking. Your Mac has a 1.6GB hard drive installed, and you have 853MB available. If you choose one of the icon selections from the Finder's View menu (or select the "Show disk info in headers" checkbox in the Views control panel), the headers display the number of items visible in the window, the amount of disk space they consume, and the amount of disk space available. You're misinterpreting the

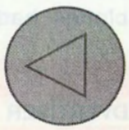


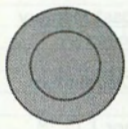
THE INFO SHOWN in window headers can be confusing if you don't know to add the "in disk" and "available" amounts to determine disk size.

"769.7MB in disk" to mean the size of your drive. Add this number to the 853MB available, and you'll see that, in fact, your hard drive has a total capacity of 1.6GB. If you don't believe me, launch Apple System Profiler (it should be in your Apple Extras folder), and choose Device Information from the Select menu. All devices on the first bus appear in the window on the left. Select the hard drive, and check that its capacity is indeed 1.6GB.

Q I've noticed that some Macs have two small buttons on them. One button has a triangle on it, and the other has a small dot. What do these buttons do?

A These are the Reset and Interrupt switches, respectively. Pressing the Reset switch restarts the Mac, whereas pressing the Interrupt switch opens a minidebugger (or MacsBug, available at http://www.download.com or on The Disc). Not every Mac has these switches. If you can't find little buttons with the triangle and dot icons, either someone neglected to install the plastic doodad (don't ask me where you can get these; I don't know if they're even still available anywhere) necessary for your older Mac, or your Mac doesn't have hard Reset and Interrupt switches. However, virtually every Mac can simulate the function of these switches via the keyboard. Press Command-Control and the power *key* on your keyboard (not the power *button* on the Mac) to mimic the Reset button, or press Command-power for the Interrupt function. OK, that explains what these keys are and how to use them, but not why. If your Mac crashes and force-quitting (Command-Option-Esc) doesn't allow you to save open documents, pressing Reset may at least allow you to avoid flipping the power switch or pulling the plug on your Mac. You'll lose any changes made to open documents, but the contents of your RAM disk (if any) will be saved. The Interrupt switch mainly is for programmers, not everyday schmoes like you and me. However, if your Mac crashes, press the Interrupt switch, and enter G FINDER, followed by Return, and you may be safely taken to the Finder. If it works, save all open documents, and choose Shut Down from the Special menu. If it doesn't work, hit Reset instead.





Q How do I keep my father from rummaging through my files? I tried locking my files in the Get Info window, but if my dad tries opening a locked file, the Finder just says it's locked and then opens the file anyway. Hey man, what gives? What's a girl to do to get some privacy?

A I'm not about to inquire as to the types of secrets a daughter wants to keep from dear old dad, but I will tell you how to keep pop's prying peepers out of your private stuff. The Locked checkbox in the Get

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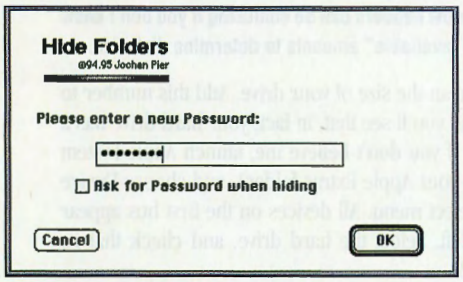
Info window simply prevents someone from accidentally making changes to, or deleting, a file. It has nothing to do with preventing a file from being opened. If that's the kind of protection you seek, I suggest you check out Jochen Pier's shareware program Hide Folders. Just drag and drop your sensitive files or folders onto this application, and a dialog box asks for a password. Enter it twice for safety's sake, and the file or folder is replaced in the Finder with a new icon bearing whatever name you want. If you double-click this icon, an alert box requests your password. Enter the correct password, and your hidden file or folder magically reappears; enter the wrong password, and you're denied access. If dad's a hacker for an ultrasecret government agency, or if he knows how to toggle a file's invisibility bit, it's likely he can crack his way into your hidden files, but otherwise you can consider your secret stuff relatively secure.



THE SHAREWARE HIDE FOLDERS offers simple security by making files and folders invisible.

Q I was on the verge of ordering a PowerBase 240 when a friend said that Power Computing machines were worthless and that I would be better off with something from UMAX. Of course, I immediately consulted *MacAddict* and found that Power Computing clones had received favorable reviews. My cynical friend claims that Power Computing clones use memory modules that are difficult to find and expensive. Is my friend full of beans?

A Your friend is so full of frijoles he could be a burrito. Power Computing's clones (800-999-7279 or 512-388-6868, http://www.powercc.com) have received high marks from the computer press and consumers alike. For that matter, so have UMAX Computer's SuperMacs (800-232-8629 or 510-226-6886, http://www.supermac.com). A few quick calls to several memory merchants was all it took to find that the PowerBase 240 uses 60-nanosecond (ns), 5-volt, 168-pin, EDO (extended data out) modules. In contrast, the SuperMac C600/240 is a similar machine that uses 70ns, 168-pin, standard FPM (fast-paged mode) modules. These two types of modules were available from every vendor I contacted, and prices were never more than $10 apart for a 16MB module, and in some cases, EDO modules were actually cheaper. Although I would never base my computer purchase decision solely on the type of memory used, keep in mind that EDO memory offers a slight performance increase over standard modules in computers that accept both types.

Hot Tip:
Yo ho ho and a bottle of redrum: Hold down the Shift key while double-clicking inside a QuickTime movie frame to play the movie backward, including the soundtrack.

Owen W. Linzmayer (askaddict@aol.com; http://www.netcom.com/~owenink) is a San Francisco-based freelance writer and the author of *The Mac Bathroom Reader.* Please submit technical questions or helpful tips directly via email or c/o *MacAddict,* 150 North Hill Drive, Suite 40, Brisbane, CA 94005.

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powerplay

Why people spread rumors that Apple is abandoning the consumer market.

Holiday Fun

There will be all kinds of goodies for Mac gamers this year. Most everybody will want Riven, the sequel to Myst, and we'd love to show you screenshots and the like, but Red Orb—Brøderbund's new consumer entertainment division—didn't bother to make its press kit cross-platform. As if Myst weren't written in HyperCard in the first place! Sheesh.

Working behind enemy lines is Atomic Games, hard at work on Close Combat 2: A Bridge Too Far. This killer sequel adds a bunch of nice touches: Buildings have more than one level, you can zoom in to a view, and you can set up all your combat maneuvers at once, rather than having to deal with them all in real time. One sacrifice Atomic did make, however, was small screens: You'll need a 17-inch monitor.

Sure to be a barrel of laughs, Starship Titantic is an adventure created by Douglas Adams. Adams has endeavored with Titantic to put more of the fluid gameplay of a text adventure into a graphical adventure. This is good news because many graphical adventures have extremely linear gameplay due to the constraints of the medium. Adams isn't alone in his pursuit—last year's Bad Mojo and the new RedJack: Revenge of the Brethren also expand the static graphical adventure.

For the third annual Electronic Entertainment Expo (E3), the games industry transplanted itself from the Silicon Valley and Hollywood into the heart of the South: Atlanta. Although it wasn't as big as last year's blowout in Los Angeles—attendance was down 35 percent—E3 proved it's a worthy successor to the Consumer Electronics Show (CES).

Picture a three-ring circus. Add 447 more rings and you get a sense of what E3 is all about. In the center ring you find the three main console game vendors: Sega, Sony, and Nintendo. Each of these companies had a huge, huge booth—the size of about 10 basketball courts crammed together. Filling these booths were dozens of stations showing off this year's holiday titles. Surrounding them and spilling out into every imaginable nook and cranny of the World Congress Center and the Georgia Dome were every game, multimedia, children's software, and development tools vendor you could possibly imagine. All tried to outdo each other in grabbing attention for their titles.

We Mac addicts will drool over whatever the gods at Bungie create.

Amid the racing cars, hairy-chested barbarians, and autograph seekers hounding Terry Bradshaw and Wayne Gretzky were a few products for the Macintosh. The coolest was TechWorks' Power3D, a 3D accelerator card for the Mac based on 3Dfx Interactive's Voodoo technology. This card screams. TechWorks reports benchmarks of 1 million triangles per second and 45 Mpixels per second. Benchmarks like these are hard to comprehend (can you imagine a million things at once?), but in this editor's subjective opinion, the Power3D feels faster than ATI Technologies' Xclaim VR card (we'll give you more accurate assessments in an upcoming review). It gets more performance by taking shortcuts, such as not including a 2D chip.

What that means is that you can't simply plug your monitor into the card and have it display your Mac desktop. The card displays only 3D graphics. To get such niceties as menus and dialog boxes, you have to plug the monitor cord into the card and use a pass-through cable to plug it into your standard monitor port, too. When displaying dialogs, for instance, the card fades out the 3D graphics and fades into your Mac's video port, then back again when the dialog is dismissed. ATI is not just standing still with this new competition in the Mac 3D market—the company will be upgrading its Rage II chip to the Rage Pro later this year—and remember, the Power3D doesn't have the other fancy features, such as QuickTime capture and accelerated playback, of the ATI card.

A 3D card isn't worth very much without games to play on it. Both ATI and TechWorks have been dedicated in working with vendors to make games run on their cards. We were not wowed by the card so much as the games running on it. MacSoft's Quake was oh, so smooth.

Also readying its latest game was Bungie Software Products. Nine out of nine machines displaying Myth: The Fallen Lords at Bungie's booth were PCs. Bungie did show off Myth's development tools on a Mac in the back of the booth to those who were interested. Well, you gotta do what you gotta do, and the truth is, we Mac addicts will drool over whatever the gods at Bungie create, because we know they produce quality products. The PC world has long viewed Bungie as "those Doom wannabe Mac heads." From what we could see, Bungie shed this perception at E3, and PC users had as much drool on their lips as we did—and it certainly wasn't just foam from Surly Dwarf Ale.

One booth we didn't get a chance to visit was Apple's. We couldn't take a look at it because it didn't exist. Bing Gordon, executive vice president of marketing at Electronic Arts, though not talking about Apple directly in an interview with Miller Freeman's *Game Developer* magazine, nevertheless conveyed why it is important for hardware vendors to come to E3:

"The most valuable feedback we get at E3 is not about software titles at all, but about hardware prospects. The "buzz" in each hardware booth defines retail and software community support for the rest of the year. Since most of our titles are on a 12- to 15-month cycle for

FIND A BIG QUICKTIME preview of Myth on The Disc.

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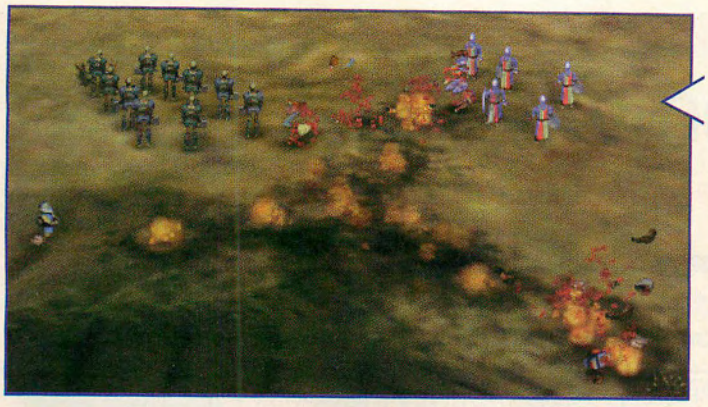
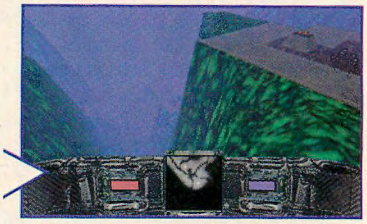
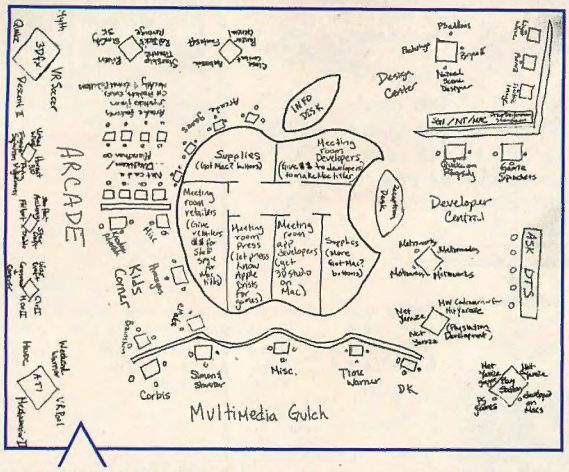


"THE BLOOD IS MORE FLUID," quipped Bungie propagandist Doug Zartman on playing Myth on a 3Dfx card.

ALSO SHOWING ITS WARES was Swiss developer Virtually Unlimited, which licenses 3D code to developers so they don't have to bother their pretty heads with all that math. These libraries are cross-platform, and they take advantage of RAVE or write directly to the 3Dfx card. Check them out at http://www.virtually3d.com.





WITH MINIMAL SPACE, Apple could have shown that it's a player in game design, development, and sales. This is the Apple booth we wish we had seen at E3—but didn't.

CAN YOU PICTURE an Apple exec in this get-up? Neither can we. But Intel CEO Andy Grove understands the importance of "fun."

fall release, we will use this E3 to prioritize our hardware support for Christmas 1998."

The hardware offerings at E3 consisted of those from Nintendo, Sony, Sega, Microsoft/Intel, and Bandai. No, our favorite fruit company couldn't be bothered to buy a booth at the biggest entertainment software trade show of the year.

Apple representatives met with major Mac game publishers at Macworld Expo in San Francisco last January. These reps asked the publishers which trade shows Apple should attend to show its support for games. They were told, "CGDC (Computer Game Developer Conference) and E3." Apple did not show up at either one. Granted, Apple is losing money, and needs to pick and choose the shows that will benefit it the most. We can understand skipping the CGDC, but missing E3 was the absolute stupidest thing Apple could do for the consumer market—because CES is no longer in existence, E3 is the only place to strut your consumer stuff.

Executives like Bing Gordon aren't going to get a "buzz" about the Mac as a game platform because there were no Macs to get excited about. What they saw was Intel CEO Andy Grove dressed up in an MMX dancer suit boogieing down during his keynote speech and proving that Intel puts the "fun" in PCs. They saw Microsoft's booth rivaling the size of Nintendo's, Sony's, and Sega's. They saw Microsoft on hotel room phone speed-dial and key cards, for goodness' sake. That's right—an operating system only two years old—Windows 95—has gained more gamer mindshare than a multimedia veteran. Apple didn't need to blanket the expo with marketing, as Microsoft did, but it could at least have shown up.

E3 isn't just about games. Children's software and multimedia title vendors come to show their wares, too. Apple's absence sent the message to developers that they don't need to worry about spending their precious time and money creating educational titles, interactive storybooks, historical CD-ROMs, and, yes, games, for the Mac this year because Apple couldn't possibly care less about whether they exist.

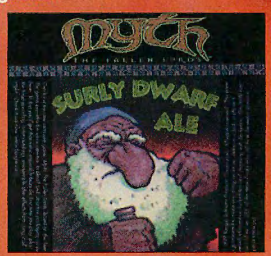
While we are down on Apple's lack of support for the consumer market, we are definitely up on Mac games. There are more great games that will be sold this year than we can count using both fingers and toes. There are rays of hope inside the mothership. The Power Mac 6500 team put a 3D accelerator chip on the motherboard and bundled four 3D games with it—and that model is selling like hot cakes. The reality that games are important to the consumer market is beginning to trickle up Apple's management hierarchy. Now, if only some sense could be beat into the people with power—the members of Apple's executive committee who've told us to use a compatibility card or Connectix Virtual PC to play games on our Macs. Maybe, just maybe, Apple's board will hire a CEO who has played Marathon. —*Kathy Tafel*

Tchotchke Watch

One of the ways companies at E3 try to influence your opinion is with tchotchkes—trinkets sporting the product logo, or some other kind of tie-in.

CyberFlix tied for best tchotchke. In addition to the squid squirt gun included in the standard press kit, "special" people got voodoo dolls (probably anybody who braved the long trek to CUC Software's off-site booth). These tchotchkes were promoting its new game, RedJack: Revenge of the Brethren. We didn't need the squid to see that this will be a great adventure. Based on the fifth generation of CyberFlix DreamFactory technology, the new engine lets you view 360 degrees, adds ambient sound (you can tell where the bar is, for instance, by the noise coming out of it), and greatly enhances interactions with characters. RedJack should be a suitably spooky game.

Bungie Software Products, in addition to the arrow sent our way, gave away 12 ounces of ale "guaranteed to make you strong as an ox, sharp as a tack, crafty as a weasel, eloquent as a charlatan and charming with the ladies."



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