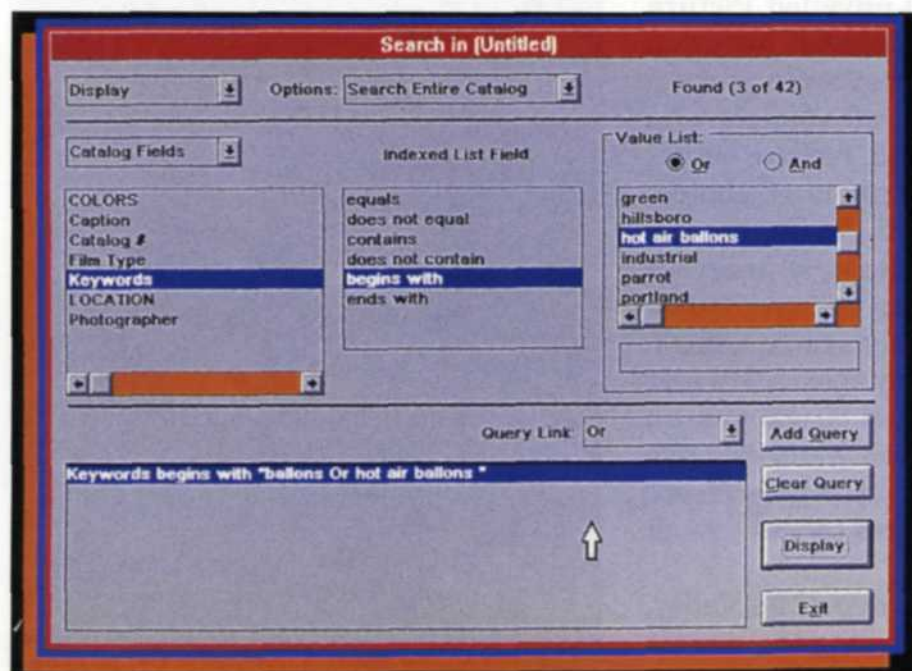


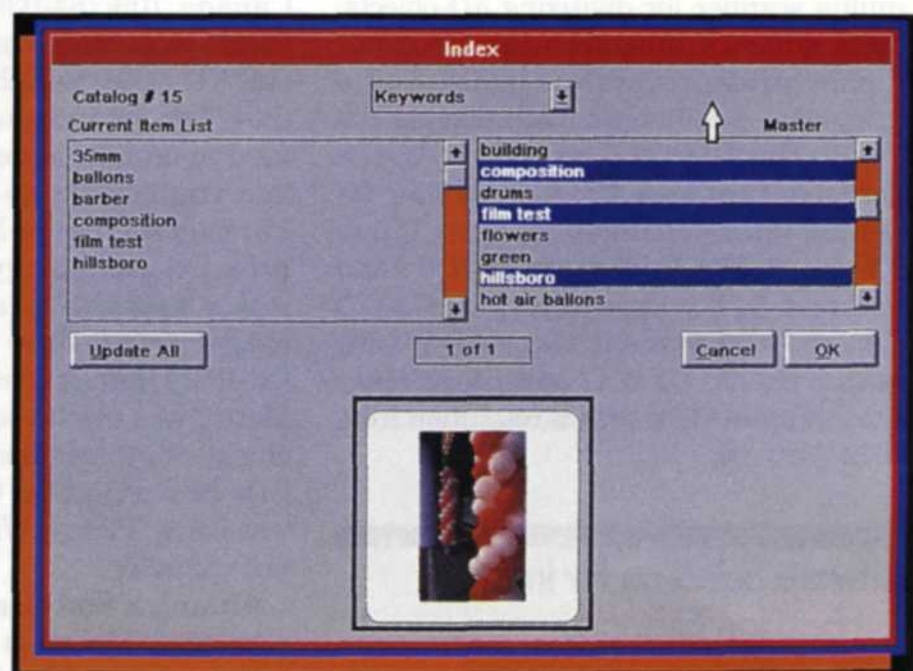
DIGITAL DIRECTIONS



[HIJAAK] Images collected in photo album



[KODAK SHOEBOX] Setting up search string, and "keywords" for image index



CHOOSE THE RIGHT

ONE OF THE key elements in operating a successful electronic imaging service is being able to quickly locate the right image file when you need it. In a traditional lab, you would simply amble over to your trusty file cabinet and pull the necessary images from the client's job folder.

In an electronic lab, file location requires the use of a computer program called an image database. Databases are certainly not new on the scene, since they were one of the first types of computer programs available. They store information in files, so you can quickly find a specific file using the "search and locate" tools.

Image databases are relatively new and feature a miniature representation of the actual photo, called a "thumbnail". When

an image database is first set up, it makes thumbnails of each photo stored in your computer and catalogs them into a picture album on your computer screen. This way when you need a certain photo, just view the picture album and make your selection.

Of course, there are dozens and dozens of image databases available, each with different ways of approaching image storage. The problem comes when deciding which image database software will perform the best in your electronic lab.

We have evaluated several of the products currently available in order to give you a hand in your decision making. Instead of comparing the image databases to each other, we felt that a better approach would be to point out the most desirable features

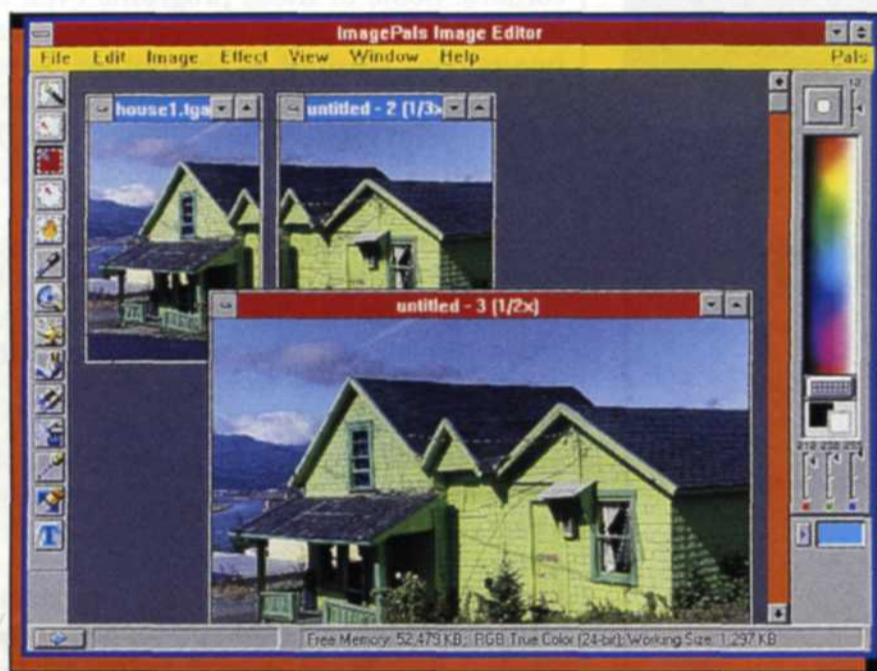
for an image database and show you how these features can help your electronic lab work more efficiently.

The most important part of any image database is the thumbnail. This small representation of the actual image can quickly show you which version of an image you are looking for. Let's say that you scanned in an image for a client six months ago, and made several changes over the next three months. The client wants one of the versions reprinted, but can't remember which one. With the thumbnails, the lab owner can easily look over the small images until the correct image is selected.

If you find that the thumbnails are too small for viewing, most of the image database software programs allow you to



[LEADVIEW 3.0] Photo album and image editor



[IMAGE PALS2] "Stitch" mode in image editor



[IMAGE PALS2] "Warping" function in image editor

IMAGE DATABASE

Jack and Sue Drafahl

increase the size of the thumbnail until you have only three to four images per screen. The average-size thumbnail allows for 15-20 images per screen. If you are still having trouble deciding between two photos, you can check the information included with each thumbnail. This additional information usually includes data about the image file itself such as: the date the file was made, size and type of file, resolution, and several other image attributes.

If the program is well designed it should also have the ability to add user information to the thumbnail. It could include: client's name, film format, subject, location, caption, image use, film type, photographer or original photo number. This additional information allows the lab operator to fine-tune

the search for a specific photo. It can also narrow down the amount of thumbnails you need to search through, especially if you have thousands of images from hundreds of clients. You could search very quickly by asking for a specific client, photographer, format and date. In a few seconds the image database would search all the records for these parameters and display only those thumbnails fitting that criteria.

An extremely important function in an image database is its ability to batch-print. This function allows you to select various images using the thumbnail database and then send the full image files to a specific output device. You'll learn just how important batch printing is the first time you need one slide of 50 different images!

Another key feature in an image database is its ability to convert from one file format to another. This is absolutely necessary to keep compatibility between graphics programs. There are dozens of possible file formats for your image database, and some work better than others with output devices. A client may bring in a scanned TIFF image for you to edit and shoot on a film recorder. You might import it into your graphics program, edit it, and save it as a TARGA file, and then image it on the film recorder. Later, after the job is done, you may even convert it to a JPEG compression format to save disk space.

When using the convert portion of the database, it is best to keep the original ver-

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Choose The Right Image Database

(Continued from page 25)

sion of the file until you see the new thumbnail in the database. If it looks the same, you can then delete the original version. Some of the more important file formats are TIFF, TARGA, BMP, JPG, EPS, MAC, PCX, PICT, and PCD.

The PCD format is the PhotoCD format and requires special considerations. If you need the PhotoCD format in your image database, make sure that the program you

select allows you to pick a specific resolution. You should also find out how long it takes to uncompress a full resolution PhotoCD image. Some of the programs we tested took up to 15 minutes per image to uncompress, while others took just a few minutes to do the same job.

Another key feature in an image database system is the image editor. These editors are usually linked to the database pro-

gram so that you can select a specific image from the database and expand it directly into this editor. This is accomplished with the "drag and drop" command. Using the mouse, select the file to be edited in your photo album and drop it on the image editor icon. The editor program will then start itself and load the image to be edited. These editors are usually not as complex as fully functional programs such as Photoshop or PhotoStyler, but you can still accomplish such tasks as cropping, rotation, dust removal, color correction, sharpening, gamma control and many other basic image manipulation controls.

All of these image editing programs allow the scanned images to be sent to output devices such as printers or film recorders. Some of these programs even allow "straight through" where the scanned image goes straight to the output device and then is saved afterwards as a thumbnail in your photo album. This "straight through" allows for expedience in the lab work.

An important control in the image editor is the convert command. This is not to be confused with the file "convert" program discussed earlier. This convert command changes 24-bit color to black and white or 256 color images to 24-bit color.

In some of the newer database editors you may find the "stitch image" command. This is an especially useful command that allows you to scan in sections of a very large image and re-assemble it in the image editor. The image is then saved as a single image file in your database and an updated thumbnail is added to the database photo album.

A bonus feature found in most image database programs is called "screen capture". This feature is not a necessity, but it is a nice extra. With this program you can save a selected portion or the entire screen to file. You might use the screen capture to make training aids for new photo lab employees, to enable them to learn the database system faster. You might also make screen captures of album pages for a client. Software manufacturers often use the screen capture function to show the many screens used in their software program. We used the screen capture to make all the images for this article.

We know that you're a very busy person. You have a photo lab to operate, so the last thing you have time for is comparing every feature software programs have to offer. Hopefully we have saved you some time by evaluating several software packages, putting them through the paces in our electronic imaging business and creating a list of important features for you.

(Continued on page 28)

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Choose The Right Image Database

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Shopping List for Features in Image Database Programs

1. Ability to change the size of thumbnails.
2. Batch printing of image files and album pages.
3. Ability to add key word list to each thumbnail.
4. A search function that can access key word list.
5. Linked image editor.
6. File conversions—the more the better. Should include fast decompression of PhotoCD.
7. Ability to read PhotoCD images from the hard disk.
8. Ability to scan directly into thumbnail photo album.
9. Multi-album display and search.

10. Automated insertion of files into the photo album.

In our business we ended up with two different image database systems. We use one image database for PhotoCDs because of their differences in speed and versatility, and another database for all other image formats.

By reviewing four different programs we found that each seemed to excel in different areas. Kodak's Shoebox is a great program for PhotoCDs as it stores CD images at five resolutions and can store thousands of low-resolution images. LeadView for Windows is perfect for those who work with a lot of compression programs as it saves disk space and transmission time by converting images to compressed file types. Image Pals2 for Windows has an excellent photo album, image editor and offers the screen capture feature and HiJaak Pro offers over 60 different file conversions.

Before you decide on a program, you should evaluate your lab's needs and check the program's features to see if you have a match. Take your time when selecting the image database. Don't settle for less than you want. See it demonstrated if at all possible. Call for literature so you totally understand all the program's features. Remember, once you make up your database, you want it to work for you, day in and day out, and you certainly don't want to do it over again in six months!

Jack and Sue Drafaul own and operate a custom lab in Portland, OR. They are also professional photographers, specializing in underwater photography.



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