

## Tips for Managing Digital Medical Images

Digital imaging, which has become the norm in commercial and consumer photography, is now also becoming the imaging method of choice for medical professionals. This powerful and convenient technology is compelling because it dramatically improves patient care while saving time and money for doctors, hospitals, and clinics.

MediCapture, Inc., a long-time leader in the field of digital medical imaging, offers products that can easily and inexpensively bring digital imaging to any medical practice. The MediCap™ device captures digital images from video sources such as ultrasounds, endoscopes, and surgical cameras. It's designed to be very easy to use, capturing images to a removable USB flash drive at the touch of a button. When the imaging session is finished, you can remove the flash drive and insert it in the USB connector on your computer. You can then copy the images to your computer where you can archive them, email them, enhance them, etc. This document contains tips on how you can take full advantage of the digital images captured by your MediCap.

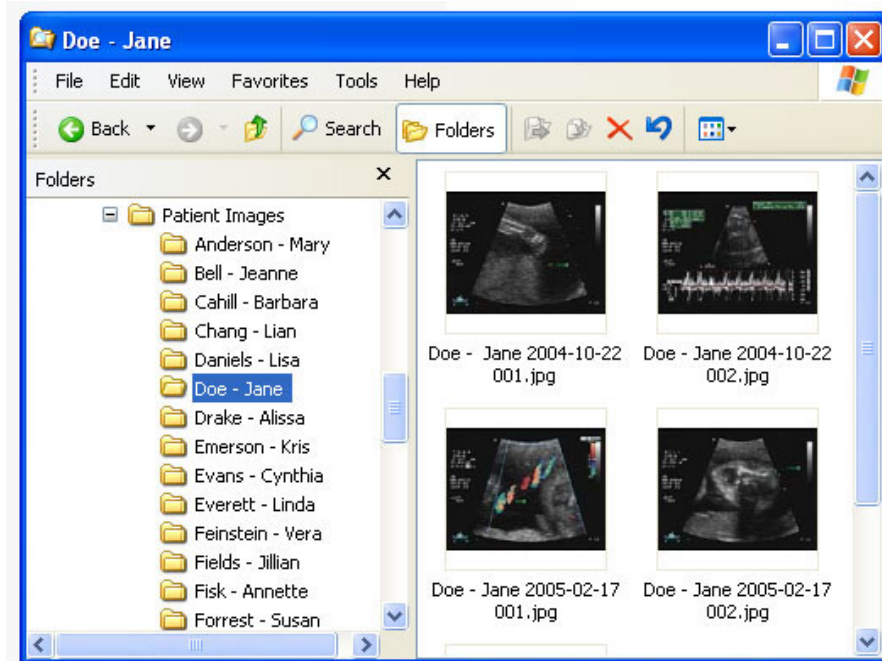
### **Do I need to buy special software to manage my digital medical images?**

No! Today's computer operating systems (like Windows®) include built-in tools that are specially designed to help you organize and archive images. The MediCapture Image Wizard which is included with your MediCap also helps you manage your images. This document describes how to create a friendly, convenient system for managing your images using only the built-in facilities of Windows and the provided Image Transfer Wizard. Third-party software packages for managing digital medical images can further enhance the usefulness of your images, but they are not required to experience the tremendous benefits of digital imaging.

### **Basic Organization**

Managing digital medical images on your computer is easy! The figure on the next page shows an example of how you can easily organize your digital medical images on a Windows computer. Archiving your images in folders like this allows you to instantly locate any image you wish. Note the following about this example:

- The example archive shows the “explorer-style” window that displays a list of folders on the left and the contents of the selected folder on the right. To access the explorer window, RIGHT click on the “Start” button (usually in the lower-left corner of your screen) and then select “Explore” from the pop-up menu. Then you can “browse” to the desired folder.
- The example also uses the “thumbnail” view that shows a small picture of each image. This view is available by clicking on the “View” menu choice at the top of the window and then selecting “Thumbnails.”



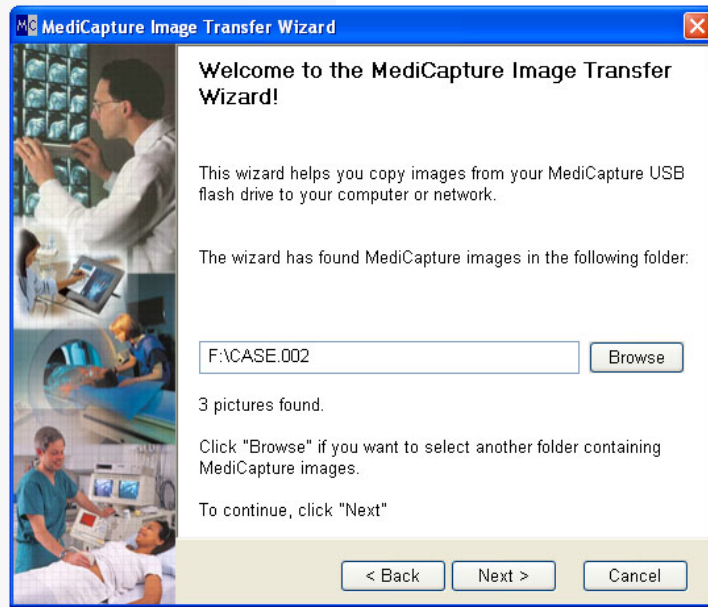
Example Archive of Digital Medical Images in Windows

Here are some more notes about the example archive:

- Creating one folder for each patient is a good technique.
- When naming folders, you can use the patient name as in this example. If so, you may want to use “last name first” as shown. As an alternative to using the patient name, you can use the patient ID or a combination of patient name and ID. For example, “Doe - Jane 02375843” or “02375843 Jane Doe.”
- When naming individual images, use a similar system to the one you used for naming folders. In addition, you may want to include a date in the image name. Using a “reverse date” is an excellent technique. It’s in the format yyyy-mm-dd. For example, 2005-05-25 indicates May 25, 2005. This format ensures that the files will sort in the proper chronological order even when they span multiple years.
- To create a new folder in Windows, browse to the “parent” folder where you want the new folder to reside. Then RIGHT-click and select “New,” then select “Folder.” You can then type in the name of the new folder.
- To rename a folder or file, click on the name, wait a couple seconds, then click again. Alternatively, you can RIGHT-click on the name and select “Rename.”
- You can create the folders for your archive using Windows or you can create them “on the fly” while using the Image Transfer Window as described next.

### Using the Image Transfer Wizard

The MediCapture Image Transfer Wizard helps you transfer images from your USB flash drive to your computer. The wizard is very easy to use. It starts automatically when you insert the flash drive and then “walks” you through the transfer process so there’s usually no need to read any documentation. However, if you do have questions about the Wizard, see the *MediCapture Image Transfer Wizard User Guide* which is located in the Support section of the MediCapture web site at [www.medicapture.com](http://www.medicapture.com). The following section describes a few tips you can use while working with the Wizard.

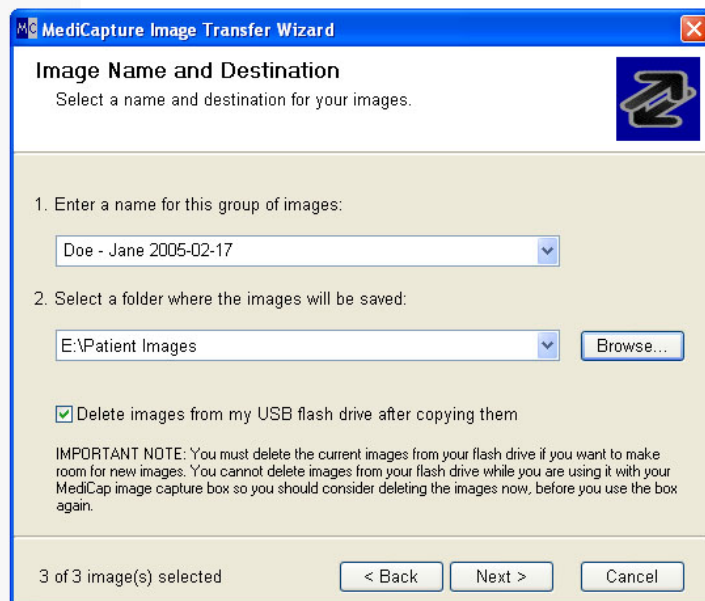


*Image Transfer Wizard Example: Images will be copied from the folder on the flash drive named "CASE.002"*

### Friendly File & Folder Names

When using the MediCapture Image Transfer Wizard, you will first select a folder on the USB flash drive containing the images you want to copy to your computer. You'll notice that the folders have names like "CASE.002," "CASE.003," etc. Each of these folders contains the images for one capture session (a session ends when you press the "Save" button on the MediCap box). For example, suppose you capture images of Jane Doe and then press the Save button. Then all of Jane Doe's images will be in a folder called something like "CASE.002."

After you specify the folder on the flash drive you are copying images *from*, you will be guided to a screen where you specify the folder you will copy the images *to*. A sample of this screen is shown here. In this example, the images will be copied to a folder named "Doe, Jane." You specify the folder by using the "Browse" button. This can either be an existing folder or a new folder you create by clicking the "Make New Folder" button in the browse window. *It's important to specify a folder consistent with the organization you planned for your archive* (see "Basic Organization" earlier).



*Image Transfer Wizard Example: Images will be copied to the folder on the computer named "Doe - Jane." The first image will be named "Doe - Jane 2005-02-27 001," the second image will be named "Doe - Jane 2005-02-27 002," etc.*

In the same screen you also specify a name for this group of images. This will start the file name for each image in the group. For example, if you specify "Doe - Jane 2005-02-27," the first image in the group will automatically be named "Doe - Jane 2005-02-27 001," the next image will be "Doe - Jane 2005-02-27 001," etc. *As shown in this example, it's a good idea to specify the patient's name here (and/or the patient's ID) plus*

a *date*. This will help keep your files organized and will save the time that it would otherwise take to identify the files manually. It's also a good idea to use a "reverse date" format as shown. This helps sort the files chronologically.

**Note:**

Windows XP does not allow these characters in file and folder names: \ / : \* ? " < > |  
Earlier versions of Windows also do not allow these characters: . , ; [ ] = +

**Locating Images**

If you organized your archive as described above, it will be easy to quickly browse to any images you want. You can also use the powerful search tool in Windows to find the desired images. To start the search tool, simply click on the "Search" button at the top of a folder window or use ctrl-F (hold down the ctrl key while you press the F key). Then enter the file name (or just part of the name) that you want to search for (for example, "Doe"). The search tool will find all matching files in the current folder and in all of its sub-folders. If you're really having problems finding a file, browse to the highest level on your disk and start the search tool from there – this will search the entire disk.

**Emailing Images**

It's easy to email images! This is one of the many powerful benefits of digital images. Now you can easily ask for a second opinion from a colleague by simply emailing him or her the relevant image.

To email an image, "attach" it to the email before sending it. In the Microsoft Outlook email program, you can attach an image to an email by "dragging and dropping" it into the email. Alternatively, you can position the cursor anywhere in the email and select "Insert" from the menu at the top of the email. Then select "File" and browse to the desired image.

**Inserting Images in Microsoft Word and PowerPoint Documents**

Another benefit of digital images is that you can easily insert them into reports and presentations. To insert an image in a Microsoft Word document, simply position the cursor where you would like the image to appear. Then select "Insert" from the menu at the top of the document, and select "Picture" followed by "From File." Browse to the desired image and double-click on it. You can resize the picture by clicking on it and then dragging one of the corners. Other options are also available when you RIGHT-click on the image and select "Format Picture."

The procedure for inserting an image in a PowerPoint presentation is similar except that you don't need to position the cursor first. Simply select "Insert" from the menu at the top of the slide, then select "Picture" followed by "From File." Once the image is in the slide, you can drag it to the desired position and resize it by dragging a corner.

**Using a Report Template**

Another way to organize the images in your archive is to insert them in patient reports. This allows you to store the images along with important information about the patient's condition. MediCapture provides a simple report template in Microsoft Word that you can use "as is" or customize for your practice. The template is available in the Support section of MediCapture's website at [www.medicapture.com](http://www.medicapture.com). A sample of the template is shown on the next page.

