

INCISIVE SOFTWARE

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TECH SHEET

SCANNING DOCUMENTS

Key Points

Choose an image resolution that gives you the clarity you require and also the smallest possible file size ~ A single page should be about 15 – 30 Kb in size ~ Try different Scan settings to see which work the best for you ~ Make sure the scanned image is legible ~ Check you are backing up the scanned document files.

Overview

Ideally patient information should be held as binary data within a database (entered via the keyboard) rather than as scanned documents as it is easier to do database queries and takes considerably less storage room.

However there are times when scanning documents related to a patient is a useful supplement especially where physical file storage space is at a premium.

The scanned documents are not stored in the database but as **TIF** files in a directory. Each image that is assigned to a patient by the software will be automatically copied to the correct directory for the nominated doctor, given a unique ID, and have that ID stored in the database.

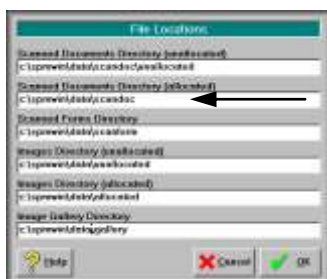
Good quality 'document' scanners should be used with 'Automatic Document Feeders' (ADF) and have SCSI or USB interface connections. Unless you plan to scan in photographs or x-ray films you should not use entry level 'flat bed' scanners as they are too slow and cumbersome.

Setting up

The scanner can be connected to either a workstation or the server. Because of the extra work that the workstation is going to have to do you will need to have at least 256Mb of RAM. More RAM is preferable.

The correct TWAIN drivers for the scanner and version of the operating system you are using (Windows NT, 2000 etc) needs to be installed onto the computer that is connected to the scanner.

Make sure there is a 'base' directory for the scanned documents to be stored in. The software will automatically add the directories for each User to this 'base' directory. If there is no such 'base' directory use a technician to make a directory (usually off the Data directory but can be anywhere) and call it 'Scandocs'.



In the software go to the Setup module and use F2 to select the User. Select 'System' and then 'File Locations'.

Enter in the drive and path to the 'base' directory. Use UNC or 'Mapped' drives

Scanned documents can be stored on separate physical drives or special purpose Network Storage devices.

If you are using Windows 98, 2000 or XP you will need to make sure that no other software program is selected to automatically capture the scanned images from the scanner. In Settings – Control Panel – Scanners & Cameras make sure that this setting is not selected.

Scanning documents

Scanned documents are automatically assigned to a particular patient during the scanning process.

Each image file (tif format) can hold multiple pages of scanned documents. This means that a patient's complete file can be scanned and all of the pages will be stored in one image file. This is only possible using scanners that have ADF.

Preparation of documents

Make sure all the staples and paper clips are removed and that the papers are not stuck to each other. If necessary fan through them to loosen them up.

The better quality 'document' scanners should be able to scan coloured paper without it becoming illegible.

Caution – some hand-written notes may not produce a good quality image especially if it was written in pencil or with a red (or similar) coloured ink. **YOU MUST CHECK THAT THE SCANNED IMAGE IS LEGIBLE.**

Getting ready to scan

In 'Patient' module select the patient and go to the 'Notes' tab. Select the 'Scan' option.

If you have more than one TWAIN driver loaded on your computer a window will appear prompting you to select the correct driver for the scanner you are using. If there is only one TWAIN driver on your computer no prompt will appear.

Scan settings

When the 'Scan' option is activated there are a range of settings that can affect the quality of the scanned image.

Resolution

Usually set to 200x200 or 300x300 dots per inch (dpi). This setting has one of the largest effects on the size of the image file. Try to keep the setting as low as possible whilst still keeping it legible.

Some scanners (eg Canon DR-3020) have special functions if the depth setting is 0 (zero).

Brightness

Setting from -100 to 100.

Usually the best setting is 0.

Contrast

Puts more or less emphasis between the text and the background.

Setting from -100 to 100. **Usually the best setting is 100.** This makes the text much darker. This is especially useful when scanning handwritten notes that might be quite light.

Colour

Options of Colour, Greyscale and Black & White.

Standard documents should always be scanned in **Black & White**. If they are hard to read then Grayscale could be used.

This setting will have the largest effect on the size of the image file.

Save automatically

If checked ON each document will be automatically saved as it is scanned. Only one image will appear in the left hand column even if there are multiple pages.

If not selected, all of the separate pages will appear in the left hand column as 'thumbnails'. You need to **'tag'** each page you want to save by clicking on it with the RIGHT mouse button. Then select the 'Save' button.

Despeckle

Despeckling is a process which can identify specks of 'dust' on the scanned image and remove them without deleting the text.

If checked ON each scanned document will have one despeckle pass run over it before being saved.

Additional efforts to despeckle an image can be done by clicking on the 'Despeckle' button.

Duplex

If the scanner you are using can scan both sides of one document during one pass through the scanner then this option needs to be turned ON.

If images are created of blank pages you need to turn the 'Save Automatically' option OFF and do not 'tag' these blank pages to be saved.

Blank Page Threshold

If a scanned page is blank (or nearly blank) or the amount of text on the page is less than the threshold value as a percentage of the whole image size, the page will be assumed to be blank and will not be shown as a thumbnail in the left hand column and will not be automatically saved.

Caution – this setting could potentially mean that a page that does hold a very small amount of genuine patient information could be under the threshold and therefore not saved. It is intended to exclude those pages that are blank or just have some 'dust' specks on them. The default setting is 0.75

Saving the scanned document

If the 'Save automatically' option is checked on all you need to do is to click on the 'Close' button.

To manually save, once all of the pages have been scanned you need to click the RIGHT mouse button on the thumbnail images in the left hand column that you want to save. Once selected click on the 'Save' button and then the 'Close' button.

Displaying scanned documents

All of the pages held within a multi-page TIF file are displayed as thumbnail images in the main Notes screen.

In 'Notes' tab in the 'Patient' module make sure the word 'Scanned Doc' is highlighted in the left hand column and then press the **Spacebar** to view. This will make the image zoom to full screen display. (Don't double click on the image)

Displaying the NEXT page

When displaying the image in a full screen mode you can jump to the Next or previous screen by:

- Clicking on the words Back or Forward at the top of the screen, or;
- Clicking the LEFT mouse button anywhere on the page to advance forward one page or click the RIGHT mouse click to go back one page.

Setting the display size

Select from the drop-down list the setting that you prefer to see the page displayed at each time. This setting is saved.

Deleting scanned documents

From the 'Notes' tab click on the 'Scanned Doc' you want to remove and then click on the 'Delete' button.

You can only delete the whole image file not just one page

Printing scanned documents

In the Notes tab either:

- click on the 'Scanned doc' in the left hand column and then press the F6 key to 'tag' the file. Click on the 'Print' button and the select 'Print tagged entries', or;
- click on the 'Scanned doc' in the left hand column. Click on the 'Print' button and select 'Displayed Entries'

Backing up

It is very important to make sure that your backup system is large enough to store all of the scanned document images.

Also make sure that the technician who configures your backup software knows where the image files are.

Copying scanned documents to a Notebook computer

If you want to take a copy of the scanned documents on your Notebook computer to able to view them at a remote clinic you need to copy the files across and then run a special program to change the settings in your local database which records where scanned documents are.

Call the Incisive Software support line for more information.