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**User's Guide for
Scan 'n Store[®] Application, *Version 2.2x*
for 32-bit Windows[®] Environments
(Microsoft Windows[®] 95/98/NT4.0)**

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Table of Contents

TABLE OF CONTENTS	I
INTRODUCTION	1
ABOUT THIS MANUAL.....	1
<i>Documentation Conventions</i>	2
CHAPTER 1 INSTALLING SCAN 'N STORE	3
INSTALLING SCAN 'N STORE.....	3
STARTING AND EXITING SCAN 'N STORE	4
CHAPTER 2 ADMINISTRATIVE OVERVIEW	5
UNDERSTANDING LIBRARIES	5
DESIGNING AND ORGANIZING LIBRARIES	6
<i>Scenario 1: Storing purchase orders received by large companies or businesses</i>	7
<i>Scenario 2: Photographs of damaged property for insurance claims</i>	8
SCAN 'N STORE DATABASES.....	9
<i>Access Databases</i>	10
<i>ODBC Databases</i>	11
CHAPTER 3 NAVIGATING SCAN 'N STORE	15
USING THE SCAN 'N STORE WORK AREA	15
<i>Toolbars</i>	16
File Toolbar	17
Image Toolbar	18
Mouse Toolbar	20
Page Toolbar	21
<i>Search Window</i>	21
<i>Results Window</i>	22
Search Results tab	22
Batch Index tab	23
<i>Image Viewer</i>	23

CHAPTER 4 MANAGING LIBRARIES	25
USING THE LIBRARY TAB	25
CREATING LIBRARIES	27
OPENING LIBRARIES	29
CONFIGURING LIBRARIES	31
<i>Using the Fields table</i>	<i>31</i>
Field	31
Type	32
Required?	33
<i>Defining Categories for a Library.....</i>	<i>34</i>
CHAPTER 5 ADDING IMAGES TO LIBRARIES	37
IMPORTING IMAGE FILES	37
<i>Importing Existing Images</i>	<i>38</i>
<i>Scanning Images</i>	<i>39</i>
Configuring Your Scanner	40
Configuring Your Jobs	42
Scanning Documents.....	44
<i>Acquiring Images from TWAIN Devices</i>	<i>45</i>
About TWAIN Images in Scan 'n Store.....	46
INDEXING IMAGES	47
<i>Using Default Keywords</i>	<i>49</i>
ENHANCING IMAGE QUALITY	51
ADDING IMAGES TO A LIBRARY	52
<i>Deleting Imported Images.....</i>	<i>52</i>
CHAPTER 6 FINDING IMAGES IN LIBRARIES.....	53
USING THE SEARCH RESULTS TAB	53
BROWSING WITH FLEXFOLDERS	54
<i>Changing the Sort Order.....</i>	<i>56</i>
SEARCHING WITH KEYWORDS	58
<i>Finding All Images.....</i>	<i>59</i>
<i>Narrowing Your Search</i>	<i>60</i>
Using Comparison Values.....	60
<i>Free-Form Searching.....</i>	<i>62</i>
Using Free-Form Search Criteria	63
<i>Resetting Search Parameters</i>	<i>63</i>
<i>Deleting Images From a Library</i>	<i>64</i>
CHANGING IMAGE INDEX VALUES.....	65
PRINTING IMAGES.....	66

CHAPTER 7 EXPORTING IMAGES FROM LIBRARIES	67
EXPORTING TO EXISTING DATABASES	67
EXPORTING TO NEW DATABASES	72
CHAPTER 8 VIEWING IMAGES.....	77
SIZING IMAGES	77
<i>Zooming In 50%</i>	77
<i>Zooming Out 50%</i>	77
<i>Using Preset Image Sizes</i>	78
Reset to Original	78
Actual Size	78
Full Image	79
ROTATING IMAGES	79
<i>Rotate Left</i>	79
<i>Rotate Right</i>	80
SETTING IMAGE QUALITY	80
<i>Draft</i>	80
<i>Better</i>	81
<i>Best</i>	81
<i>Adjusting Anti-Aliasing</i>	81
<i>Fixing Scanned Images</i>	82
USING THE MOUSE IN THE IMAGE VIEWER	83
<i>Flying Magnifier</i>	83
<i>Stretch Zoom</i>	84
<i>Hand Pan</i>	84
<i>Select Area</i>	85
VIEWING MULTIPLE-PAGE TIFF IMAGES.....	86
<i>First Page</i>	86
<i>Previous Page</i>	86
<i>Next Page</i>	87
<i>Last Page</i>	87
<i>Goto Page</i>	88
CHAPTER 9 WORKING WITH ANNOTATIONS.....	89
CREATING ANNOTATIONS	89
SELECTING ANNOTATIONS.....	91
EDITING ANNOTATION PROPERTIES	92
USING THE ANNOTATION PROPERTIES DIALOG BOX.....	94
<i>Box and Ellipse Annotations</i>	94
<i>Text Annotations</i>	97
<i>Line Annotations</i>	100
ANNOTATION STORAGE	102

CHAPTER 10 USING SCANFIX.....103

ADJUSTING “DE-SKEW”104
USING SCANFIX ON MULTI-PAGE TIFFS106
REMOVING NOISE FROM IMAGES107
REMOVING DOT SHADING FROM IMAGES109

APPENDIX A QUICK START TUTORIAL A-1

SECTION 1: SEARCHING LIBRARIESA-1
Lesson 1: Search a Library..... A-1
 Before You Begin A-1
 Open a Library A-2
 Search the Library Database..... A-3
Lesson 2: Sort the Search Results List A-5
Lesson 3: View Images With the Image Viewer A-5
 Zoom In/Out on Images A-5
 Rotate Images..... A-6
 Improve Image Quality A-7
 Zoom on Selected Portions of an Image A-8
 Print a Selection..... A-10
SECTION 2: ENTERING IMAGES INTO LIBRARIESA-11
 Before You Begin A-11
 Lesson 1: Scan a Document..... A-12
 Lesson 2: Import an Image A-15
 Lesson 3: ScanFix an Image A-15
 Lesson 4: Check the Field Name Configurations..... A-16
 Lesson 5: Index an Image A-16
 Assign Keywords to Field Names A-16
SECTION 3: MAKING A NEW LIBRARYA-19
 Before You Begin A-19
 Lesson 1: Create a Database A-20
 Lesson 2: Assign Categories to a Library..... A-22
 Lesson 3: Add Images to New Libraries A-25
 Lesson 4: Export Images to New Libraries A-26

INDEX

Introduction

Scan 'n Store is a software product that allows organizations and workgroups to easily scan, index, store, and retrieve large numbers of graphics and documents. The ability to store information about each scanned graphic or document means you can quickly search for images based on specific keywords you define when you configure the Scan 'n Store image database.

About this Manual

This manual assumes you know how to use a mouse, open a menu, and choose menu and dialog box options. The book groups subjects into two parts:

- **Part 1** — Introduction, Chapters 1 & 2
This section covers the Scan 'n Store documentation, DocuStream contact information, software and hardware requirements, installation, and an overview of Scan 'n Store.
- **Part 2** — Chapters 3 - 10
This section covers how to use the software.
- **Part 3** — You can also refer to the *Scan 'n Store Tutorial* in Appendix A for a quick introduction to using the software. When you are using the software, you can refer to the online help provided with Scan 'n Store.

To use the online help

- Click on the **Help** button in the Scan 'n Store window.
- Press F1 to display context-sensitive help.

Documentation Conventions

This manual uses documentation conventions that closely resemble those used in other Windows documentation

This...	Means...	Example
bold	Menu names, dialog boxes, and options.	Click Browse .
<i>italic</i>	References to specific files.	Open the <i>AcctRcv.mdb</i> file.
ALL CAPS	Specific keys.	Press ENTER.

Chapter 1

Installing Scan 'n Store

This chapter briefly describes everything you need to know about installing Scan 'n Store. It includes information about system requirements, installing, and starting Scan 'n Store.

Installing Scan 'n Store

To install Scan 'n Store,

1. Insert the Scan 'n Store CD-ROM in the drive.
(The installation program should start automatically. If it does not, proceed to step 2.)
2. From the Windows **Start** menu, click **Run**.
3. Type *d:\setup* at the prompt, where “d” is the path of your CD-ROM drive.
4. Click **OK**.
5. Follow the instructions that appear on the screen.

Starting and Exiting Scan 'n Store

Use these instructions to start and exit Scan 'n Store.

To start Scan 'n Store,

1. From the Windows **Start** menu, click **Programs**.
2. Select **Scan 'n Store 2.0**.
3. Select **Scan 'n Store**.
(The start screen appears.)

To exit Scan 'n Store,

- In the **File** menu, click **Exit**.

Chapter 2

Administrative Overview

Scan 'n Store is a software product that allows organizations and workgroups to easily scan, index, store, and retrieve large numbers of graphics and documents. The ability to store information about each scanned graphic or document means someone can quickly search for images based on specific keywords the administrator defines after installing the Scan 'n Store image database.

Unlike other programs that simply archive and store graphics, Scan 'n Store keeps track of the relationships among the images to make them easy to find and use.

Understanding Libraries

Scan 'n Store uses the concept of a “library” as a metaphor for storing, identifying, and retrieving images. A Scan 'n Store library consists of:

- Groups of images stored in a database or directory.
- Sets of keywords and descriptions stored in a Microsoft Access database. The keywords and descriptions identify groups of images and specific images within each group.

In the same way that you might use author names, titles, or subject keywords to search for books in a library, you can define ways to search for images in a Scan 'n Store library.

Designing and Organizing Libraries

Before you begin working with Scan 'n Store to create a library of images, take time to think about a few issues concerning how the library should be organized so people can find what they want quickly and efficiently. Like any real library, the organization of the data affects the usability and usefulness of the information it contains.

- **Use logical groupings of images in the library.**

Determining differences and similarities between images can help define possible search topics. For example, one person might want to gather all the materials related to a single author, while another might need to search for all the materials created before a certain date.

- **Be specific when you define searchable fields for your library.**

Choose specific search categories that allow users flexibility when searching. For example, users who want to search for an author might want to search for all authors with first names “William” or all authors with last names “Shakespeare.” Thus you would want to provide two fields, a “first name” field and a “last name” field, rather than a single “name” field to accommodate more granular searches.

- **Use consistent naming conventions when you enter data for each field.**

Be consistent in your use of initial capital letters, abbreviations, and numbering systems. Inconsistent use of naming conventions can affect the reliability of a search.

The following examples illustrate two common type of libraries. Each example includes tips for organizing library images and highlights pitfalls you should avoid.

Scenario 1: Storing purchase orders received by large companies or businesses.

Businesses that deal with large volumes of incoming purchase orders need to have a system to quickly and easily retrieve specific POs to handle a variety of sales, administrative, and customer service situations. To make the stored images accessible to these distinct groups, begin by looking for categories of information common among all the POs. These categories might include:

- PO
- Date
- Company name
- Total cost
- Rep (sales representative name)
- Paid (yes/no)

By creating individual fields for these categories, a librarian creates a flexible set of search rules for users. For example,

- Sales reps can enter their names in the “Rep” field to retrieve records of all their sales. Additionally, they could narrow the search by searching on a specific company name to track their sales in an individual account.
- Administrative personnel can pull records for all accounts payable and view the signature on the POs to correctly identify who in the purchasing company approved the PO.
- Customer service can respond to customer inquiries by searching for specific POs to verify that a PO was received and that the account was paid.

Pitfall: Non-specific fields make record retrieval very difficult and in some cases impossible. It might be tempting for some librarians to include a single field for “Items Purchased” so users could search based on the items a company purchases. To allow

someone to search based on items purchased, you would have to provide several “item” fields (item1, item2, item3,...) so that each item could be entered into a separate item field.

Tip: Identify all common categories for your images, but create fields only for those categories necessary to retrieve specific images. Be specific about the information that will be entered into a field and try to keep that information as granular as possible to enhance search capabilities.

Scenario 2: Photographs of damaged property for insurance claims.

Insurance companies often keep photographic records of damaged property when clients file a claim. By themselves, these photographs probably do not suggest clearly defined categories by which the Scan ’n Store librarian should organize them. Instead, the librarian must define a set of categories by identifying distinct sets of users and understanding their needs.

For example, insurance agents wanting to search a library might expect to be able to search based on these categories appearing as fields in the Scan ’n Store database:

- Name (of insured)
- Policy Type (home, auto, health)
- Policy
- Incident (of claim)
- Date (of accident)
- Notes (describing how the image relates to the claim)

However, if the insurance company has a set of photographers they use frequently, the photographers might want to search a library using fields defining categories like

- Date (of taking the picture)
- Name (of photographer taking picture)
- Type of photo (b/w or color)
- Notes (describing image)

Pitfall: A narrow view of who will use a library can hinder its overall usability. In the example above. The photographer's set of categories would make it difficult for insurance agents to find specific images; likewise, the insurance agent's set of categories would make it difficult for photographers to find specific images. The librarian needs to address the needs of both user groups by creating a broad set of categories that will help both audiences find what they need.

Tip: Carefully consider the needs of your audience when you define categories. Ask yourself who will use the library?; why might they be searching for an image in the library?; what information will they be able to provide and expect to be able to use to find a specific image? Categorizing the data what will be put into a library often gives a good idea what fields must be contained in the library for it to be used effectively.

Scan 'n Store Databases

Scan 'n Store allows you to store library data in either a native Microsoft Access database or in an ODBC database. If you want to store image data in an ODBC database type, you must manually create the database tables and install the database as an ODBC source before you can add images to the library from Scan 'n Store.

Regardless of the type of database you use, the following tips can help you create a functional, usable library:

- **For large libraries, store images in directories rather than a database.**

It is faster to retrieve images from a directory of images than it is to pull them from a database. If you attempt to retrieve a large number of images from a library, you will get better performance if the images are stored in directories.

- **Only use multiple libraries if you have specific requirements or needs that make it necessary.**

Scan 'n Store does not perform cross-reference searches among libraries. Thus, if you needed to search for a set of images that are spread among different libraries, you would need to perform a search on each library individually. Storage space limitations may require you to archive old information in your library: use the export facility to remove records based on date, PO, or some other category that can be used to locate the data if you need it in the future. You must manually track the library name and its location since Scan 'n Store does not have the ability to track exported data from library to library.

Access Databases

Scan 'n Store uses three tables in a Microsoft Access database to track and manage images in a library.

IMPORTANT: We do **not** recommend altering the tables using Microsoft Access or any other utility. Improper modifications can affect the functionality and usability of your library.

This table	Contains
SNSData	User-defined indices values entered during indexing.
SNSImage	All images that have been added to the library.
SNSXRef	Associations between one record (set of indices) from the SNSData table and a specific image from the SNSImage table.
SNSOptions	Library specific information such as the library image directory and the indexing image directory.
SNSSpool	A list of all images scanned or imported and awaiting indexing.

ODBC Databases

The ODBC database uses the same tables as the Microsoft Access database. The steps below explain how to create a typical ODBC database for use with Scan 'n Store.

IMPORTANT: Only your system administrator should create or edit an ODBC database for use with Scan 'n Store. Improper modifications can affect the functionality and usability of your library.

To create an ODBC database,

1. Start the administration program for your database.
2. Create a new ODBC database with these five tables:
 - SNSData
 - SNSImage
 - SNSOptions
 - SNSSpool
 - SNSxRef

3. Add the following field to the **SNSData** table.

PK_ID *primary key, autoincrement integer*

4. In the **SNSData** table, add all the fields you want to use to index images in your library. (See “Designing and Organizing Libraries” on page 6 for information on determining fields for your library.)

5. Add the following fields to the **SNSImage** table.

PK_ID *primary key (autoincrement integer)*
 SNSImageDate *Date/Time in the form mm/dd/yy hh:mm:ss*
 SNSImageName *text*
 SNSImagePath *text*
 SNSImageIndexer *text*
 SNSImageCreator *text*
 SNSImageOriginalName *text*
 SNSImageThumbnail *Binary Large Object*
 (or your DBMS equivalent)
 SNSImageImage *Binary Large Object*
 (or your DBMS equivalent)
 SNSImageAnnotations *Binary Large Object*
 (or your DBMS equivalent)

6. Add the following fields to the **SNSOptions** table.

PK_ID *primary key (autoincrement integer)*
 LibraryPath *text*
 (the path where the images will be
 stored after indexing)
 IndexPath *text*
 (the path where the images will be
 stored prior to indexing)

7. Add the following fields to the **SNSSpool** table.

PK_ID	<i>primary key (autoincrement integer)</i>
Description	<i>text</i>
Date	<i>Date/Time in same format as above</i>
Creator	<i>text</i>
Indexer	<i>text</i>
Status	<i>text</i>
OriginalName	<i>text</i>
Path	<i>text</i>

8. Add the following fields to the **SNSXRef** table.

FK_DataID	<i>integer (primary key)</i>
FK_ImageID	<i>integer</i>

9. After you create these fields, you should be able to open the new ODBC database. (See “Opening Libraries” on page 29 for instructions.)

Chapter 3

Navigating Scan 'n Store

Scan 'n Store combines all the features needed to create, maintain, and use image libraries in a single interface that is both functional and intuitive.

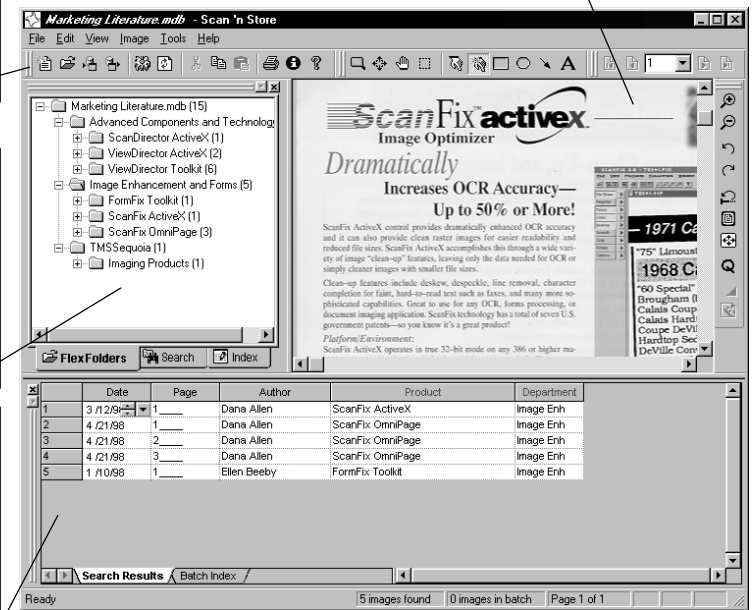
Using the Scan 'n Store Work Area

Toolbars control file handling, cursor functions, multiple-page TIFF images, and the appearance of images in the Image Viewer.

The Search Window allows you to browse a library using FlexFolders, search a library using keywords, or select a group of images for indexing.

The Results Window shows lists of images either retrieved from a library after a search or waiting to be indexed and added to a library.

The Image Viewer shows the images selected in the Search Window FlexFolders or Results Window lists.

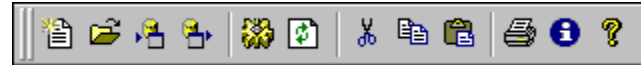


Use the	To
Toolbars	Choose to configure a library, enter images into a library, ScanFix an image, search for images in a library, or export images from a library.
Search Window	Scroll through thumbnail versions of images in the library.
Results Window	Review the results of a search run on an image library.
Image Viewer	View a specific image in a library and enhance the appearance of the image for printing.

Toolbars

Scan 'n Store uses four toolbars to control file handling, cursor functions, multiple-page TIFF images, and the appearance of images in the **Image Viewer**.

File Toolbar



This toolbar allows you to control handling of libraries and images, adjust Scan 'n Store settings, and perform common tasks like printing.

File Buttons













	New Library	Create a new library using the New Library Wizard .
	Open Library	Open an existing Scan 'n Store library.
	Import Image	Import an image into an open Scan 'n Store library.
	Export	Export images from a library.
	Options	Display the Options dialog box and adjust the settings for Scan 'n Store.
	Refresh	Refreshes the contents of the Results Window , the Search Window , and the Image Viewer . Use this if you add images to a library from the Batch Index and those images do not appear in the FlexFolders .
	Cut	Removes text from a field and copy the contents to the clipboard
	Copy	Copies text or selected areas of an image to the clipboard
	Paste	Pastes text from the clipboard into a selected field
	Print	Prints the image currently in the Image Viewer .
	Image Info.	Displays image size, dimensions, type, and # of colors.
	About	Displays the About Scan 'n Store dialog box, showing copyright date and version number.

Image Toolbar



This toolbar allows you to control how an image appears when it is in the Image Viewer.

Image Buttons



Zoom In

Zooms in on an image. When you use this option, the image remains centered but appears 50% larger.



Zoom Out

Zooms out on an image. When you use this option, the image remains centered but appears 50% smaller.



Rotate Left

Rotates the image 90° counter-clockwise.



Rotate Right

Rotates the image 90° clockwise.



Reset to Original

Displays the image as it appeared when you first opened it in the Image Viewer.



Actual size

Displays the actual size of the stored or scanned image in the Image Viewer.

***NOTE:** Typically, the actual size of a scanned or stored image is much larger than the Image Viewer. Use the scrollbars or the Hand Pan option to view the rest of the image.*



Full Image

Displays the entire image in the Image Viewer.

**Image Quality**

Adjusts the quality of the image displayed in the Image Viewer. Higher quality images look better overall and provide more clarity for detailed images, but they appear more slowly in the Image Viewer and can slow performance when scanning numerous images. Lower quality images might not show details in images, but they appear more quickly in the Image Viewer and can make scanning through numerous images less time-consuming.

Draft: Achieves best performance within the Image Viewer. This option reduces image quality to increase the speed at which Scan 'n Store draws and refreshes images in the Image Viewer.

Better: Shows a good quality image and achieve good performance within the Image Viewer. This option strikes a balance between image quality and the speed at which Scan 'n Store draws and refreshes images in the Image Viewer.

Best: Shows best image quality within the Image Viewer. This option displays the highest quality images in the Image Viewer.

**Shades of Gray**

Determines whether Scan 'n Store anti-aliases the edges of an image using 4 or 16 shades of gray, or not at all.

**ScanFix**











Enhances the appearance and readability of single images and multi-page TIFFs displayed in the Image Viewer.

Mouse Toolbar



This toolbar allows you to set the function of the mouse cursor within the Image Viewer.

Mouse Buttons






	Flying Magnifier	changes the appearance of the cursor in the View Pane and allows you to temporarily magnify parts of an image without increasing the size of the image.
	Stretch Zoom	Zooms in on a selected part of an image. When you use this option, the selected rectangle fills the entire View Pane.
	Hand Pan	Moves an image in any direction within the View Pane. Unlike the scrollbars, the Hand Pan tool allows you to move (pan) images up or down and left or right at the same time. Use this tool when an image is larger than the View Pane on both the horizontal and vertical axes.
	Select Area	Selects an area of an image with a solid rectangle.
	Select Annotation	Selects an annotation and activates an Attached Note or Hyperlink to another graphic.
	Edit Annotation	Allows you to edit, move, resize, or delete an annotation.
	Draw Rectangle	Adds a rectangle annotation to an image.
	Draw Ellipse	Adds an ellipse annotation to an image.
	Draw Line	Adds a line annotation to an image.
	Add Text	Adds a text annotation to an image.

Page Toolbar



This toolbar allows you to navigate through the individual pages of multi-page TIFF images.

Page Buttons

	First Page	Displays the first page in a multi-page TIFF image.
	Previous Page	Displays the page preceding the currently displayed page in a multi-page TIFF image.
	Page List	Use this drop-down list to display a specific page within a multi-page TIFF.
	Next Page	Displays the page following the currently displayed page in a multi-page TIFF image.
	Last Page	Displays the last page in a multi-page TIFF image.

Search Window

The **Search Window** includes all the tools you need to find images in a Scan 'n Store image database. Three tabs provide easy access to tools for browsing, keyword searching, and selecting images ready to be indexed into the library.



*Click **FlexFolders** to display a hierarchical folder view of an image database and browse for images.*

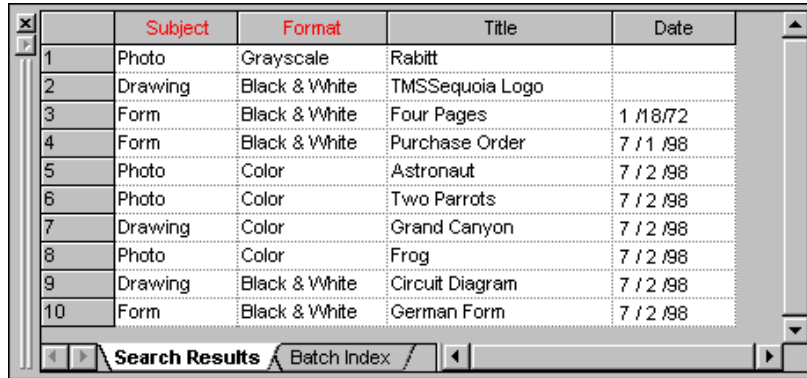
*Click **Search** to display tools to perform a keyword search for indexed images.*

*Click **Index** to display a folder view of groups of images ready to be indexed.*

Results Window

The **Results Window** includes two tabbed views that show lists of images either already in an image database or waiting to be added to an image database.

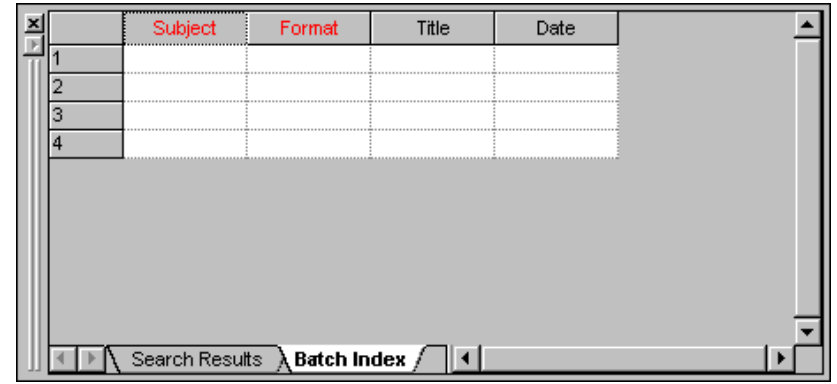
Search Results tab



	Subject	Format	Title	Date
1	Photo	Grayscale	Rabitt	
2	Drawing	Black & White	TMSSequoia Logo	
3	Form	Black & White	Four Pages	1 /18/72
4	Form	Black & White	Purchase Order	7 /1 /98
5	Photo	Color	Astronaut	7 /2 /98
6	Photo	Color	Two Parrots	7 /2 /98
7	Drawing	Color	Grand Canyon	7 /2 /98
8	Photo	Color	Frog	7 /2 /98
9	Drawing	Black & White	Circuit Diagram	7 /2 /98
10	Form	Black & White	German Form	7 /2 /98

The **Search Results** tab displays the images retrieved from a library after a search. From this tab you can edit the field values assigned to an image, browse images in a library, and delete images from a library.

Batch Index tab



After you scan documents using ScanDirector, acquire images from a TWAIN device, or import some existing images, Scan 'n Store places the image files in the Indexing directory and a list of the images appears in the **Batch Index** tab. Before you add these images to your library, you must index each of them by assigning values to each required **Name** field in the **Batch Index** tab.

Image Viewer

The Image Viewer displays images selected in the **FlexFolders**, **Search Results** tab, or **Batch Index** tab. You can use the Image toolbar to resize, rotate, and enhance the quality of the image. Read “Chapter 8: Viewing Images” for more information about using the Image Viewer.

Chapter 4

Managing Libraries

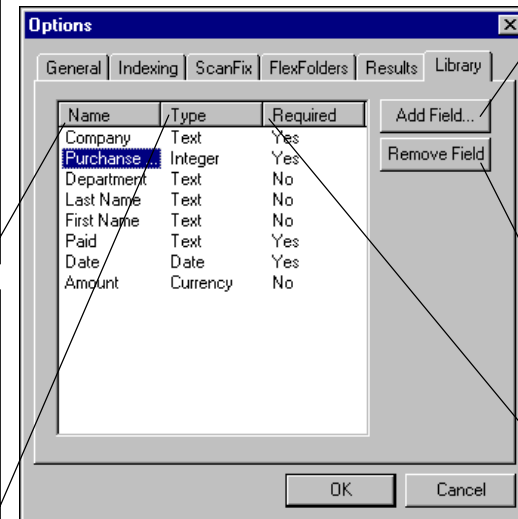
The model for the Scan 'n Store image database is the concept of a library where images are stored and indexed using keywords. The tools included in the program allow you to create, open, and configure libraries quickly and easily.

Using the Library Tab

This tab allows you to define the categories used to describe each image. You must assign a name for each category, determine what type of information the category contains (numerical, textual, dates, etc.), and whether or not the category is required before an image can be added to the library.

*The **Name** column shows the names of the categories in a library. Scan n Store uses the values shown in the Name fields for indexing, browsing, and searching.*

*The **Type** columns shows the type of information a Name field can contain. Available types include currency, date, float, integer, and text.*



*Click **Add Field** to display the Add Field dialog box and create a new Name field for a library. The new Name field will appear in the Name column when you close the dialog box.*

*Click **Remove Field** to remove selected Name fields from a library.*

*The **Required** column shows whether or not a Name field must contain data before it can be added to a library.*

This	Does this
Name	Shows the names of the categories in a library. Scan n Store uses the values shown in the Name fields for indexing, browsing, and searching. For example, a library that contains images of classic cars might have Make/Model/Year as field names.
Type	Shows the type of information a Name field can contain. Fields can contain text, integers, dates, currency (e.g., 103.54), or floating point numbers (e.g., 18736.5597).
Required	Indicates which Name fields must be filled-in before adding images to a library. When adding images to a library, you may want some information to be required when performing a search. For example, part number might be required for images of auto parts in a parts store. This column shows whether or not a Name field must contain data before it can be added to a library: NO means a Name field can be empty; YES means a Name field must contain valid data.
Add Field...	Displays the Add Field dialog box and create a new Name field for a library. The new Name field will appear in the Name column when you close the dialog box.
Remove Field	Removes selected Name fields from a library. To select a Name field, click on the value in the Name field column. (A selected field will appear highlighted.)

CAUTION: When you remove a Name field from a library it cannot be undone. Make sure you do not need the Name field for any images before you remove it from a library!

Creating Libraries

When you first use Scan 'n Store, you may need to create a library of images if one does not already exist. When you create a new library, you can choose to store the images in either a database or a directory. (A single library cannot store images in both a database and a directory at the same time.)



NOTE: Before you create a new library, read “Understanding Libraries” in Chapter 2 to learn about Scan 'n Store libraries.

If a library of images does not already exist, you need to build one. Before you build your library, know four things:

- What will you name your library?
- Where do you want to store the images you keep in your library?
- After you scan or import images, where do you want these images to sit until you index them and add them to your library?
- What categories do you want to use to organize the images in your library?


When you have the answers to these questions, you are ready to create a new library.

To create a new library,

1. Click  in the **File** toolbar.
2. Type `c:\path\new.mdb` in the **Database Name** field, where “c:\path” is the drive on which you installed Scan 'n Store.
-or-
Click  to display the **New Library Name** dialog box, choose the folder where you want to install the library, and enter the library name in the **File name** field.
3. Click **Next**.


4. Choose a directory where you want to store images for indexing. Type *c:\path* in the first field, where “c:\path” is the drive on which you installed Scan ’n Store.

-or-

Click  to display the **Select Directory** dialog box and choose the folder where you want to store images for indexing.

5. Choose a directory where you want to store library images. Type *c:\path* in the second field, where “c:\path” is the drive on which you installed Scan ’n Store.

-or-


Click  to display the **Select Directory** dialog box and choose the folder where you want to store library images.

6. Click **Next**.
(An *Open Error dialog box* will display indicating that the libraries do not exist.)
7. Click **Yes** to create the directories.
8. Click **Finish** to create the new library.
(After the *New Wizard* closes, Scan ’n Store displays the **Library** tab from the **Options** dialog box so you can assign categories to your library.)

Opening Libraries

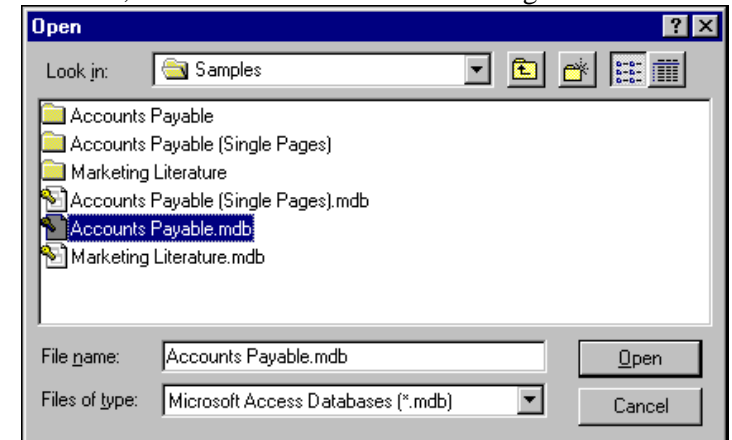
When you look for images using Scan 'n Store, you need to choose which library the images are in. You can choose a library using the Scan 'n Store menus, toolbar icons, or keyboard commands.

To open a library,

1. **Mouse:** Click  in the **File** toolbar.
Menu: From the **File** menu, select **Open Library...**

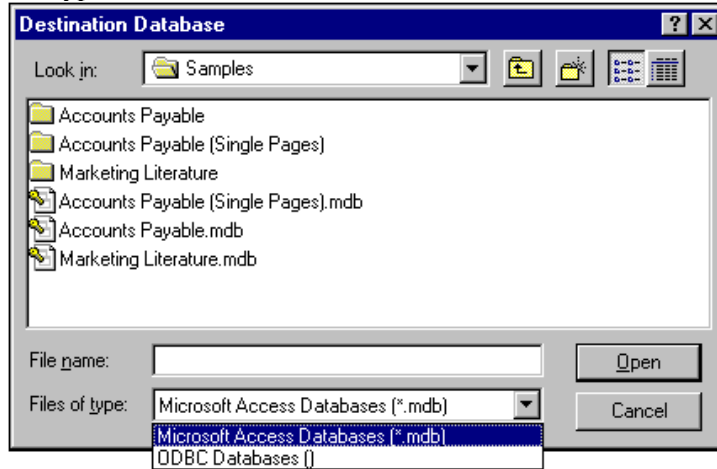
*(The **Open** dialog box appears.)*

2. If you are opening a library that uses a Microsoft Access 97 database, choose a database from the dialog box.



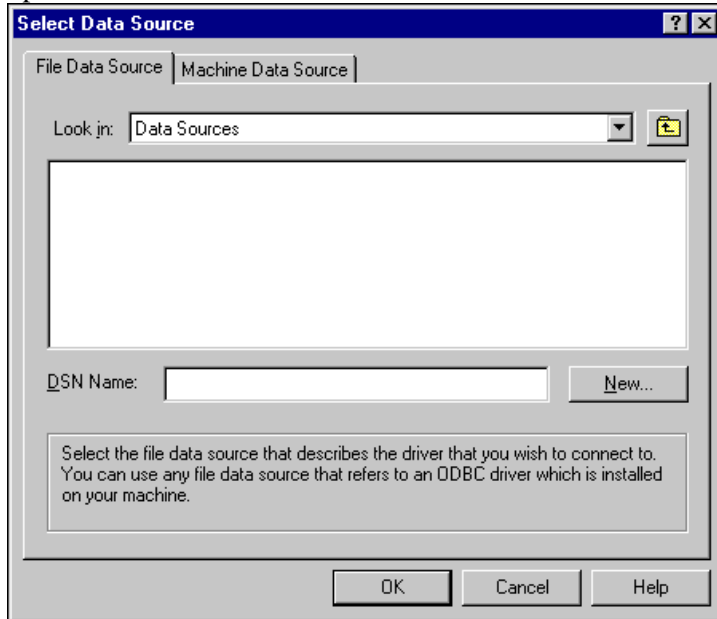
If you are opening a library that uses an ODBC database, proceed to step 3.

- To open an ODBC database, choose the **ODBC Databases** file type.



(The *Select Data Source* dialog box appears.)

- In the dialog box, select the ODBC database you want to open.



Configuring Libraries

Libraries need to be well-configured to be useful to anyone searching for an image or images. Configuring a library simply means providing a logical means of searching for images using the Fields table in the Search Window **Search** tab.

NOTE: Poorly configured libraries are difficult to use and can be a support problem for the librarian. Before you configure your library, read “Designing and Organizing Libraries” in Chapter 2 to learn about basic questions you should ask before configuring Scan ’n Store libraries.

Using the Fields table

The Fields table in the **Library** tab contains the categories you assign to describe an image in a database. The table requires you to complete three columns of information to define a category:

- Name
- Type
- Required

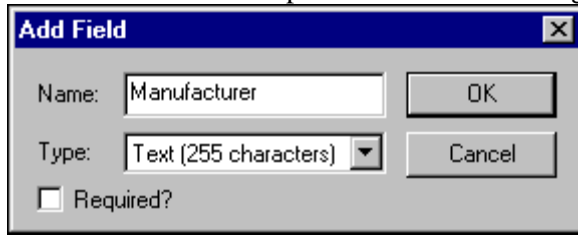
Field

The **Name** is the name of the category. For example, a library containing images of auto parts might include a category identifying the manufacturer of each part. A logical field name for this category would be “Manufacturer.”

To define a Field Type for a category,

1. Choose the **Library** tab from the **Options** dialog box. (*The **Library** tab shows any categories already defined for your library.*)

2. Click **Add Field...** to open the **Add Field** dialog box.



3. From the **Add Field** dialog box, click in the **Name** field and type the category name.

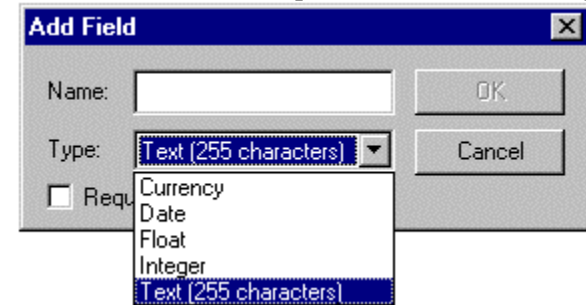
Type

Type describes the type of data you can use when you define categories for images in a library. There are five types of field data to choose from.

Use	To allow only
Currency	Money values in Data fields. (Do not include symbols like "\$" in the Data fields.) For example, 103.54.
Date	Numeric date values in Data fields for a category. For example, 12/25/97 or 12-25-97
Float	Floating point values, such as 18736.5597, in Data fields.
Integer	Whole numbers in Data fields for a category. For example, 0, 1, 2, 3, ..., n.
Text	Words and letters in Data fields for a category. You can only use letters from the alphabet in "text" Data fields.

To define a Field Type for a category,

1. Choose the **Library** tab from the **Options** dialog box.
(The **Library** tab shows any categories already defined for your library.)
2. Click **Add Field...** to open the **Add Field** dialog box.




3. From the **Add Field** dialog box, click in the **Type** field and select a value from the drop-down list.

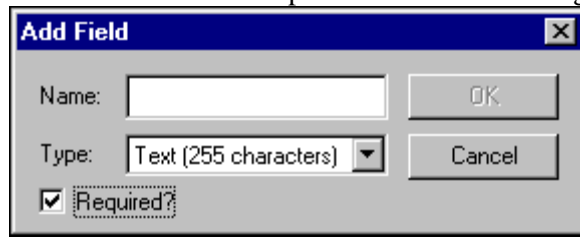
Required?

Required? determines whether or not Name fields for a category must contain data before an image can be added to a library.

To mark a category as required or optional,

1. Click  to open the **Options** dialog box
2. Choose the **Library** tab from the **Options** dialog box.
(The **Library** tab shows any categories already defined for your library.)

3. Click **Add Field...** to open the **Add Field** dialog box.



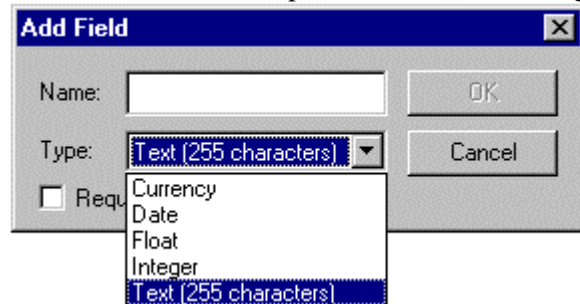
4. From the **Add Field** dialog box, click in the **Required?** check box

Defining Categories for a Library

Each row in the Fields table defines a single category for images in a library. You must fill in each field in a row to complete a category definition. After you define categories for a library, you can go back and modify them if you need to.

To define categories for a library,

1. Choose the **Library** tab from the **Options** dialog box.
(The **Library** tab shows any categories already defined for your library.)
2. Click **Add Field...** to open the **Add Field** dialog box.



3. In the **Name** field, enter the name of the new category.

4. From the **Type** list, select the type of data associated with the new category.
5. Click in the **Required?** box to define a category as required for all images.
6. Click **OK** to add the category to the library.
(The new category and its settings appear in the Library tab.)
7. Repeat 2-6 until you have added all the categories you want to define for your library.
8. Click **OK** in the Options dialog box to save the new categories in your library.

You can go back and modify the category definitions at any time.

Chapter 5

Adding Images to Libraries

Adding images to a Scan 'n Store library is a four-step process:

1. Importing image files.
2. Assigning keywords to images.
3. Enhancing image quality.
4. Adding images to the library.

The main tools for adding images to a library are the **Batch Index** tab, the **Indexing** tab, and the **Scan Images** dialog box. This chapter covers the use of these tools to complete each of the steps for adding images.

Importing Image Files

When you import images in Scan 'n Store, the images are saved to a directory, called the “batch”, where they remain until they are indexed and added to the library. There are three ways to add images to the batch,

- Importing existing images
- Scanning images
- Acquiring images from TWAIN devices

NOTE: You cannot simply copy images to the batch indexing directory to import them. Copied images will not appear in the Batch Index tab, so they cannot be indexed and added to the library. You **must** use one of the three methods to import images.

Importing Existing Images

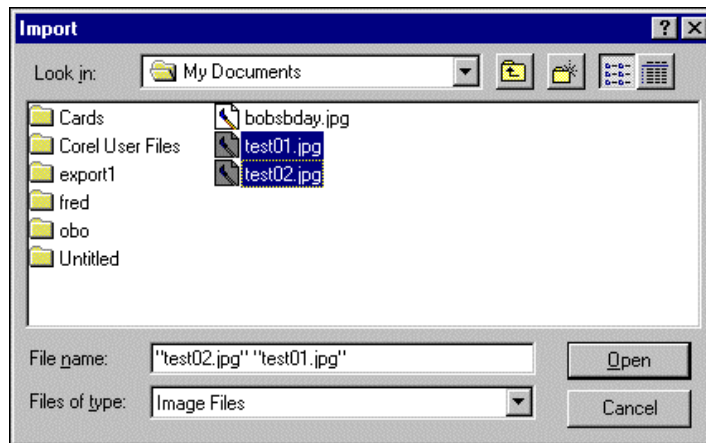
Scan 'n Store lets you import the following file formats:

- TIFF
- PCX
- BMP
- JPEG
- CALS
- NIRS/NIF and NAV-C

Scan 'n Store saves all images imported using the Scan Images dialog box as TIFF. If you have images ready, you can import them directly into a Scan 'n Store library.

To import existing images,

1. Choose  or select **Import Images...** from the **File** menu. (*The **Open** dialog box appears.*)



2. Select the file or files you want to import.

3. Choose **Open**.
(The images you selected appear in the **Batch Index** tab, ready for indexing.)

Scanning Images

You can scan a document using the ScanDirector software included in Scan 'n Store. By using ScanDirector to scan your documents, you can add scanned images directly to your library without first saving them to a directory. (If your scanner supports TWAIN, see “Acquiring Images from TWAIN Devices” on page 45.)

To scan a document using ScanDirector, select the **Scan...** option from the **File** menu to open the ScanDirector dialog box. This dialog box lets you set up your scanner, configure scan jobs, and start or stop scanning documents.

NOTE: ScanDirector supports only binary (2 bit) data so all data obtained from ScanDirector supported scanners is saved as TIFF Group 4.

Configuring Your Scanner

Choose this button to display the Open dialog box. Select a scanner driver for Scan 'n Store to use

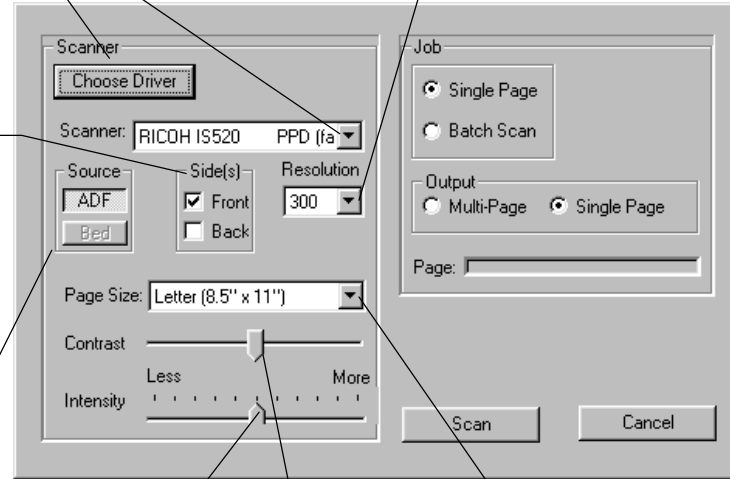
Choose Front to scan the front of a document; Back to scan the back. Select Front and Back to scan both sides.

Choose ADF to scan documents from a document feeder. Choose Bed to scan from the scanner bed.

Move the marker to the left to decrease scanning brightness; to the right to increase scanning brightness.

This box displays the current scanner. Clicking the down arrow displays a list of scanners the selected driver supports.

This box displays the current resolution. Clicking the down arrow displays a list of resolutions your scanner supports.



Move the marker to the left to decrease scanning contrast; to the right to increase scanning contrast

This box displays the current page size. Clicking the down arrow displays a list of page sizes your scanner supports.

The “Scanner” area of the dialog box controls the setup of your scanner. The options available in this area change depending on what driver you choose and what scanner you select. If some options are not available for your scanner, they will be grayed to indicate they are inactive. For example, if your scanner does not support automatic document feeders, the **ADF** button will be grayed. Scan 'n Store remembers any changes you make to the Job configuration the next time you open the dialog box.

To configure a scanner before scanning an image,

1. Select **Scan...** from the **File** menu.
(The ScanDirector dialog box appears.)
2. Click on the **Choose Driver** button.
(The Open dialog box displays.)
3. Select the Windows scanner driver for your scanner.
4. Click in the **Scanner** box to display a drop down list of scanners supported by the driver you chose.
5. Select your scanner from the list.
(The options available in the Scanner and Job areas of the dialog box should change from gray to white.)
6. From the **Source** area, choose a paper source.
 - **ADF** selects an automatic document feeder.
 - **Bed** selects the scanner bed
7. From the **Side(s)** area, select the sides of a document you want to scan. (You can choose both.)
 - **Front** scans the front of a document.
 - **Back** scans the back of a document.
8. Click in the **Resolution** box to display a drop down list of resolutions your scanner supports.
9. Select a resolution from the list.
10. Click in the **Page Size** box to display a drop down list of page sizes your scanner supports.
11. Select the page size of the document you want to scan.
12. Adjust the **Contrast** and **Intensity** levels as needed.

Configuring Your Jobs

Choose Single Page to scan one page or Batch Scan to scan multiple pages (requires a document feeder).

Choose Single Page to create an image for each page you scan or Multi-Page to save multiple scanned images to a single TIFF file

A solid bar shows the progress as the scanner scans a page.

The “Jobs” area of the dialog box controls how you want to scan your documents. The options available in this area change depending on what driver you choose and what scanner you select. If some options are not available for your scanner, they will be grayed to indicate they are inactive. For example, if your scanner does not support automatic document feeders, or if **Bed** is selected as the paper source, the **Batch Scan** and **Multi-Page** options will be grayed. Scan ’n Store remembers any changes you make to the Jobs configuration the next time you open the dialog box.

You can control how many pages you want to scan, depending on the capabilities of your scanner.

Use	To scan
Single Page	One page at a time.
Batch Scan	All the images in the feeder tray. <i>(Only available for scanners with document feeders.)</i>

You can also control whether Scan 'n Store saves the output from a job to individual files or to one multi-page file.

Use	To
Multi-Page	Scan multiple scanned documents to one image. For example, you might use this when you are scanning all the pages of a long contract so you can make sure the pages stay together. <i>(Only available for scanners with document feeders.)</i>
Single Page	Save scanned documents to their own individual files.

To configure a job,

1. Select **Scan...** from the **File** menu.
(The ScanDirector dialog box appears. The “Scanner” area controls the hardware setup for your scanner; the “Job” area controls the setup for a scan job.)
2. Choose a scan method.
 - **Single Page** scans one document per job.
 - **Batch Scan** scans all documents in a feeder tray in one job.
3. From the **Output** area, choose how you want to save your scanned images.
 - **Multi Page** saves all the documents in a job to a single multi-page TIFF file.
 - **Single Page** saves each page in a job to its own TIFF file.

Scanning Documents

After you set up your scanner and configure your jobs, you are ready to scan your documents. The Scan Images dialog box allows you to start and stop your jobs and view the progress of a document being scanned.

NOTE: Refer to the documentation that came with your scanner to make sure you have it properly installed.

To start a scan job,

- Choose the **Scan** button from the Scan Images dialog box.

The **Scan** button becomes gray (inactive) and the **Cancel** button becomes the **Stop scanning** button.

The **Page** status bar fills with a solid color to indicate the progress of each page being scanned.

To stop a scan job,

- Choose the **Stop scanning** button from the Scan Images dialog box

The **Page** status bar disappears to indicate a stopped job.

The **Scan** button becomes active again and the **Stop scanning** button returns to the **Cancel** button.

To cancel a job,

- Choose the **Cancel** button from the Scan Images dialog box.

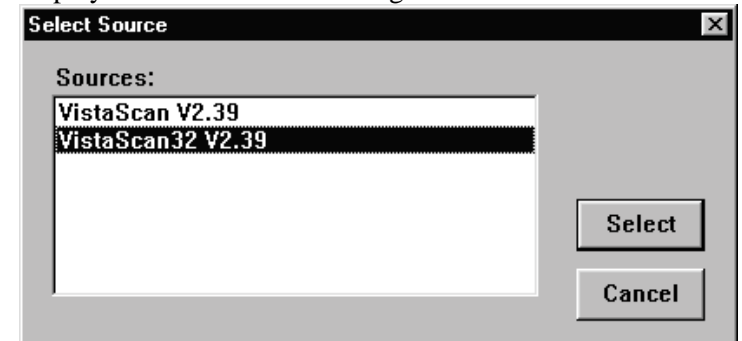
The ScanDirector dialog box disappears.

Acquiring Images from TWAIN Devices

Scan 'n Store supports the use of TWAIN devices for image input. TWAIN (Technology Without An Independent Name) is an industry-standard protocol that allows communication between application programs and input devices such as scanners and digital cameras. If your scanner is not TWAIN compliant, you can use the Scan Images dialog box to configure your scanner and scan jobs for use with Scan 'n Store.

To scan using TWAIN devices,

1. From the **File** menu, choose **Select TWAIN Source...** to display the **Select Source** dialog box.



2. From the **Select Source** dialog box, click on the TWAIN driver for your scanner and then click the **Select** button. Choose a 32-bit driver if one is available.
*(The **Select Source** dialog box closes. You will not need to select a TWAIN source again, unless you install another TWAIN device on your system.)*
3. From the **File** menu, choose **Acquire TWAIN Data...** to open your TWAIN scanning utility.
(The TWAIN scanning utility that shipped with your scanner appears. Use the utility to scan the document(s) you want to import into the library. Exit the utility after you finish scanning.)

4. To scan more documents, repeat step 3.
(*The scanned image will appear in the **Batch Index** tab.*)

About TWAIN Images in Scan 'n Store

Scan 'n Store receives images from TWAIN data sources in BMP format and saves the images as shown in the table below.

This color depth...	Is saved as...
2 bit	TIFF Group 4
4 bit	BMP
8 bit	JPEG
16 bit	BMP
24 bit	JPEG
32 bit	BMP
Others ¹	BMP

If a file is saved as a BMP file you will be notified via a dialog box that the file is being saved as a BMP file. BMP files are very large and take up a great deal of hard drive space. If possible you should choose a color depth of 2,8 or 24 bits as output from your TWAIN device.

¹ The BMP file specification only allows for 2, 4, 8, 16, 24 and 32 bit data - any other color depth is non-standard and may not be supported by any particular image viewer.

Indexing Images

After you import an image, and before you add it to a library, you need to index the image by assigning keywords to it. This allows users to look up the image when they need it. Because other people will need to be able to find the image in the library, be sure to choose logical keywords that accurately describe the image and its contents.

To index images,

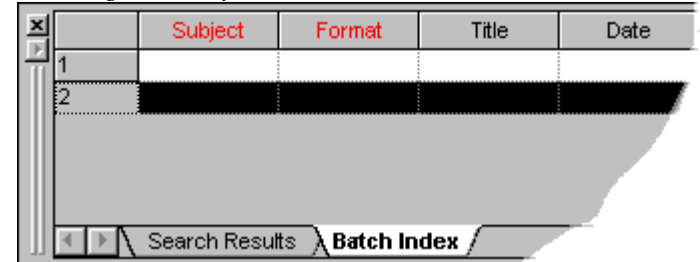
1. Click on the **Index** tab in the **Search** window.



*(The **Batch Index** tab in the **Results** window becomes active.)*

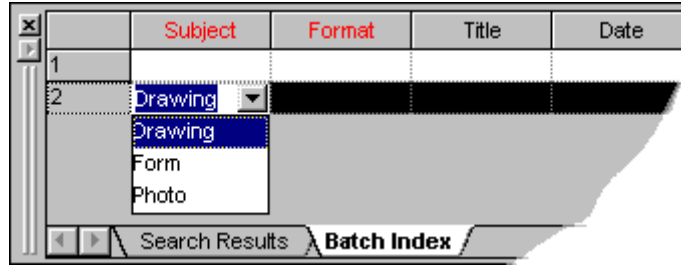
2. Click on the Batch folder (Michael Wilson 1 (1)) in the **Search** window.

*(The **Batch Index** tab displays a list of all the images in the Indexing directory.)*



3. Click on a row number from the left of the window to select an image from the Batch,
(The selected image will appear in the Image Viewer.)
4. Click in any field that you want to use to index the selected image.
(Red names indicate that this field is required for all images in the open library.)

5. Enter a value in the field or select one from the drop-down list.



6. Repeat steps 4-5 for all required fields and as many unrequired fields as possible. The more fields you index the easier it is for others to search for images in the library.
7. After you finish indexing an image, you can either begin indexing all the other images in the Batch, or you can go ahead and add to the image library.

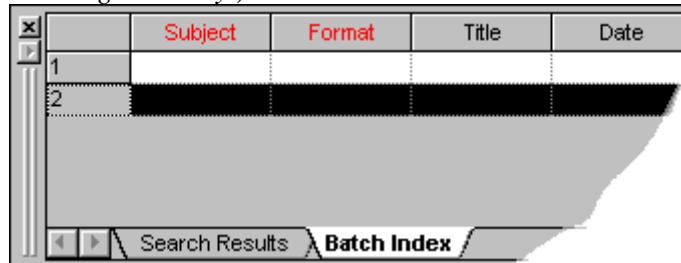
To delete an image from the batch,

1. Click on the **Index** tab in the **Search** window.

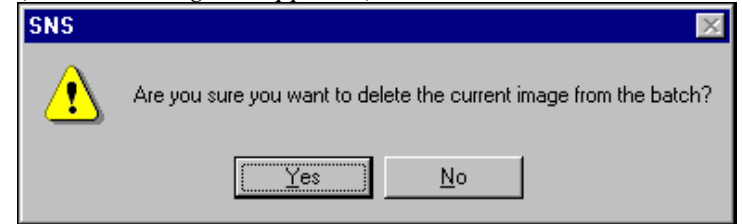


(The **Batch Index** tab in the **Results** window becomes active.)

2. Click on the Batch folder (Michael Wilson 1 (1)).
(The **Batch Index** tab displays a list of all the images in the Indexing directory.)



3. Click anywhere on a row to select an image from the Batch, *(The selected image will appear in the Image Viewer.)*
4. Press CTRL+DELETE to remove the image from the batch. *(An alert dialog box appears.)*




5. Click **Yes** to delete the image; click **No** to keep the image in the batch.

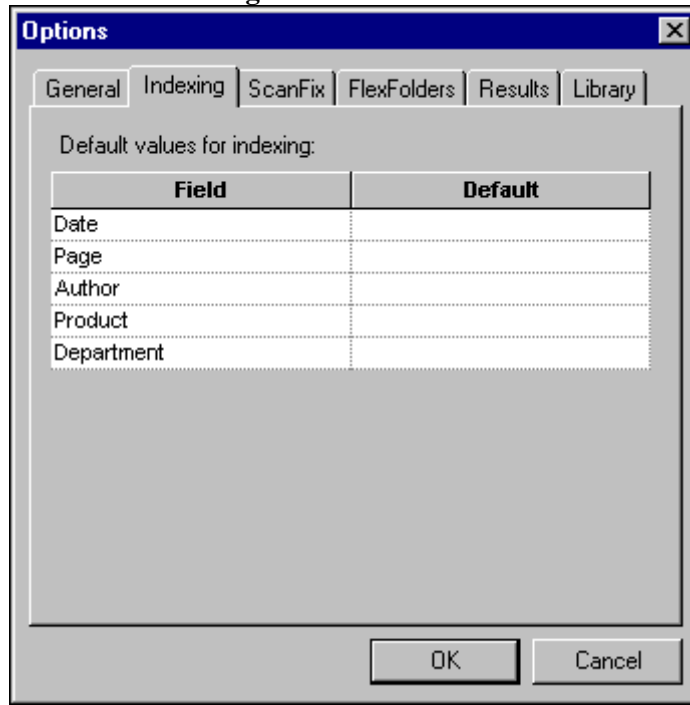
Using Default Keywords

You can choose to assign new, unique keywords for each image individually. However, if you are sorting a large group of closely-related images that might share the same keywords, you can define a set of default keywords that immediately populate the **Name** fields when you import an image and it appears in the **Batch Index** tab. Use the **Indexing** tab in the **Options** dialog box to define default values for each Name field defined in the **Library** tab.

To define a set of default keywords,

1. Click  or select **Options...** from the **Tools** menu. *(The Options dialog box appears.)*

2. Choose the **Indexing** tab.



3. Enter the keywords in the **Default** fields beside the appropriate **Field** name.
4. Choose **OK** to accept the default keywords you assign, or choose **Cancel** to close the dialog box without making any changes.

The next time you import an image or group of images, the fields in the **Batch Index** tab will automatically fill with the default keywords you assigned.


Enhancing Image Quality

When you scan documents and save them as images, the quality of the image can sometimes be less than desirable for use in an image library. The ScanFix utility included in Scan 'n Store corrects the most common problems found in scanned images.

Problem	What ScanFix does
Skew (Images scanned at an angle)	Realigns an image along the vertical and horizontal planes uses text and horizontal lines as guides. The resulting image is slightly larger than the original image
Noise (Random flecks in images.)	Removes random flecks of noise based on the size of the flecks and whether or not the flecks are isolated (not near or touching anything else).
Dot Shading (Large blocks of color become splotchy gray patches)	Removes large areas of dot shading based on the size of the dots that make up the shaded area.

Before adding an image to a library, check to see if the document appears to have any of these common scanning problems. Fixing these problems increases the readability of an image and can reduce the size of the image file.

To enhance the quality of an image,

Mouse: Click  in the **Image** toolbar.

Menu: In the **Edit** menu, select **ScanFix...**

NOTE: You should see the image change in the Image Viewer. If the problems you identified are not fixed after using ScanFix, you, refer to “Chapter 10: Using ScanFix” for help on adjusting ScanFix to meet your needs.

Adding Images to a Library

After you assign keywords and fix any problems with the appearance of a scanned image, you are ready to save the image in your library.

To add indexed images to a library,

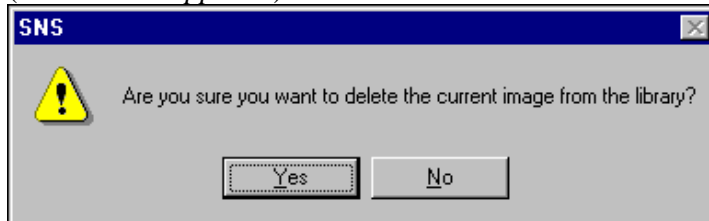
- In the **Image** menu, select **Add Batch to Library** .
(Scan 'n Store will add all the indexed image to the library. Any unindexed images, or images that do not have values for all the required fields, will remain in the batch.)

Deleting Imported Images

If you decide not to add an imported image to the library, you can remove it from the set of imported images.

To delete an imported image,

1. Use the **FlexFolders** or **Search** tabs to find the image you want to remove.
(Read “Chapter 6: Finding Images in Libraries” for more information.)
2. Press CTRL+DELETE to remove the image from the library.
(An alert box appears.)



3. Choose **Yes** to delete the image, choose **No** to keep the image in the library.

Chapter 6

Finding Images in Libraries

Scan 'n Store provides two methods for finding images in a library.

- Browsing with FlexFolders
- Searching with Keywords

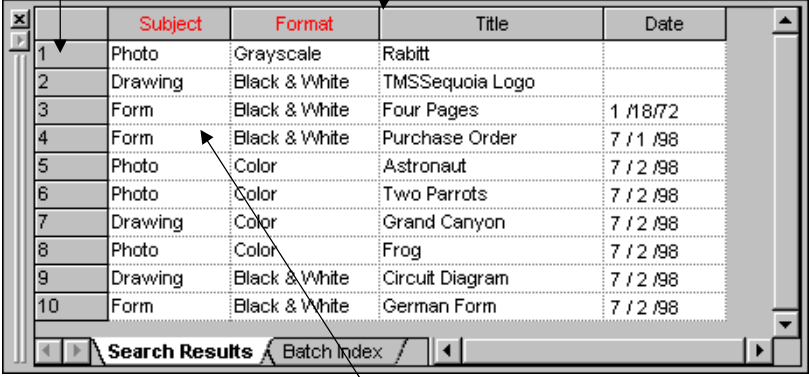
The results of either method will appear in the **Search Results** tab in a scrollable list.

Using the Search Results Tab

The **Search Results** tab displays the images retrieved from a library after a search. From this tab you can edit the field values assigned to an image, browse images, and delete images from a library.

Click on the number for an image to view the image in the Image Viewer, or to delete the image from the library.

*Click on the headings in the top row to sort images in the **Search Results** tab based on the values in this column before browsing the results list.*

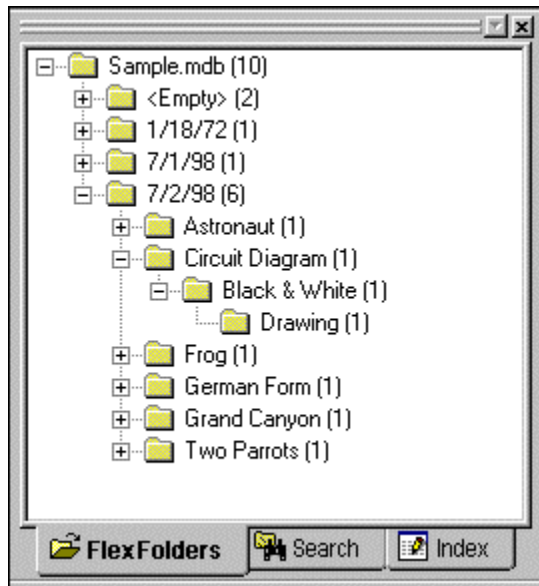


	Subject	Format	Title	Date
1	Photo	Grayscale	Rabitt	
2	Drawing	Black & White	TMSSequoia Logo	
3	Form	Black & White	Four Pages	1 /18/72
4	Form	Black & White	Purchase Order	7 / 1 /98
5	Photo	Color	Astronaut	7 / 2 /98
6	Photo	Color	Two Parrots	7 / 2 /98
7	Drawing	Color	Grand Canyon	7 / 2 /98
8	Photo	Color	Frog	7 / 2 /98
9	Drawing	Black & White	Circuit Diagram	7 / 2 /98
10	Form	Black & White	German Form	7 / 2 /98

Click in any field to edit the index value for an image. You can choose any existing values using a drop-down list, or enter a new value.

Browsing with FlexFolders

FlexFolders allow you to browse an open library based on a hierarchical view of categories in the library. What makes FlexFolders so useful, is their ability to display information in many different ways. You can rearrange the hierarchy so the FlexFolder display information to accommodate the way your work. When you click on any FlexFolder, all the images it contains appear in the **Search Results** tab.



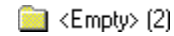
In this example, our library has four categories: Subject, Format, Title and Date with the following sort order:

Date>Title>Format>Subject

Sample.mdb (10)

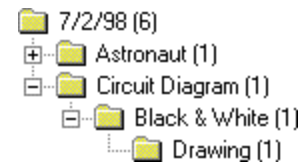
The “root” folder shows the name of the open library and the number of images the library contains. Clicking on this folder

would show all the images in a library in the **Search Results** tab.



Folders marked “Empty” do not have values assigned to a category. The empty folder in the example indicates that no date was assigned to two images. Clicking on this folder would show the two images with empty date categories in the **Search Results** tab.

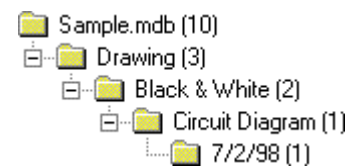
All other FlexFolders show the Name value assigned to each of the categories defined for the open library. This example shows that the library contains a black and white drawing of a circuit diagram entered into the library on July 2, 1999.




If we were to reverse the sort order in the **FlexFolders** tab to this:

Subject>Format>Title>Date

then, our folder tree showing the circuit drawing would look like this:



To find images using FlexFolders

1. Click  or select **Options...** from the **Tools** menu.
*(The **Options** dialog box appears.)*
2. Choose the **FlexFolders** tab from the **Options** dialog box.
*(The **FlexFolder** tab shows the order in which categories will appear in the FlexFolder tree.)*
3. Use the **FlexFolders** tab to determine which categories you want to include in the FlexFolder tree and the order in which they should appear.
4. Click **OK** to accept your changes and close the **Options** dialog box.
5. Double-click on the “root” folder to open it and display the nested folders.
*(A list of all the contents of the library fills the **Search Results** tab. The first image in the list appears in the Image Viewer.)*
6. Open a nested folder to narrow your search.
*(The **Search Results** tab now only shows the images contained within the nested folder you selected.)*
7. Continue to open nested folders until the set of images or a specific image appears in the **Search Results** tab or the Image Viewer.

Changing the Sort Order

FlexFolders allow you to browse the images in a library based on a sorting order. This tab allows you to determine the sorting order. By default, the Name fields appear in the **Selected Fields** list in the order that they appear in the **Library** tab. You can change their

order or remove them to the list of **Available Fields** using the center column of buttons.

The order in the **Selected Fields** list determines the hierarchy in the FlexFolders tree. Click on a field to select it before you move it up, down, or remove it from the FlexFolders Tree.

The fields appearing in the **Available Fields** list do not appear in the FlexFolders Tree. Click on a field to select it (highlight) before you add it to the **Selected Fields** list and to the FlexFolders Tree.

Click **Add** to move a field from the **Available Fields** list to the **Selected Fields** list so it will appear in the FlexFolders tree.

Click **Remove** to move a field from the **Selected Fields** list of the **Available Fields** list and remove it from the FlexFolders Tree.

Click **Move Down** to move the highlighted field in the **Selected Fields** list down to a lower branch in the FlexFolders Tree.

Click **Move Up** to move the highlighted field in the **Selected Fields** list up to a higher branch in the FlexFolders Tree.

To add a field to the sort order,

1. Click on a Name in the **Available Fields** list.
2. Click **Add** to move the selected field to the **Selected Fields** list so it will appear in the FlexFolders Tree.

To remove a field from the sort order,

1. Click on a Name in the **Selected Fields** list.
2. Click **Remove** to move the selected field to the **Selected Fields** list so it will appear in the FlexFolders Tree.

To move a field up in the sort order,

1. Click on a Name in the **Selected Fields** list.
2. Click **Move Up** to move the selected field up in the **Selected Fields** list order so it will appear in the FlexFolders Tree.

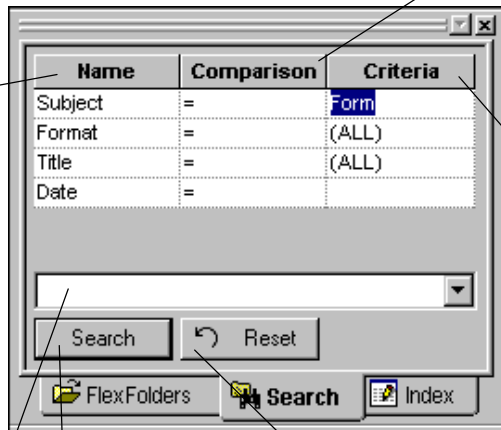
To move a field down in the sort order,

1. Click on a Name in the **Selected Fields** list.
2. Click **Move Down** to move the selected field down in the **Selected Fields** list order so it will appear in the FlexFolders Tree.

Searching with Keywords

This column displays the list of Field Names defined in the Configure tab.

This box allows you to manually edit the search parameters Scan 'n Store will use to retrieve images from a library. As you enter Comparison values and Criteria values in the table on the Search tab, the free-form fills with the resulting search string.



Choose this column to display a list of comparison values. Use the values to narrow the scope of your search..

Choose this column to enter the keyword for your search. Keywords must be of the type defined in the Configure tab. (For example, Integer fields can only contain whole numbers.)

*Choose **Search** to search a library for images that match the search criteria defined in the table.*

*Choose the **Reset** button to returns all the fields in the Search tab to their default values.*

The Search tab provides all the tools you need to search for images in a library. When you click on the tab, all the fields in the table are blank. You can fill all, some, or none of the fields to perform a search, depending on the scope of your search.

Finding All Images

In some cases, you might want to find all the images in a library. For example, if you wanted to edit the keywords for the Field Names of all the images in your library, you could run a search for all the images in the library and edit the keywords from the Image List.

To find all images in a library,

1. After you open a library, choose the **Search** tab.



2. Click the **Search** button in the window.
(*The **Search Results** tab displays all the images in the library.*)
3. Click on the heading at the top of any column to sort the images in the **Search Results** tab based on the contents of that column.
(*Scan 'n Store sorts the images alphabetically and numerically.*)
4. Use the scroll bars to browse images that scroll out of the window.
5. Click anywhere in a row to display the image in the Image Viewer.

Narrowing Your Search

Usually, you will only want to find a small group of images in a library. To do this, you need to narrow the scope of your search by choosing keywords which Scan 'n Store uses to retrieve matching images. Use the “Comparison” and “Criteria” fields to define your search.

Using Comparison Values

Each field in the Comparison column of the **Search** tab contains a drop down list with the following options. You can use them singly or in combination to customize your search. For more granular control of your search, use the “free-form search” box to edit the search string Scan 'n Store uses to retrieve images from the library.

Use	To
=	Find images matching the value entered in “Criteria”
<	Find images with alphabetic or numeric values less than the value in “Criteria.”
<=	Find images with alphabetic or numeric values less than or equal to the value in “Criteria.”
> =	Find images with alphabetic or numeric values greater than or equal to the value in “Criteria.”
>	Find images with alphabetic or numeric values greater than the value in “Criteria.”
<>	Find images with alphabetic or numeric values that are not equal to the value in “Criteria.”
Like	Find images containing the value in “Criteria.” (For example, searching for “ca” would return images with values of “ <u>car</u> ,” “ <u>because</u> ,” and “ <u>candles</u> .”)

To narrow your search using search criteria,

1. Choose the **Search** tab.
2. Choose an option from the “Comparison” field beside one of the Field Names.
(An arrow appears to the right of the field.)
3. Click on the down arrow to display a list of possible comparison values.
4. Click in the corresponding “Criteria” field and enter a keyword.

You must enter a value of the type defined for the Name field in the Library tab. For example, if the field uses the “Date” type, you must enter a value in the form defined by the **Regional Settings** in your Windows 95/98/NT **Control Panel**.

If there is already a value in the field, that value will disappear as soon as you start typing.

5. Repeat steps 2–4 for all the Name fields you want to use to narrow your search.
6. After you fill in the fields, click the **Search** button.
*(The **Search Results** tab displays all the images in the library that match your search parameters.)*
7. Click on the heading at the top of any column to sort the images in the **Search Results** tab based on the contents of that column.
(Scan ’n Store sorts the images alphabetically and numerically.)
8. Use the scroll bars to browse images that scroll out of the window.

- Click on a row number at the left of the window to view an image.

NOTE: The more Name fields you define, the more you narrow your search. If you are looking for specific images, use as many Name fields as possible to define your search.

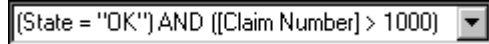
Free-Form Searching

The bottom of the **Search** tab contains a text box that allows you to manually edit the search parameters Scan 'n Store will use to retrieve images from a library. As you enter comparison values and keyword criteria in the table, the free-form box fills with the resulting search string. For example, if you have a Name value of "State" and you select "=" as the comparison value and search for "OK", the following appears in the free-form search box:



A screenshot of a search box with a dropdown arrow on the right. The text inside the box is "State='OK'".

Scan 'n Store places quotation marks around values entered into fields with a Type of "text." If you add to your search using a Claim Number field name with ">" as the comparison value and "1000" as the criteria value, the following appears in the free-form search box:



A screenshot of a search box with a dropdown arrow on the right. The text inside the box is "(State = 'OK') AND [(Claim Number) > 1000]".

Parentheses group each set of search operations. Scan 'n Store defaults to using AND to join the search operations together. Use brackets around values that contain spaces.

Using Free-Form Search Criteria

The free-form search box also allows you to search using additional comparisons, including :

OR, NOT, NOT=, !=

For example, suppose you wanted to run the search outlined above, but you wanted to include all the images with `State = "TX"`. You could manually edit the search box to form the following search string:

```
((State = "OK") OR (State = "TX")) AND  
([Claim Number] > 1000)
```

Suppose that you also wanted to include all images with claim numbers equal to or greater than 1000 and all images with Date field values greater than 1/1/97. The following search string should return all matching images.

```
((State = "OK") OR (State = "TX")) AND  
((([Claim Number] >= 1000) or (Date >  
1/1/1997)))
```

Resetting Search Parameters

After you perform a search on a library and view the results, you might want to perform a new search based on a new set of search keywords. You can use the **Reset** button to reset all the search fields to their default values before you define your new search.

To reset the search fields,

- In the **Search** tab, click **Reset**.
(All the fields in the *Search* tab become blank.)

Deleting Images From a Library

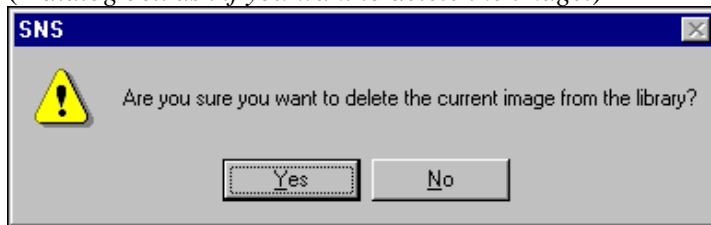
You might run a search to find a list of images you want to delete from a library. For example, if your library contains images of parts specifications, you might want to delete specifications for parts no longer in use.

CAUTION: Deleting an image deletes the image file from the directory or database where it is stored. Do **not** delete an image unless you are sure you no longer need it.

To delete an image,

NOTE: Before you delete images from a library, search for images you want to delete and display them in the **Search Results** tab.

1. In the **Search Results** tab, find the image to delete.
(You can rearrange the order in which the images appear by clicking on the headings at the top of each column.)
2. After you find the image you want to delete, click anywhere in the row associated with the image.
3. In the **Edit** menu, select **Delete Image**.
-or-
Press CTRL+DELETE on your keyboard.
(A dialog box ask if you want to delete the image.)

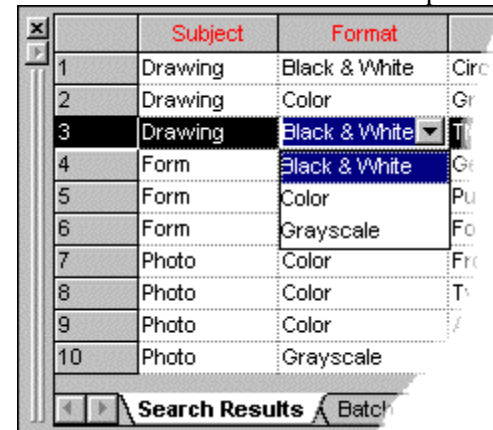


4. Click **Yes** to delete the image or **No** to keep the image.
5. Repeat steps 1-4 for each image you want to delete.

Changing Image Index Values

As your needs or the way you use libraries change, you may wish to edit the values you originally assigned when you indexed your images. Or, you may wish to enter values for fields originally left blank. (See “Indexing Images” on page 47 for information on how to index images in the **Batch Results** tab.)

1. Use the **FlexFolders** or the **Search** tab to find the images you want to re-index.
2. Click on a column heading to sort the images in the **Search Results** tab based on the contents of that column.
(*Scan 'n Store sorts the images alphanumerically.*)
3. Use the scroll bars to browse images that scroll out of the window.
4. Click anywhere in a row to select an image.
(*The selected image will appear in the Image Viewer.*)
5. Click in the first field you want to edit, then enter a value in the field or select one from the drop-down list.




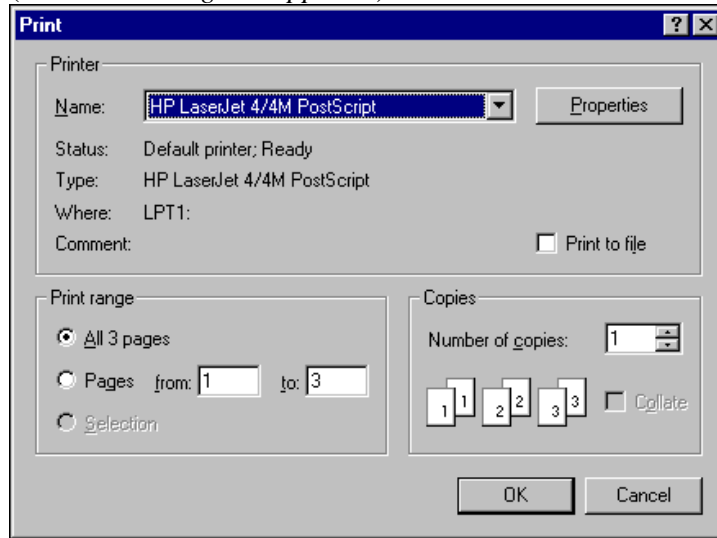
6. Repeat steps 1-3 for all the images and fields to edit.

Printing Images

After you search for and retrieve images from a library, you can print them to any installed printer.

To print an image,

1. Click  in the **File** toolbar.
(The **Print** dialog box appears.)



2. If you are printing a multi-page TIFF file, select the pages to print in the **Print Range** area.
3. Click **OK** to print the pages or **Cancel** to close the dialog box without printing.

Chapter 7

Exporting Images from Libraries

After you search a library and retrieve a list of matching images, you can export those images to another Scan 'n Store library. Reasons for exporting libraries might include:

Library management. As your libraries grow, it might be a good idea to break a single large library into smaller, more manageable libraries.

Archiving. As images in a library become unnecessary or obsolete, you might want to move them to an archival library rather than deleting them.

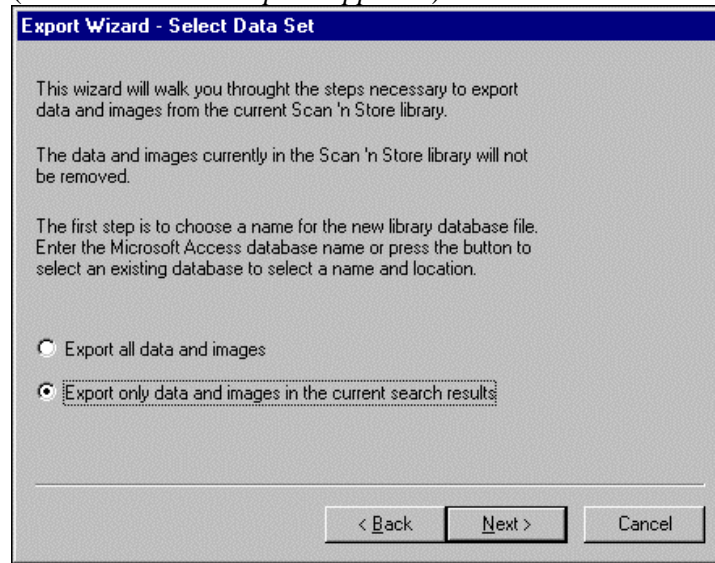
Distribution. Departments and branch offices may only need access to part of a library. You could export images from a large central library to smaller departmental libraries.

Exporting to Existing Databases

The following steps describe how to export images from one library to another using the **Export Wizard**. At any step during the export process, you can use the wizard's **Back** button to go to a previous step, or click **Cancel** to stop the export and close the Export Wizard.

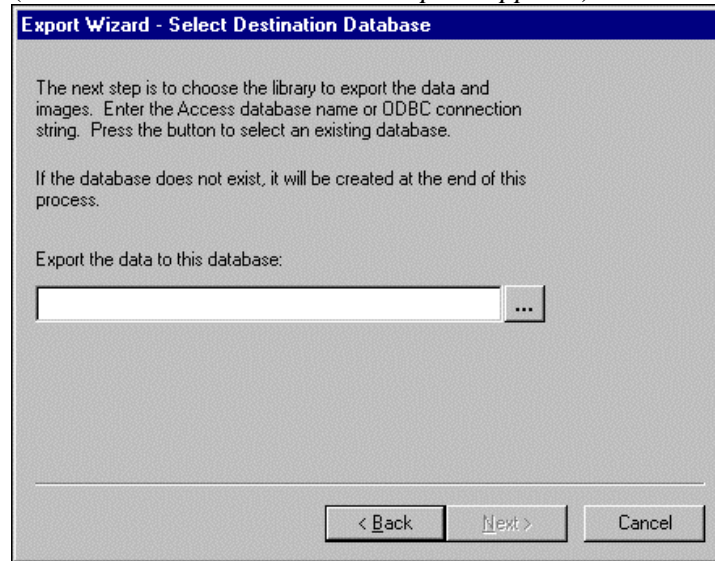
1. Click  or choose **Export...** from the **File** menu to start the Export Wizard .


*(The **Select Data Set** pane appears.)*

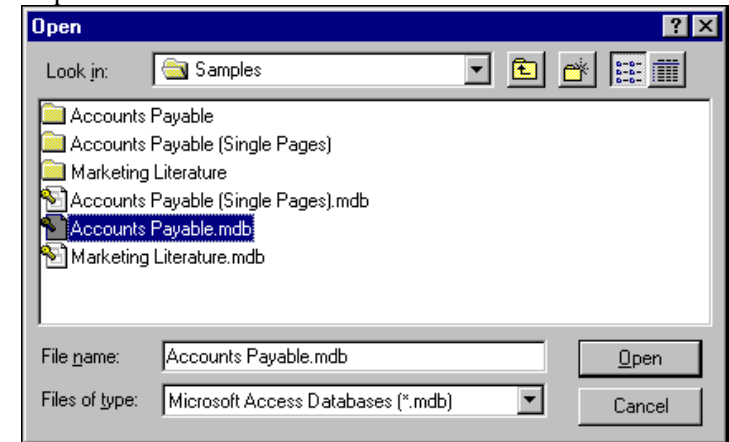


2. Choose to export all images or only those images appearing in the **Search Results** tab. Click **Next**.

*(The **Select Destination Database** pane appears)*

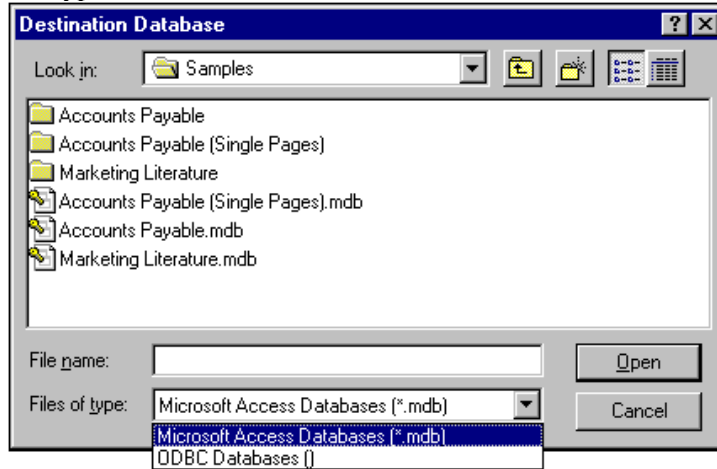


3. Click  to display the Destination Database dialog box and choose the target database for the images.
4. If you are opening a library that uses a Microsoft Access 97 database, choose a database from the dialog box. Skip to step 8.



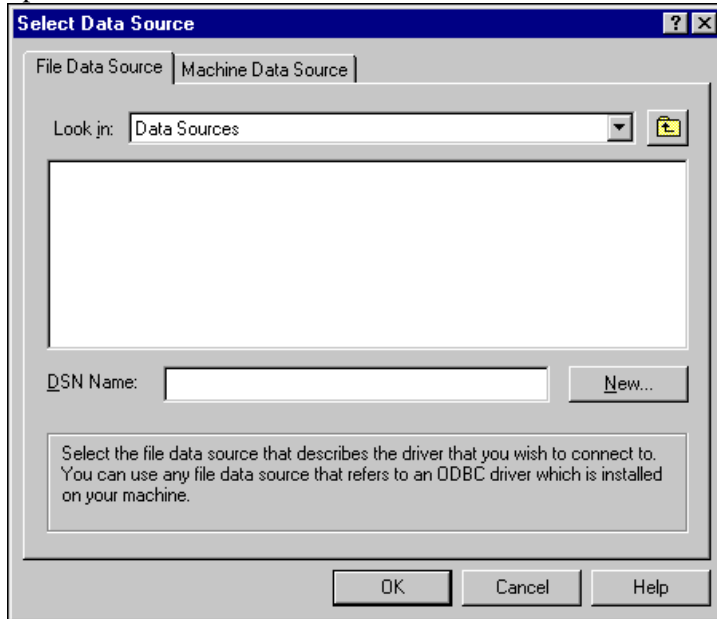
If you are opening a library that uses an ODBC database, proceed to step 5.

- To open an ODBC database, choose the **ODBC Databases** file type.



(The *Select Data Source* dialog box appears.)

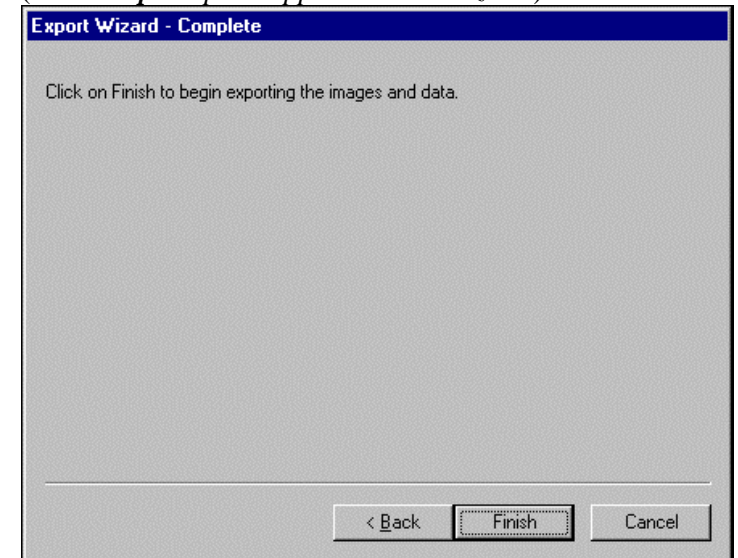
- In the dialog box, select the ODBC database you want to open.



7. Click **OK**.

8. Click **Next**.

*(The **Complete** pane appears in the wizard.)*

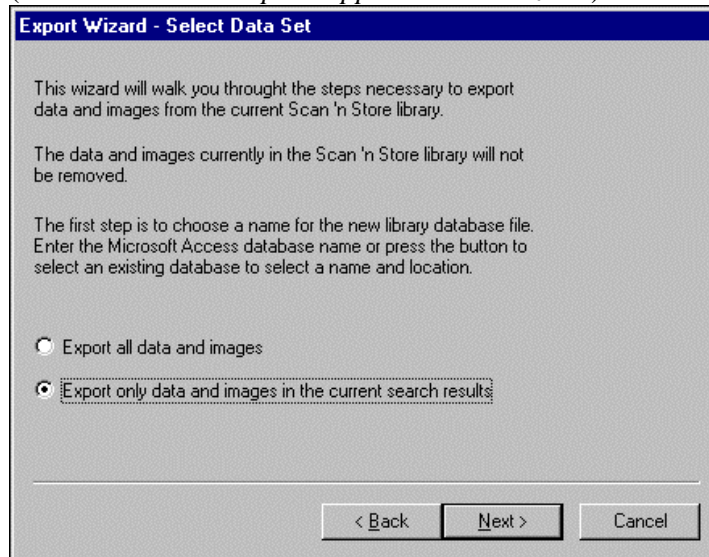


9. Click **Finish**.

Exporting to New Databases

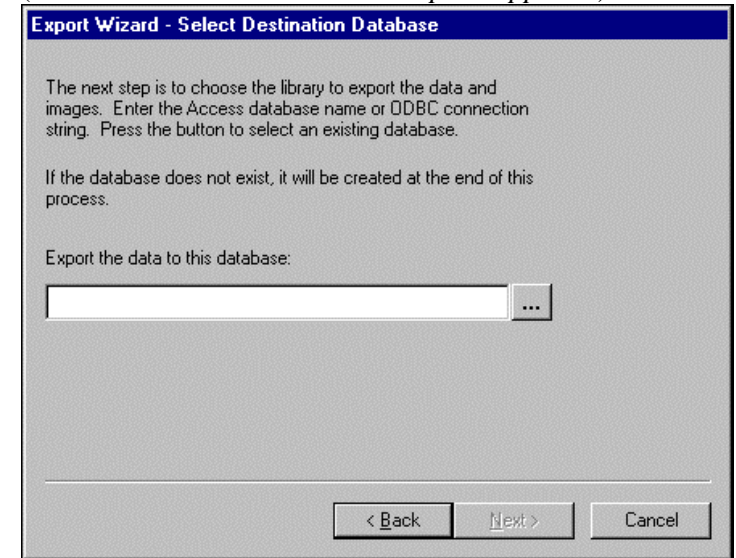
The following steps describe how to export images from a library to a new Access '97 database using the **Export Wizard**. At any step during the export process, you can use the wizard's **Back** button to go to a previous step, or click **Cancel** to stop the export and close the Export Wizard.


1. Click  or choose **Export...** from the **File** menu to start the Export Wizard .
(The *Select Data Set* pane appears in the wizard.)



2. Choose to export all images or only those images appearing in the **Search Results** tab. Click **Next**.

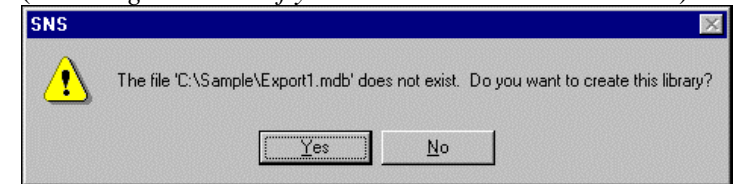
*(The **Select Destination Database** pane appears.)*



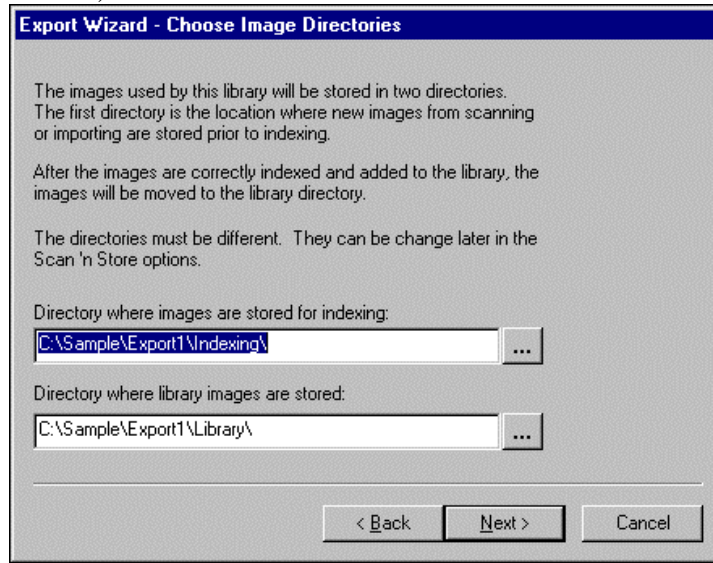
3. Click  to display the **Destination Database** dialog box and choose the target database for the images.



4. Click **Next**.

(A message box asks if you want to create the database.)



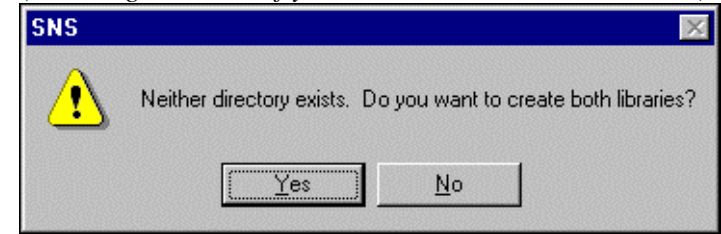
5. Click **Yes**.
(The *Choose Image Directories* pane appears in the wizard.)



6. Click the first  button to display the **Browse for Folder** dialog box and choose the folder where you want to store images for indexing.
7. Click the second  button to display the **Browse for Folder** dialog box and choose the folder where you want to store library images.

8. Click **Next**.

(A message box asks if you want to create the directories.)

9. Click **Yes**.

*(The **Complete** pane appears in the wizard.)*

10. Click **Finish**.

(Scan 'n Store creates the directories for the new database and exports the images and data to the new library. The new library contains the same categories as the originating library, and the images have the same index values associated with them.)

Chapter 8

Viewing Images

The Image Viewer in the Scan 'n Store window provides a large set of tools to adjust how you view an image.


Sizing Images

The following menu options allow you to adjust the size of the image in the Image Viewer.

Zooming In 50%

Use the **Zoom In 50%** selection to zoom in on an image. The image remains centered but appears 50% larger.

To Zoom In on an image,

Mouse: Click  in the **Image** toolbar, or


Menu: In the **Image** menu, select **Zoom In** , or

Keyboard: Press CTRL+UP ARROW.

Zooming Out 50%

Use the **Zoom Out 50%** selection to zoom out on an image. The image remains centered but appears 50% smaller.

To Zoom Out on an image,

Mouse: Click  in the **Image** toolbar.

Menu: In the **Image** menu, select **Zoom Out** .

Keyboard: Press CTRL+DOWN ARROW.

Using Preset Image Sizes

The Image Viewer includes a set of tools to allow you to quickly zoom to a few of the most desirable image sizes.

Reset to Original

Use the **Reset** selection to display the image as it appeared when you first opened it in the Image Viewer.

To view the original image,

Mouse: Click  in the **Image** toolbar.

Menu: In the **Image** menu, select **Reset to Original**.


Keyboard: Press CTRL+R.

Actual Size

Use the **Actual Size** selection to display the actual size of the stored or scanned image in the Image Viewer.

NOTE: Typically, the actual size of a scanned or stored image is much larger than the Image Viewer. Use the scrollbars or the Hand Pan option (page) to view the rest of the image.

To view the actual size of an image,

Mouse: Click  in the **Image** toolbar.


Menu: In the **Image** menu, select **Actual Size**.

Keyboard: Press CTRL+A.

Full Image

Use the **Full Image** selection to display the entire image in the Image Viewer.

To view the full image,

Mouse: Click  in the **Image** toolbar.

Menu: In the **Image** menu, select **Full Image**.

Keyboard: Press CTRL+F.


Rotating Images

Sometimes it is necessary to rotate images in order to view them correctly. (For example, if someone scans an image upside down.) The Image Viewer tool menu offers two options to rotate images: Rotate Left and Rotate Right.

Rotate Left

Use the **Rotate Left** selection to rotate the image 90° counter-clockwise.

To rotate the image 90° left,

Mouse: Click  in the **Image** toolbar.


Menu: In the **Image** menu, select **Rotate Left**.

Keyboard: Press CTRL+LEFT ARROW.

Rotate Right

Use the **Rotate Right** selection to rotate the image 90° clockwise.

To rotate the image 90° right,

Mouse: Click  in the **Image** toolbar.

Menu: In the **Image** menu, select **Rotate Right**.

Keyboard: Press CTRL+RIGHT ARROW.

Setting Image Quality

You can adjust the quality of the image displayed in the Image Viewer. Higher quality images look better overall and provide more clarity for detailed images, but they appear more slowly in the Image Viewer and can slow performance when scanning numerous images. Lower quality images might not show details in images, but they appear more quickly in the Image Viewer and can make scanning through numerous images less time-consuming. The Image Viewer tool menu provides three options to adjust image quality: Draft, Better, and Best.

Draft

Use the **Draft** selection to achieve best performance within the Image Viewer. This option reduces image quality to increase the speed at which Scan 'n Store draws and refreshes images in the Image Viewer.

To display “draft” quality images,

Mouse: Click  in the **Image** toolbar; in the sub-menu select **Draft**.

Menu: In the **Image** menu, select **Quality**; in the sub-menu select **Draft**.

Better

Use the **Better** selection to display a good quality image and achieve good performance within the Image Viewer. This option strikes a balance between image quality and the speed at which Scan 'n Store draws and refreshes images in the Image Viewer.

To display “better” quality images,

Mouse: Click  in the **Image** toolbar, in the sub-menu, select **Better**.

Menu: In the **Image** menu, select **Quality**; in the sub-menu, select **Better**.

Best

Use the **Best** selection to achieve best image quality within the Image Viewer. This option displays the highest quality images in the Image Viewer.

To display “best” quality images,

Mouse: Click  in the **Image** toolbar, in the sub-menu, select **Best**.


Menu: In the **Image** menu, select **Quality**; in the sub-menu, select **Best**.

Adjusting Anti-Aliasing

Scan 'n Store uses anti-aliasing to enhance the appearance of images in the Image Viewer. Anti-aliasing smooths jagged edges on graphics and text in images to make them more readable and more like the original document. However, anti-aliased images can slow the performance of the Image Viewer. To allow you to balance performance and appearance, Scan 'n Store lets you set the number

of shades of gray it uses to anti-alias an image, where more shades of gray creates a better reproduction of the original document.

To set the number of shades of gray,

Mouse: Click  in the **Image** toolbar; in the sub-menu click **None**, **4 Shades**, or **16 Shades**.


Menu: In the **Image** menu, click **Shades of Gray**; in the sub-menu click **None**, **4 Shades**, or **16 Shades**.

Fixing Scanned Images

When you scan documents and save them as images, the quality of the image can sometimes be less than desirable for use in an image library. The ScanFix utility included in Scan 'n Store corrects the most common problems found in scanned images.

Problem	What ScanFix does
Skew (Images scanned at an angle)	Realigns an image along the vertical and horizontal planes uses text and horizontal lines as guides. The resulting image is slightly larger than the original image
Noise (Random flecks in images.)	Removes random flecks of noise based on the size of the flecks and whether or not the flecks are isolated (not near or touching anything else).
Dot Shading (Blocks of color become splotchy gray patches)	Removes large areas of dot shading based on the size of the dots that make up the shaded area.

To enhance the quality of an image,

Mouse: Click  in the **Image** toolbar.

Menu: In the **Image** menu, select **ScanFix...**

Keyboard: Press CTRL+S.

NOTE: You should see the image change in the Image Viewer. If the problems you identified are not fixed after using ScanFix, refer to “Chapter 10: Using ScanFix” for help on adjusting ScanFix settings.


Using the Mouse in the Image Viewer

You can change the function of the left mouse button in the Image Viewer. There are often times when you might want to zoom in on a small portion of an image. (For example, to see the signature on a scanned image of a letter.) The Image Viewer provides two tools for zooming in on parts of images: **Flying Magnifier** and **Stretch Zoom**. The **Hand Pan** tool allows you to manually position an image within the image viewer. The **Select Area** tool allows you to highlight a specific area of the image

Flying Magnifier ()

The Flying Magnifier tool changes the appearance of the cursor in the Image Viewer and allows you to temporarily magnify parts of an image without increasing the size of the image.


To magnify parts of an image,

1. Click  to enable the **Flying Magnifier** tool and cursor. *(The cursor looks like a rectangular magnifying glass when you move it over the Image Viewer.)*
2. Click on the part of the image you want to magnify. *(A beveled window appears over the image. Within the window is a magnified view of the image.)*
3. Continue to hold down the left mouse button and move your mouse across the image. *(The beveled window moves across the image and shows a magnified view of each part of its trail.)*

Stretch Zoom ()

Use this selection to zoom in on a selected part of an image. When you use this option, the selected rectangle fills the entire Image Viewer.


To zoom in on a selected part of an image,

1. Click  to enable the **Stretch Zoom** tool and cursor.
(The menu disappears and the cursor looks like a round magnifying glass with cross-hairs above it.)
2. Place the cross-hairs at one corner of the rectangular area you want to select.
3. Click the left mouse button and hold it down while you drag the cursor across the area you want to select.
(A rectangle will appear to show the selected area.)
4. When the area you want to select is contained within the rectangle, release the mouse button.
(The selected area within the rectangle fills the entire Image viewer.)

Hand Pan ()

Select **Hand Pan** to move an image in any direction within the Image Viewer. Unlike the scrollbars, the Hand Pan tool allows you to move (pan) images up or down and left or right at the same time. Use this tool when an image is larger than the Image Viewer on both the horizontal and vertical axes.


To pan an image,

1. Click  to enable the **Hand Pan** tool and cursor.
(The menu disappears and the cursor looks like an open hand.)
2. Place the hand anywhere on the image in the Image viewer.
3. Click the left mouse button and hold it down while you drag the cursor in the direction you want to pan the image.
4. Release the mouse button when the image is where you want it or when you reach the edge of the Image viewer.
(The hand will not move beyond the Image viewer.)
5. Repeat steps 2-4 until the image is where you want it.

Select Area ()

Use **Select Area** to mark a region of an image with a solid rectangle.

To select a region with solid color,

1. Click  to enable the **Select Area** tool and cursor.
(The menu disappears and the cursor looks like a hand holding a pen with cross-hairs.)
2. Place the cross-hairs at one corner of the rectangular area you want to select.
3. Click the left mouse button and hold it down while you drag the cursor across the area you want to select.
(A solid rectangle will appear to show the selected area.)
4. When the area you want to select is contained within the rectangle, release the mouse button.

5. When the area you want to select is contained within the rectangle, release the mouse button.


Viewing Multiple-Page TIFF Images

The TIFF file format allows multiple pages to be saved within a single file. The Image Viewer is able to load these files and provides a set of tools to allow you to view each of the pages within the TIFF image. The Image Viewer tool menu provides four options to view pages within a TIFF image: First Page, Previous Page, Next Page, and Last Page.

First Page

Use the **First Page** selection to view the first page in an image.

To view the first page in a TIFF image,

Mouse: Click  in the **Image** toolbar.


Menu: In the **Image** menu, select **First Page**.

Keyboard: Press SHIFT+UP ARROW.

Previous Page

Use the **Previous Page** selection to view the page preceding the currently displayed page in a multiple page TIFF image.

To view the previous page in a TIFF image,

Mouse: Click  in the **Image** toolbar, or


Menu: In the **Image** menu, select **Previous Page** , or

Keyboard: Press SHIFT+LEFT ARROW.

Next Page

Use the **Next Page** selection to view the page following the currently displayed page in a multiple page TIFF image.

To view the next page in a TIFF image,

Mouse: Click  in the **Image** toolbar.


Menu: In the **Image** menu, select **Next Page**.

Keyboard: Press SHIFT+RIGHT ARROW.

Last Page

Use the **Last Page** selection to view the last page in an image.

To view the last page in a TIFF image,

Mouse: Click  in the **Image** toolbar.

Menu: In the **Image** menu, select **Last Page**.

Keyboard: Press SHIFT+DOWN ARROW.

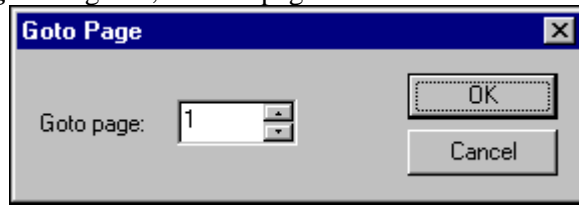
Goto Page

Use the **Goto Page** selection to go to a specific page in an image.

To go to a specific page in a TIFF image,

Mouse: Click  in the **Image** toolbar, then select a page in the drop-down list.

Menu: In the **Image** menu, select **Goto Page...** In the **Goto Page** dialog box, select a page number.



Keyboard: Press CTRL+G.

Chapter 9

Working With Annotations

Scan 'n Store allows you to add four types of annotations to your stored images: boxes, ellipses, lines, and text. With annotations, you can highlight important parts of images, insert notes. From the Image Viewer, you can create, select, edit, move, resize, and delete annotations.

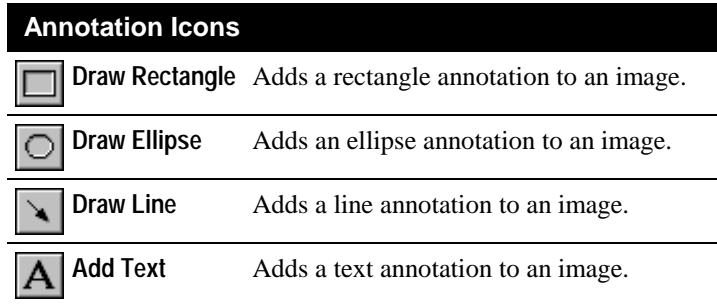
Creating Annotations

The Image Viewer allows you to create the following four types of annotations.

This type	Does this
Box	Lays a box with a on top of the image in the Image Viewer.
Ellipse	Lays a ellipse with a border on top of the image..
Text	Inserts a single line of text over the image in the Image Viewer. Scan 'n Store defaults to using the Arial font for the text.
Line	Inserts a black line over the image in the Image Viewer. You can add arrow heads to on or both ends of the line using the Annotation Properties dialog box described in “Editing Annotation Properties” on page “92.”.

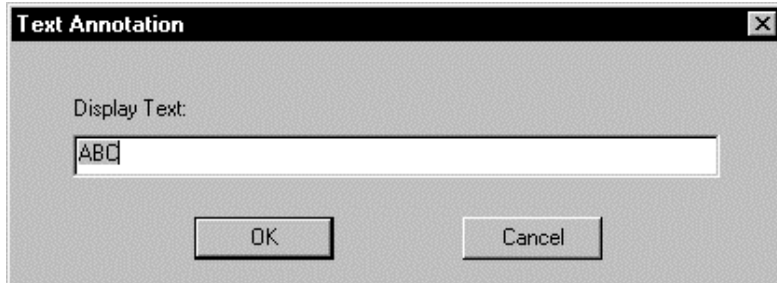
To create annotations

1. Choose one of these icons from the **Mouse** toolbar.



2. Hold down the left mouse button and drag the mouse to adjust the size of the annotation.
3. Release the mouse button to create the annotation.

When creating text annotations, the following dialog box prompts you for the text string after you release the mouse button.





Selecting Annotations

The Activation options (None, Hyperlink, Attached Note) control the effect of clicking on an annotation with the **Select Annotation** tool enabled. The options have the following effects:

If you choose	Then
None	Nothing happens
Hyperlink	A graphic specified in the Hyperlink text box appears
Attached Note	Text entered in the Attached Note text box appears.

To select an annotation,


1. Choose  from the **Mouse** toolbar to enable the **Select Annotation** tool.
2. Move the mouse cursor over an annotation.
(The cursor changes to  as it moves over an annotation.)
3. Click once on the desired annotation to execute the Hyperlink or display the Attached Note.
(The annotation will be outlined when selected. In the graphic below, the ellipse is the selected annotation.)



Editing Annotation Properties


You can change the appearance of annotations using the Annotation Properties dialog box. The dialog box changes depending on the type of annotation you select to edit. Click on the annotation type you want to edit to display the appropriate dialog box, then click on the dialog box elements for help on how to use them.

To edit annotation properties,

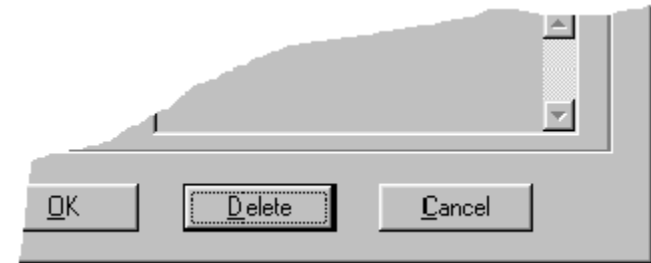
1. Choose  from the **Mouse** toolbar to enable the **Edit Annotation** tool.
2. Double-click on the annotation you want to edit.
*(The **Annotation Properties** dialog box appears. The actual properties available in the dialog will depend on the annotation type.)*
3. Click **OK** to keep any changes you make or **Cancel** to discard changes.
*(**Delete** removes the selected annotation from the image.)*

NOTE: The Hyperlink and Attached Note activations are not available in this version of Scan 'n Store.


To delete annotations:

1. Choose  from the **Mouse** toolbar to enable the **Edit Annotation** tool.
2. Double-click on the annotation you want to delete.
*(The **Annotation Properties** dialog box appears.)*


3. Click **Delete** to delete the selected annotation.



To move an annotation using the mouse,

1. Choose  from the **Mouse** toolbar to enable the **Edit Annotation** tool.
2. Click and hold the mouse button over the desired annotation. By moving the mouse, you can drag the annotation outline to the desired location and release the mouse button to drop the annotation.
(The annotation remains selected after it has been moved.)

To resize an annotation using the mouse,

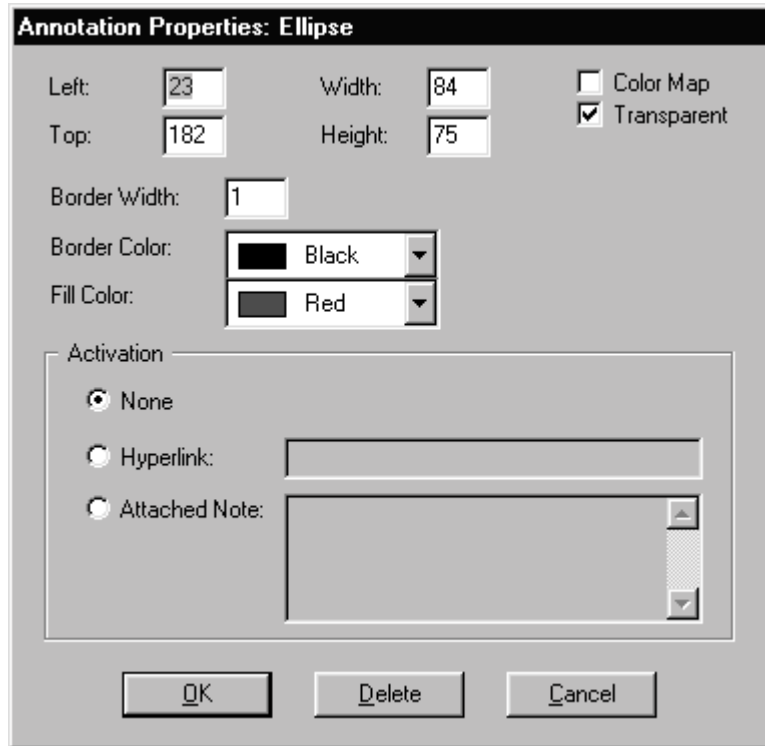
1. Choose  from the **Mouse** toolbar to enable the **Edit Annotation** tool.
2. Click once on the desired annotation.
3. Move the mouse cursor near the edge or corner of the selection rectangle.
(The mouse cursor should change to a resize cursor [double-ended arrow].)
4. Click and hold the mouse button to start resizing.
5. Drag the mouse until the annotation selection rectangle indicates the desired size, then release the mouse button.

Using the Annotation Properties Dialog Box

The Annotation Properties dialog box you see when you double-click on a selected annotation depends on the type of annotation you are editing. The following pages briefly describe the options available on annotation type dialog box.

Box and Ellipse Annotations

The Box and Ellipse annotation types share the same properties. The title bar for the dialog box below indicates the Ellipse annotation type, but the same dialog box is used for the Box annotation type.

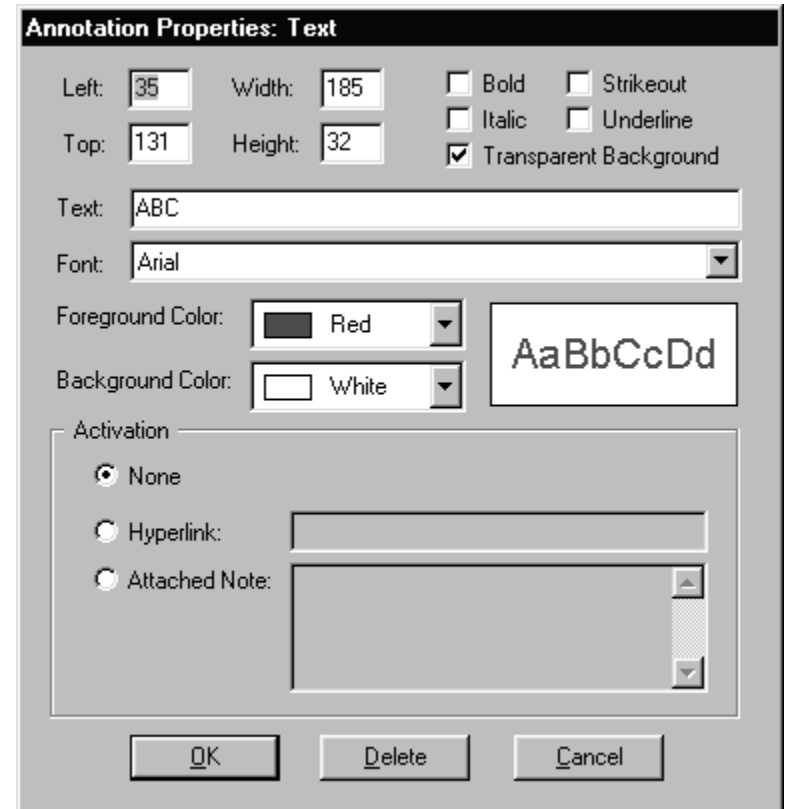


This option	Does this	Default
Left	Determines how far from the left side of a graphic the annotation should begin (in pixels).	N/A
Top	Determines how far from the top of a graphic an annotation should begin (in pixels).	N/A
Width	Determines the width of an annotation (in pixels).	N/A
Height	Determines the height of an annotation (in pixels).	N/A
Color Map	<p>For all elements in an image appearing beneath an annotation, this option converts all non-white elements to values of the selected Fill Color. For example, if you picked Fuscia as a Fill Color, all black elements would appear as Fuscia, and all non-black elements would appear as lighter shades of Fuscia</p> <p>If neither Color Map nor Transparency are selected, the Fill color of the annotation becomes opaque and obscures the area of the image beneath it.</p>	not checked

Transparent	<p>For all elements in an image appearing beneath an annotation, this option converts all non-black elements to values of the selected Fill Color. For example, if you picked Fuscia as a Fill Color, all white elements would appear as Fuscia, and all non-white elements would appear as darker shades of Fuscia.</p> <p>If neither Color Map nor Transparency are selected, the Fill color of the annotation becomes opaque and obscures the area of the image beneath it.</p>	checked
Border Width	<p>You can include a border around your annotation to make them more visible. This option sets how wide the border appears (in pixels).</p>	1
Border Color	<p>You can change the color of borders around annotations by selecting a color from the drop down list.</p>	black
Fill Color	<p>When you create a box or ellipse annotation, Scan 'n Store fills the annotation with color. You can change the filled color by selecting a color from the drop-down list.</p>	red
Activation	<p>The Activation options (None, Hyperlink, Attached Note) control the effect of clicking on an annotation with the Select Annotation tool enabled. The options have the following effects:</p> <ul style="list-style-type: none"> ▪ None. Nothing happens. ▪ Hyperlink. A graphic specified in the Hyplerlink text box appears in the Image Viewer. ▪ Attached Note. Text entered in the Attached Note box appears. 	None

Text Annotations

The Annotation Properties dialog box for the Text annotation type includes options to control font color, style, typeface, and content.

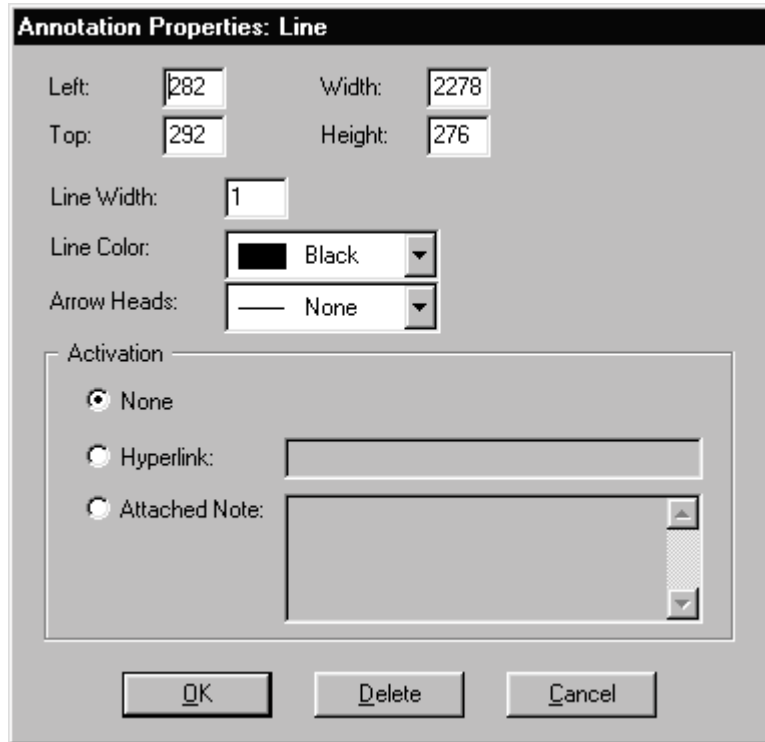


This option	Does this	Default
Left	Determines how far from the left side of a graphic the annotation should begin (in pixels).	N/A
Top	Determines how far from the top of a graphic an annotation should begin (in pixels).	N/A
Width	Determines the width of an annotation (in pixels).	N/A
Height	Determines the height of an annotation (in pixels).	N/A
Bold	Changes annotation text to bold type.	Not checked
Italic	Changes annotation text to <i>italic</i> type.	Not checked
Strikeout	Changes annotation text to strikeout type.	Not checked
Underline	Changes annotation text to <u>underline</u> type.	Not checked
Transparent Background	Renders the annotation background transparent, regardless of the Background Color selected. If this option is not checked, the background changes to the selected background color.	Checked
Text	Contains the text that appears in the annotation.	N/A.
Font	Determines the font used to display the annotation on a graphic. To change the font, select a font from the drop-down list.	Arial

Foreground Color	Determines the color of the text in the annotation. Select from the drop-down list to change the text color.	black
Background Color	Determines the color of the background in the text annotation. The background color is only visible if the Transparent Background option is not checked.	white
Text Style	Shows the appearance of the annotation text based on options selected in the dialog box.	N/A
Activation	The Activation options (None, Hyperlink, Attached Note) control the effect of clicking on an annotation with the Select Annotation tool enabled. The options have the following effects: <ul style="list-style-type: none"> ▪ None. Nothing happens. ▪ Hyperlink. A graphic specified in the Hyperlink text box appears in the Image Viewer. ▪ Attached Note. Text entered in the Attached Note box appears. 	None

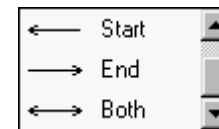
Line Annotations

The Annotation Properties dialog box for the Line annotation type includes options to control line width, line color, and whether or not arrow heads appear on the ends.



This option	Does this	Default
Left	Determines how far from the left side of a graphic the annotation should begin (in pixels).	N/A
Top	Determines how far from the top of a graphic an annotation should begin (in pixels).	N/A

Width	Determines the width of an annotation (in pixels).	N/A
Height	Determines the height of an annotation (in pixels).	N/A
Line Width	Determines the width of the selected line (in pixels).	1
Line Color	You can change the color of the line annotation by selecting a color from the drop-down list.	black
Arrow Heads	Choose an option from the drop-down list to change the appearance of the ends of a line annotation.	no arrow heads



- **Start** places an arrow head at the point where you begin your line annotation.
- **End** places an arrow head at the point where you end your line annotation.
- **Both** places arrows at both ends of a line annotation.

Activation	The Activation options (None, Hyperlink, Attached Note) control the effect of clicking on an annotation with the Select Annotation tool enabled. The options have the following effects: <ul style="list-style-type: none">▪ None. Nothing happens.▪ Hyperlink. A graphic specified in the Hyperlink text box appears in the Image Viewer.▪ Attached Note. Text entered in the Attached Note box appears.	None
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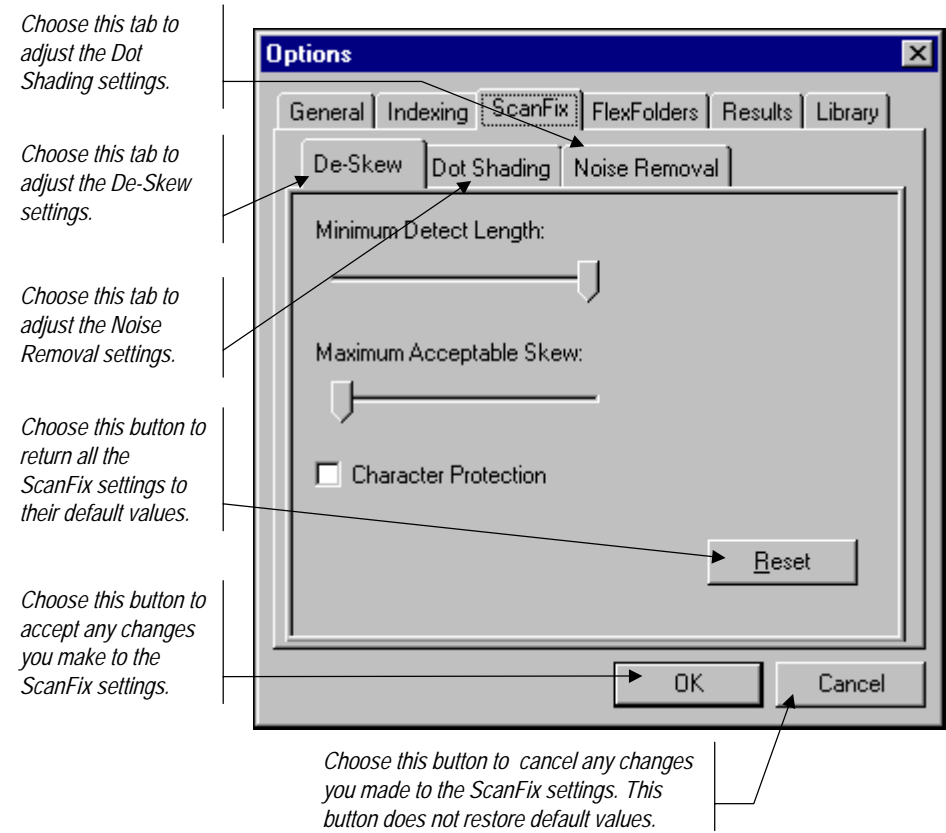
Annotation Storage

Annotations are stored in a file separate from the image. The name of the file is the same name as the image but with a file extension of .ANN. For example, annotations for image PARROTS.JPG would be stored in PARROTS.ANN. When an image is loaded that has a corresponding annotation file, the annotations are automatically loaded and displayed. Upon unloading an image, if annotations have changed (created, deleted, moved, resized, etc.), you will be prompted to save the annotations.

Chapter 10

Using ScanFix

ScanFix enhances the appearance and readability of images displayed in the Image Viewer. Use ScanFix before adding a library or an image to a library or when viewing or printing images already in a library. In either of these instances, the default setting for the ScanFix utility will probably be adequate. If you find the default settings are not producing the desired result, you can adjust them from the **ScanFix** tab in the **Options** dialog box.



Adjusting “De-Skew”

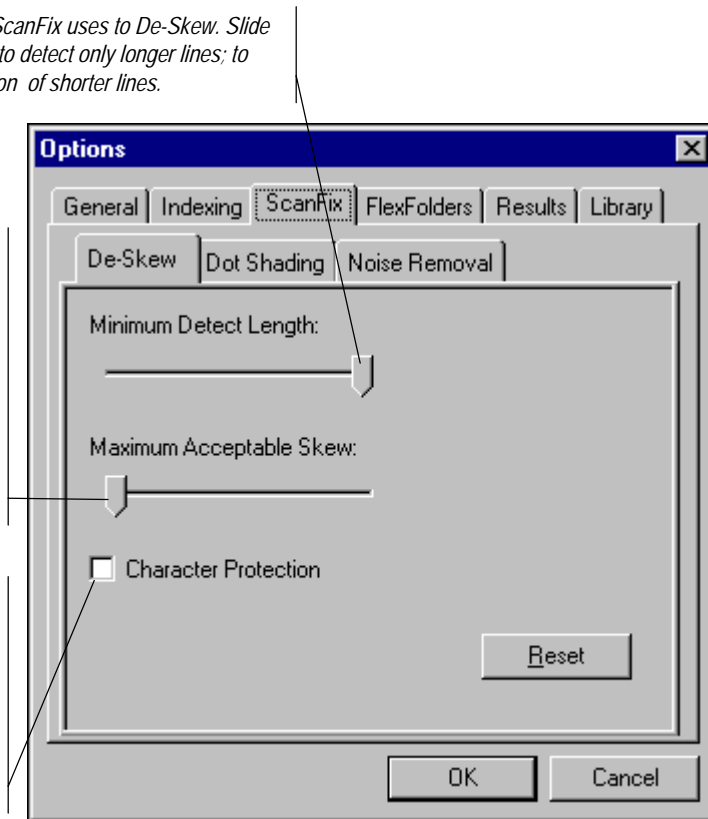
Sometimes images are scanned at angles that affect the appearance and readability of an document image. Skew refers to how much rotation the text in a scanned image has in relation to the horizontal plane. ScanFix includes a **De-Skew** tab to control how it uses text and horizontal lines to detect and remove skew from an image.

In addition to improving appearance and readability, De-Skew can decrease the file size of scanned images because it improves the effectiveness of image compression algorithms. De-Skew will also increase the height and width of your image.

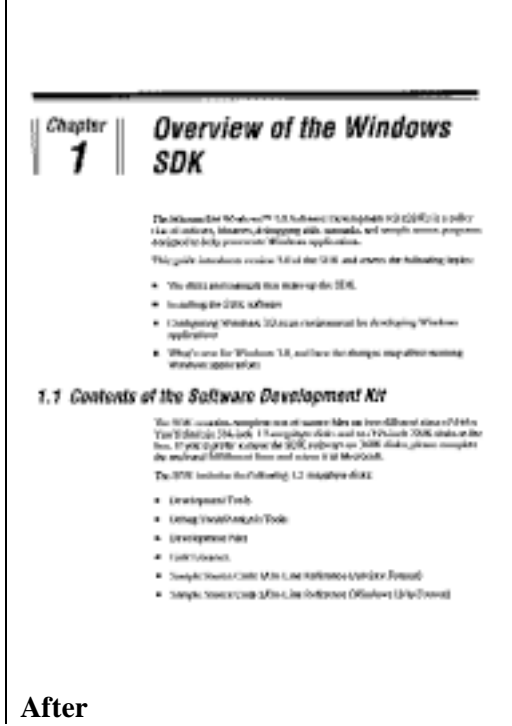
Sets the shortest line ScanFix uses to De-Skew. Slide the marker to the right to detect only longer lines; to the left to allow detection of shorter lines.

Determines how much skew ScanFix allows in an image. Slide the marker to the right to increase the amount of rotation ScanFix will allow in images; to the left to decrease the allowed rotation.

Removes rotational distortion from De-Skewed characters. Check this box to improve appearance and readability of text in De-Skewed images.



The following images show the same image before and after using ScanFix to de-skew.

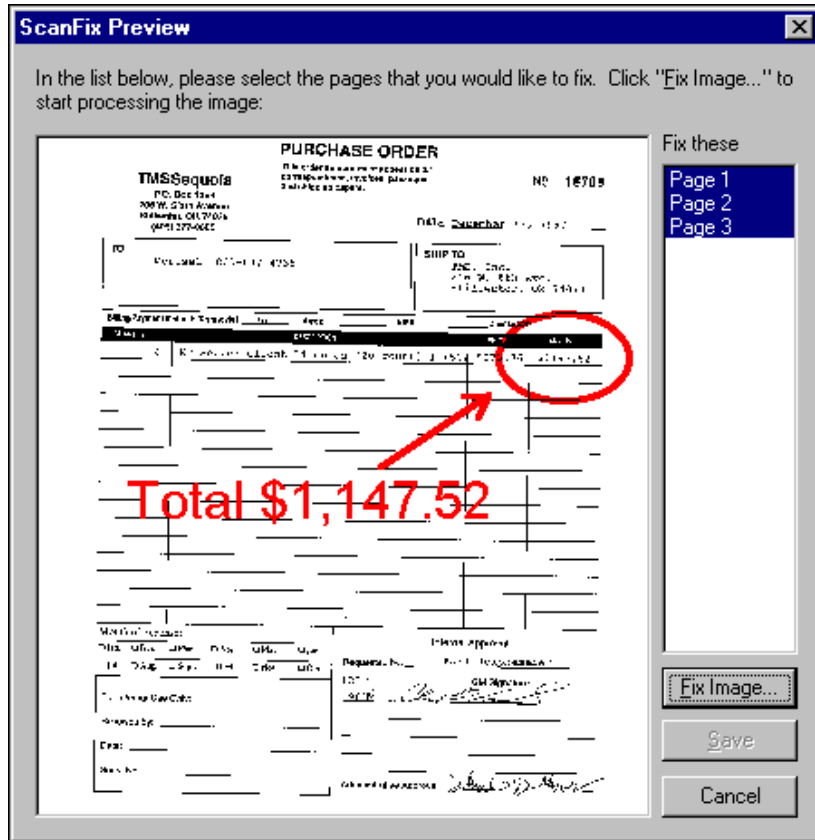


Before

After

Using ScanFix on Multi-Page TIFFs

When you use ScanFix on multi-page TIFFs, you can select which pages of the image you want to fix. If you choose to ScanFix a multi-page TIFF, the **ScanFix Preview** dialog box appears. You can immediately click **Fix Image** to fix all the pages, or you can select individual pages. As you select individual pages, the last selected page will appear in the window at the left of the dialog box.



Removing Noise From Images

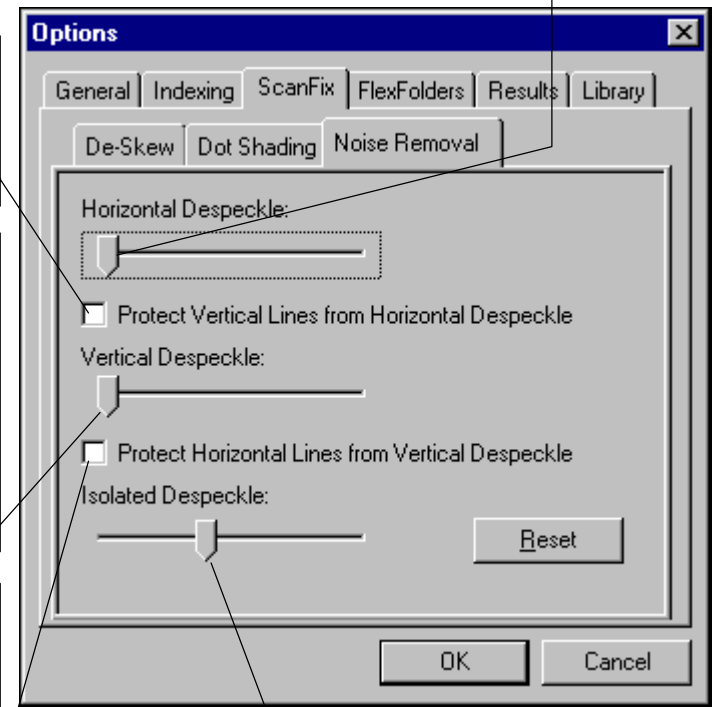
When you scan documents, things like imperfections in paper or particles on the scanner bed can add speckles to a scanned image. Introducing these speckles to a scanned image is called “noise.” ScanFix includes a **Noise Removal** tab to control how it detects noise in an image and removes the speckles to improve the appearance and readability of an image.

Defines the maximum horizontal length for a fleck that ScanFix will recognize as noise and remove from an image. Slide the marker to the right to increase the max. length; to the left to decrease the max. length.

Click this box to tell ScanFix to check to see if a group of pixels is part of a vertical line or character

Defines the maximum vertical length for a fleck that ScanFix will recognize as noise and remove from an image. Slide the marker to the right to increase the max. length; to the left to decrease the max.

Click this box to tell ScanFix to check to see if a group of pixels is part of a horizontal line or character.



Removes specks that are not touching anything else in the image. Slide the marker to the right to remove larger specks.

ScanFix uses the Noise Removal settings to determine how it identifies parts of a scanned image as “noise.” The following table summarizes the functions of each of the tools in the **Noise Removal** tab and how they affect ScanFix.

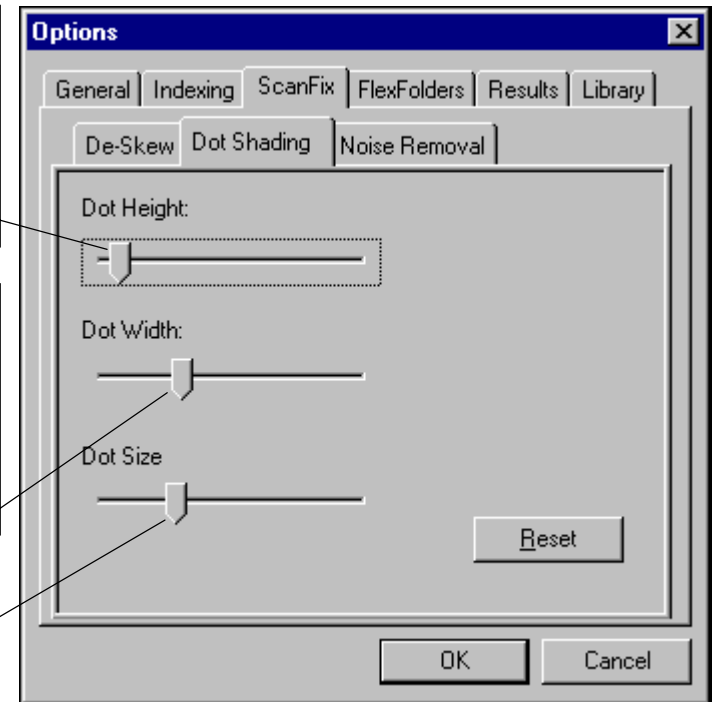
Use	To
Horizontal Despeckle	Define the maximum horizontal length for a fleck that ScanFix will recognize as noise and remove from an image. ScanFix examines each horizontal line (a single pixel high) and deletes any group of black pixels whose length is less than this value. You can increase this value to remove larger specks, but if you set this value too high you might remove segments of text from your image.
Vertical Despeckle	Define the maximum vertical height for a fleck that ScanFix will recognize as noise and remove from an image. ScanFix examines each vertical line (a single pixel wide) and deletes any group of black pixels whose length is less than this value. You can increase this value to remove larger specks, but if you set this value too high you might remove segments of text from your image.
Protect Vertical Lines from Horizontal Despeckle	Tell ScanFix to check to see if a group of pixels is part of a vertical line or character. ScanFix will not delete groups of pixels that are part of vertical lines or characters.
Protect Horizontal Lines from Vertical Despeckle	Tell ScanFix to check to see if a group of pixels is part of a horizontal line or character. ScanFix will not delete groups of pixels that are part of horizontal lines or characters.
Isolated Despeckle	Removes specks that are not touching anything else in the image. Slide the marker to the right to remove larger specks. Sliding the marker too far to the right can cause ScanFix to remove periods and the dots on the letters i and j. Experiment with this feature to get the best results for your images.

Removing Dot Shading From Images


Black and white images use dithering, or “dot shading,” to simulate shades of gray or color found in the scanned documents. ScanFix includes a **Dot Shading** tab to control how it detects areas of dot shading in an image and removes the areas to improve the appearance of an image. Removing dot-shaded regions can also decrease the file size of images. The following image shows the controls for noise removal and the callouts describe their use.

Sets the height of the smallest dot-shaded area you want ScanFix to remove. Slide the marker to the left to detect shorter dot-shaded areas.

Sets the width of the smallest dot-shaded area you want ScanFix to remove. Slide the marker to the left to detect thinner dot-shaded areas.



Sets the maximum size of individual dots in a dot-shaded area that ScanFix will remove. If ScanFix removes part, but not all of a dot-shaded area, undo the ScanFix, slide the marker farther to the right, and repeat the ScanFix to remove the larger dots.

Use	To
Dot Height	Set the height of the smallest dot-shaded area you want ScanFix to remove. Slide the marker to the left to detect shorter dot-shaded areas.
Dot Width	Set the width of the smallest dot-shaded area you want ScanFix to remove. Slide the marker to the left to detect thinner dot-shaded areas.
Dot Size	Set the maximum size of individual dots in a dot-shaded area that ScanFix will remove. If ScanFix removes part, but not all of a dot-shaded area, then click  from the Image toolbar to undo the ScanFix, slide the marker farther to the right, and repeat the ScanFix to remove the larger dots.

Appendix A

Quick Start Tutorial

This appendix introduces you to the Scan 'n Store work area and teaches you some common procedures. Read this appendix to learn how to use Scan 'n Store program.

Section 1: Searching Libraries

The lessons in this section use a sample library of images provided for this tutorial when you installed Scan 'n Store. The library contains a set of scanned purchase orders maintained in an accounts payable database.

Lesson 1: Search a Library


In this lesson, you will learn how to do the following:

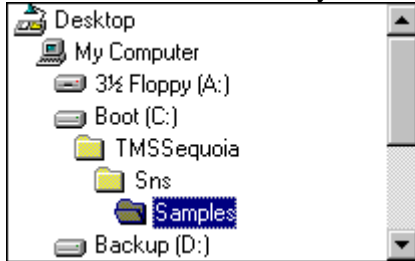
- Open an image library.
- Search an image library.
- Display and print a particular image.

Before You Begin

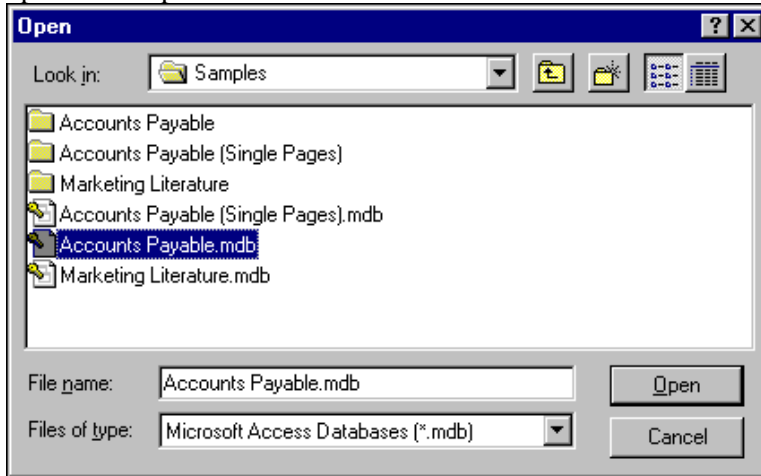
1. Start Windows 95/NT.
2. Select “Scan 'n Store” from the “Scan 'n Store” group in the Start Menu.

Open a Library

1. Click  from the **File** toolbar.
(The *Open dialog box* displays.)
2. Go to the Samples directory to view the sample databases
Scan 'n Store installed on your computer.



3. Double-click on *Accounts Payable.mdb* in the dialog box to open the sample database.



Search the Library Database

To search the database:

1. Click the **Search** tab to display the options in the tab.



2. Click the **Search** button in the tab.

Scan 'n Store displays all the images in the library in the list at the bottom of the window. However, for very large libraries, this kind of search is not the most effective way to find a particular image. To find a particular image in a large image database, you will want to narrow the number of listed images by using the information associated with the images when they were entered into the Scan 'n Store image library.



To narrow the search:

The **Department** column in the **Search Results** tab shows two possible values: PS and Corporate. Let's assume we know the purchase order we seek is in Department "PS" and was issued before December 15, 1997.

1. In the **Search** tab, click in the Criteria field of the "Department" Field Name.
(An arrow appears to the right of the field.)
2. Click on the arrow and select "PS" from the drop-down list.
3. Click in the Comparison field of the "Date" Field Name.
(A drop-down list appears in the field.)
4. In the drop-down list, select the "<" option.
5. Click in the Criteria field of the "Date" Field Name.
(The current date appears in the field.)

6. In the field, select the date 12/15/97 using one of the following methods.
- Click in each of the date/month/year areas and type the values.



- Click in each of the date values and use the spin box () to select the values.
- Click  to display a calendar, then use the calendar to select the date.



7. Click on the **Search** button.
(*Scan 'n Store now only displays the images that have a value of PS in the Department column and have a Date earlier than 12/15/97.*)

This narrowed the list to two images. Now you can view the images in the Image Viewer to determine which image you need.

Lesson 2: Sort the Search Results List

The **Search Results** list not only displays the list of images retrieved from a search, but is also an interactive tool that can help you find a particular image. You can sort the contents of the list based on any of the headings in the first row.



To sort list:

1. In the **Search** tab, click the **Reset** button then click the **Search** button.
*(The **Search Results** tab again shows all the images in the Accounts Payable library.)*
2. In the **Search Result** tab, click on any heading in the list.
(Scan 'n Store sorts the contents either alphabetically or numerically, depending on the field type.)



Lesson 3: View Images With the Image Viewer

The Image Viewer shows a large display of the image selected in the Thumbnails or in the Image List. The viewer also allows you to affect the appearance of the image for viewing and printing.

Zoom In/Out on Images

1. In the **Search Results** tab, click on any image in the list.
(The image should appear in the Image Viewer.)
2. Click  in the **Mouse** toolbar to make the image appear 50% larger in the viewer.
3. Click  in the **Mouse** toolbar to make the image appear 50% smaller in the viewer.
(You can repeatedly zoom in or out on an image to make it as large or small as necessary. You can also quickly change

the size of the image based on a set of common Scan 'n Store image sizes.)


4. Click  in the **Mouse** toolbar to display the actual size of the scanned purchase order.
(Typically, the actual size of an image will not fit within the Image Viewer.)
5. Click  in the Mouse toolbar to display the whole image within the viewer.

In some cases, you may want to zoom on a specific portion of an image.


Rotate Images

Sometimes, scanned documents can be difficult to read due to the orientation of the page. The following steps show you how to rotate images within the Image Viewer to make them easier to read.

1. In the **Search Results** tab, find the image that has “**Knowledg**” in the Company column and click anywhere in the row of that image.
(A purchase order to “Knowledge Asset Media” should appear in the Image Viewer.)
2. This image is a multi-page TIFF, which means several scanned pages are saved in a single image file. We want to see the second page in this image file.

To view the second page, click  in the **Page** toolbar.
(The drop-down list box in the toolbar will change to indicate the current page.)



3. Click  in the **Image** toolbar to rotate the image.
(The image should rotate 90° clockwise.)



Now, you can use the zoom features to size the image for easier reading on-screen.

Improve Image Quality

Scan 'n Store allows you to adjust the quality of the black and white images in the Image Viewer. (You cannot adjust the quality of gray-scale or color images.) Adjusting Scan 'n Store to display using low-quality increases the performance in the Image Viewer. This means images load more quickly, you can scroll or pan images more quickly, and you can resize images more quickly. However, the image will be harder to read and can appear chunky with jagged lines. Improving the image quality enhances the appearance of the image, but slows the performance of the Image Viewer.



Let's view the image we just rotated using the highest and lowest quality settings.

For lowest quality settings,

1. Click  from the **Image** toolbar, then select **Draft** from the list.
2. Click  from the **Image** toolbar, then select **None** from the list.

The image should have jagged lines and small type should be difficult to read.

Now, for highest quality settings,

1. Click  from the **Image** toolbar, then select **Best** from the list.
2. Click  from the **Image** toolbar, then select **16 Shades** from the list.




The jagged lines should appear smoother with these settings.
The text in the image should grow darker and thicker as Scan 'n Store alters it to make it more readable.

Zoom on Selected Portions of an Image

The text in most images is too small to easily read on-screen. Scan 'n Store provides two methods for magnifying portions of an image within the Image Viewer: using the **Stretch Zoom** and **Flying Magnifier** tools.

The Stretch Zoom tool allows you to select a portion of an image and fill the Image Viewer with that piece of the image.



To use the Stretch Zoom tool,


1. In the **Search Results** tab, choose the image with the value “15708” in the Purchase Order column.
(An image with red annotations should appear in the Image Viewer.)
2. Click  to fit the full image within the Image Viewer.
3. Click  in the **Mouse** toolbar.
(The cursor changes to a magnifying glass  when you pass the it over the Image Viewer.)
4. Using the left mouse button, click in the top left corner of the portion of the image circled with a red elliptical annotation, hold the mouse button down as you drag the cursor to the lower right corner of the section (a black box should mark the area selected), and release the mouse button.
(The selected area should grow to fill the Image Viewer. You should see \$1147.52 in large text.)

- Click  to fit the full image within the Image Viewer again.

For images where you have a lot of portions you want to magnify, going through these steps over and over again can be tedious. For frequent magnifications in a single image, the **Flying Magnifier** tool is very useful.

To use the Flying Magnifier tool,

- Click  to make sure the full image appears within the Image Viewer.
- Click  in the **Mouse** toolbar.

(The cursor changes to a different magnifying glass  when you pass the it over the Image Viewer.)


- Move the cursor over the red ellipse and click the left mouse button and hold it down.
(The area within the ellipse should enlarge within a beveled border. The enlargement will continue until you release the mouse button down.)

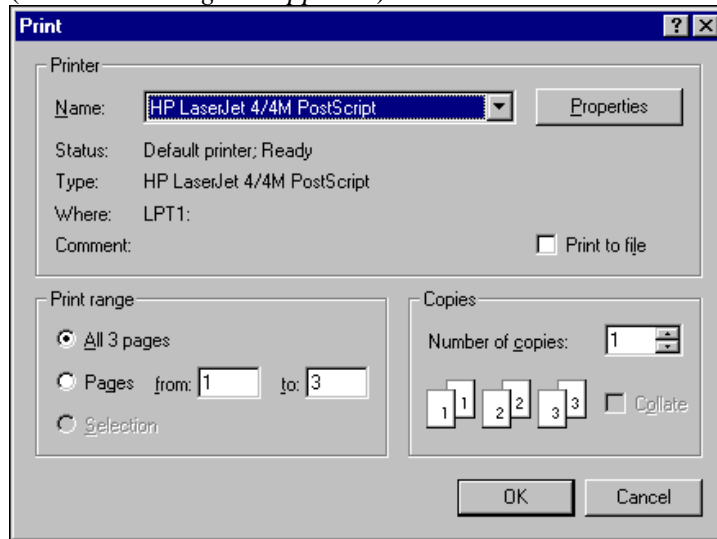
There is one other difference between the two methods for zooming on portions of an image—image quality. The Stretch Zoom enlargement (at left) takes advantage of any quality settings you use, whereas the Flying Magnifier enlargement shows the enlargement without using any of the quality settings.

Check/COD	
PRICE	AMOUNT
\$578.76	\$1147.52

Check/COD	
PRICE	AMOUNT
\$578.76	\$1147.52

Print a Selection

1. Click  in the **File** toolbar.
(The *Print* dialog box appears.)



2. Click **OK** to print all the pages in the image.

Go to “Section 2: Entering Images Into Libraries”

Section 2: Entering Images Into Libraries

The lessons in this chapter use a sample Scan 'n Store database installed with the software and a sample image file. For a library to continue to be useful and current, it is usually necessary to add images to it.

In this chapter, you will learn how to do the following:

- Scan documents with Scan 'n Store.
- Select images to enter into a library.
- ScanFix an image to enhance readability.
- Assign keywords to field names.
- Add an image to a library.

Before You Begin

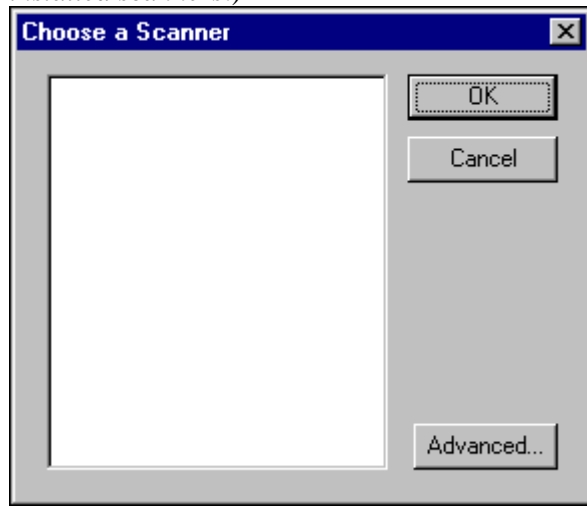
1. Start Windows 95/NT.
2. Select “Scan 'n Store” from the “Scan 'n Store” group in the Start Menu.
3. Use the procedures from Section 1 to open the Accounts Payable library.
(Do **not** open the “Accounts Payable (Single pages)” library.)

Lesson 1: Scan a Document

Before you begin adding documents to a library, you need to scan them and save them as image files.

To scan a document using Scan 'n Store:

1. In the **File** menu, select **Scan...**
(A dialog box showing scanning options appears.)
2. Click **Load Driver**.
(The **Choose Driver** dialog box appears, showing any installed scanners.)



3. Click **Advanced...**
(The **Open** dialog box displays.)
4. Double-click on the *Fakescsi.drv* file shown in the dialog box.
5. Click in the **Scanner** box to display a drop down list of scanners supported by the driver you chose.

6. Click on “RICOH IS520” from the list.
(The options available in the Scanner and Job areas of the dialog box should change from gray to white.)

Not all scanners support each of the options shown in the dialog box. You can click on the other scanners in the Scanner drop-down list to see how the available options change depending on which scanner you select. Before you go on to step 7, make sure “RICOH IS520” is the selected scanner.

7. Click on **Back** to set the scanner to scan the back side of a page.
(Both Front and Back should be checked at this point.)
8. Click on the Resolution arrow and choose “200” from the drop-down list.
9. Click on the Page Size arrow and choose “Legal (8.5" x 14")” from the drop-down list.
10. Click **Scan** .
*(The Page status bar will show the progress of a scan and the **Cancel** button changes to **Stop Scanning**.)*
11. After the scan completes, click **Close**.
(Scan 'n Store adds the scanned image to a batch which holds images until they are indexed and added to a library.)

Scan 'n Store will remember which driver you choose, which scanner you select, and how you configure the scanning options. The next time you click **Scan...**, the dialog box will automatically fill with the last set of options you used.

12. Click the **Index** tab to view the Batch contents.
*(The **Batch Index** tab in the bottom of the Scan 'n Store Window becomes active.)*



13. In the **Index** tab, click on the folder.
(The closed folder changes to an open folder, the name of a Scan 'n Store user appears in the Locked By column, and a solid black image created by the test scan fills the Image Viewer.)



14. In the **Batch Index** tab, click anywhere in the row to select the scanned image.




15. Press CTRL+DELETE to remove the image from the batch.
(An alert dialog box appears to ask if you really want to delete the image.)
16. Click **Yes**.
(The image disappears and the folder says "No images to index.")

Lesson 2: Import an Image

The first step in adding images to a library is to select which images you want to include.

To select an image to enter into the library:


1. Click  in the **File** toolbar.
(The *Open* dialog box displays.)
2. Double-click on the *test1.tif* file.
3. Click the **Index** tab.
4. In the **Index** tab, click the folder.
(A contract for AIIM 98 Exhibit Space should display in the Image Viewer.)

Lesson 3: ScanFix an Image

Images are often scanned at angles that make them awkward to read and print. Scan 'n Store includes the ScanFix utility to help overcome angled, or skewed, images.

The contract shown in the Image Viewer is skewed. Lets fix that before we enter it into the library.

To ScanFix an image:

1. Click  in the **Image** toolbar.
(A dialog box should appear to allow you to select which pages of this multi-page TIFF you want to affect. All these pages should appear selected.)
2. Click **Fix Image** to ScanFix all pages.

3. If you like the changes ScanFix made, click **Save** to save the changes.

If you do not like the change, click **Cancel**.
(The image should look like it did before your used ScanFix.)

Lesson 4: Check the Field Name Configurations

When a library is created the person creating it decides what Field Names will is required and what data is optional.

To check for required fields in the open library:

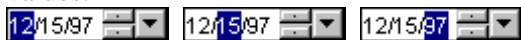
- Look at the image list in the **Batch Index** tab. All column headings in red indicate they are required. Notice that the Date, Paid, Purchase Order, and Company fields are required for any image entered into the library.



Lesson 5: Index an Image

The **Batch Index** tab displays a table with a list of field names available to describe the image you want to add to the library. You should enter as much information as necessary to make the image easy to locate when someone tries to find it using the **Search** tab.

Assign Keywords to Field Names

1. Click in the Date field.
(The current date appears in the field.)
2. Select the date 12/15/97 using one of the following methods.
 - Click in each of the date/month/year areas and type the values.




- Click in each of the date values and use the spin box () to select the values.
- Click  to display a calendar, then use the calendar to select the date.



3. Press TAB to move focus to the Paid field.
4. Type “No” in the field
5. Click in the Purchase Order field.
6. Type “15709” in the field.
7. In the **Image** menu, click **Add Batch to Library**.

You should have gotten a message saying “0 images added to the library.” Scan ’n Store will not allow you to enter an image into the library without filling in all the required fields.

8. Click in the Company field.
9. Click  to display a drop-down list of company names already used in the library.
10. Click Knowledge Asset. Media.
(The selection fills the field.)
11. Again, in the **Image** menu, click **Add Batch to Library**.

To make sure the image is actually in the library, use the **Search** tab to locate and display the image.

Go to “Section 3: Making a New Library”

Section 3: Making a New Library

The lessons in this chapter use the sample image file installed with Scan 'n Store. After reading Section 1 and completing the lessons in Sections 2 and 3, you are ready to make your own Scan 'n Store database.

In this chapter, you will learn how to do the following:



- Create a database for a new library.
- Create Field Names for information that will describe images stored in the library.
- Assign Field Types to determine what type of information can be associated with specific field names.
- Determine whether or not specific field names will be required when adding images to the new library.
- Add an image to a Scan 'n Store image library.
- Export images to a new Scan 'n Store image library.

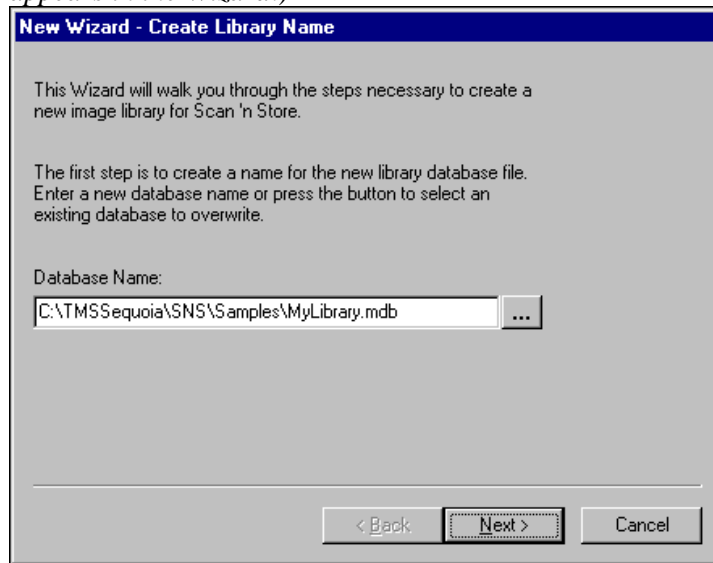
Before You Begin

1. Start Windows 95/NT.
2. Select “Scan 'n Store” from the “Scan 'n Store” group in the Start Menu.

Lesson 1: Create a Database

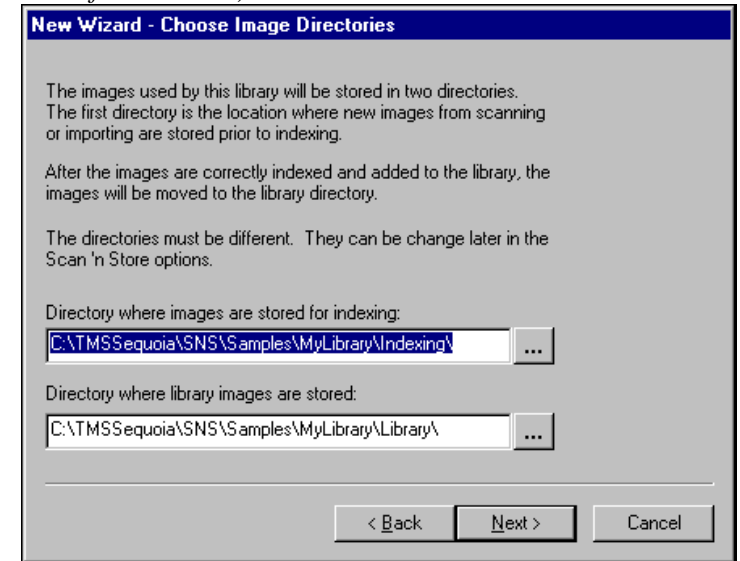
The first step in creating a new library is to create a Scan 'n Store database so you will know where the images are and can keep track of them.

1. Click  in the **File** toolbar to start the **New Library Wizard**.
2. Click  to display the **New Library Name** dialog box,
3. Type “MyLibrary” in the **File name** box.
4. Click **Open**.
(The dialog box closes and the path to the new library appears in the Wizard.)



5. Click **Next**.

*(The **Choose Image Directories** pane appears. We will use the default values.)*

6. Click **Next**.

*(An **Open Error** dialog box will display indicating that the libraries do not exist.)*

7. Click **Yes** to create the directories.8. Click **Finish** to create the new library.

*(After the New Wizard closes, Scan 'n Store displays the **Library** tab from the **Options** dialog box so you can assign categories to your library.)*


9. Click **Cancel**.

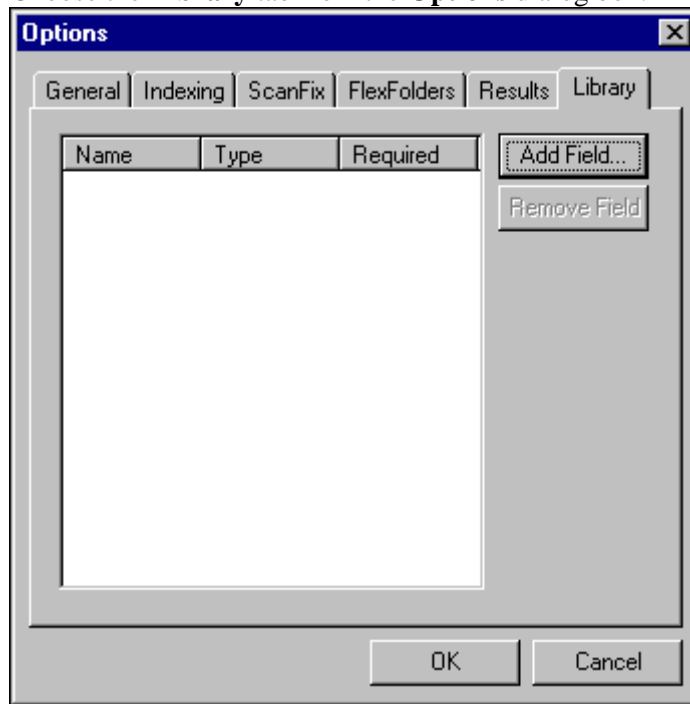
*(The **Options** dialog box closes.)*

Lesson 2: Assign Categories to a Library

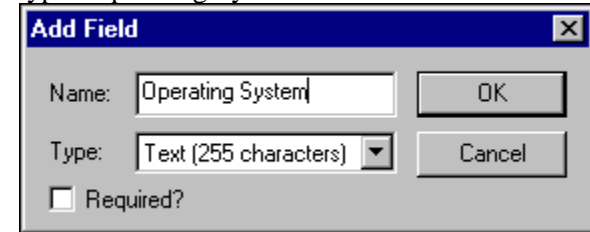
Field Names help users navigate through the images in a library by assigning meaningful topics or categories for users to search. In our example, let's assume our new library will hold images of archived user manuals for software development kits (SDKs) at Software Tools Company. One way to categorize these images would be to identify the operating system (DOS, Windows 95/NT, OS/2 UNIX, etc.) the SDKs were written for.

To assign a field name:

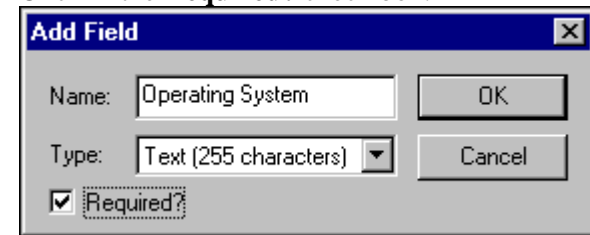
1. Click  in the **File** toolbar to re-open the **Options** dialog box.
2. Choose the **Library** tab from the **Options** dialog box.



3. Click **Add Field...** to open the **Add Field** dialog box.
4. From the **Add Field** dialog box, click in the **Name** box and type “Operating System”.



5. Click in the **Required?** check box.



6. Click **OK**.
(The new category appears in the **Library** tab.)

Name	Type	Required
Operating ...	Text	Yes

7. Click **Add Field...** to open the **Add Field** dialog box.

8. From the **Add Field** dialog box, click in the **Name** box and type “ChapNum” to create a field for chapter numbers.
9. Click in the **Type** box and select **Integer**.
10. Click **OK**.
11. Click **Add Field...** to open the **Add Field** dialog box.
12. From the **Add Field** dialog box, click in the **Name** box and type “ChapTitle” to create a field for chapter titles.
13. Click **OK**.



*(The **Library** tab now shows all three categories.)*

Name	Type	Required
ChapTitle	Text	No
ChapNum	Integer	No
Operating ...	Text	Yes

14. Click **OK** in the **Options** dialog box to save your changes and close the dialog box.

Lesson 3: Add Images to New Libraries

Adding images to new libraries is the same as adding images to existing libraries (See “Chapter 4: Entering Images Into Existing Image Libraries.”)

1. Click  in the **File** toolbar.
(The **Open** dialog box displays.)
2. Double-click on the “test2.tif” file.
3. Click the **Index** tab.
4. In the **Index** tab, click the folder.
(A chapter page should display in the Image Viewer.)
5. Click  in the **Image** toolbar.
6. Click **Fix Image** to ScanFix the page.
(The image should re-align without an angle.)
7. Click **Save** to save the changes.
(The “fixed” image appears in the Image Viewer.)
8. In the **Batch Index** tab, click in the “Operating System” field.
(Remember, this is a required field and should appear in red type.)
9. Type “Windows 95” in the “Operating System” field.
10. Type “1” in the “ChapNum” field.
11. Type “Overview of the Windows SDK” in the “ChapTitle” field.

12. In the **Image** menu, click **Add Batch to Library**.



(Scan 'n Store adds the image to the library. The image will disappear from the Batch Index tab and Image Viewer.)

To make sure the image is in the library, look for the image in the **FlexFolders** tree.

13. Click on the **FlexFolders** tab to display the tree.


 MyLibrary.mdb (1)

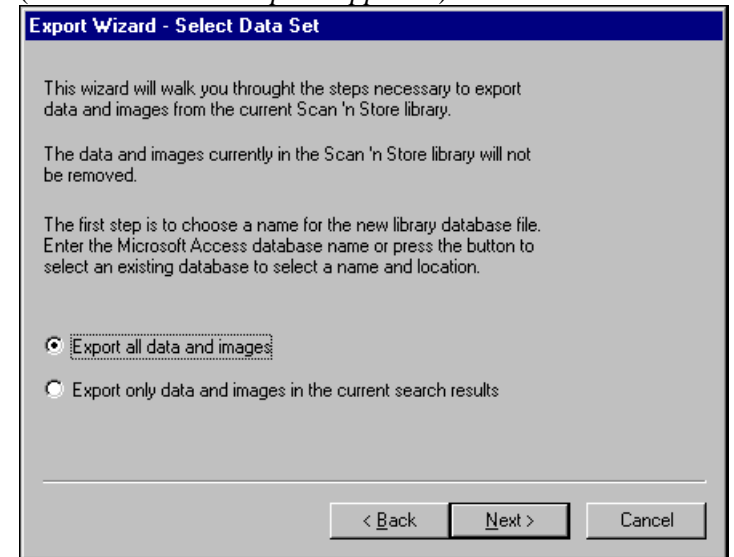
14. Click on the “+” box to expand the tree and show your image.


 MyLibrary.mdb (1)
 Overview of the Windows SDK (1)

Lesson 4: Export Images to New Libraries

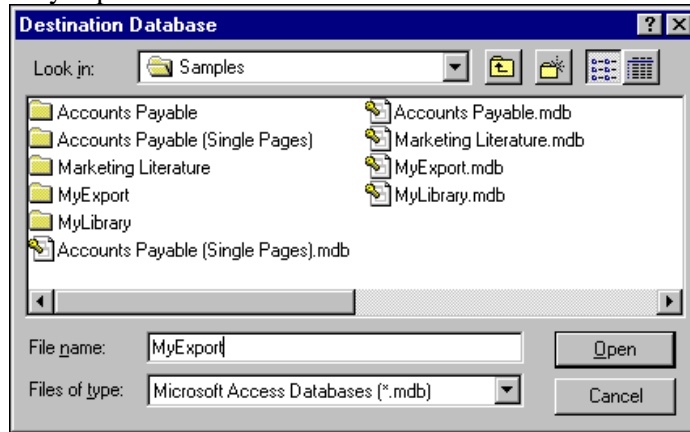
After you perform a search and Scan 'n Store returns a list of images that match your search criteria, you might want to export that group of similar images to their own library. For example, suppose you wanted to create new libraries for the Software Tools Company user manuals so each library contained only user manuals associated with specific operating systems.

1. Click  to start the Export Wizard .
(*The **Select Data Set** pane appears.*)

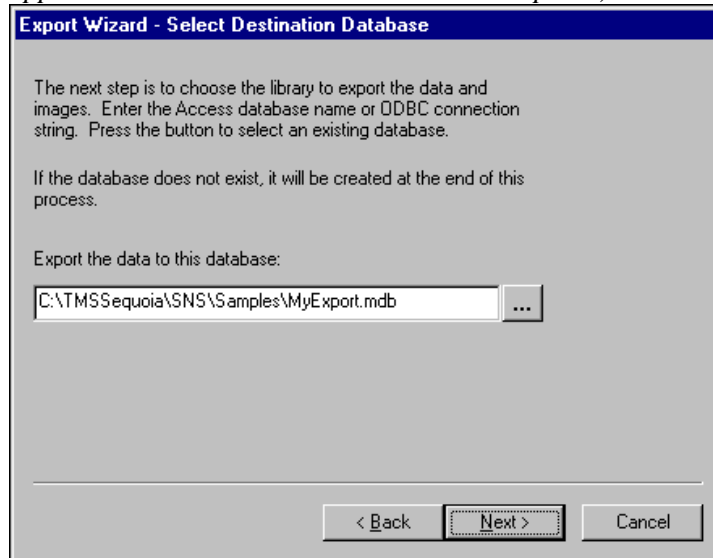


2. Choose **Export all data and images**.
3. Click **Next**.
(*The **Select Destination Database** pane appears*)
4. Click  to display the **Destination Database** dialog box.

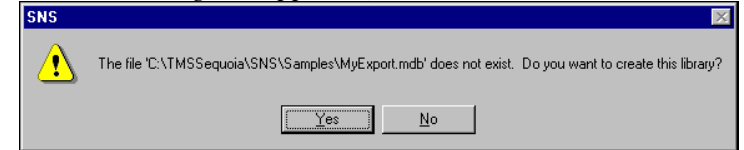
5. Go to the directory containing *MyLibrary.mdb* and type “MyExport” in the File name box.



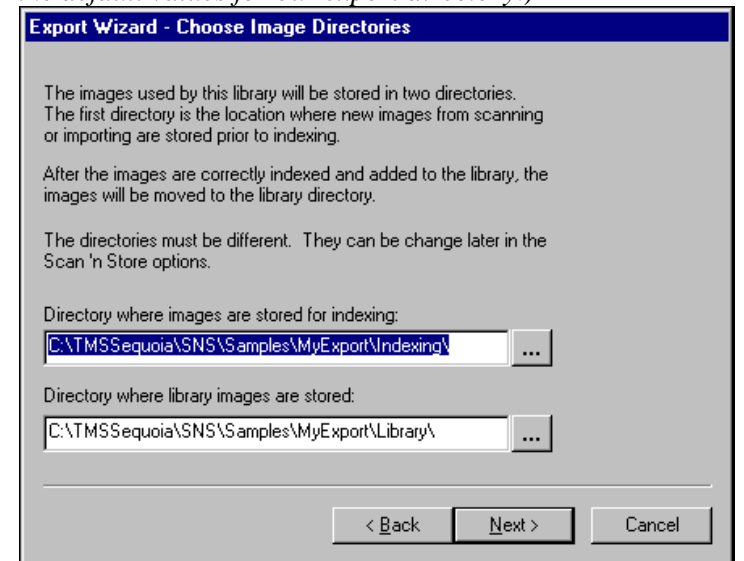
*(The dialog box closes and the path to the export database appears in the **Select Destination Database** pane.)*



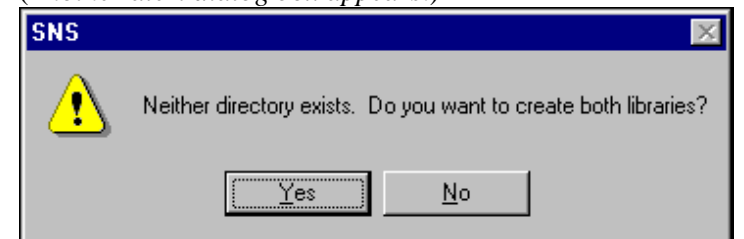
6. Click **Next**.
(An alert dialog box appears.)



7. Click **Yes**.
(The **Choose Image Directories** pane appears. We will use the default values for our export directory.)

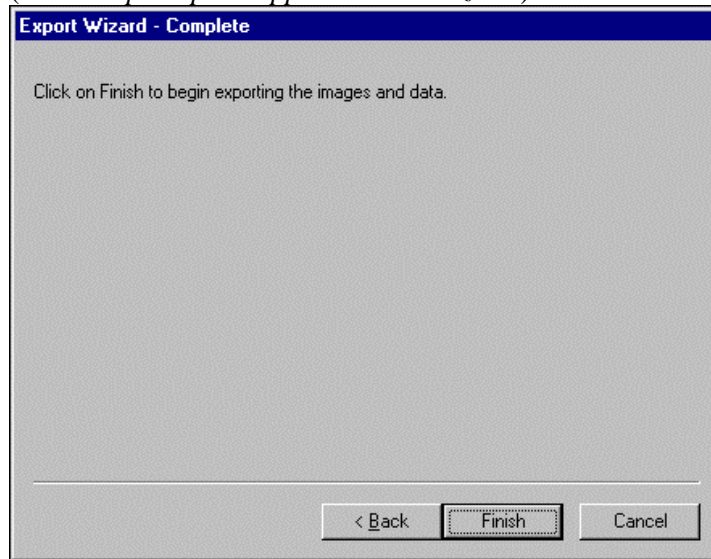


8. Click **Next**.
(Another alert dialog box appears.)



9. Click **Yes**.

(The Complete pane appears in the wizard.)



10. Click **Finish**.

(Scan 'n Store begins exporting the images and data to the new export database.)

End of Tutorial

Index

▪

.ANN files, 102
.BMP
 TWAIN images, 46

A

acquiring images from TWAIN devices, 45
Actual Size, 78
Annotation Properties dialog box, 93–102
 line annotations, 100
 text annotations, 97
annotations, 87–102
 .ANN file formats, 102
 creating, 89–91
 deleting, 92
 editing, 91–93
 four type of, 89
 moving, 93
 resizing, 93
 selecting, 91
 using the Annotation Properties dialog
 box, 93–102
 line annotations, 100
 text annotations, 97
anti-aliasing, 81
archiving images, 67
assigning keywords, 47

B

Batch Index
 deleting images from, 48
Best quality, 81

Better quality, 81
boolean search, 62
browsing images, 54

C

categories
 audience needs, 9
 defining using the Fields table, 31
 how to define, 34
 identifying all categories, 8
comparison values, 60
configuring libraries, 31–34
 using the Fields table, 31
 Field, 31
 Required?, 33
 Type, 32
configuring scan jobs, 42
configuring scanners, 40
creating libraries, 27
currency field, 32

D

databases
 Access, 10
 ODBC, 11
 performance, 10
 structure of, 11
date field, 32
default keywords, 49–50
defining categories, 34
deleting annotations, 92
deleting images, 52
 from a library, 64
 from Batch Index, 48

- imported images, 52
- designing libraries, 6
- de-skew, 104
 - imported images, 51, 82
- despeckle, 108
- dot height, 109
- dot shading
 - removing from imported images, 51, 82
- dot size, 109
- dot width, 109
- dot-shading, 109
- Draft, 80

E

- editing annotations, 92
- enhancing image quality
 - before adding images, 50–51
- exporting images, 75
 - to existing databases, 67
 - to new databases, 72

F

- Field, 31
- fields
 - categorizing data, 9
 - currency, 32
 - date, 32
 - Field Name
 - in Configure tab, 32, 23
 - float, 32
 - integer, 32
 - naming conventions, 6
 - text, 32
- Fields table
 - Field, 31
 - Required?, 33
 - Type, 32
- First Page, 86
- FlexFolders, 54, 58
- float field, 32
- Flying Magnifier, 83
- Full Image, 79

G

- Goto Page, 88

H

- Hand Pan, 84

I

- image
 - sizes in Image viewer, 77–84
- image list, 22
- image viewer, 23, 77–87
 - anti-aliasing, 81
 - quality, 80–81
 - quality of images
 - Best, 81
 - Better, 81
 - Draft, 80
 - reset display
 - actual size, 78
 - full image, 79
 - original display, 78
 - rotating images left, 79
 - rotating images right, 80
- ScanFix, 82
- using the left mouse button
 - Flying Magnifier, 83
 - Hand Pan, 84
 - Select Area, 85
 - Zoom on Selection, 84
- viewing multi-page TIFF images, 84–87
 - First Page, 86
 - Goto Page, 88
 - Last Page, 87
 - Next Page, 87
 - Previous Page, 86
- zooming in 50%, 77
- zooming out 50%, 77
- images
 - adding to libraries, 34–52
 - adding images, 52
 - importing existing images, 37–38
 - archiving, 67
 - assigning keywords. *see* keywords
 - categorizing for libraries, 8

- deleting from a library, 64
- deleting from Batch Index, 48
- deleting imported images, 52
- exporting. *see* exporting images
- grouping, 6
- improving quality of, 50–51
- in Image viewer, 77–87
- indexing, 47
- multi-page TIFF images, 84–87
- quality of, 80
 - anti-aliasing, 81
 - Best, 81
 - Better, 81
 - Draft, 80
 - ScanFix, 82
- rotating
 - left 90 degrees, 79
 - right 90 degrees, 80
- scanning using TWAIN devices, 45

Import dialog box, 38

importing image files, 37

indexing images, 47

- changing index values, 65
- default keywords, 49

installation, 1–4

- exiting the program, 4
- installing the software, 3
- starting the program, 4

integer field, 32

K

keywords

- assigning to images, 45–47
- default, 49–50
 - how to define, 49
- narrowing a search with, 60
- searching with, 58
- with comparison values, 60

L

Last Page, 87

libraries

- adding images to, 34–52
- assigning keywords. *see* keywords

- importing existing images, 37–38
- improving image quality, 51
- configuring, 31–34
- creating, 27
- defining categories, 34
- defining search fields, 6
- designing, 6
- exporting images, 75
- grouping images, 6
- managing. *see* managing libraries
- multiple libraries, 10
- opening, 29–30
- overview of, 5
- see also* categories, 6

Library tab, 26

- Add Field, 26
- Name, 26
- Remove Field, 26
- Required, 26
- Type, 26

M

managing libraries, 25–34

- configuring, 31–34
- creating libraries, 27
- opening libraries, 29–30
- using the Library tab, 26

moving annotations, 93

multi-page images, 84–87

multi-page TIFFs

- ScanFix, 106

N

Next Page, 87

noise removal, 107

- from imported images, 51, 82

O

ODBC databases, 11

opening libraries, 29–30

organizing libraries, 6

Original Display, 78

overview

of libraries, 5

P

panning images in Image viewer, 84
Previous Page, 86

Q

quality, 80–81
 Best, 81
 Better, 81
 Draft quality, 80

R

readability of scanned images, 103
removing images. *see also* deleting images
required fields, 33
Required?, 33
resetting search parameters, 63
resizing annotations, 93
Results window
 Batch Index tab, 23
 overview of, 22
 Search Results tab, 22
rotating images, 79
 fixing scanned images, 104
 left 90 degrees, 79
 right 90 degrees, 80

S

scan jobs, 42
 cancelling, 44
 starting, 44
 stopping, 44
ScanDirector, 39
ScanFix, 87–89
 de-skew, 104
 dot-shading, 109
 imported images
 de-skew, 51, 82
 dot shading, 51, 82
 noise removal, 51, 82
 multi-page TIFFs, 106

 noise removal, 107

scanners

 configuring, 40
 configuring scan jobs, 42

scanning

 using ScanFix, 103
scanning images, 38–45
 batch scan, 42
 saving to multi-page TIFFs, 43
 saving to single-page images, 43
 single page, 42
 using the Scan Images dialog box
 to configure you scanner, 40
 to configure your scan jobs, 42
 using TWAIN devices, 45

search

 free-form searching, 62
 narrowing a search, 60
 narrowing with comparison values, 60
 resetting search values, 63
 using keywords, 58
 using the Search Results tab, 53
 with FlexFolders, 54

Search Results tab, 53

Search window

 overview of, 21

searches

 among multiple libraries, 10

Select Area, 85

speckles

 removing from scanned images, 107

T

tabs, 21

 Search Results, 53

text field, 32

TIFF

 scanned images, 38
 viewing multi-page images, 84–87
 first page, 86
 goto page, 88
 last page, 87
 next page, 87
 previous page, 86

toolbars

 overview of, 16

TWAIN devices, 45
 about TWAIN images, 46
Type, 32
types of annotations, 89

W

work area. *See* toolbars; search window;
 results window; image viewer

Z

zoom
 on selected parts, 84
 to actual size, 78
 to full image, 79
 to preset sizes, 78–80
 to show original display, 78
 using the Flying Magnifier, 83
 zooming in 50%, 77
 zooming out 50%, 77
Zoom on Selection, 84

