

Template Maker

Important!

Template Maker is used with forms that were not designed in the Form Publisher part of Scannable Office. If you designed your form with Form Publisher, you do not need to use Template Maker. Note, however, that if you design forms outside of Form Publisher, you must follow the specifications in the Designing Forms User Guide.

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AutoData Systems
6111 Blue Circle Drive
Minneapolis, MN 55343

Technical Support

Phone: 952-945-2801
FAX: 952-938-4693
Email: support@autodata.com

Sales Department:

Phone: 952-938-4710
FAX: 952-938-4693
Email: sales@autodata.com

Web Site URL:

www.autodata.com

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AutoData Template Maker

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Chapter 1

Introduction to AutoData Template Maker

Users familiar with AutoData FORM 4.1 should review the section *What's New in Template Maker*.

AutoData Template Maker is a software package used in conjunction with other AutoData software products. AutoData Template Maker is used to create a template of the form you designed according to the guidelines presented in the **Designing Forms** manual. Template Maker defines the type and location of the fields on your blank form. This template file is then used by other AutoData software products to locate and “read” the data in the fields on completed, or “filled-in”, forms.

About This Manual

This manual assumes that you have already created your form following the guidelines presented in the **Designing Forms** manual. It assumes that you are already familiar with the following fields that are recognized by Template Maker:

- Check Mark Field
- Hand Print Field
- Bar Code Field
- OCR Field
- Image Capture Field
- Key Entry Field

You should already know what these field types are, as well as how they are used. You should also be confident that the fields on your form are designed in accordance with the formatting requirements for each type of field, especially the dimensional and spacing requirements. If you need more information on any aspect of field design or use, please refer to the appropriate section in the **Designing Forms** manual.

This manual describes:

- How to create your form's template using AutoData Template Maker.
- The system requirements needed to use the software.
- A general overview of the toolbar buttons and menu commands used.
- Instructions for managing the different files created by Template Maker.
- Suggestions for increasing the quality of your scanned images.
- Instructions for creating a report listing the characteristics of your form's fields.

This manual also has a short tutorial that will lead you through the process of creating a template file using the Demonstration form, which you received with your Template Maker software.

Overview of Template Maker

There are three basic steps in creating a template in Template Maker:

- **Step 1: Scan a blank copy of your form** (none of the fields on the form should contain any data). An image of the form will appear on your screen. The image file is immediately saved. This step is repeated for multi-page forms until all images are captured and saved.
- **Step 2: Define and locate the fields on your form.** This step involves assigning specific characteristics to the data in each field and then pinpointing the exact physical location of each field.
- **Step 3: Save the form template and its related files.** This step allows the form to be accessed by other AutoData software when you are ready to process completed forms.

What's New in Template Maker

Users familiar with AutoData FORM 4.1 should take special note of the following changes:

- Template Maker only supports ISIS-compliant scanners.
- As a form is scanned, Template Maker now tries to find the corner Locators automatically. You only need to define them when the automatic method fails. Template Maker supports any size sheet that your scanner's automatic document feeder can handle, up to a maximum size of 11"×17" (portrait or landscape). Forms may be rotated 90° to accommodate landscape format.
- The Template Maker toolbar can be undocked, resized and moved about the desktop as a floating tool palette.
- Zooming in or out on the form is made simple by using the F2 or F3 keys, or by clicking on the "+" or "-" toolbar buttons.
- Any field can now be replicated. Version 4.1 only permitted replicating the last field defined.
- A form can now be moved around within the application window simply by pressing and holding the left mouse button (the cursor changes into a small hand), and moving the form as though it were a piece of paper.
- The Edit Fields dialog box now makes it easier to reorder, rename or delete fields.
- The report generator now provides additional information about individual fields, making it easier to document your form template.

System Requirements for AutoData Template Maker

To use AutoData Template Maker you need to have the following:

- IBM-compatible Pentium computer system running Microsoft Windows 95/98/2000/NT
- At least 32MB of RAM and sufficient free drive space to contain the AutoData software as well as all files which will be created in the Form definition process.
- ISIS-compliant scanner with an automatic document feeder.
- Windows-compatible mouse or other pointing device.

- AutoData Template Maker software installed on your system.
- Familiarity with Windows 95/98/2000/NT, especially with the techniques used to create folders/directories.
- Blank form created according to the guidelines and specifications contained in the **Designing Forms** manual.

Managing AutoData Template Maker Files

Template Maker File Types

Template Maker creates four different types of files. Three of these file types—Form files, Image files, and Image File Association files—are always created when you make a form template in Template Maker. A Dictionary file is only created when you have User-Defined Field types on your form.

- **Image** files store the scanned digital image of your blank form. The default image file format is .TIF but you may choose to save your image in either .PCX or .BMP format. The ability to save in one of these other formats is important only if you plan to import the image into another program which does not support the default .TIF format.
- **Template Maker** Form files, with the extension .FRM, contain all the template information for your form.
- **Image File Association** files, with the extension .IFA, enable Template Maker to associate the Image file with the Form file.
- **Dictionary** files, with the extension .DIC, are only created when you have User Defined Field types on your form template. These files are accessed by the processing software when your template definition instructs it to do so.

Storing Your Template Maker Files

It is important to organize your hard drive work space so that you can efficiently save and retrieve all of the files related to a specific form. The directory containing the AutoData Template Maker software files (Template Maker.EXE) will quickly become unwieldy if you use it to store all your files.

We recommend creating a separate subdirectory/subfolder within the main AutoData directory for each form's template. Each subdirectory/subfolder will contain the Form (.FRM) file, the Image files for each page of the form, the Image File Association (.IFA) files, and, if needed, the Dictionary (.DIC) files. Take advantage of the long name capability of Windows 95/98/2000/NT to give your subdirectory/subfolder an easily identifiable name. Organizing your files in this way will also make it easier when, and if, it becomes necessary to move a Form definition to another platform for form processing.

Chapter 2

The Template Maker Interface

This chapter describes the toolbar buttons, menu commands, keyboard shortcuts, and cursors found in AutoData Template Maker.

The Template Maker Toolbar

The buttons on the Template Maker toolbar, shown in the figure below, allow quick access to most of the software's functions.

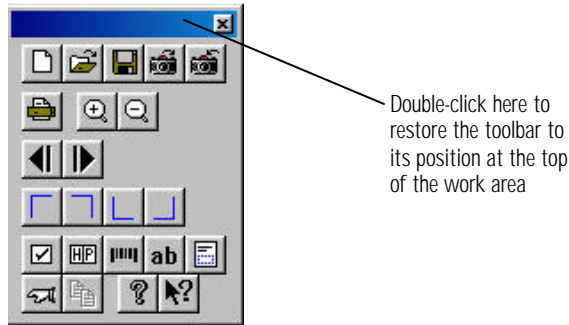
Inactive toolbar buttons activate when a Form file is open in the Template Maker window.

Click the toolbar with your mouse to change it to a "floating" toolbar



Template Maker toolbar

Clicking on the toolbar allows you to pull it down into the document window as a floating tool palette (shown in the figure below) that can be resized and moved as needed.



The floating toolbar in one of many possible configurations

The Toolbar Buttons



- **New Form File:** Click this button to begin creating a template for a new form (*or* choose **New** in the File menu, *or* press CTRL+N).



- **Open Form File:** Click this button to open a file previously created in AutoData FORM (*or* choose **Open** in the File menu, *or* press CTRL+O).



- **Save Form File:** Click this button to save your form's template file (*or* choose **Save** in the File menu, *or* press CTRL+S). Your form must be scanned into AutoData Template Maker before this button activates. If your form has a Form ID associated with it, you should use the Form ID as the name of the file.



- **Open Image File:** Click this button to open a file containing the image of a document already scanned and saved to disk (*or* choose **Open Image File** in the File menu, *or* press F8).



- **Save Image File:** Click this button to save the graphic image of your document (*or* choose **Save Image File** in the File menu). Your form must be scanned into AutoData Template Maker before this button activates.



- **Scan Form:** Click this button to scan the form page currently in the scanner's document feeder (*or* choose the **Scan Form** command in the Scanner menu, *or* press F12). Repeat this step for each page of a multi-page form, scanning and saving all pages before proceeding with field location and definition.



- **Zoom In:** Click this button to increase the size of your form (*or* choose **Zoom In** in the View menu, *or* press F2) in the window. When the button is dimmed, you have reached maximum magnification.



- **Zoom Out:** Click this button to decrease the size of your form (*or* choose **Zoom Out** in the View menu, *or* press F3) in the window. When the button is dimmed, you have reached the zoom out limit.



- **Previous Page:** Click this button to retrieve the saved image of the previous page of a multi-page form. This button and the Next Page button are only active when your form has multiple pages.



- **Next Page:** Click this button to view the saved image of the next page.



- **Top Left Locator*:** Click this button to define the top left Locator mark (*or* point to **Locate**, then choose **Top Left** in the Define menu).



- **Top Right Locator*:** Click this button to define the top right Locator mark (*or* point to **Locate**, then choose **Top Right** in the Define menu).



- **Bottom Left Locator*:** Click this button to define the bottom left Locator mark (*or* point to **Locate**, then choose **Bottom Left** in the Define menu).



- **Bottom Right Locator*:** Click this button to define the bottom right Locator mark (*or* point to **Locate**, then choose **Bottom Right** in the Define menu).



- **Define Check Mark Field:** Click this button to define a Check Mark Field (*or* choose **Check Mark Field** in the Define menu, *or* press F10).

*These buttons are used only when you are using floating corner Locators, or in the rare case where Template Maker does not locate the corners of your form automatically.



- **Define Hand Print Field:** Click this button to define a Hand Print Field (*or* choose **Hand Print Field** in the Define menu, *or* press F9).



- **Define Bar Code Field:** Click this button to define a Bar Code Field (*or* choose **Bar Code Field** in the Define menu).

NOTE: Do not define your form's Form ID as a Bar Code Field. Form IDs are read automatically by the AutoData reading engine. See the **Designing Forms** manual for more information.



- **Define OCR Field:** Click this button to define an OCR Field (*or* choose **OCR Field** in the Define menu).



- **Define Image Capture Field:** Click this button to define an Image Capture Field (*or* choose **Image Capture Field** in the Define menu).



- **Define Key Entry Field:** Click this button to define a Key Entry Field (*or* choose **Key Entry Field** in the Define menu).



- **Replicate Last Field:** Click this button to create a new field with exactly the same characteristics as the last field you defined (*or* press CTRL+R).



- **Help:** Click this button to display the AutoData Template Maker Help screen (*or* choose **Help** in the Help menu).

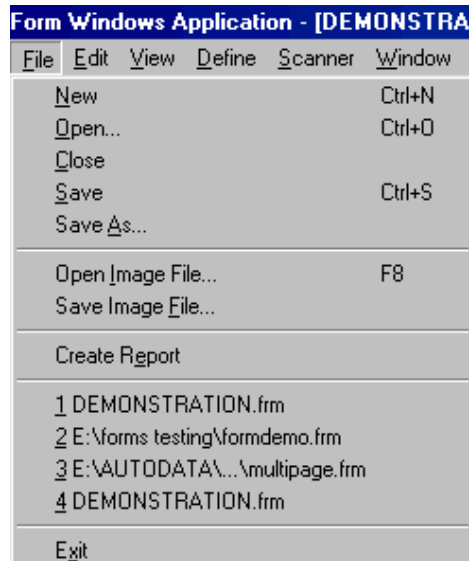


- **Context Sensitive Help:** Click this button to change the cursor into a question mark. Move the cursor to the button, menu item or other item you want information about and click on it. If context-sensitive help has been defined for the item, a window containing the help topic will open.

Menu Commands

AutoData Template Maker has seven menus: File, Edit, View, Define, Scanner, Window and Help. The commands under these menu headings and their functions are described below.

File Menu

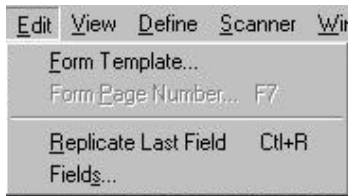


File menu

- **New:** Choose **New** to open a new Form file (*or* click the New Form File button, *or* press CTRL+N).
- **Open:** Choose **Open** to open an existing Form file (*or* click the Open Form File button, *or* press CTRL+O).
- **Close:** Choose **Close** to stop working on a particular form. Template Maker will continue running so you can create a new form or continue work on another form.
- **Save:** Choose **Save** to save the current Form file (*or* click the Save Form File button, *or* press CTRL+S). It is good practice to save the Form file immediately after you have scanned your form's page(s) and then to resave periodically to minimize work loss in the event of a system problem.
- **Save As:** Choose **Save As** to save the current, previously saved, Form file under a new name. Remember that if you do this, the new Form file is still associated with the original Image file(s) which you saved immediately after scanning the page(s) of your form.

- **Open Image File:** Choose **Open Image File** to open a graphic image that was previously saved (*or* click the Open Image File button, *or* press F8). The image you open will generally be one of a scanned document that you intend to use in your form template.
- **Save Image File:** Choose **Save Image File** to save the graphic image of the scanned document currently displayed on your screen (*or* click the Save Image File button).
- **Create Report:** Choose **Create Report** after your form template has been created to produce a report listing the characteristics of each field on your template.
- **Most Recently Used (MRU) List:** This portion of the menu displays the last four most recently used Form files. Simply click on the Form name to open it and resume work on it. You can also open the file by typing its list number on your keyboard.
- **Exit:** Choose **Exit** to leave AutoData Template Maker (*or* press CTRL+X).

Edit Menu



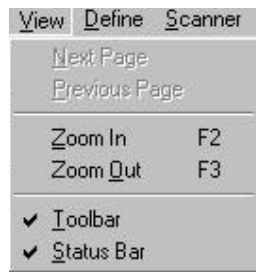
Edit menu

- **Form Template:** Choose **Form Template** to display the Template dialog box for the current Form file so you can edit it. The Template dialog box is used to designate the number of pages your Form file will contain and the type of Locator marks used.
- **Form Page Number:** Choose **Form Page Number** to move from page to page of your Form template (*or* click the Next Page and/or Previous Page buttons). In order to use this command, your document must be defined as containing multiple pages in the Form Template dialog box. Before using this command, be sure that the scanned image on your current page has been saved using the

Save Image button or command. Otherwise, the image on the current page will be lost and the document page will have to be rescanned.

- **Replicate Last Field:** Choose **Replicate Last Field** to define the next field as the same type as the last field defined (*or* click the Replicate Last Field button, *or* press CTRL+R). This copies the characteristics of the last field you defined and applies them to a new field.
- **Fields:** Choose **Fields** to see a list of all defined fields on the current form. You may use this menu to rename fields, reorder field sequence, or access a given field's Properties dialog box.

View Menu



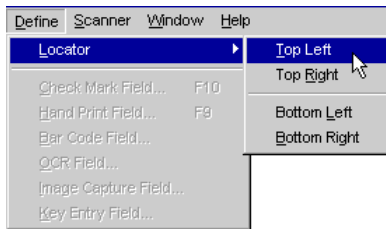
View menu

- **Next Page:** Choose **Next Page** to move to the image of a succeeding page in a multi-page form (*or* click the Next Page button).
- **Previous Page:** Choose **Previous Page** to view a previous page in a multi-page form (*or* click the Previous Page button).
- **Zoom In:** Choose **Zoom In** to increase the size of the document in the open Template Maker window (*or* click the Zoom In button, *or* press F2).
- **Zoom Out:** Choose **Zoom Out** to decrease the size of the document in the open Template Maker window (*or* click the Zoom Out button, *or* press F3).
- **Toolbar:** Turn this command off (by removing the check mark preceding it) to hide the toolbar and increase the amount of room on the screen for the image of

the form. Doing this can be worthwhile if you prefer to work with menu commands and keyboard shortcuts. To toggle this command off and on, click on it with your mouse.

- **Status Bar:** Turn this command off (by removing the check mark preceding it) to hide the status bar located at the very bottom of the Template Maker window. The bar indicates whether the Caps Lock, Num Lock, and Scroll Lock keys are active. It also displays information about items selected in the open Template Maker window.

Define Menu



Define menu

- **Locator:** Point to the **Locator** command in the Define menu to display the submenu shown above.

Choose **Top Left** to change your mouse cursor into the top left Locator mark. Use the cursor to identify the top left Locator mark on your form. You can also perform this command's function by clicking the Top Left Locator button.

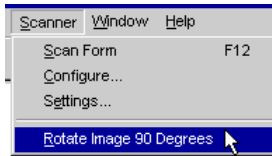
Choose **Top Right** to change your mouse cursor into a top right Locator mark. Use the cursor to identify the top right Locator mark on your form. You can also perform this command's function by clicking the Top Right Locator button.

Choose **Bottom Left** to change your mouse cursor into a bottom left Locator mark. Use the cursor to identify the bottom left Locator mark on your form. You can also perform this command's function by clicking the Bottom Left Locator button.

Choose **Bottom Right** to change your mouse cursor into a bottom right Locator mark. Use the cursor to identify the bottom right Locator mark on your form. You can also perform this command's function by clicking the Bottom Right Locator button.

- **Check Mark Field:** Choose **Check Mark Field** to define a Check Mark Field using the Define Check Mark Field Properties dialog box (*or* click the Define Check Mark Field button, *or* press F10).
- **Hand Print Field:** Choose **Hand Print Field** to define a Hand Print Field using the Define Hand Print Field Properties dialog box (*or* click the Define Hand Print Field button, *or* press F9).
- **Bar Code Field:** Choose **Bar Code Field** to define a Bar Code Field using the Define Bar Code Field Properties dialog box (*or* click the Define Bar Code Field button).
- **OCR Field:** Choose **OCR Field** to define an OCR Field using the Define OCR Field Properties dialog box (*or* click the Define OCR Field button).
- **Image Capture Field:** Choose **Image Capture Field** to define an Image Capture Field using the Define Image Capture Field Properties dialog box (*or* click the Define Image Capture Field button).
- **Key Entry Field:** Choose **Key Entry Field** to define a Key Entry Field using the Define Key Entry Field Properties dialog box (*or* click the Define Key Entry Field button).

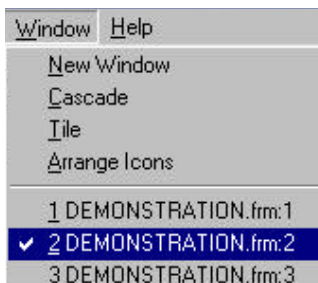
Scanner Menu



Scanner menu

- **Scan Form:** Choose **Scan Form** to scan a blank form and display its image on your screen (*or* press F12).
- **Configure:** Choose **Configure** to initially set up a scanner to work with Template Maker or to install a new scanner.
- **Settings:** Choose **Settings** to display the Scanner Settings dialog box. The Scanner Settings dialog box is used to adjust the quality of the scanned image. The degree of control available to you may be dependent on your scanner model.
- **Rotate Image 90 Degrees:** Choose this option for forms with landscape orientation prior to scanning them. A check mark indicates that this option is active.

Window Menu



Window menu

- **New Window:** Choose **New Window** to create a duplicate of the current working window on your screen. This feature is useful for zooming in and

comparing two areas of the same form on separate windows. Note that zooming in or out increases or decreases magnification in all currently open windows.

- **Cascade:** Choose **Cascade** to display all open windows simultaneously, overlapping one another. Any window can be instantly activated by simply clicking on it.
- **Tile:** Choose **Tile** to display all open windows on screen with no overlapping. The program will arrange them in various configurations depending on how many windows you have created. Clicking on a window makes it the active window.
- **Arrange Icons:** This command is not currently in use.

The list at the bottom of the Window menu shows all current windows. If there is more than one, the window with the check mark (DEMONSTRATION.frm:2 in the figure above) is the currently active window. You can make another window active by clicking on it in this list.

Help Menu



Help menu

The commands in the Help Menu provide access to the on-line Help system. The About Form selection brings up version and copyright information specific to this program.

Keyboard Shortcuts

The following is a listing of Template Maker keyboard shortcuts.

- **Form File shortcuts:**

New Form File:	CTRL+N
Open Form File:	CTRL+O
Save Form File:	CTRL+S

- **Image File shortcuts:**

Open Image File:	F8
Scan form:	F12

- **Zoom shortcuts:**

Zoom In:	F2
Zoom Out:	F3

- **Define shortcuts:**

Define Check Mark Field:	F10
Define Hand Print Field:	F9
Replicate Last Field:	CTRL+R

- **Exit Program shortcut:**

Exit Template Maker:	CTRL+X
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Menu Shortcuts

The following menu shortcuts work in two stages. The ALT + [LETTER] command opens the respective menu. Pressing a single letter or number key will invoke the command. If you look carefully at any of the drop-down menus, you will see that a single letter or number on each command line is underlined. That is the keyboard shortcut letter for invoking that particular command.

- **File menu shortcut:**

Open the File Menu by pressing ALT+F, then type the command line letter.

- **Edit menu:**

Open the Edit Menu by pressing ALT+E, then type the command line letter.

- **View menu:**

Open the View Menu by pressing ALT+V, then type the command line letter.

- **Define menu:**

Open the Define Menu by pressing ALT+D, then type the command line letter. Note that the Locator command in this menu initiates a two-step process. Pressing “L” opens a second menu with command lines for each of the four corners.

- **Scanner menu:**

Open the Scanner Menu by pressing ALT+S, then type the command line letter.

- **Window menu:**

Open the Window Menu by pressing ALT+W, then type the command line letter.

- **Help menu:**

Open the Help Menu by pressing ALT+H, then type the command line letter.

Cursors

Template Maker makes use of a variety of cursor shapes. Your normal cursor arrow changes into one of these shapes when you invoke the respective program function.



*Top Left/Right
Locator cursors*



*Bottom Left/Right
Locator cursors*



Check Mark Locator cursor



Hand Print Locator cursor



Bar Code Locator cursor



OCR Locator cursor



Image Capture Locator cursor



Key Entry Field Locator cursor



Hand Cursor

Display the hand cursor by pressing and holding the left mouse button, then dragging your form to a new location in the active window.

Chapter 3

Using AutoData Template Maker

AutoData Template Maker allows you to create a template that defines your form's field locations and types. Using the definitions on your template, the AutoData processing engine will read the data in these fields and convert the information into a format which can be imported and/or merged directly into databases used by other software programs.

Creating the template for your form consists of five basic steps:

- **Step 1: Create a new Form file.**
- **Step 2: Scan the page(s) of your form, saving the graphic image of each page.** Scan all of your form's pages before proceeding to Step 3 and/or 4.
- **Step 3: Define the Locator marks.** This step is necessary only if Template Maker fails to find them automatically.
- **Step 4: Define and locate the fields on your form.**
- **Step 5: Save the Form file document.**

This chapter provides instructions for completing all of the above steps. It also describes how to save your Form file, search for and open existing Form files, retrieve saved images of your pages, and create reports about your Form file's defined fields.

Starting AutoData Template Maker

Windows 95/98/2000/NT offer a variety of ways in which to launch a program. Scannable Office places icons for all its programs on the Windows desktop when it installs; double-click the Template Maker icon to launch the program (*or* click the START button, point to **Programs** from the menu, then point to the **AutoData Scannable Office** group and choose **Template Maker**).

Step 1: Creating New Form Files

The first step in creating a form template in AutoData Template Maker is to open a new Form file.

➤ **To create a new Form file:**



1. Click the New Form File button (*or* choose **New Form File** from the File menu, *or* press CTRL+N). An empty Form window will appear in the work area, as shown in the following figure.

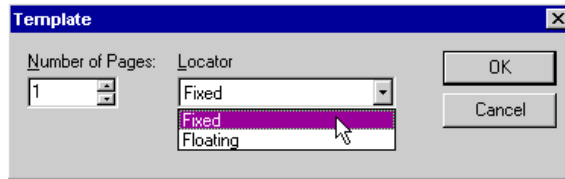


Creating a new Form file

Your form can be printed on any paper size scannable by your scanner. To make certain that Template Maker will properly recognize what you are scanning, confirm or change the following settings in Steps 2 and 3 of these instructions.

Be sure to confirm or change these settings before scanning your form.

2. Choose **Settings** from the Scanner menu. Confirm or change the size of the sheet you are scanning.
3. Choose **Form Template** from the Edit menu to open the Template dialog box shown in the following figure. Enter the number of pages for your form in the Number of Pages box, then select the correct Locator type from the Locator list box.



Choosing a Locator type from the Locator list box in the Template dialog box

4. Click OK and proceed to *Step 2: Scanning Your Form and Saving Its Image*.

Step 2: Scanning Your Form and Saving Its Image

The next step in creating a template is to scan your form and save its image. In addition to the basic instructions on completing this step, this section also includes instructions for opening existing Form files and retrieving saved images of pages scanned previously.

Scanning a Form

➤ To scan your document:

1. Place the page(s) of your document into your scanner's automatic document feeder. Be sure to place the pages carefully to ensure a straight scan. If your form is in landscape orientation, activate the **Rotate Image 90 Degrees** option in the Scanner menu.

2. Click the Scan Form button (*or* choose **Scan Form** from the Scanner menu, *or* press F12). Your scanner will scan the first page of your document, and its image will appear in the Template Maker window.

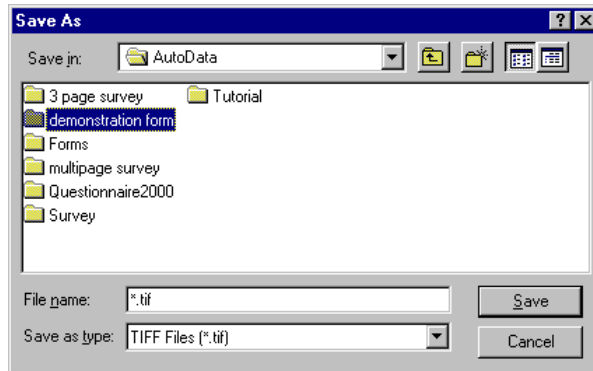
If Template Maker reports a problem finding your Locators, or if the scanned image is obviously of poor quality, stop here and determine the cause of the problem:

- Does your form follow all the guidelines in the **Designing Forms** manual?
- Are the Locator marks sized and placed correctly?
- Are you using a clean, properly reproduced copy of your form?
- If your form was printed on a laser printer, was the printer set to raster graphics (preferred) rather than vector graphics?
- Is the Form Template information (choose **Form Template** from the Edit menu) for your form entered correctly?
- Is the number of pages setting correct?
- Is the Locator type setting correct?
- Does your form contain check marks printed in non-reproducible blue ink? Check boxes printed in non-reproducible blue ink are not displayed when scanned, so they can't be precisely located by Template Maker. In this situation, instead of scanning a commercially produced copy of your form, scan a laser printed copy of the form so the check boxes can be located and defined.
- Is your scanner properly adjusted? Choose **Settings** from the Scanner menu and check the page size setting. Is it correct? Click on the Default button bar at right to return all settings to those that Template Maker considers optimal. If the settings were at default, it may be necessary to adjust the Brightness or Contrast settings. If you can't see the Locator marks on the scanned image, set the Brightness control to produce a darker image. If there are black specks on your image, or if text from the opposite side of the page is showing through, set the Brightness control to produce a lighter image. Then click OK to confirm your changes and return to the main screen.
- If you continue to have problems with your form and are fairly certain that none of these problems apply to your form, read the section in this manual,

If Template Maker reports a problem with your scan, carefully review the points on these pages in order to determine the cause.

Identifying Your Form's Locator Marks, for more tips on locating your corner marks.

- If you determine that you cannot proceed to defining fields, choose **Close** from the File menu. When asked if you want to save your file, click No.
3. If the scan was successful and Template Maker found your corner marks, you will be immediately prompted to save the Image file. The Save As dialog box shown in the following figure will open.



Save As dialog box

4. Choose a file format for the graphic image from the Save As Type list box. The default format is .TIF but you can also choose the .PCX or .BMP formats from the list. If you plan on opening your form's Image file in another application that does not support the .TIF format, choose an alternate format. Otherwise, we recommend accepting the default format.
5. Select or create a directory location and a file name for your Image file. If you create a unique directory for each project and place all related files in that location, project management will be greatly simplified and your AutoData directory will not become cluttered with Image and Template files.
6. Enter a file name into the File Name box. File management is easier if you use a name similar to the name you will use for the Form file. We suggest including the page number of your form somewhere in the name of your Image file. For example, if the name of a three-page form is Survey, it is logical to name the pages Survey_1 .TIF, Survey_2.TIF, and Survey_3.TIF.

If a document has multiple pages, each page's Image file must have a unique name to prevent over-writing of the images.

7. After you've given your Image file a name and told Template Maker where you want to save it, click OK.
8. If your form has additional pages, proceed to scan and save each page individually. Remember to save all Image files in the same location and to include the page number in the Image file name.

Saving Form Files

Once you have successfully scanned your form and saved the Image files, you should immediately save the Form file. The Image files that you have saved are simply graphic representations of your form. The Form file, which you are in the process of creating, is the template which will tell the AutoData processing engine what to look for on your form, and exactly where to find it. Although the only items identified thus far on your form are the corner marks, this is a good time to stop and save your form as a precaution against data loss. As you continue to work on the form, resave it at regular intervals. Once your Form file has been named and saved, subsequent saves (CTRL+S) will update the saved file.

➤ To save a Form file:



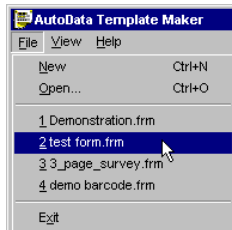
1. Click the Save Form file button (*or* choose **Save** from the File menu, *or* press CTRL+S). The Save Form file dialog box will open.
2. Navigate to the drive and directory where your Form file will be stored. It should be saved in the same directory as your form's Image file(s).
3. Type in a file name for your Form file in the File Name box. AutoData Template Maker will add the .FRM extension. Template Maker makes use of a single Form file regardless of how many pages (and consequently how many Image files) your form may have. So, for example, if your form is a survey and you saved its Image files as "Survey_1", "Survey_2", etc., you can save the Form file simply as "Survey." Template Maker will keep track of the respective related Image files.

Opening Existing Form Files

To continue working on a Form file that was previously saved or to modify a form template, you can open it by following these simple steps:

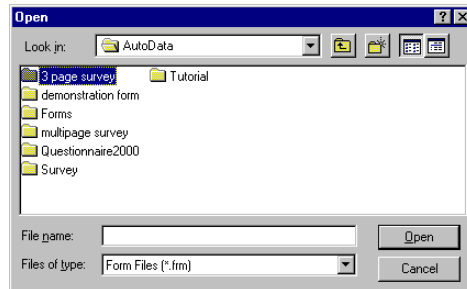
➤ **To open an existing Form file:**

1. If you worked on the Form file recently, it may still be in the Most Recently Used (MRU) list. Display the File menu and look at the list of files near the bottom, as shown in the following figure. If the Form file you want to work on is on the MRU list, click on its name to open it. If the file you want to work on is not on the MRU list, proceed to the next step.



Choosing a file from the MRU list

2. Click the Open File button (or choose **Open** from the File menu, or press CTRL+O). The Open dialog box shown in the following figure will open.



Opening a Form file in the Open dialog box

3. Locate your file, select its name, then click OK (or double-click on the file name) to open it.
4. Proceed with the definition process.

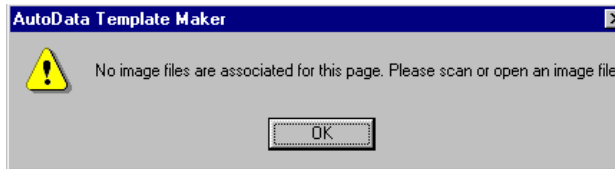
Retrieving Saved Images

➤ To use a previously saved Image file for your next page:

1. Open the Form file.



2. Move to the last page of the form, then click the Next Page button. The message box shown in the following figure will open.



This error box is displayed on the last page when the Next Page button is clicked

3. Click OK.
4. Click on the Open Image button to open the Open dialog box. Locate the Image file, then click OK to open it.

➤ To retrieve a saved Image file for the first page of a new Form file:



1. After clicking the New Form File button, click the Open Image File button (or choose **Open Image File** from the File menu, or press F8). The Open Image File dialog box will open.

2. Locate the Image file you want and click OK.

➤ To replace an existing page's image with a new one:



1. Proceeding as though you are creating a new single page form, click the New Form File button, then scan the new page.

2. Save the new Image file with the same name and in the same location as the Image file you want to replace.

Don't save the new Form file! Remember, you don't want to create a new form, you simply replace an existing graphic image with a new one.

3. When Template Maker asks whether you want to overwrite your existing file, click Yes.
4. Close the new form you created in Step 1 *without saving it*.
5. Open your original Form file and confirm that your new Image file replaced the old one, and the image quality is acceptable.

Step 3: Identifying a Form's Locator Marks

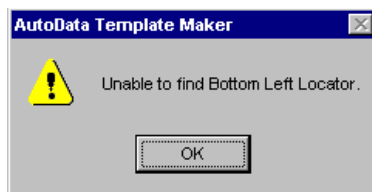
If your form does not have Locator marks on it, or if you are not sure your marks conform to the design requirements for Locators, please refer to the Locators section in the **Designing Forms** manual.

When you designed your form, you placed Locator marks on it to help Template Maker and the AutoData processing engine adjust for scanning skew. These Locator marks should be clearly visible and highlighted in yellow on the scanned image. The highlighting indicates Template Maker was able to find the Locators automatically, and you can now proceed to the section, *Defining Your Form's Fields*, later in this manual.

In the rare instances when Template Maker cannot automatically find one or more of the Locators, you must manually identify them.

Manually Identifying Locator Marks

If Template Maker is not able to identify Locator marks automatically, it displays an error message like the one shown in the following figure.



Error message displayed when Template Maker can't identify a form's Locators

The error message displayed will indicate which Locator mark(s) Template Maker was unable to find.

- If the error message indicates that both your lower left and lower right Locator marks cannot be found, choose **Settings** from the Scanner menu and review the page size settings. It's likely that the page size for your form is set incorrectly.
- If the error message indicates that one or more Locator marks can't be found, zoom in on the form image and visually identify the missing mark. If you can't see the Locator mark clearly on the image, neither can Template Maker. If necessary, use the suggestions in the previous section, *Scanning a Form*, to improve your form's scanned image. You may need to print, scan, and save a new copy of your form.

If all else fails, manually identify the missing Locators using the instructions below.

➤ **To manually identify a Locator mark:**



1. Click the appropriate Locator button (*or* choose **Locator** in the Define menu and then the appropriate Locator command line from the menu).
2. The cursor will change to the appropriate Locator shape. Position the Locator mark cursor directly over the top left Locator mark on your page and click.
3. If Template Maker still reports that it cannot find the Locator, double-check your scanner page settings, review the tips in the scanning section above, and re-scan your form.
4. Repeat this procedure as needed for any other unidentified Locator marks on your form.

Step 4: Defining Your Form's Fields

After your form's Locator marks are identified, the next step in creating your Form file is to define the type and position of the various fields on your form.

We assume you are already familiar with the different kinds of fields used by Template Maker and AutoData software. The fields on your form must conform to the requirements for each field type as described in the **Designing Forms** manual. Otherwise, Template Maker and the AutoData processing software will not be able to correctly identify the fields or their data, and your corresponding database file will be inaccurate.

If you are not sure whether your document conforms to the field design requirements, refer to the **Designing Forms** manual and revise your form as necessary.

There are six different types of fields recognized by AutoData Template Maker and other AutoData processing software. Your document may contain any combination of the Field types listed below.

- Check Mark Fields
- Hand Print Fields
- Bar Code Fields
- OCR Fields
- Image Capture Fields
- Key Entry Fields

In order for the software to correctly interpret the data on your completed forms, you must do two things in Template Maker. First, you must tell the program what kind of data is in the field. We call this *defining* a field. Second, you must show Template Maker precisely where the field is located on your form. We refer to this as *locating* your fields.

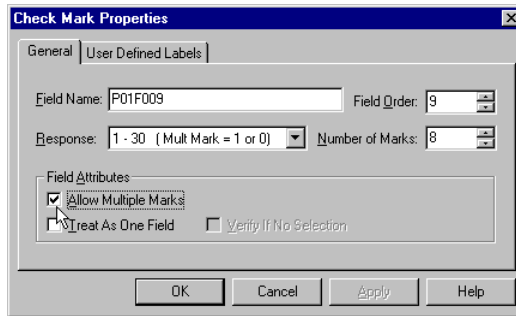
Defining and Locating Fields: Overview

The essential process for defining and locating fields on a form is the same for all field types. The following set of instructions provides a broad overview of the process. Detailed information and instructions for defining and locating specific field types (for example, a Check Box Field, or a Hand Print Field) are provided later in this chapter.

➤ To define and locate fields:



1. Click the field definition button appropriate for your field type (*or* choose the applicable menu command from the Define menu). This opens a Properties dialog box which allows you to specify the properties of the field you'll be defining. An example of the Check Mark Properties dialog box is shown in the following figure.



An example of a Check Mark Properties dialog box

Always be certain the field to be defined or located is completely visible in your workspace window. If it's not, zoom in or out on your image as needed, or move the form within the window.

2. Adjust the settings as needed in the Properties dialog box. Detailed instructions for this can be found later in this chapter.
3. Click OK. The Properties dialog box closes and your cursor changes to the Locator cursor, like the one shown in the following figure.



An example of a Check Mark Locator cursor

As its name implies, the Locator cursor is used to locate the fields on your form.

To abort the field location process when the cursor is a Locator cursor, press the Escape button on your keyboard (or if you are using a 3-button mouse, click your center mouse button).

4. To locate the field, place the cursor on one corner of the four corners of the area you want to define, then click and hold the mouse button as you drag it across to the opposite corner. As you do so, the field is delineated by a highlighting box, as shown in the following figure.



Defining a field location

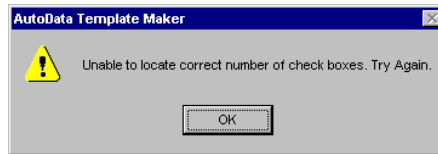
5. When the highlight encompasses the entire field area, release your mouse button.

The field will now be highlighted in yellow, and surrounded by a thin red line. A field sequence number will be clearly visible at the left side of the field, as shown in the following figure.



Located fields

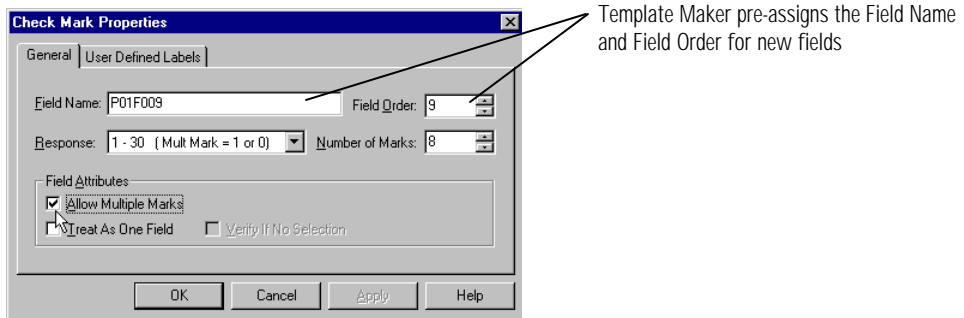
If Template Maker does not “see” what you told it to expect in the Define Properties dialog box, you may get an error message. For example, if you specified the field as containing four check boxes but there were actually six, an error message like the one shown in the following figure will open.



Field location error message

Field Names and Field Order

Each time you initiate the Define field procedure, AutoData Template Maker presents you with a Field Properties dialog box. An example of the Check Mark Properties dialog box is shown in the following figure. When the Field Properties dialog box opens, you will note that Template Maker has already assigned a Field Name as well as a Field Order.



Check Mark Properties dialog box

Field Names

The Field Properties dialog box varies with the type of field being defined. Regardless of the field type, Template Maker requires a name for every field on your form. The Field Name is used as an identifier, making it easier to locate and edit later, if needed.

Unless you are confident that assigning your own Field Names won't cause problems in the final database or spreadsheet, we recommend that you use the Field Name suggested by AutoData Template Maker.

The Field Name, completed automatically by Template Maker every time you create a field, consists of two parts. The first part indicates what page the field is on, and the second part indicates the field sequence, or order. All the fields on the first page of a form start with "P01". Fields on page two start with "P02", and so on for subsequent pages. The sequence of the first defined field is "F001". The second is "F002", and so on. So the full Field Name for the first defined field on the first page of the form will be labeled "P01F001". The second field on the first page will be labeled "P01F002", and so on.

If you want your fields to be labeled differently, you may overwrite the pre-assigned Field Name by simply typing over the assigned name. However, some of the data export formats make use of the Field Name, so the quality of your export results may be higher if you accept the Field Name suggested by Template Maker.

Field Order

Template Maker requires that each field be assigned a sequence, or Field Order, number. When you are defining and locating your form's fields, Template Maker assumes you are defining your fields in the same order you want your data sequenced. When Template Maker determines the Field Order number to pre-assign to new fields, it increases the highest existing Field Order on the form by one. So,

for example, if the form's highest Field Order number is 5, the Field Order box for the next new field will be pre-assigned the number 6, and so on.

When you have identified the location of your new field, the Field Order value assigned to it is clearly displayed at the left side of the yellow template box in a small red box, as shown in the following figure.

The Field Order number is displayed next to the defined field



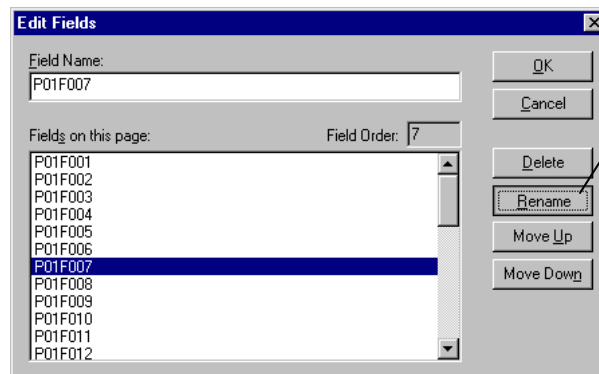
Assigning a Field Order

AutoData Template Maker makes it very easy to rename or reorder your fields. You may do this either during the initial form creation process, or at a later time if you realize that the fields are not being read in proper sequence.

➤ To change Field Name or Field Order:



1. If the Form file is not already open, click the Open button (or choose **Open** from the File menu).
2. Once the Form file is open, choose **Fields** from the Edit menu to open the Edit Fields dialog box shown below.



Edit Fields dialog box

3. To change the Field Name, click on the field you wish to rename, then click Rename.
4. To change the Field Order, click on the field you wish to reorder, and then click either the Move Up or Move Down button repeatedly until the field is in the correct sequence.

The Field Name does not change when you change the Field Order. If you want the Field Order to be accurately reflected in the Field Name, use the Rename button and change it manually. Since duplicate Field Names are not permitted, it may be necessary to give one of your renamed fields a temporary name so that you may modify the other Field Names. Change the temporarily named field to its correct name when you have finished modifying the rest.

Replicating Fields

When your form contains two or more fields with the exact same characteristics, use the Replicate feature of Template Maker during the field definition process to duplicate the last field you defined. You can also replicate fields defined earlier, either in the current definition session or on a form whose fields were defined in a previous definition session.

When you replicate a field, all its characteristics (as defined in the field's Properties dialog box), except for the field number and order, are repeated for the new or redefined field.

➤ To replicate the characteristics of the last field for the next field:

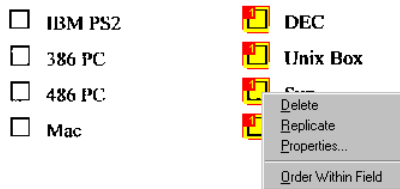


1. Click the Replicate Last Field button (*or* choose **Replicate Last Field** from the Edit menu, *or* press CTRL+R). Your mouse arrow will change to the cursor for the field type you last identified. All of the characteristics of your last field, except the Field Name and Field Order, will be repeated exactly for your new field.
2. Identify the location of your new field, using the instructions found in the overview section of the field definition and location process earlier in this manual.
3. Repeat Steps 1 and 2 as needed for the other new field definitions.

➤ **To replicate a previously defined field:**

1. Move your cursor to the field whose properties you want to replicate.
2. Right-click on the field to display the pop-up menu shown in the following figure.

Which of the following hardware do you use?



Displaying the pop-up menu for a selected field

3. Choose **Replicate** from the pop-up menu. Your mouse arrow will change to the Locator cursor appropriate for the field type you are replicating.
4. Move the cursor to the field you want to define as having the same characteristics. Click and drag in the usual way to identify and locate the field. All of the characteristics of the newly identified field, except the Field Name and Field Order, will be duplicated for the field selected in Step 2 of this procedure.
5. Repeat these steps as needed for other fields on your form.

Modifying a Field's Properties

➤ **To change a field's properties:**

1. Right-click the field to display the pop-up menu shown below.



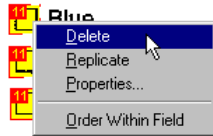
Changing a field's properties

2. Choose **Properties** to open the field's Properties dialog box.
3. Make any necessary changes in the Properties dialog box. Click OK to complete the process.

Deleting Fields

➤ To delete a field:

1. Right-click the field to display the pop-up menu shown below.



Deleting a field

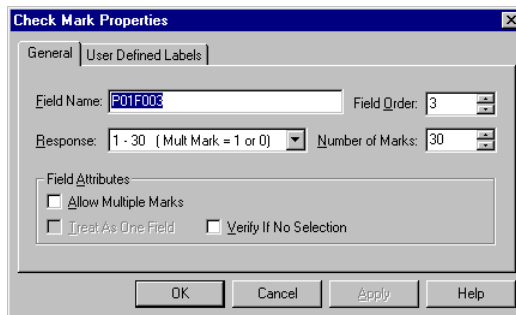
2. Choose **Delete** to delete the field.

Defining and Locating Check Mark Fields

➤ To define a Check Mark Field:



1. Click the Check Mark Field button (*or* choose **Check Mark Field** from the Define menu, *or* press F10) to open the Check Mark Properties dialog box shown below.



Check Mark Properties dialog box

2. If necessary, change the information in the Field Name and/or Field Order boxes.
3. Choose the Response type that fits your Check Mark Field. Your choice of Response type tells Template Maker what the corresponding fields in your target database should yield when a box is checked. Additionally, your selection may determine automatically the value options available in the Number of Marks box.

Response type options include:

- **1–30 (Multi Mark = 1 or 0):** When this Response type is selected, Template Maker assigns a numeric value from 1 to 30 for each individual check mark box. The number assigned to the box appears in the target database when the box is checked. For example, when the first box is checked, your database field will record the number 1, and so on. A maximum of 30 individual check marks is imposed.

Use this Response type in conjunction with the Allow Multiple Marks option if your form permits respondents to check multiple responses. In this scenario, a response in a check box yields an output value of 1. A blank check box yields an output value of 0.

- **Alpha (A–Z):** When this Response type is selected, Template Maker assigns each of the check mark boxes in the field its own letter. The letter value assigned to the box is the value yielded in the corresponding field in the target database when the box is checked. For example, when the first box is checked, the corresponding field in the database will yield a value of A. When the second box is checked, the corresponding field in the database will yield a value of B, and so on. Fields of this Response type are limited to 26 check mark boxes.
- **Yes / No (Y/N):** Use this Response type when your Check Mark Field consists of two boxes, one labeled Yes and the other No. When the Yes box is checked, the corresponding field in the target database will yield a value of Y. When the No box is checked, it will yield a value of N. The Number of Marks box is automatically set to 2 when this Response type is selected.
- **Yes / No / Other (Y/N/O):** Use this Response type when your Check Mark Field consists of three boxes, labeled Yes, No, and Other. The corresponding fields in the target database will yield values of Y, N, and O, respectively, when the boxes are checked.

- **True / False / Other (T/F/O):** Use this Response type for Check Mark Fields consisting of three boxes, labeled True, False, and Other. The corresponding fields in the target database will yield values of T, F, and O, respectively, when the boxes are checked.
- **Male / Female (M/F):** Use this Response type for Check Mark Fields consisting of two boxes, labeled Male and Female. The corresponding fields in the target database will yield values of M and F, respectively, when the boxes are checked.
- **User Defined Labels:** When this Response type is selected, you can specify the specific character(s) yielded for the corresponding fields in the target database when the box is checked. Instructions for using this Response type are given later in this section.

If you choose the 1–30 (Multi Mark = 1 or 0) or the Alpha (A–Z) Response type and also check the **Allow Multiple Marks** option, the value in the Number of Marks box *must* be manually adjusted to reflect the correct number of check boxes in the field.

If you choose the **User Defined Labels** Response type, the Number of Marks value is adjusted automatically by Template Maker.

4. If you selected the Response type of 1–30 (**Multi Mark = 1 or 0**) or **Alpha (A–Z)**, enter the number of check boxes contained in the new field in the Number of Marks box. Do this by clicking the box’s up- or down-arrows (*or* by selecting the current value and typing in a new one).

The value contained in the Number of Marks box is determined automatically for you for all other Response types.

5. If your new field allows the user to check more than one box, check the **Allow Multiple Marks** box. Otherwise, leave it unchecked (this is the default).
6. If you checked the **Allow Multiple Marks** option and want Template Maker to group all the responses into one corresponding field in your target database (rather than creating a corresponding field for every single check box), check the **Treat as One Field** option.
 - If you check this option and have selected **1–30 (Multi Mark = 1 or 0)** as your Response type, the corresponding field in your database will yield a connected string of ones and zeros (such as 1010010), with each 1 representing a selected check box and each 0 representing an unselected check box.
 - If you check this option and have selected **User Defined Labels** as your Response type, the corresponding field in your database will yield a connected string of labels you defined for each check box, not ones and zeros. For example, if your form asked participants to check the activities they enjoyed, the connected string of values might read “jogging swimming tennis.”

7. If you want the AutoData processing engine to stop processing your form in the event none of the field's available check boxes contain marks, check the **Verify if No Selection** option. The person processing the form is required to change and/or approve the contents of the field before processing can continue.
8. When you are satisfied with the options selected in the Check Mark Properties dialog box, click OK. Your cursor will change to the Check Mark Locator cursor shown below.



Check Mark Field Locator cursor

9. Position the cursor at one corner of an imaginary box encompassing all of the check boxes that are part of the field being defined.
10. Click your left mouse button and drag the cursor to the opposite corner of your imaginary box, as shown below.



Defining a Check Mark Field

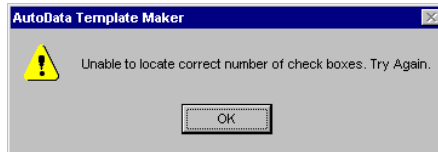
11. Release the mouse button.

If Template Maker “sees” what you told it to expect in the Properties box, each of the check boxes will be highlighted in yellow with a red frame. The Field Order number will be visible in a red tab, as shown below.



A new Check Mark Field's Field Order number

If Template Maker is unable to locate the correct number of boxes, you will receive the error message shown below and will need to redefine the field.



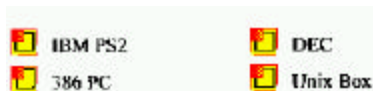
Check Mark Field error message

Changing a Check Mark Field's read order

Changing the read order within a field is only available when the field's Response type option is 1–30 (Multi Mark = 1 or 0) or User Defined Labels.

When you define and locate a group of check boxes using the above instructions, Template Maker assumes that it should read the check boxes in order from left to right, then from top to bottom.

For example, if your field's group of check boxes is arranged in two columns, as shown in the example below, the corresponding fields in the target database would be as follows: IBM PS2, DEC, 386 PC, Unix Box.



Determining the read order within a Check Mark Field

Use the Field Order feature of Template Maker to define the read order for your Check Mark Field while you are locating it on your form.

➤ To determine the read order of a Check Mark Field during the field location process:

1. Define the Check Mark Field's characteristics as usual in the Check Mark Properties dialog box.
2. When you locate the field, rather than defining all the check boxes in your field simultaneously by highlighting the entire field area, click separately inside each check box. As you do so, each check box will be defined and located.

➤ **To view the read order of check boxes within a Check Mark Field:**

1. Right-click any of the check boxes to display the pop-up menu shown in the following figure.



Displaying the pop-up menu for a Check Mark Field

2. Choose **Order Within Field** from the pop-up menu.

The color of the fields will change, and the Field Order numbers will be replaced by the read order, as shown below.



Viewing the read order within a Check Mark Field

When the **Order Within Field** option is turned on, all of the Check Mark Fields on your form will show their read order, not just the one you clicked.

You may have to zoom in on a field to see the read order clearly.

Turn off the **Order Within Field** option by repeating Steps 1 and 2 of these instructions.

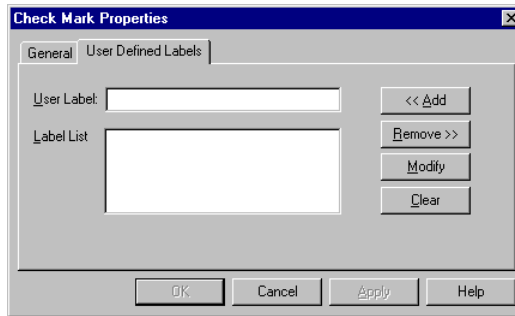
Creating User Defined Labels

As explained earlier, choosing the Response type of **User Defined Labels** means that the target database corresponding to a field's check boxes will display text defined by you, rather than ones and zeros.

➤ **To create a User Defined Labels Check Mark Field:**

1. In the Check Mark Properties dialog box, choose **User Defined Labels** as a Response type.
2. Modify the other settings on the General tab of the dialog box as needed.

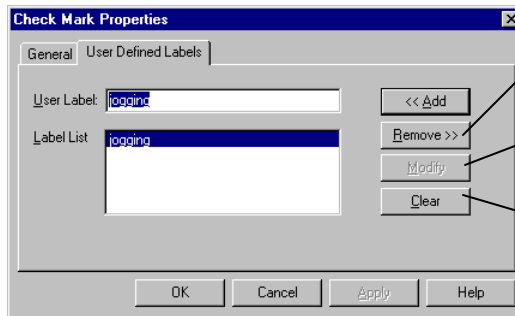
- Click the User Defined Labels tab to activate the tab, shown in the following figure.



User Defined Labels tab

Labels can contain up to seven characters. You may need to use abbreviations.

- In the User Label box, type a label for the first check box in your field, then click Add. The label you typed will display in the Label List box, as shown in the following figure.



Adding a user defined label

Click to remove a selected label

Click to change the text of a selected label

Click to clear the contents of the User Label box

The order in which the labels appear on the list is the same order in which they will be sorted in the target database.

- Repeat Step 4 as needed until the Label list box displays a label for each check box in your field.

If needed, use the tab's buttons to remove or change incorrect labels.

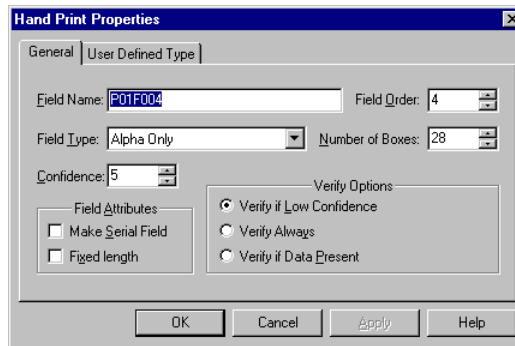
- When you are satisfied with the labels on your list, click OK, and define the location of your Check Mark Field as usual.

Defining and Locating Hand Print Fields

➤ To define a Hand Print Field:



1. Click the Hand Print Field button (*or* choose **Hand Print Field** from the Define menu, *or* press F9) to open the Hand Print Properties dialog box shown in the following figure.



Hand Print Properties dialog box

2. If necessary, change the Field Name and/or Field Order for your new field.
3. Choose a Field Type from the drop-down list box. Options include:
 - **Alpha Only:** Select this Field Type if your field contains letters from the alphabet, and no numbers. The Field Size value for this type must be set manually.
 - **Numeric Only:** Select this Field Type when your field contains only numbers. The Field Size value for this type must be set manually.
 - **Street Address:** Select this Field Type when your field contains a street address. Fields of this type must follow these rules:

The house and/or apartment number should be separated from the street name by a blank box.

Normal street name suffixes (such as 90TH, 91ST, 92ND) should be used, and no spaces should be left between the number and the suffix.

Street designations (such as AVE, ST, etc.) should be separated from the street names by a blank box.

To maximize Hand Print Field data accuracy and minimize operator corrections, remember to print an ADS Normal font sample alphabet on the first page of your form, along with brief instructions on how to correctly fill in the boxes.

Minimize address input errors by explaining these rules on your form.

Post office boxes can be abbreviated in any of three ways, as illustrated by these examples: PO BOX 123, BOX 123, or FOB 123. A blank box must be left between PO and BOX, and between the letters and numbers.

The Field Type helps the AutoData processing engine recognize the type of information that will be entered into the field.

- **Phone Number:** Select this Field Type when your field contains a telephone number.
- **Decimal (N.DD):** Select this Field Type when your field contains a number with two decimal places. A decimal place must be printed in the third box from the right, followed by two blank spaces for the decimal. The decimal point must be preceded by at least one box. The Field Size value for this type must be set manually.
- **Social Security Number:** Select this Field Type when your field contains a social security number.
- **Date (MM/DD/YY):** Select this Field Type when your field contains a date. The format for the date should be MM/DD/YY (e.g., 03/25/01).*
- **Date (DD/MM/YY):** Select this Field Type when your field contains a date. The format for the date should be DD/MM/YY (e.g., 25/03/01).*
- **Date (YY/MM/DD):** Select this Field Type when your field contains a date. The format for the date should be YY/MM/DD (e.g., 01/03/25).*
- **Time (HH:MM:SS 12 Hour):** Select this Field Type when your field contains a 12-hour time entry.**
- **Time (HH:MM:SS) 24 Hour:** Select this Field Type when your field contains a 24-hour time entry.**
- **Zip Code (5 digit):** Select this Field Type when your field contains a ZIP code. If you want the field to specify a 9-digit code, use either the **Numeric Only** type or the **User Defined Type**. See the chart following this section for more details.
- **Personal Name:** Select this Field Type when your field contains the name of a person.
- **Company Name:** Select this Field Type when your field contains the name of a company.

*All three Date Fields support a 4-digit year format. Simply change the number of spaces in the Properties dialog box from the default 8 to 10 and increase the Year section of your form's field from 2 to 4 spaces.

**If you do not require seconds to be recorded in a Time Field, reduce the printed field to 4 spaces separated by a colon and manually change the number of spaces in the properties dialog box from 8 to 5.

- **State (XX):** Select this Field Type when your field contains a 2-character state abbreviation.
- **City:** Select this Field Type when your field contains a city name.
- **User Defined Type:** Select this Field Type when the entries in your field can be either numeric or alphabetic, but must conform to a specific format, such as a serial number. See *Defining User Defined Type Hand Print Fields*, later in this section for more details.
- **Mixed Alphanumeric:** Select this Field Type when your field contains either alphabetic or numeric characters that do not conform to a specific format.

NOTE: Use the following table as a quick reference for your Hand Print Fields.

Hand Print Field Type	Field Characteristics	Min. Boxes	Max. Boxes
Alpha Only	Alphabetic only	1	28
Numeric Only	Whole numbers only	1	28
Date (all formats)	8 Fixed spaces, including 2 separator slash marks	8	10
Time (all formats)	8 (5 adjusted) Fixed spaces, including 2 colons	5	8
Street Address	Alphanumeric, see text for additional rules	1	28
Phone Number	12 Fixed Spaces, including 2 dashes	12	12
Decimal (N.DD)	Numeric, including decimal point and 2-digit decimal	4	28
Social Security	11 Fixed numeric spaces including 2 dashes	11	11
Zip Code (5 digit)	5 Fixed numeric spaces	5	5
Zip Code (9 digit)	Use Numeric Only with 9 fixed spaces and no dashes or use User Defined Type with 10 fixed spaces, including 1 dash	9-10	9-10
Personal Name	Alphabetic	1	28
State (XX)	2 Fixed alphabetic spaces	2	2
City	Alphanumeric	1	28
User Defined Type	Alphanumeric, see text for additional rules	1	28
Alphanumeric	Mixed Alphanumeric	1	28

4. If necessary, adjust the value shown in the Number of Boxes box by clicking the up- or down-arrow next to the field (*or* overwrite the existing number with a new one). Depending on the Field Type you selected, this number might not be able to be changed.
5. If necessary, check one or both options in the Field Attributes section of the Hand Print Properties dialog box. Options include:

The Field Type for Serial fields will always be User Defined Type. See *Creating User Defined Type Hand Print Fields*, later in this section, for more information.

- **Serial Field:** A Serial Field is one that will appear on every page of a multi-page form. Although the value in the field can vary for every person completing the form, each page completed by an individual must have the same number entered in exactly the same way. For example, suppose you ask each person to identify themselves on each page by entering the first two letters of their last name, plus the last four digits of their social security number. The combination of letters and numbers would vary by individual, but the total number of characters, and the format used to enter them, would be the same on each form.

Use the **Fixed Length** option in conjunction with the **Verify Field Always** or **Verify Field if Data Present** if you want the operator to correct errors or note omissions real-time during processing.

- **Fixed Length:** A fixed length field is one where every single box in the field should be completed with a character, such as a telephone number or a social security number. When this option is turned on, empty boxes will be represented by blank spaces in the corresponding field in the target database.

6. The Confidence level ranges from 1 to 10 with a default of 5. Set the Confidence level for the new field by clicking the up- or down-arrow next to the field (*or* overwrite the existing number with a new one).

The Confidence level is the threshold at which the AutoData processing engine questions the contents of a Hand Print Field. When the form is being processed, the processing engine analyzes the quality of the hand printed characters in the boxes. It assigns a Confidence level from 1 to 10 for each box. If the Confidence level assigned by the processing engine to a hand printed character is above the confidence setting you chose, the character is accepted as interpreted. If the Confidence level it assigns to the character is below your setting, the processing engine flags the character as “low confidence.”

Setting the Confidence level to 1 means that the AutoData processing engine questions fewer characters and accepts its own interpretation of the hand printed character more often. Therefore, forms are processed more quickly, but the risk of error is greater. Setting the Confidence level to 10 means that the processing

engine questions more characters and accepts its own substitutions less frequently. Therefore, forms are processed more accurately, but each form requires more operator input and could take substantially longer to process, as illustrated by the table below.

Confidence Level	1	10
Recognition accuracy	Lower	Higher
Operator verification	Lower	Higher
Total processing time	Faster	Slower

Confidence level tradeoffs

AutoData Template Maker sets the Confidence level default at 5. This setting has proven to provide the optimum level of accuracy versus substitutions. However, you may wish to change this value if you are consistently achieving inaccurate data.

To change the Confidence level, either click the up- or down-arrows next to the field (*or* overwrite the existing number with a new one).

7. If necessary, change the Verify Options setting. Options include:
 - **Verify if Low Confidence:** Turning on this option causes the processing of the form to stop for operator verification whenever the field is flagged as low confidence.
 - **Verify Always:** Turning on this option causes the processing of the form to stop for operator verification every time it reaches the field, regardless of whether the field contains data or not.
 - **Verify if Data Present:** Turning on this option causes the processing of the form to stop for operator verification whenever the field contains data.
8. If you selected a Field Type of **User Defined Type**, complete the necessary information for it on the User Defined Type tab. See *Defining User Defined Type Hand Print Fields*, later in this section, for more information.
9. When you are satisfied with your selections in the Hand Print Properties dialog box, click OK.

Your cursor will change to the Hand Print Locator cursor shown below.



Hand Print Field Locator cursor

10. Position the cursor in any corner of the Hand Print Field area. Click and drag the cursor to the opposite corner, to highlight all the boxes in the field. Then release your mouse button.

The box containing the Field Order number for Hand Print Fields will be red, unless the field's Field Type is **Serial Field**, in which case the box will be blue.

The Hand Print Field will be defined and located, as shown in the following figure.

SAMPLE 0 - 9



Locating a Hand Print Field

NOTE: Remember that all letter characters used in Hand Print Fields must be printed in capital (uppercase) letters. It is advisable to place a sample alphanumeric strip using the ADS Normal font on the first page of any form, as shown in the example below.

Please print as neatly as possible. **USE ALL CAPS. Do not touch the box sides.**

ABCDEFGHI JKLMNOPQRSTUVWXYZ1234567890

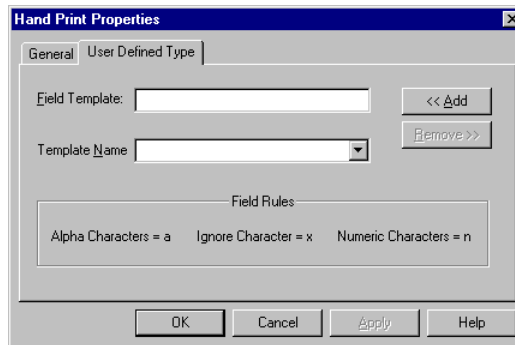
Additionally, all of the symbols, such as lines, dashes, colons, etc., must be preprinted on your form, and not hand printed by the user of the form. All of those punctuation marks are included in the ADS Normal font. The AutoData Template Maker engine makes use of sophisticated context checking and alerts the operator if unexpected characters are encountered. Template Maker expects a state abbreviation to contain two letters, a social security number to be totally comprised of numbers, a city name to be comprised completely of letters, and so on. Any apparent deviation from these rules will result in a processing alert.

Defining User Defined Type Hand Print Fields

➤ To define a User Defined Type Hand Print Field:



1. Click the Hand Print Field button (or choose **Hand Print Field** from the Define menu, or press F9). The Hand Print Properties dialog box will open.
2. If necessary, change the Field Name and/or Field Order shown in the Properties box.
3. In the Field Type box, choose **User Defined Type** from the list.
4. Click the User Defined Type tab to activate it. The User Defined Type tab is shown in the following figure.



User Defined Type tab

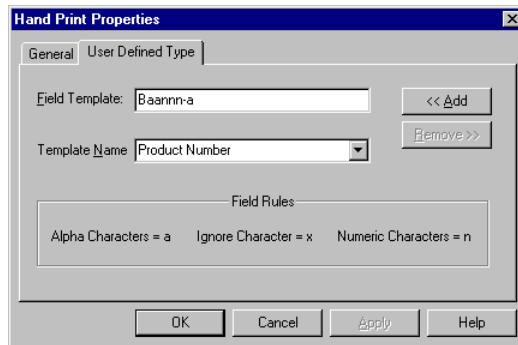
5. Type a field template in the Field Template box.

The AutoData processing engine expects the letters, numbers or characters in a User Defined Type Hand Print Field to appear in the same order every time it processes the form. The field template tells the AutoData processing engine what combination of characters it should expect when it reads the field. By assigning a field template, you identify the contents of each box in the field, specifying whether each box contains a letter, a number or a character. If desired, you can also instruct the AutoData processing engine to ignore the contents of a box completely; whatever appears in these boxes will not appear in your target database.

To assign a field template, follow these rules:

- Type a lowercase **a** for the boxes which will contain a letter.
- Type a lowercase **n** for the boxes which will contain a number.
- Type a lowercase **x** in the boxes whose contents you want to exclude completely in your data export file.
- If a box will ALWAYS contain the same number, symbol, or character, type the actual symbol character in the box. When entering letters always use uppercase letters.

To illustrate, suppose your User Defined Hand Print Field contains a product number which always starts with a **B**, followed by two letters, three numbers, a dash, and then another letter. You would type **Baannn-a** in the Field Template box, as shown in the following figure.



Assigning a Field Template

If you don't want the dash to appear in your target database, replace the dash in the above example with a lowercase **x**, as such: **Baannnx**.

Remember to type actual recurring letters as capital letters in your template. Thus, an uppercase **A** means that it's always an "A", but a lowercase **a** means that the entry can be any letter of the alphabet.

6. If you want to be able to use the field template when you are defining other Hand Print Fields on this or other forms, enter a name for your field template in the Template Name Box and click Add.

Conversely, if you want to use an existing field template rather than define a new one, select a field template name from the Template Name list. The Field Template box will automatically be filled with the template.

7. When you are satisfied with the properties of your User Defined Type Hand Print Field, click OK.

Template Maker counts the number of spaces in the field template as you create them and automatically increments the Number of Boxes field. Remember that the figure in the Number of Boxes field must equal the actual number of boxes in the field as it appears on your form.

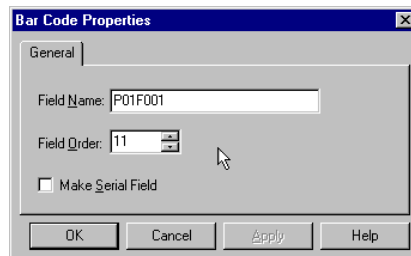
Defining and Locating Bar Code Fields

NOTE: It is not necessary to define the Form ID bar code as a Bar Code Field. If you created a Form ID bar code and positioned it as explained in the **Designing Forms** manual, the AutoData processing engine will automatically read that location. No further definition is necessary.

➤ To define a Bar Code Field:



1. Click the Define Bar Code Field button (or choose **Bar Code Field** from the Define menu) to open the Bar Code Properties dialog box shown below.



Bar Code Properties dialog box

2. If necessary, change the Field Name and/or Field Order.

3. If the bar code is being used as a Serial Field, check the Make Serial Field box. Remember that a bar code used as a Serial Field must be exactly the same on all pages of your document (if used on a multi-page form), but it must change for each form being processed.
4. When you are satisfied with your selections in the Bar Code Properties box, click OK. Your cursor will change to the Bar Code Locator cursor shown in the following figure.



Bar Code Locator cursor

5. Place the cursor at any corner of the bar code you are locating, then click and hold the left mouse button while dragging the cursor to the opposite corner. When the highlight encompasses the entire bar code, release the mouse button.

The Bar Code Field will be defined and located, as shown in the following figure.

If your bar code is a Serial Field, the box containing the Field Order number will be blue instead of red.



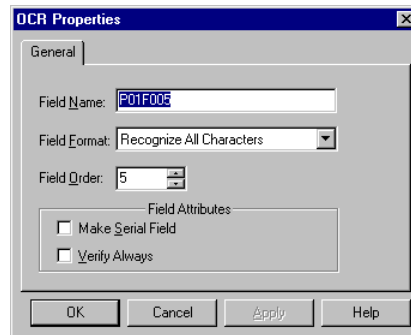
Defining and locating a Bar Code Field

Defining and Locating OCR Fields

➤ To define and locate an OCR field:



1. Click the Define OCR Field button (*or* choose **OCR Field** from the Define menu) to open the OCR Properties dialog box shown in the following figure.



OCR Properties dialog box

2. If necessary, change the Field Name and/or Field Order.
3. An OCR field consists of text, numbers or symbols that are preprinted on your form and which you want to be read by the AutoData processing engine.

Select a Field Format corresponding to the characteristics of your OCR Field from the drop-down list. The following format options are available:

- **Recognize All Characters:** Select this option when the field contains a mixture of numbers, letters and punctuation marks.
- **Alpha Lowercase:** Select this option when the field contains lowercase letters only.
- **Alpha Uppercase:** Select this option when the field contains uppercase (capital) letters only.
- **Alpha Only:** Select this option when the field contains both upper and lowercase letters, but no numbers or punctuation marks.
- **Numeric Only:** Select this option when the field contains only numbers from 0 to 9.
- **Alphanumeric:** Select this option when the field contains only upper and lowercase letters, numbers from 0 to 9, but no punctuation marks.
- **Numeric (0-9 , \$ + - % / = .):** Select this option when the OCR Field will contain numbers from 0 to 9 and/or the symbols listed in the parentheses.

4. If the OCR Field is to be used as a Serial Field, check the **Serial Field** option. Remember that a Serial Field must be exactly the same on all pages (if used on a multi-page form), but it must change for each form being processed. Make certain that your Serial Field complies with the conditions and requirements for Serial Fields as explained in the **Designing Forms** manual.
5. If you want the AutoData processing engine to require that the operator verify the information read in the OCR Field, check the **Verify Always** option. When the AutoData processing engine reaches this field during processing, it will open the scanned field's image on the screen and the operator can approve or change the information.
6. When you are satisfied with the information in the Properties dialog box, click OK. Your cursor will change to the OCR Locator cursor shown below.



OCR Locator cursor

7. Place the cursor at any corner of the OCR Field you are locating. Press and hold the left mouse button while dragging the cursor to the opposite corner of the field. When the highlighting box encompasses the entire field area, release your mouse to locate the new OCR Field, as shown below.



Locating an OCR Field

Defining and Locating Image Capture Fields

➤ To define and locate an Image Capture Field:



1. Click the Image Capture Field button (or choose **Image Capture Field** from the Define menu, or press F11). The Image Capture Properties dialog box, shown in the following figure, will open.

Only select the **Capture Only if Data Present** option when your Image Capture Field consists of an empty box with a 1-point frame for users to complete; otherwise, the field will generate an error during processing

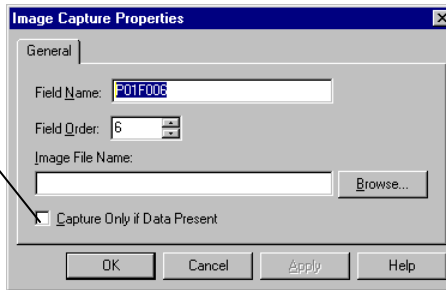


Image Capture Properties dialog box

2. If necessary, change the Field Name and/or Field Order.
3. Click the Browse button to open the Save As dialog box, shown in the following figure.



Save As dialog box

4. Navigate to the directory where you want your captured Image files to be stored, then enter a base name for your Image Capture files, choosing a different file type than the one shown in the Save as Type box, if necessary. Then click Save to return to the Image Capture Properties dialog box.

Save your Image file in one of three formats: .TIF, .PCX, and .BMP. The default format is .TIF.

When an Image Capture Field is processed, the AutoData processing engine saves a graphic image of whatever appears in the space designated for the field by the form's template. When the AutoData processing engine processes completed forms, it saves the Image files to the directory you have selected in this Step. In order to enable you to locate and access specific Image files as needed, it will save each image with the file name you entered in this step and append the name with a numeric value corresponding to the order in which the

forms are processed. For example, if you named your file Signature.TIF, the first Image file will be named Signature0001.TIF. The second Image file will be named Signature0002.TIF, and so on.

A file is not actually created when you close the Save As dialog box, but Template Maker stores the file name, file type, and where you want to save the file. This information is read by the AutoData processing software.

5. When you are satisfied with your file name, location and format, click Save to return to the Image Capture Properties dialog box, where your file name now appears in the Image File Name box.
6. If (*and only if*) your field area is framed by a 1-point box that is completely empty, and you want to capture images from the field only when users have entered information into the Image Capture Field, check the **Capture Only if Data Present** option box. We emphasize that the area inside the box must be empty. Place any instructions or comments outside the box borders.

If this option is not checked, the AutoData processing engine will save an Image file for each of your forms, even if the fields are blank.

If this option *is* checked, the Image Capture area *must* be framed by a 1-point empty box on your form. For example, the field label of “Signature” or instructions such as “Please sign your name in the box,” should appear *outside* the 1-point frame.

7. When you are satisfied with your choices in the Image Capture Properties dialog box, click OK. Your cursor will change to the Image Capture Locator cursor, as shown below.



Image Capture cursor

8. Position the cursor at any corner of an imaginary rectangle enclosing your image area. Be generous in defining this area, especially if it is a signature. Click and hold the left mouse button while dragging the cursor to the opposite corner of the area you want to capture. When the highlighting box encompasses the entire field area, release the mouse button to locate the field, shown in the following figure.



Locating an Image Capture Field

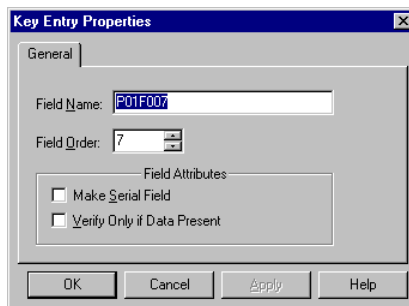
Defining and Locating Key Entry Fields

For more information about Key Entry Fields, refer to the **Designing Forms** manual.

A Key Entry Field contains handwritten information that can't be appropriately captured by one of Template Maker's other field types. It requires interpretation and input by the operator processing completed forms.

➤ To define and locate a Key Entry Field:

1. Click the Key Entry Field button (*or* choose **Key Entry Field** from the Define menu) to open the Key Entry Properties dialog box, shown in the following figure.



Key Entry Properties dialog box

2. If necessary, change the Field Name and/or Field Order.
3. There are two check boxes in the Key Entry Properties dialog box:
 - **Serial Field:** Select this option if the Key Entry Field is to be used as a Serial Field. The data entered by the operator must conform to Serial Field requirements.

- **Verify Only if Data Present:** Select this option if you want processing of the form to stop for operator verification when the Key Entry Field contains data. When a Key Entry Field is processed, the AutoData processing engine always stops for operator input. If this attribute is checked, the processing engine will only stop when the field contains information, but the defined field area *must* be enclosed by a 1-point box on the form. Additionally, any printed text or instructions on the form must be located *outside* the box.
4. When you are satisfied with your settings in the Key Entry Properties dialog box, click OK. Your cursor will change to the Key Entry Field Locator cursor shown below.



Key Entry Locator cursor

5. Position the cursor at any corner of the field area. Click and hold the left mouse button while dragging the cursor to the opposite corner of the field. When the highlighting box encompasses the entire field area, release the mouse button to define the field, as shown in the following figure.



Locating a Key Entry field

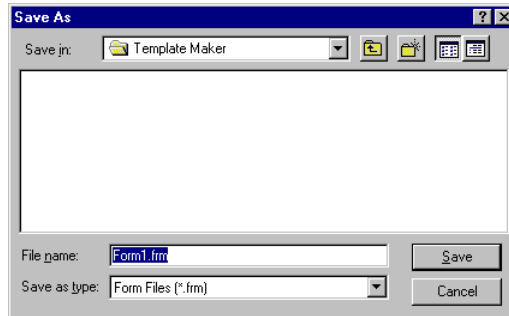
Step 5: Saving Your Form File

Earlier in this chapter, we noted that it is always a good practice to save your Form file early in the creation and defining process, and to resave it regularly as a precaution against data loss. Once your Form file has been named and saved, a simple CTRL+S instantly updates the saved file.

➤ To save your Form file:



1. Click the Save Form File button (*or* choose **Save Form File** from the File menu, *or* press CTRL+S). The Save As dialog box shown below will open.



Save As dialog box

2. Navigate to the drive and directory where you want your Form file to be saved. You should save it in the same directory as your form's Image file(s).
3. Type a file name for your Form file in the File Name box. Template Maker makes use of a single Form file regardless of how many pages (and consequently how many Image files) your form may have. So, for example, if your form is a survey and you have saved its Image files as "Survey_1", "Survey_2", etc., you can simply save the Form file as "Survey." Template Maker will keep track of the respective related Image files.

AutoData Template Maker will add the .FRM extension to your file name.

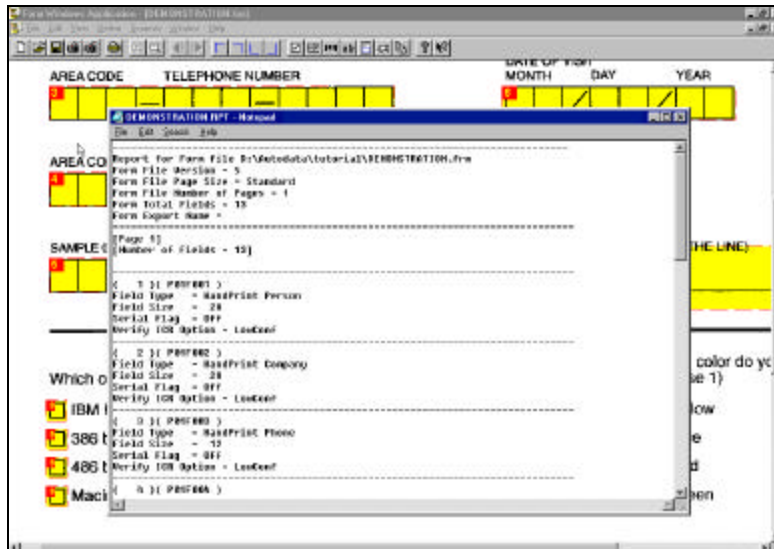
For subsequent saves, clicking the Save Form File button (*or* choosing **Save Form File** from the File menu, *or* pressing CTRL+S) will automatically update the previously saved file.

Creating a Report

AutoData Template Maker can create a detailed report containing information about each of the fields you defined on your form. This report can be a helpful tool when you are testing your template file later, and it may be worthwhile to save a copy as documentation together with your printed forms.

➤ **To create a report for your Form file:**

1. Choose **Create Report** from the File menu. Template Maker opens a Notepad window containing a text file report like the one shown in the following figure.



Creating a report for a Form file

The report, bearing the same name as your form but with the .RPT extension, is automatically saved in the same directory as your Form file.

2. Exit the Notepad window by choosing **Exit** from the File menu.

Exiting Template Maker

Exit AutoData Template Maker by choosing **Exit** from the File menu (*or* press CTRL+X). If you have not saved all work on your Form file, Template Maker will prompt you to do so before permitting you to exit.


Tutorial

AutoData Template Maker

The tutorial in this section takes you through the process of creating a new Form file using AutoData Template Maker. This will involve the following steps:

- **Step 1: Launch the AutoData Template Maker software**
- **Step 2: Create a new Form file**
- **Step 3: Scan the demonstration form and save its Image file**
- **Step 4: Define and locate the form's Hand Print Fields**
- **Step 5: Define and locate the form's Key Entry Field**
- **Step 6: Define and locate the form's Check Mark Fields**
- **Step 7: Define and locate the form's Image Capture Fields**
- **Step 8: Save the Form file**
- **Step 9: Create a report and exit Template Maker**

Included in your software package is a Microsoft Word sample form, shown in the figure below, titled "Demo1.DOC." Print a copy of this form to use during the tutorial presented in this section.


DEMONSTRATION FORM

Name

Company Name

Area Code Phone Number Date of Visit
----- Month Day Year
----- / / / / /

Area Code Fax Number Lunch Tab

Sample 0-9 Key Entry Field
---------- _____

Which of the following hardware do you use? Your Gender? Which color do you prefer?

<input type="checkbox"/> IBM PS2	<input type="checkbox"/> DEC	<input type="checkbox"/> Male	<input type="checkbox"/> Yellow
<input type="checkbox"/> 386 PC	<input type="checkbox"/> Unix Box	<input type="checkbox"/> Female	<input type="checkbox"/> Blue
<input type="checkbox"/> 486 PC	<input type="checkbox"/> Sun		<input type="checkbox"/> Red
<input type="checkbox"/> Mac	<input type="checkbox"/> Other		<input type="checkbox"/> Green

Signature: _____ Date: _____

Print the sample form included with the Template Maker software for use during this tutorial

The demonstration form contains a variety of field types so you can familiarize yourself with the procedures for locating and defining each one. The demonstration form includes seven Hand Print Fields, one Key Entry Field, three Check Mark Fields, and two Image Capture Fields. (The bar code at the top of the form functions as the Form ID, and therefore is not defined.)

We recommend creating a “Tutorial” subdirectory in your AutoData directory; use this subdirectory to store the template files created during this tutorial. If you need assistance creating a subdirectory within the AutoData directory, refer to your copy of the Microsoft Windows user manual.

For the sake of this exercise, accept the default name assigned to each field by Template Maker, keeping in mind that with a real form you may want your Field Names and Field Order to correspond to an external database.

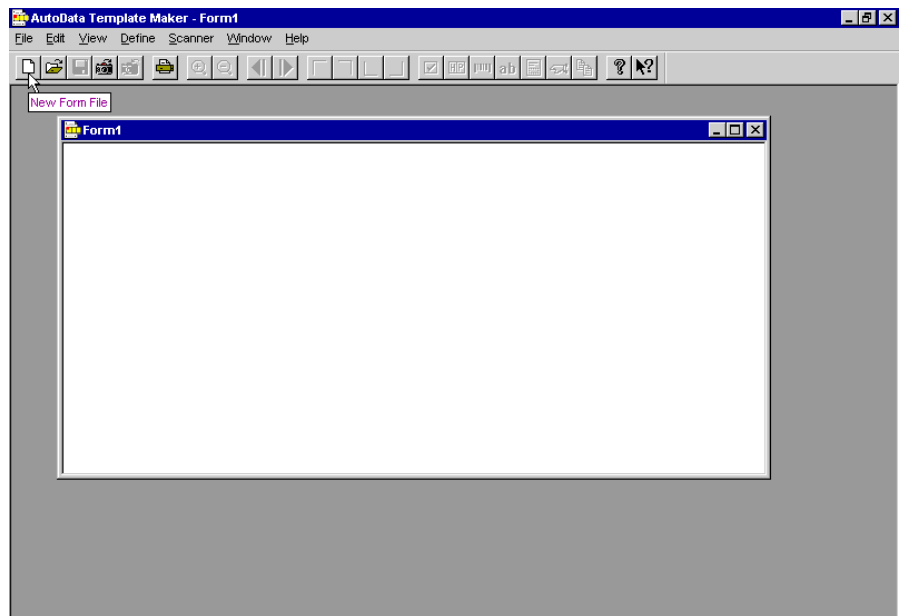
Step 1: Start AutoData Template Maker

1. Click the Windows Start button, point to **Programs**, and then point to **AutoData Scannable Office** to open the Scannable Office menu.
2. Choose **Template Maker** from the Scannable Office menu to launch the Template Maker software.

Step 2: Create a New Form File



- Click the New Form File button (*or* choose **New Form File** from the File menu, *or* press Ctrl+N). An empty Form window will appear in the Template Maker work area, as shown below.



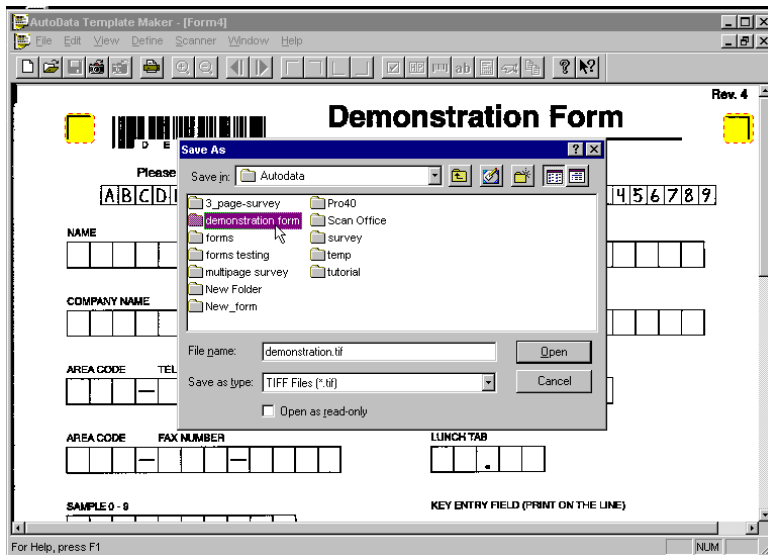
Opening a new Form file

Step 3: Scan the Form and Save Its Image File

1. Place the demonstration form in your scanner's automatic document feeder.



2. Click the Scan Form button (or choose **Scan Form** from the Scanner menu, or press F12). The form will pass through your scanner and the image of the demonstration form will appear in the active window, as shown in the following figure.



Scanning a form

3. As illustrated above, the Save As dialog box will immediately open in the window after you scan the image. Navigate to the location where you want to save the Image file, then name the Image file in the File Name box.

For the purposes of this exercise, create a subdirectory/folder within the AutoData directory called “Tutorial.” We suggest you name the Image file “Demonstration” and accept the default .TIF file format. If you plan to use the form image in a program that does not support the .TIF format, you may choose to save it in .PCX or .BMP format.

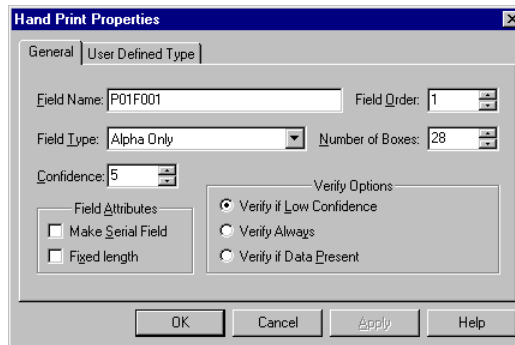
NOTE: If Template Maker fails to automatically find your corner Locator marks, you will immediately receive an error message. In this event, choose **Settings** from the Scanner menu and verify that the page size setting is set to Letter 8½"×11". Then re-scan the form. If this does not solve the problem, carefully review the suggestions on page 24 in the *Using AutoData Template Maker* section of this manual.

4. Confirm that the path and file name are correct. Click OK to save it and exit the Save As dialog box.

Step 4: Define and Locate the Hand Print Fields



1. Click the Hand Print Field button (or choose **Hand Print Field** from the Define menu, or Press **F9**) to open the Hand Print Properties dialog box, shown below.



Hand Print Properties dialog box

2. Choose **Personal Name** from the Field Type list.
3. In the Number of Boxes field, enter the number **28**, since the Name Hand Print Field has 28 boxes.
4. Since all of the other default settings in the dialog box are correct, click OK. The cursor will change to the Hand Print Field Locator cursor.

5. Position the cursor at one of the four corners of the Name field fill-in box grid, then press and hold the left mouse button while dragging your mouse to the opposite corner of the Hand Print Field.
6. When the highlighting box encompasses all the boxes in the field, release the mouse button. The New Hand Print Field will be defined and located, as shown below.



Defining and locating a Hand Print Field

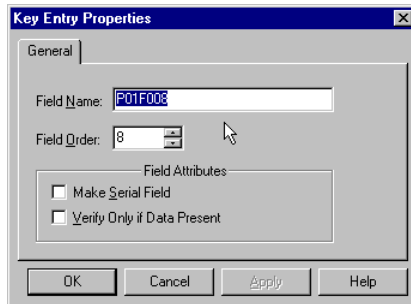
7. Repeat Steps 1 through 6 of this procedure for the remaining six Hand Print Fields. The table below shows each field's Field Order, Field Type, and the value to enter into the Number of Boxes box.

Field Order	Field Name on Form	Field Type	Field Size
2	Company Name	Company name	28 (default 28)
3	Telephone Number	Telephone number	default (12)
4	Fax Number	Telephone number	default (12)
5	Sample 0–9	Numeric only	10
6	Date of Visit	Date (MM/DD/YY)	default (8)
7	Lunch Tab	Decimal	5

Step 5: Define and Locate the Key Entry Field

ab

1. Click the Key Entry Field button (*or* choose **Key Entry Field** from the Define menu) to open the Key Entry Properties dialog box, shown in the following figure. Assuming the first seven Hand Print Fields have been correctly defined as described above, the next available Field Order number displayed should be 8.



Key Entry Properties dialog box

2. Choose OK to accept the settings in the Key Entry Properties dialog box. Your cursor will change to a Key Entry Field Locator cursor.
3. Position the cursor slightly above and to the left of the area you want to define. Then press and hold your left mouse button while dragging the cursor to the opposite corner of the field.
4. When the highlighting box encompasses the entire field, release the mouse button. The new Key Entry Field will be defined and located, as shown in the following figure.



Defining and locating a Key Entry Field

Step 6: Define and Locate the Check Mark Fields

The demonstration form has three different types of Check Mark Fields.

The first type, called a **Multiple Marks Allowed** field, is shown in the following figure. This field type allows users to check more than one box in the field. When completed forms are processed, each check box will yield a single-digit field in the final output file; a checked box will yield a value of 1; an unchecked box will yield a value of 0.

Which of the following hardware do you use?

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> IBM PS2 | <input type="checkbox"/> DEC |
| <input type="checkbox"/> 386 based PC | <input type="checkbox"/> NEXT |
| <input type="checkbox"/> 486 based PC | <input type="checkbox"/> Sun Sparcstation |
| <input type="checkbox"/> Macintosh | <input type="checkbox"/> Other |

Multiple Marks Allowed Check Mark Field type

The second type, called a **Single Mark Only** field, allows the user to check only one of the multiple boxes. On the demonstration form shown below, the Male/Female Check Mark Field is an example of this type. If the Male box is checked, the final output file will display the letter M. If the Female box is checked, the file will display the letter F.

Your gender?

- Male
 Female

Single Mark Only Check Mark Field type

The third type, shown below, is a **Single Mark Only, User Defined Labels** field. In the target database, the choice selected by the user will be written out in full. For example, if the user checks the first box, the database will display the word **Yellow**.

Which color do you prefer?
(choose 1)

- Yellow
 Blue
 Red
 Green

Single Mark Only, User Defined Labels Check Mark Field type

Multiple Marks Allowed Check Mark Field



1. Click the Check Mark Field button (or choose **Check Mark Field** from the Define menu) to open the Check Mark Properties dialog box, shown below.

Check Mark Properties dialog box

2. In the Response box, choose **1–30 (Multi Mark = 1 or 0)**.
3. Check the **Allow Multiple Marks** option.
4. Type **8** into the Number of Marks box.
5. Click OK to accept the settings in the Check Mark Properties box. Your mouse arrow will turn into the Check Mark Locator cursor.
6. Position the cursor at one corner of the check box group you want to identify. Press and hold the left mouse button while dragging the cursor to the opposite corner of the group.
7. When the highlighting box encompasses all the check boxes in the field, release your mouse button to locate the field, as shown in the following example.

Which of the following hardware do you use?



Defining and locating a Multiple Marks Allowed Check Mark Field

To view the sequence of the check mark boxes within the field as Template Maker will read them, zoom in and right-click on any of the highlighted check boxes to display the pop-up menu shown below.



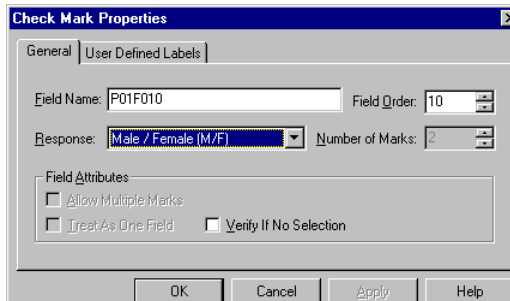
Displaying the pop-up menu for a Check Mark Field

Choose **Order Within Field** to display the sequence (in this case, 1 through 8) of the fields as Template Maker will read them.

Single Mark Only Check Mark Field



1. Click the Check Mark Field button (or choose **Check Mark Field** from the Define menu) to open the Check Mark Properties dialog box, shown in the following figure.



Check Mark Properties dialog box

2. From the drop-down menu choose **Male/Female**. The Number of Marks box automatically sets itself to 2.
3. Single Mark Only is the default (the Allow Multiple Marks box is unchecked) and all the other default values are correct. Click OK.
4. Your mouse arrow will change to the Check Mark Locator cursor. Position the cursor at one corner of the group of check boxes you want to identify, then press and hold your left mouse button while dragging the cursor to a position in the opposite corner of the check box group.
5. When the highlighting box encompasses all the check boxes in the field, release the mouse button to locate the field, as shown below.

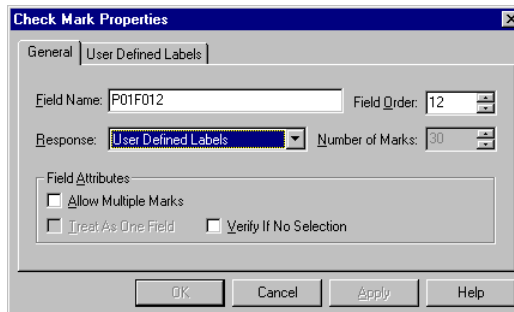


Defining and locating the Single Mark Only Check Mark Field

User Defined Labels Check Mark Field



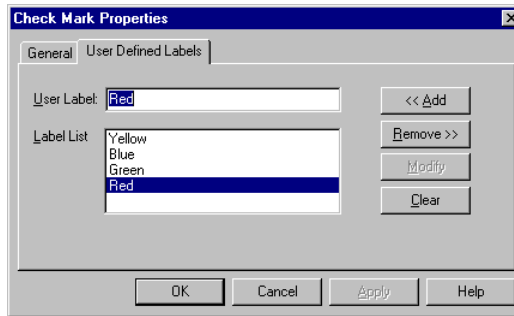
1. Click the Check Mark Field button (or choose **Check Mark Field** from the Define menu) to open the Check Mark Properties dialog box, shown in the following figure.



Check Mark Properties dialog box

2. Choose **User Defined Labels** in the Response box. Ignore the Number of Marks entry because Template Maker will automatically count the number of labels you create and set the total for you.
3. Open the User Defined Labels tab by clicking on its label.
4. Type **Yellow** in the User Label box and click Add to add it to the Label List.
5. Type **Blue** in the User Label box and click Add to add it to the Label List.
6. Type **Green** in the User Label box and click Add to add it to the Label List.
7. Type **Red** in the User Label box and click Add to add it to the Label List.

All four options have now been added to the Label List, as shown in the following figure.



Adding User Defined Labels

8. Click OK. Your mouse arrow will change to the Check Mark Locator cursor. Position the cursor at one corner of the group of check boxes, then press and hold the left mouse button while dragging the cursor to the opposite corner of the group.
9. When the highlighting box encompasses all the check boxes in the field, release the left mouse button to locate the field, as shown in the following figure.



Defining and locating the User Defined Labels Check Mark Field

Step 7: Defining and Locating Image Capture Fields

When the AutoData processing engine processes a completed form, it saves the portion of the form designated as an Image Capture Field as a graphic image. Later, this image can be viewed using any software which can open graphic files in the format in which the image is saved. The demonstration form has an area reserved for a signature and one for a date that we will now define and locate as Image Capture Fields.



1. Click the Image Capture Field button (or choose **Image Capture Field** from the Define menu) to open the Image Capture Properties dialog box, shown in the following figure.

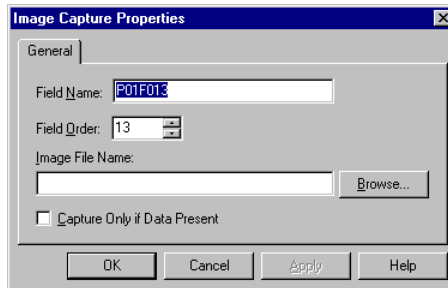
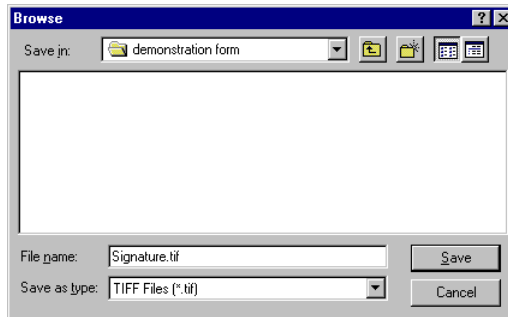


Image Capture Properties dialog box

2. Click Browse to display the Browse dialog box. Enter **Signature.tif** in the File Name text box, as shown in the following figure.



Choosing a base name and storage location for the Image Capture files in the Browse dialog box

3. Because you want images to be saved in the .TIF format, don't make any changes to the selection in the Save as Type box. Click Save to exit the Browse dialog box and return to the Image Capture Properties dialog box.
4. Click OK in the Image Capture Properties dialog box. Your mouse arrow will change to the Image Capture Locator cursor. Position the cursor at one corner of the signature area, then press and hold the left mouse button while dragging the cursor to the opposite corner of the group.
5. When the highlighting box encompasses the entire signature area, release the left mouse button to locate the field, as shown in the figure below.

Keep in mind that signatures can be quite large. The descenders on lowercase letters can easily extend well below the line. Highlight a large area with your Image Capture Locator cursor.



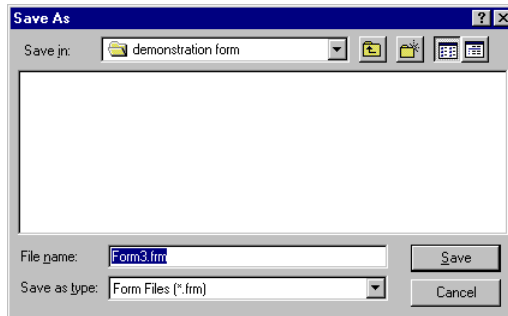
Defining and locating the Image Capture Field

6. Repeat Steps 1–5 to create an Image Capture Field for the Date area of the form, using Date.TIF for your Image file name in Step 2.

Step 8: Saving the Form File



1. Click the Save Form file button (*or* choose **Save As** from the File menu, or press CTRL+S). The Save As dialog box shown in the following figure will open.

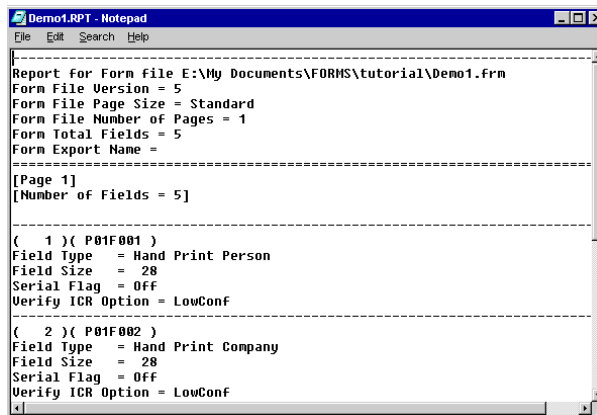


Save As dialog box

2. Navigate to the same directory as the one where the Image files will be stored. Then overwrite the suggested text in the File Name box with **Demo1.FRM**.
3. Click Save to save the Form file as Demo1.FRM and return to the main Template Maker window.

Step 9: Creating a Report and Exiting Template Maker

1. Choose **Create Report** from the File menu to open a new Notepad window containing details about each of the fields on your form, as shown in the following figure.



Creating a report

Template Maker automatically saves the report in the same directory as your form's Image and Template files. The file is saved with an .RPT extension and may be opened and printed by any program that reads ASCII text files.

2. If desired, print a hard copy of the report for your records by choosing **Print** from the File menu of the Notepad utility.
3. Exit the report window by choosing **Exit** from the File menu of the Notepad utility.
4. Exit the AutoData Template Maker program by choosing **Exit** from the File menu (*or* press CTRL+X).

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