

# Chapter 1

## Introducing OmniScan™

This chapter includes the following topics:

- Description of OmniScan™

- Term Definitions

- Features

- GUI for Managing INI

### 1.1 Description of OmniScan™

The purpose of developing OmniScan™ is to automate the process of scanning documents and segregating them into records and associating tags with the documents so as to enable easy searching and retrieval of the documents in the desired Document Management System (DMS) to which they are exported. It also caters to the need of creating folders in the DMS based on desired field values. Rescanned documents can also be imported into OmniScan™ to arrange them into records. Extraction of values from the scanned documents is also supported for BARCODE and MICR.

### 1.2 Term Definitions

Following are the terms frequently used in context of OmniScan™:

#### 1.2.1 Document Type

Document Type, or doc type, can be defined as a logical separation of records into sections.

The term can be taken in its literal meaning, as a record may have different types of documents in it. For example, suppose a standard form, an address proof, a driving license, and a medical statement together form an individual record. Now, the record can be logically divided into Standard Form, Certificates (comprising of address proof and driving license), and Medical Statement. The Standard Form, Certificates, and Medical Statement are sections of the record and are called its Document Types.

#### 1.2.2 Data Class

Data class is a term related to Newgen OmniDocs™. It provides the concept of user-defined indexing and metadata association with documents and folders. Data classes are set of indexes that can be associated with a document or folder by providing a unique entity to them. These indexes store values associated with the data fields and are usually obtained from the document itself. These indexes or fields can be of different types. When a data class is associated with a document or folder, it becomes an integral part of the folder or document property. Data classes can be assigned, modified, and searched upon. For example, if we create a data class named “employee” containing fields such as emp\_id, emp\_name, emp\_doj, and so on, it can be associated with all the employee records and provides a quick way of searching on any fields.

### **1.2.3 INI File**

An INI file is an initiation or a configuration file, which contains all the information regarding the way in which the scanning of the documents needs to be done. It defines the various data fields that need to be associated with the documents during scanning, describes the document types into which the documents need to be divided, and also contains the information about the data classes that need to be associated with the doc types. Apart from these, the INI file also contains information regarding the scanning protocol, export settings, folder settings, job settings, and so on. Thus, the INI file is known as a template for the scanning of documents.

### **1.2.4 Job**

A job corresponds to a template INI file and the MDB (Database file). Every time a user does bulk scanning of documents, he/she needs to select a template INI file according to which the scanning needs to be done. The template assigns a unique identifier to the job according to the defined job settings. The protocol to be used for scanning, that is, TWAIN or ISIS, and the operator of the job are also assigned according to the template. All these constitute the attributes of the Job. No two jobs can have the same name. Every new set of bulk scanning of documents corresponds to a new job.

## 1.3 Features

OmniScan™ has the following features:

- It enables a user to scan documents in bulk, and add scanned documents with some values into fields that have to be stored in the database.
- It enables the user to define Doc Types and separators for Doc Types. When a batch is scanned, it gets automatically separated into Doc Types.
- It enables the user to define fields as **Carry Forward** fields. Because of these fields, the user does not have to enter the common field values again.
- It enables the user to define data classes with fields that have to be created in the OmniDocs™ cabinet when job records are exported in the OmniDocs™ cabinet.
- It provides data entry support for user-defined indexes.
- It provides support of manual separation of documents at the time of verification.
- It enables the user to define zone value for any page number of a document type. This zone information is used to extract barcode or MICR values.
- It enables the user to export job records in the registered OmniDocs™ cabinet by simply logging into the cabinet. The scanned documents are separated into Doc Types. The scanned documents are split according to the page range specified for the Doc Types, and the documents are created in the folder specified in the Name tag of the INI file.
- Records can be automatically organized in the OmniDocs™ folders because the name of the folders that are created in the OmniDocs™ cabinet can be concatenated with two or more field values of the record.
- It supports Add -Ins.
- The field data can be supplied from some external source, that is, a DLL. If a field is defined as <External DataSource> then on the lost focus of the field, an external function "EditValues" of "BulkScan.dll" is called, supplying the already entered values of the field. On the lost focus of the text box of the field, a function of external DLL is called, which connects to the OmniDocs™ cabinet with the username and password supplied in an INI file called "FetchFromOD.ini". This INI file should exist under the Windows directory. The function searches the folder having the data class in which the field defined as <External DataSource> exists and the values already filled in the field exist. The INI file then fills the fields of the data class if the folder is found.
- It provides a centralized INI concept. An INI file is stored at some defined location. Whenever a new job is created, the INI file is downloaded from the specified path and is used for job creation.
- OmniScan™ provides export to OmniDocs™ through HTTP protocols.

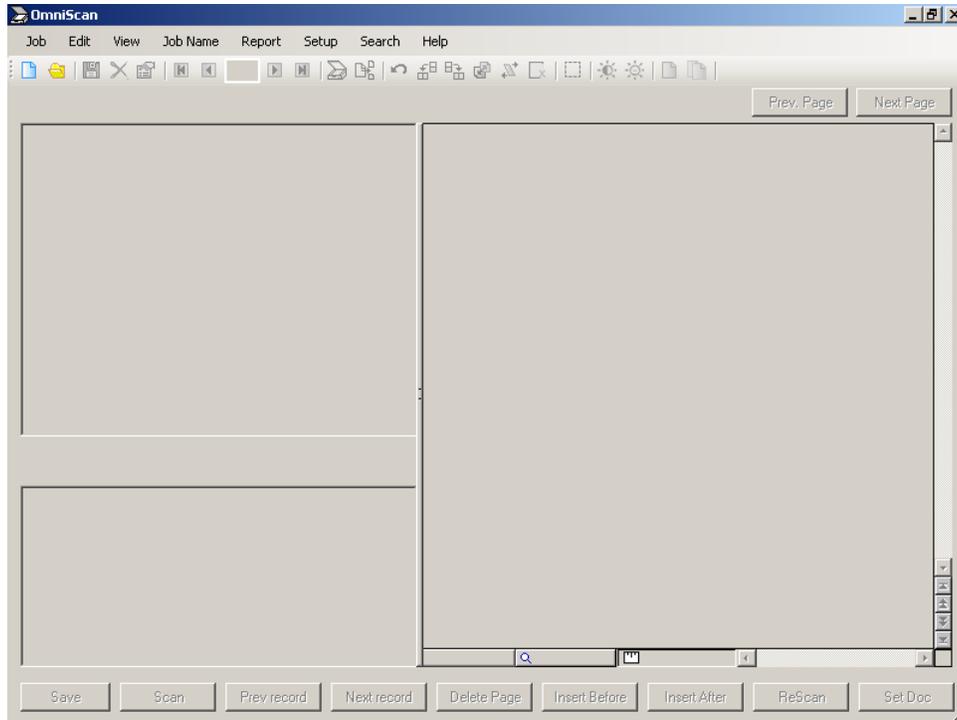
## 1.4 GUI for Managing INI

OmniScan™ provides an interactive graphical user interface (GUI) to create a new INI file and modify an existing INI file.

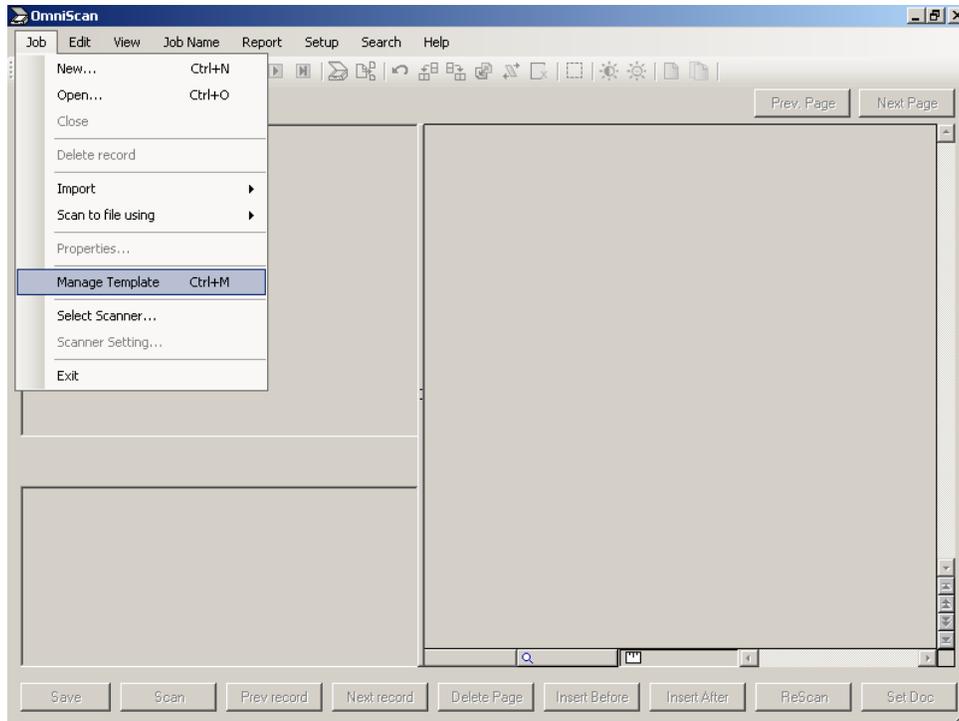
### 1.4.1 Creating an INI File Using GUI

To create an INI file through the graphical user interface:

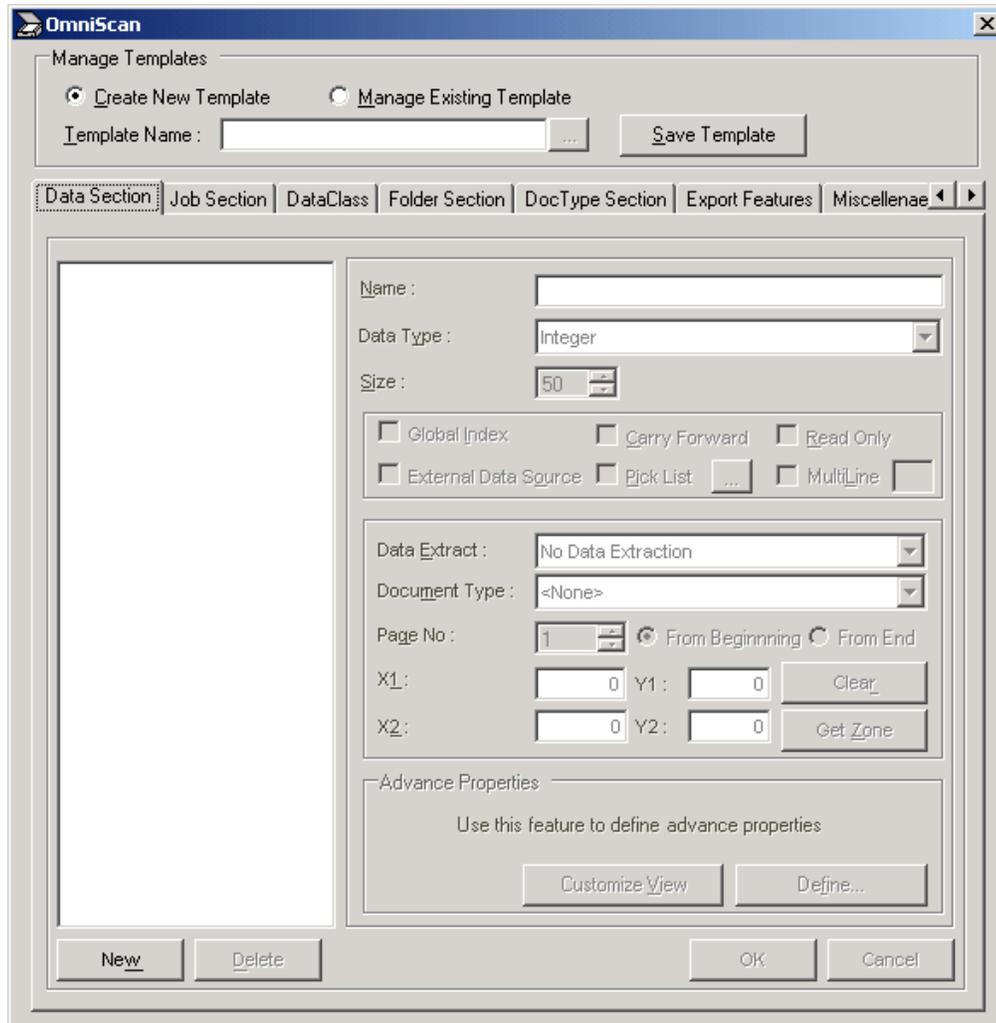
1. Open the OmniScan™ application. The following window appears:



2. Click **Job -> Manage Template**, as shown below:

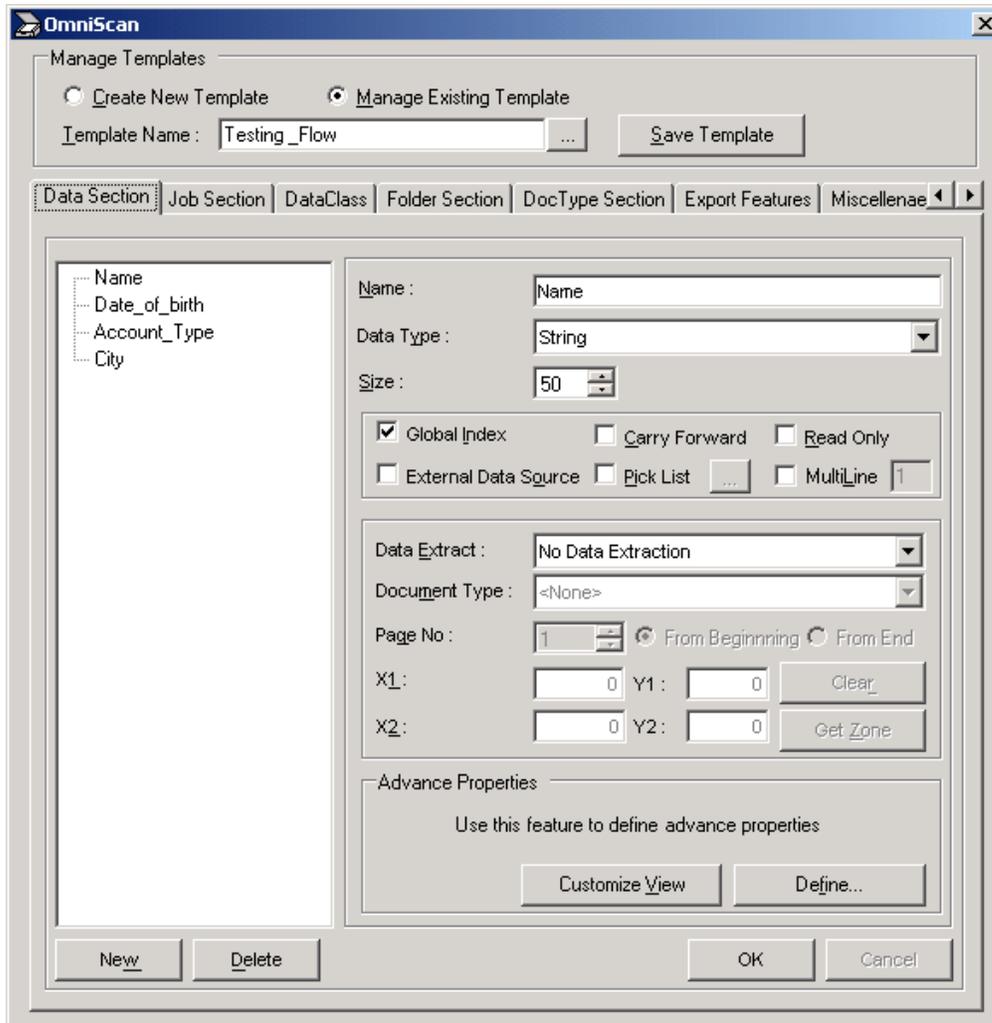


3. The OmniScan™ GUI screen appears, as shown in the following figure:



4. Under **Manage Templates**, notice that, by default, the **Create New Template** option is selected.

In the OmniScan™ GUI screen, if you want to modify an existing template, under **Manage Templates**, click **Manage Existing Template**. Click the ellipsis (...) button next to the **Template Name** text box and select the template you want to modify or manage. The following screen appears:



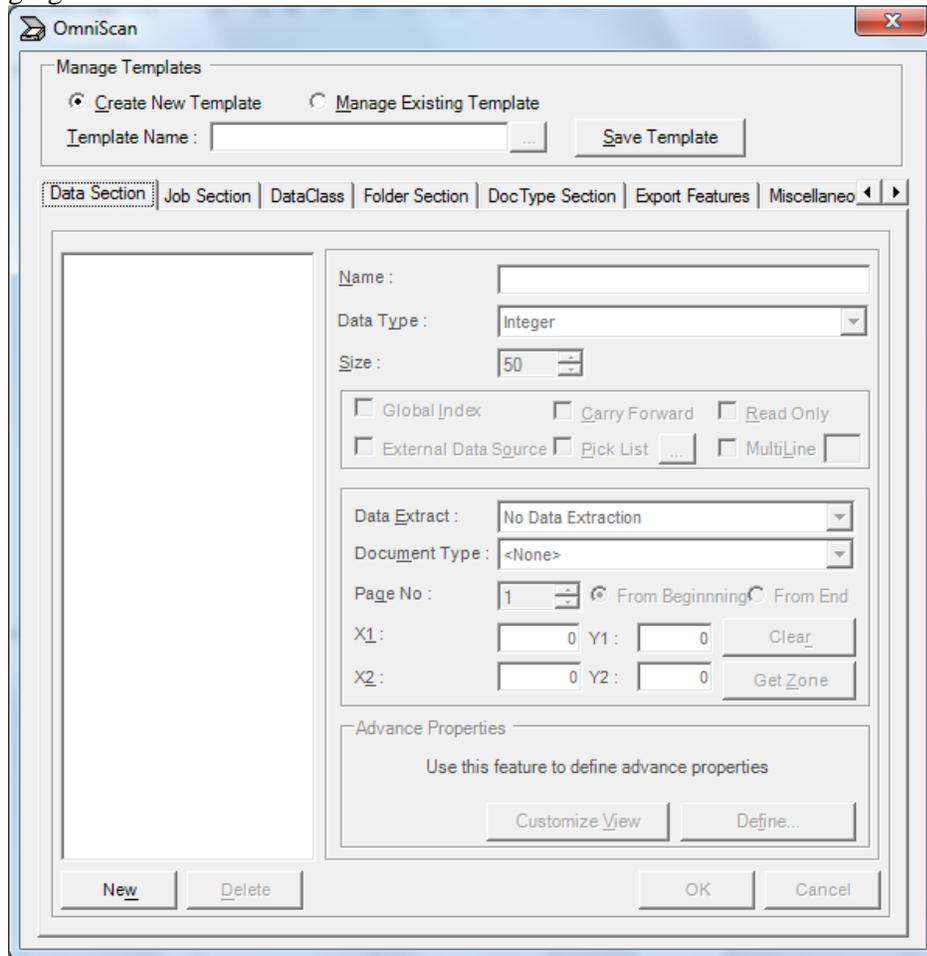
The OmniScan™ GUI screen contains the following tabs, which you use to create and manage INI files:

- Data Section
- Job Section
- Data Class
- Folder Section
- Doc Type Section
- Export Features
- Miscellaneous
- Image Settings
- Flow Section
- User Defined Section

**Note:** The Image Settings and Flow Section tabs appear when you click the right arrow button next to the tabs.

## Data Section

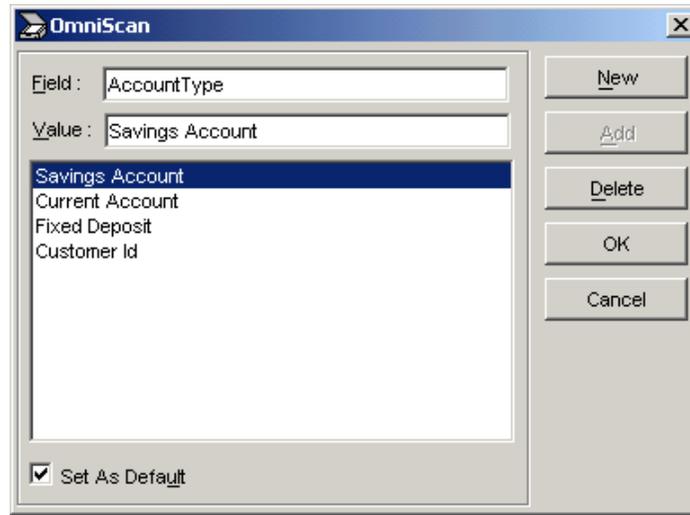
The **Data Section** tab allows you to specify various field properties. The **Data Section** tab is shown in the following figure:



The **Data Section** tab contains the following fields:

- **Name:** This text box specifies the name of the index field and takes alphanumeric values.
- **Data Type:** This drop-down list is used to specify the field type that you can select from the available options.
- **Size:** This selection box specifies the length of the index field that takes a numeric value from 1 to 255. The **Size** selection box is shown or enabled if **String** is selected from the **Data Type** drop-down list. If you select **Date** from the **Data Type** drop-down list, then the **Date Format** drop-down list appears instead of the **Size** selection box.
- **Date Format:** This drop-down list appears if you select **Date** from the **Data Type** drop-down list. It allows you to select a date format. There are 16 date formats that are available in the drop-down list.
- **Global Index:** This check box, if selected, allows you to create a global index in the DMS.
- **Carry Forward:** This check box, if selected, allows you to retain the data of a field. If this check box is not selected, the data is cleared. The retained data is carried forward while adding a record.

- **Read Only:** This check box, if selected, prevents the user from changing the field value.
- **External Data Source:** When this check box is selected, the defined function for the external DLL is called on the lost focus and got focus of the specified field. The name of the External Data Source is defined in the **Miscellaneous** tab, which is discussed later.
- **Multi Line:** This check box allows you to enter long text or remarks about a job in a text field.
- **Pick List:** This check box, when selected, enables the ellipsis button placed next to it. On clicking the ellipsis button, the following dialog box appears where a user can manage the pick list values:



This dialog box contains the following fields and buttons:

- **Field:** This text box specifies the field names and takes alphanumeric values.
  - **Value:** This text box specifies the selected pick list value and takes the value according to the data type of the field.
  - **Set As Default:** If this check box is selected then the specified pick list value becomes the default value for the specified field.
  - **New:** This button allows you to initiate the process of adding a new pick list value. Focus is set on the **Value** text box.
  - **Add:** This button adds a new pick list value to the pane below the **Value** text box.
  - **Delete:** This button deletes the selected pick list value.
  - **OK:** This button saves the pick list value in the data structure and closes the dialog box.
  - **Cancel:** This button closes the dialog box.
- **Data Extract:** This drop-down list is used to specify the type of data to be extracted. Following are the four types of data that can be extracted from the document image:
    - Barcode
    - MICR
    - Image Assisting Data Entry

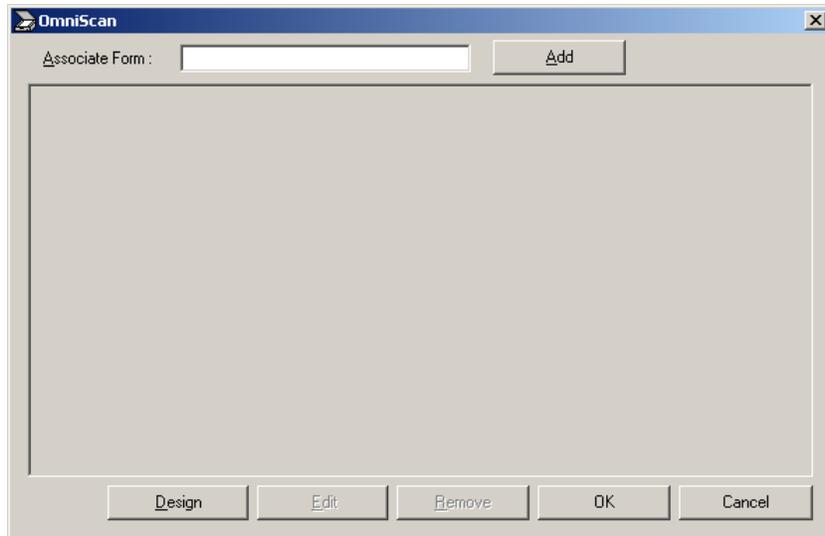
If **Data Extract** is defined as **Image Assisting Data Entry** then on creation of records, the value is not extracted from the image. Instead, the user can perform data entry by focusing on

the specified area on the image. The user can then easily fill the data from the selected area of the image. **Note:** The **Data Extract** drop-down list becomes disabled if the **Pick List** check box is selected.

- **Document Type:** This drop-down list is used to specify the document name from which data extraction is done. The user can select **None** to start data extraction from the page number specified in the **Page No** field. **Note:** The **Document Type** drop-down list is enabled if a data type is selected from the **Data Extract** drop-down list.
- **Page No:** This selection box specifies the page number of the selected document type from where data extraction will be done. However, if **None** is selected from the **Document Type** drop-down list, the **Page No** field specifies the page number of the record.
- **From Beginning:** This option specifies the position of the page number from the beginning of the doc type page range. For example, if doc type page range is from 10 to 20 and 5 is specified in the **Page No** field then data will be extracted from the fifth page starting from the beginning of the doc type page range.
- **From End:** This option specifies the position of the page number from the end of the doc type page range. For example, if doc type page range is from 10 to 20 and 8 is specified in the **Page No** field then data will be extracted from the eighth page starting from the end of the doc type page range.
- **X1:** This text box specifies the left coordinate of the area of the image for extraction.
- **Y1:** This text box specifies the top coordinate of the area of the image for extraction.
- **X2:** This text box specifies the right coordinate of the area of the image for extraction.
- **Y2:** This text box specifies the bottom coordinate of the area of the image for extraction.

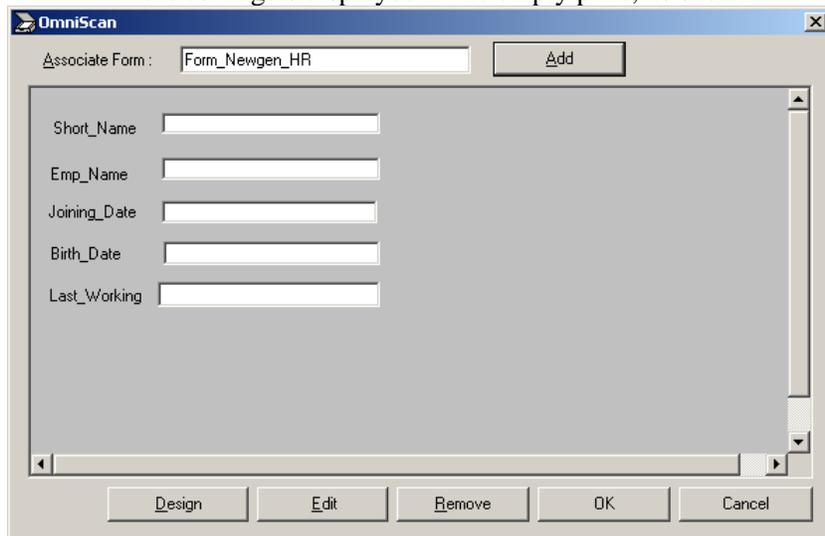
The **Data Section** tab also contains the following buttons:

- **New:** This button is used to add a new field in the tree view in the left pane and set the focus to the **Name** text box. This button only adds a data field in the tree view but does not save it permanently.
- **Delete:** This button is used to delete the selected field from the tree view.
- **OK:** This button is used to save the changes made in **Data Section** to the template structure.
- **Cancel:** This button is used to cancel the changes made in the **Data Section** tab, which have not been saved.
- **Customize View:** This button is used to allow you to design and add forms to a template. The following dialog box appears when the **Customize View** button is clicked:



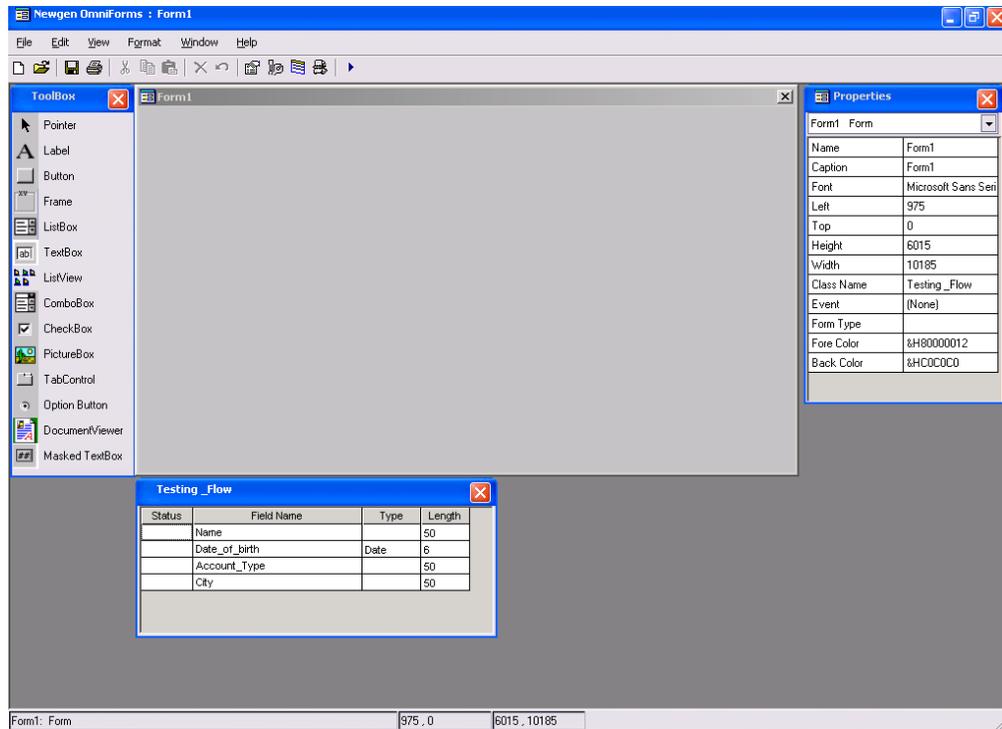
This dialog box contains the following fields and buttons:

- **Associate Form:** This text box specifies the name of the form.
- **Add:** This button opens the **Open** dialog box from which you can select the form that you want to add. The name of the form gets displayed in the **Associate Form** text box when the required form is selected from the **Open** dialog box and the form gets displayed in the empty pane, as shown:



**Note:** You can attach only one form with the template. Adding a new form overwrites the existing one.

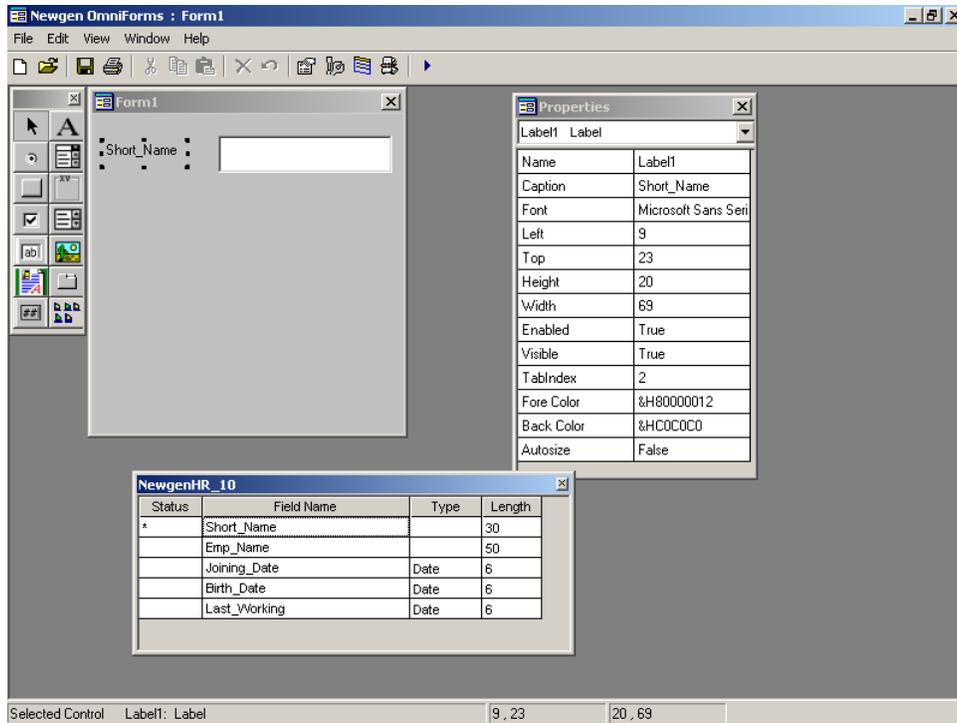
- **Design:** This button opens the Form Builder window, shown in the following figure, where you can design forms using various controls:



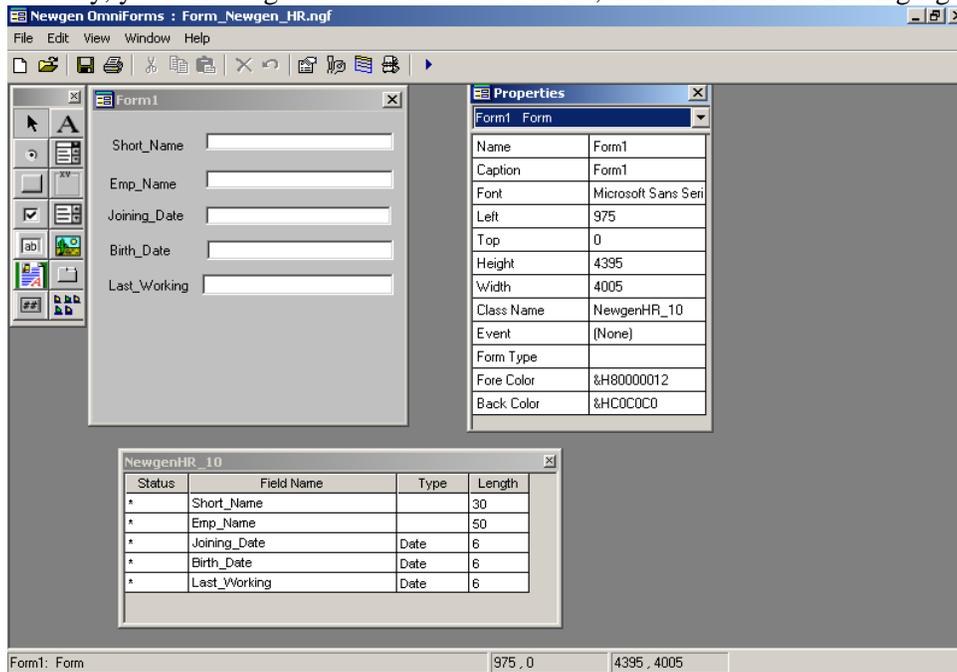
The Form Builder window contains a Toolbox, a form, the Properties window, and a window displaying tabular data of the data fields associated with the selected template. You can design the required fields on the form by adding appropriate controls. The controls can be added in the form by selecting them from the **Toolbox** and clicking in the Form window.

After designing a form, you need to map its fields with the fields contained in the tabular data. Only the fields that are mapped with the fields of the table are saved in the MDB. To map fields, select the field in the form and then double-click the corresponding field in the table. An asterisk (\*) gets added in front of the field in the **Status** column of the table to identify that this particular field has been associated with the form.

For example, if there are five fields *Short\_Name*, *Emp\_Name*, *Joining\_Date*, *Birth\_Date*, and *Last\_Working* defined in the template and you add the *Short\_Name* field in the form. Then, to associate it with the *Short\_Name* field of the template, select it first in the form and then double-click the corresponding field in the table. The “\*” sign gets added in the **Status** column, as shown, indicating that the *Short\_Name* field of the template has been associated with the form.



Similarly, you can design and associate other fields, as shown in the following figure:

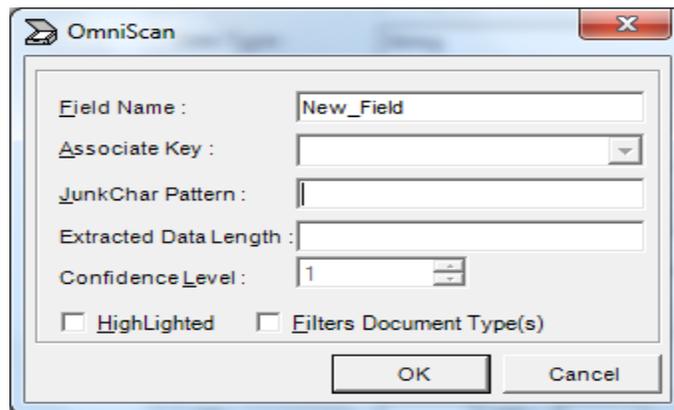


**Note:** The forms designed in Form Builder are saved with .ngf extension.

- **Edit:** This button appears enabled if a form is attached to the template. However, if you are attaching a form for the first time, the button gets enabled when the **Add** button is clicked. It allows you to edit the selected form. When clicked, it opens the

Form Builder window where you can modify the selected form. When the Form Builder window is closed after saving the changes, the **Edit** button changes to **Update** button. Click the **Update** button to display the updated form in the empty space.

- **Remove:** This button appears enabled if a form is attached to the template. However, if you are attaching a form for the first time, the button gets enabled when the **Add** button is clicked. It allows you to delete the selected form.
  - **OK:** This button allows you to save the changes and close the dialog box.
  - **Cancel:** This button closes the dialog box without saving the changes.
- **Define:** This button is used to display a new form where the user can define the advance properties for fields. The following dialog box appears when **Define** is clicked:



This dialog box contains the following fields and buttons:

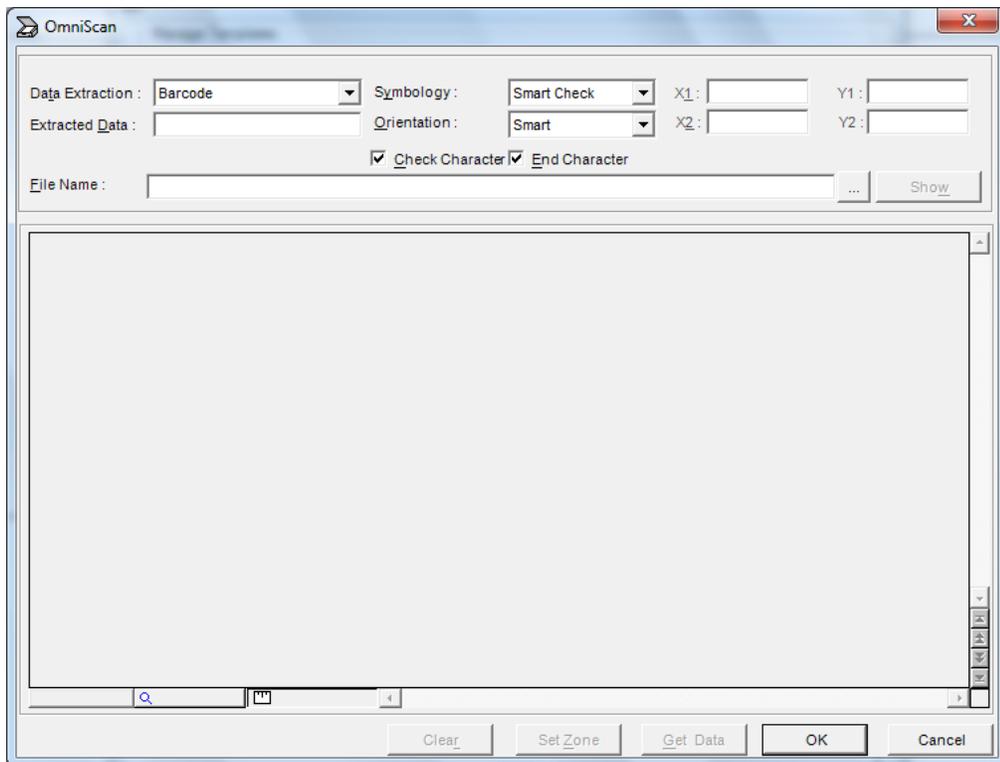
- **Field Name:** This text box specifies the name of the field.
- **Junk Char Pattern:** This text box specifies a value, which is checked character-by-character with the value extracted from Barcode and Micr. If any of the character in both the values is same, it is considered as junk character and the extracted value is not accepted as a valid string.
- **Associate Key:** This drop-down list appears enabled if the **External Data Source** checkbox is selected in the Data Section screen. You can select a key from the drop-down box to associate it with the selected data field. Associating a key with the data field calls the corresponding external DLL when the key is pressed. The available keys are F1, F2, F3 till F9.
- **Extracted Data length:** This text box specifies a range for extracted data length. If the extracted data length is between the given range then that data will be shown in the textbox field in OmniScan. Format for length range should be minimum – maximum value (eg 1-12).
- **Confidence Level:** This text box defines the confidence level for extracted data value. Junk Char Pattern field is mandatory for defining the Confidence Level.
- **Highlighted:** When you select this check box, the field name appears in bold in the record.

- **Filters Document Type(s):** This check box is enabled if the **External Data Source** and **Pick List** check boxes are selected in the **Data Section** tab. If the **Filters Document Type(s)** check box is selected, the doc types specified in the external DLL are called on the basis of the value selected from the pick list. For example, if the user selects the “abc” value from the pick list, then only the doc types associated with this value get displayed. The pick list values and their associated doc types are defined by the user in the external DLL in the Before New Record Event with event ID 8. The format of the string specified in the external DLL should be:

FieldName1=FieldValue1 Chr(21) FieldName2 = FieldValue2 Chr(24) “0,1,3”  
 Chr(25) FieldName1=FieldValue1 Chr(21) FieldName2 = FieldValue2 Chr(24)  
 “0,2,9”.....

The user can set only the doc types specified in the external DLL or export these doc types to OmniDocs™

- **OK:** This button allows you to save the changes and close the dialog box.
- **Cancel:** This button closes the dialog box without saving the changes.
- **Clear:** This button clears the **X1**, **Y1**, **X2**, and **Y2** text boxes.
- **Get Zone:** This button allows you to get zone information from where the data will be extracted. When clicked, opens a new dialog box, as shown in the following figure:



This dialog box contains the following fields:

- **Data Extraction:** This drop-down list is used to specify the extraction of data type and contains three options: Barcode and MICR.

- **BarCode Symbology:** This drop-down list is used to specify a barcode symbology: USS39, CODE128, PDF417, both (USS39 and CODE128), or Smart Check. Specifying the barcode symbology helps in extracting the barcode value faster.
- **File Name:** This text box specifies the path of the file from which data will be extracted.
- **X1:** This text box specifies the X1 zone position.
- **Y1:** This text box specifies the Y1 zone position.
- **X2:** This text box specifies the X2 zone position.
- **Y2:** This text box specifies the Y2 zone position.

This dialog box contains the following buttons:

- Ellipsis button next to the **File Name** text box: Opens a new dialog box to select the TIFF file.
- **Show:** Displays the specified file in the Document Viewer pane.
- **Clear:** Clears the Document Viewer pane data to specify a new file.
- **Set Zone:** Draws the zone area on the image in the Document Viewer.
- **Get Data:** Extracts the selected data and displays it in the **Extracted Data** text box.
- **OK:** Sets the specified zones and closes the dialog box.
- **Cancel:** Closes the dialog box without saving the changes.

When the user clicks **OK** , this dialog box closes and the defined coordinates are set in the X1, Y1, X2, and Y2 text boxes of the **Data Section** tab.

## Job Section

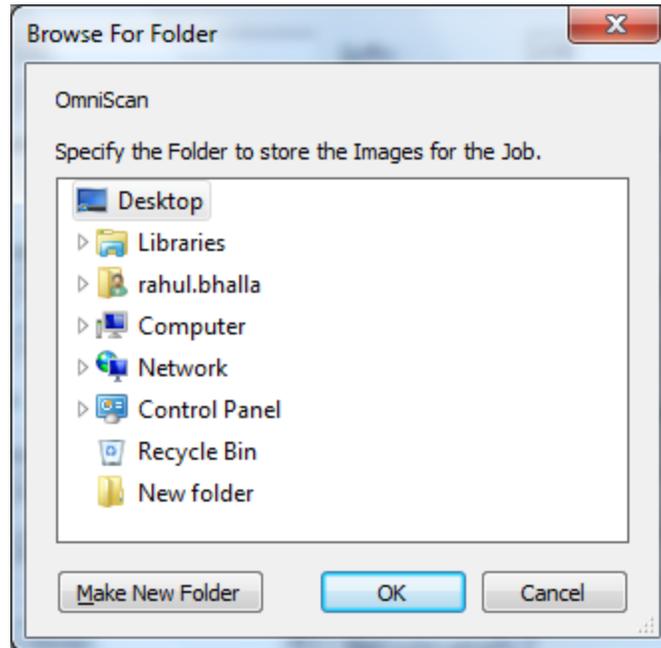
The **Job Section** tab is used to define job information. The **Job Section** tab is shown in the following figure:

The screenshot shows the OmniScan software window with the 'Job Section' tab selected. The window title is 'OmniScan'. At the top, there is a 'Manage Templates' section with radio buttons for 'Create New Template' and 'Manage Existing Template'. Below this is a 'Template Name' field containing 'temp1' and a 'Save Template' button. The main area is divided into several sections: 'Data Section', 'Job Section', 'DataClass', 'Folder Section', 'DocType Section', 'Export Features', and 'Miscellaneous'. The 'Job Section' is currently active and contains the following fields and options: 'Job Prefix' (text box with 'OC'), 'Suffix' (text box with 'JOB'), 'Start No' (text box with '1'), 'Current No' (text box with '2'), a 'Padding' checkbox, a 'Save Images in HDD' checkbox, 'Image Path' (text box with 'C:\Program Files\Newgen'), 'External Source' (text box), 'BarCode Specifications' (Symbology and Orientation dropdowns), 'Display Settings' (Scan Input, Display Scan Message, Show Scanner Interface checkboxes), 'Standard Form' (Use New API for Standard Form checkbox), 'Blank Page Attributes' (Border %, Line Threshold, Row Threshold, Profile Threshold text boxes), 'Compression' (dropdown), 'Quality Factor' (spin box), 'Confidence L...' (spin box), 'Create Document If No Image Associate' checkbox, 'BarCode Length' (text box), 'Junk Character' (text box), and 'Confidence L...' (spin box). At the bottom are 'Advance...', 'OK', and 'Cancel' buttons.

The **Job Section** tab contains the following fields:

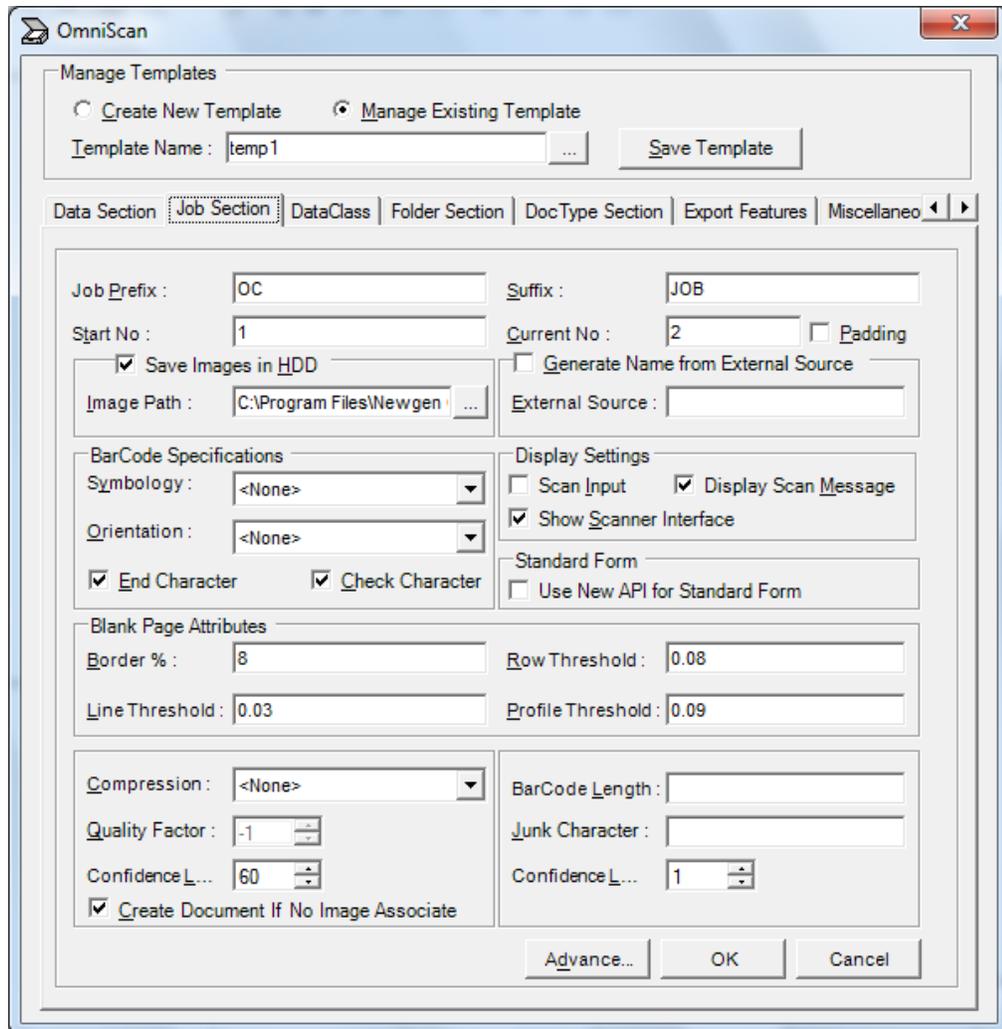
- **Job Prefix:** This text box displays the prefix of the job name.
- **Suffix:** This text box displays the postfix of the job name.
- **Start No:** This text box displays the starting job number, for example, 1, 2, or 3.
- **Current No:** This text box displays the current job number and automatically gets updated.
- **Padding:** This checkbox when checked allows to use left zero padding for 9 places in JobNo.

- **Save Images in HDD:** This check box, when selected, saves records in the hard disk. If this check box is cleared, the record images are saved in job MDB file.
- **Image Path:** This drop-down list is used to specify the path where the image will be saved. This drop-down list is enabled only if the **Save Images in HDD** check box is selected. You can select the image path by clicking the ellipsis button next to the **Image Path** drop-down list. On clicking the ellipsis button, the **Browse For Folder** dialog box appears, as shown in the following figure:



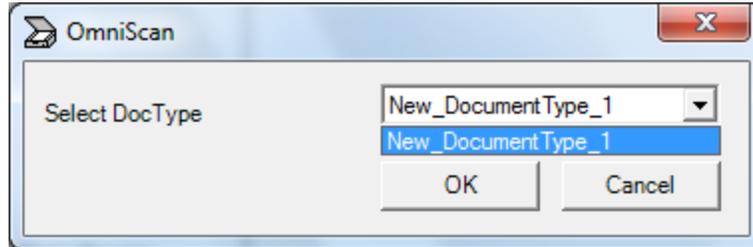
- **Generate Name from External Source:** This check box, when selected, is used to call an external data source for generating the new job name. If this check box is not selected, the new job name is generated with the help of concatenation of the prefix, current job, and postfix strings.
- **External Source:** This text box displays the external data source name that returns the new job name. This field is applicable only if the **Generate Name from External Source** check box is selected.
- **Bar Code Specifications:** This section specifies the following parameters for extracting the barcode:
  - **Symbology:** This drop-down list allows you to select the barcode symbology for extracting barcode values. The options available are USS39, CODE128, USS39 and CODE128, I2OF5, and PDF417. Specifying the barcode symbology helps in extracting the barcode value faster.
  - **Orientation:** This drop-down list allows you to specify the orientation for searching the barcode. The options available are **Portrait**, **LandScape**, and **Smart**.
  - **Check Character:** This check box, when selected, specifies that the check character is present in the barcode. If this check box is not selected, then the check character is not present in the barcode.

- **End Character:** This check box, when selected, specifies the presence of end characters in the barcode. If this check box is not selected, then end characters are not present in the barcode.
- **Display Settings:** This section allows you to specify the following display settings:
  - **Scan Input:** This check box is used to decide whether the user will be prompted to provide input before scanning or not. If selected, user input is required for scanning.
  - **Display Scan Message:** This check box, when selected, specifies that a message after scanning is completed is to be displayed. This message displays the number of pages that have been scanned.
  - **Show Scanner Interface:** This check box, when selected, specifies that the scanner interface will be displayed when the user scans images in OmniScan™. If this check box is not selected, then the interface will not be displayed. The scanning will be done on the basis of scanner settings.
- **Standard Form Logic:** This checkbox when checked specifies that optimized Standard Form separation logic is used; else regular Standard Form separation logic is used.
- **Blank Page Attributes:** This section allows you to specify the following blank page attributes:
  - **Border %:** This text box is used to specify the percentage of width and height that needs to be ignored from all the four boundaries of a page to discard any disturbance that might occur at the borders because of improper scanning and paper skew. The default value is 8.
  - **Row Threshold:** This text box is used to specify the minimum number of rows, in inches, that need to be qualified for nonblank rows. The default value is 0.08.
  - **Line Threshold:** This text box is used to specify the maximum threshold for the thickness of a line, in inches, above which the line is not considered as a line. The default value is 0.03.
  - **Profile Threshold:** This text box is used to specify the threshold for the number of black pixels in a row (in inches) above which the row is considered as a nonblank row. The default value is 0.09.
- **Compression:** This drop-down list allows you to select the compression scheme to be applied on images. The options available are **G4**, **LZW**, and **JPEG**. If **JPEG** is selected from the **Compression** drop-down list, the **Quality Factor** field is enabled, as shown in the following figure:



- **Quality Factor:** This drop-down list is used to specify the quality of the image. It contains values from 0 to 100. The higher the quality factor, higher will be the quality and lesser will be the compression of the image.
- **Confidence Level:** This drop-down list is used to specify the confidence level for a standard form.
- **Create Document If No Image Associate:** This check box, when selected, creates a 0 KB document in OmniDocs™ and the doc type page range is 0-0.
- **Bar Code Length:** This text box is used to specify the barcode length range. If the extracted barcode's length is not within the given range then that barcode is considered as an invalid barcode, otherwise, the barcode is again validated on the basis of the junk pattern and the confidence level.
- **Junk Character:** This text box is used to define junk characters as a string. If any of the character in the junk pattern is found in the extracted barcode then their percentage occurrence will be calculated. If the junk characters percentage occurrence is less than the Confidence Level then the barcode is considered as valid, otherwise, the barcode is considered invalid.
- **Confidence Level:** This field is mandatory if the user specifies junk characters.

- **Median Filter:** To apply the median filter open the advance job settings window by clicking the Advance button on the job screen. If the medianFilter checkbox is checked then size and option textboxes are enabled. Size and Option textboxes are used to specify the size and option values.
- **Append Crop With DocType:** This checkbox when checked allows the user to manually crop a document in OmniScan and assign the cropped image to any document type with zero page range as shown in the figure below.



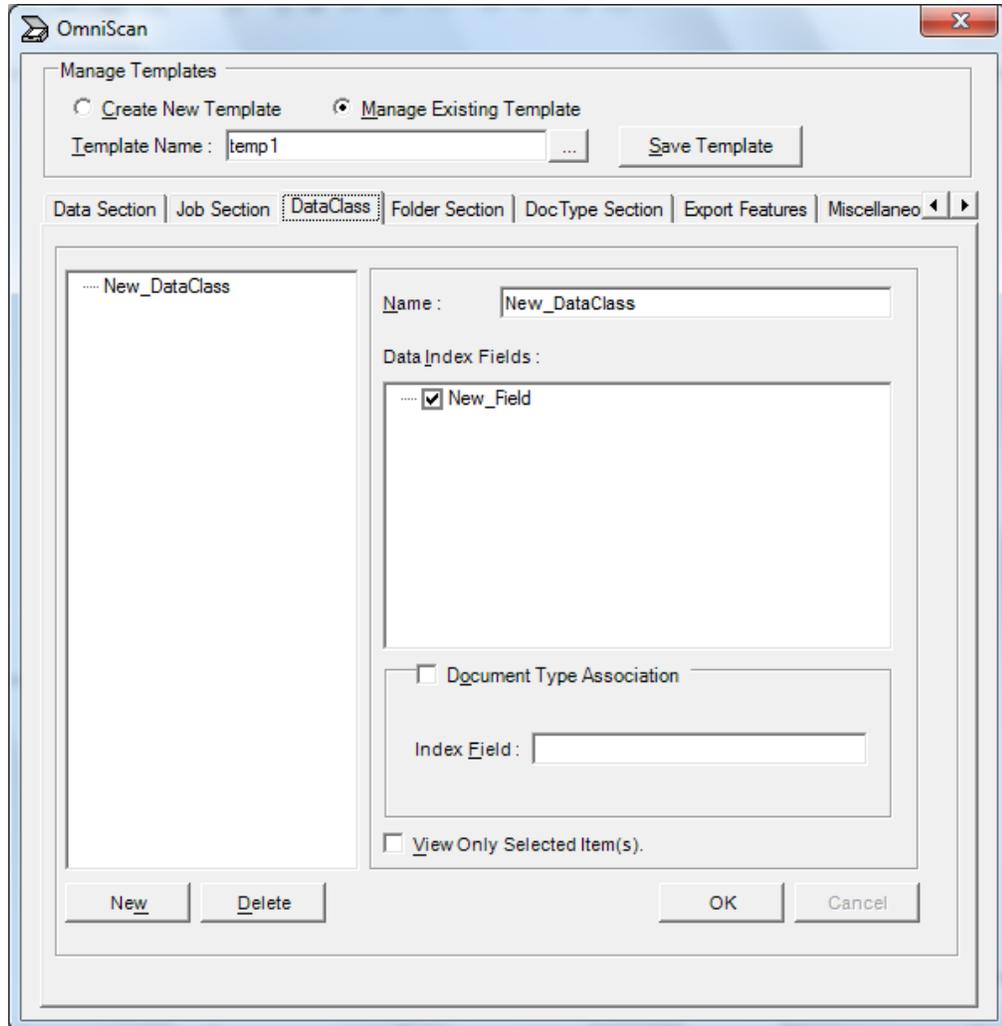
To perform this operation the user has to select the *Select Button* from the OmniScan toolbar and then use the select tool to mark any zone on the image in the doc viewer. After performing this operation the user has to right click the mouse button on the marked zone and select the crop function from the menu item. On selecting the crop functionality an OmniScan setting window pops up where the user can select the document type (from the Select DocType combo box) to whom the cropped image has to be assigned.

The **Job Section** tab contains the following buttons:

- **Advance:** Allows you to specify the advanced properties for defining the job information.
- **OK:** Saves or updates the job.
- **Cancel:** Cancels the current job settings and displays the last saved settings.

## Data Class

The **Data Class** tab displays the list of the defined data classes and the index field list. The index fields appear selected if they are associated with the data class. The **DataClass** tab is shown in the following figure:



In the left pane of the **Data Class** tab, a tree view structure displays the names of the created data classes. You can select the data class from the tree view to populate its details in the **Data Index Fields** pane.

The **Data Class** tab contains the following fields:

- **Name:** This text box displays the name of the data class selected from the left pane. You can also type the name of the data class in this text box.
- **Data Index Fields:** This pane displays the data index field list. If any field is associated with the data class then the check box of that field appears selected.
- **View Only Selected Item(s):** This check box, when selected, displays the only the index fields associated with a data class.

- **Document Type Association:** If checked then user can define name of that index in the Index Field textbox and its values will be name of that document type which will be associated with that data class.

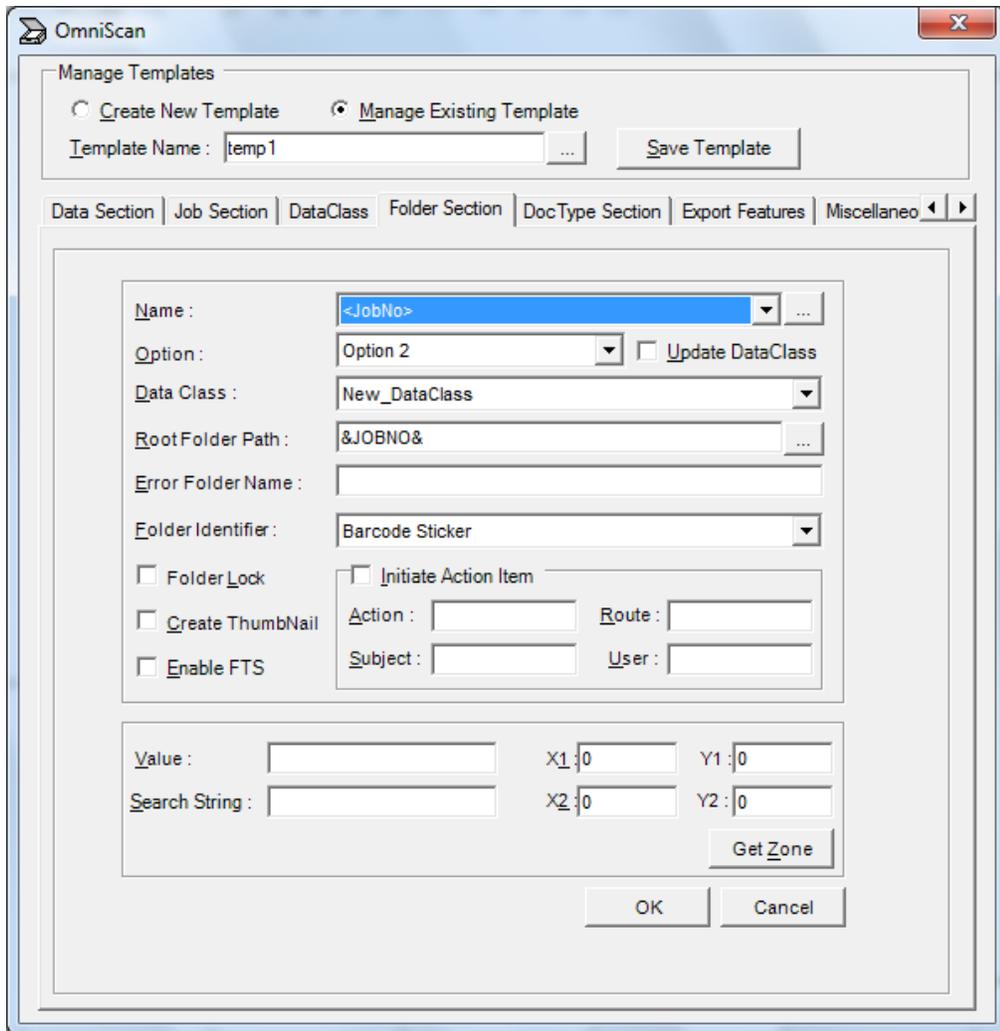
- 

The **Data Class** tab contains the following buttons:

- **New:** Add a new data class item in the data class list and sets the focus to the **Name** text box. It only adds a data class field in the list but does not save it permanently.
- **Delete:** Deletes the selected data class.
- **OK:** Saves the data class.
- **Cancel:** Cancels the new data class creation operation. It removes temporary data class name shown in the data class tree view in the left pane.

### **Folder Section**

The **Folder Section** tab is used to specify the folder/record information. The **Folder Section** tab is shown in the following figure:



The **Folder Section** tab contains the following fields:

- **Name:** This text box specifies the folder name where the scanned document will be exported in the DMS. The folder name consists of:
  - Any static string value.
  - Any index field(s).
  - Concatenation of static and variable data index field's value.
- **Option:** This drop-down list contains the following two folder options:
  - **Option 1:** If the folder already exists in the DMS then OmniScan™ creates a new error folder. If the error folder already exists in the DMS then the document will be exported in the existing error folder.
  - **Option 2:** Finds the folder specified in the **Name** text box first and if the folder does not exist in the DMS then OmniScan™ creates the folder.
- **Update Data Class:** This check box, if selected, updates the already exported folder's data class. This checkbox is enabled if **Option 2** is selected from the **Option** drop-down list.
- **Data Class:** This drop-down list allows you to select a data class, which gets associated with the specified folder.

- **Root Folder Path:** This text box specifies the destination root folder in the DMS where the defined folder is created. The root folder name includes:
  - Any static string value separated by “\”. For example, ICICI Bank\Delhi\Saving Account.
  - Any data class index field(s) value.
  - Concatenation of static and variable data index field’s value.

The user can either type the destination root folder in the **Root Folder Path** text box or select a data index field from the drop-down list, which is displayed on clicking the ellipsis button next to the **Root Folder Path** text box. This list contains the field names defined in the **Data Section** tab.

For example, the root folder is defined as ICICI Bank\&fieldname&. When you click the ellipsis button next to the **Root Folder Path** text box, this *fieldname* is selected automatically from the drop-down list that appears. The value that appears in the **Root Folder Path** text box is ICICI\Value of the field name. This means that a subfolder of the ICICI folder is created with the name of the value entered in the **Root Folder Path** text box. This field is defined by the user in the **Data Section** tab.

- **Error Folder Name:** This text box is used to signify that if the specified folder exists in the root folder and the **Option** field is set as **Option 1** then the destination root folder is the defined folder.
- **Folder Identifier:** This drop-down list is used to specify the position from where the record needs to be divided. The document can be divided on the basis of the specified document identifier. The various folder identifier options are:
  - **No Identifier:** Signifies that no identifier is selected.
  - **Blank Page:** Signifies that the document is divided from where a blank page is identified. The blank page, after being identified, does not become a part of the document.
  - **Barcode:** Signifies that the document is divided from where a separate page with the barcode is identified. The barcode page, after being identified, does not become a part of the document.
  - **Barcode Sticker:** Signifies that the document is divided from where a barcode with sticker is identified. The barcode page, after being identified, becomes a part of the document.
  - **Standard Form:** Signifies that the document is divided from where the standard form is identified. The standard form, after being identified, becomes a part of the document.
  - **Fix Page:** Signifies that the Record type is defined as fix page. The document gets separated with the specified number of pages.

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When the user selects the **Barcode** or **Barcode Sticker** option, the new section appears. This section is discussed later.

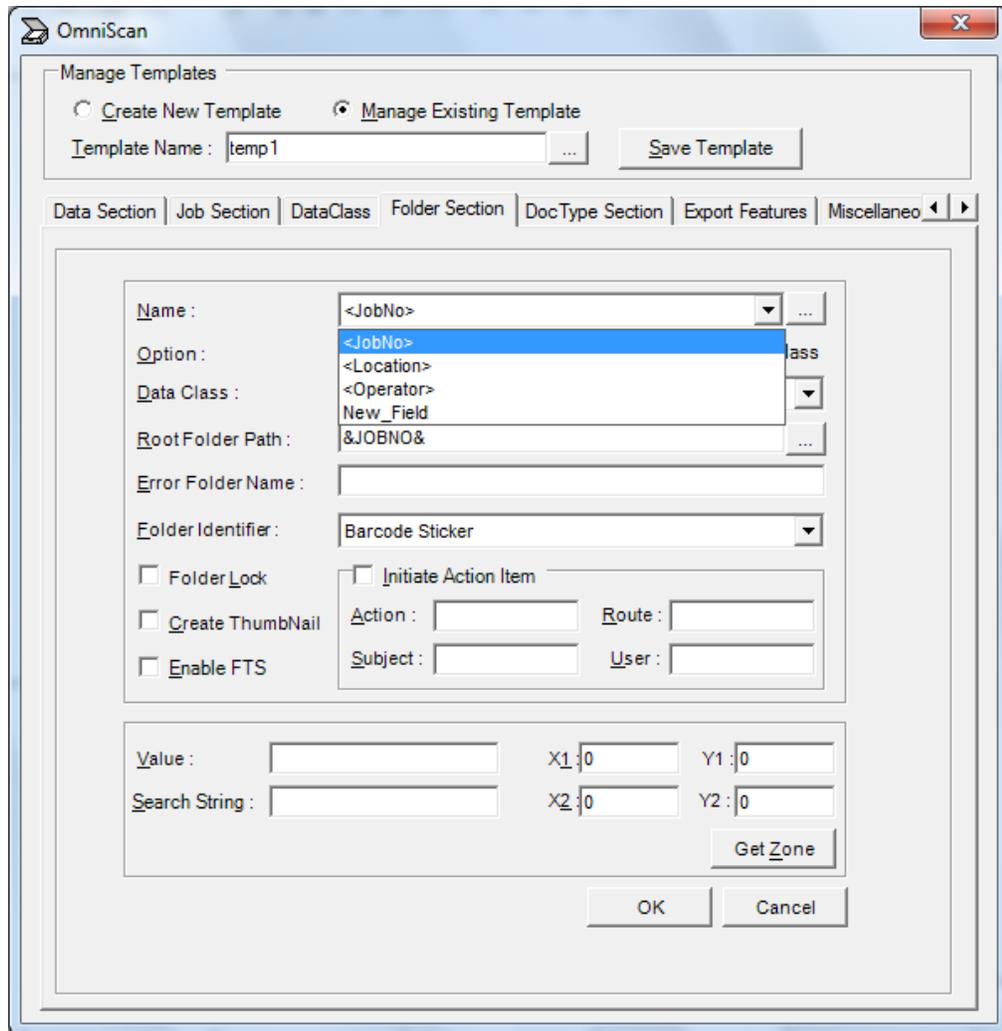
When the user selects the **Standard Form** option, the Form Template Path text box appears. The user has to fill the standard form template path, which is discussed later.

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- **Folder Lock:** This check box, when selected, locks the folder in OmniDocs™ while exporting.
- **Create Thumbnail:** This check box, when selected, generates the thumbnail view of the exported document.
- **Enable FTS:** This check box, when selected, allows the user to perform Full Text Search (FTS) on all the documents of the current folder.
- **Initiate Action Item:** This check box, when selected, implies that action needs to be initiated. If this check box is not selected, then it implies that no action is to be initiated.
  - **Action:** This text box is used to specify the data class name that has been created in OmniDocs™.
  - **Route:** This text box is used to specify the route name that has been created under the Action data class through OmniDocs™ admin.
  - **Subject:** This text box is used to specify the subject of the action item.
  - **User:** This text box is used in case of a flexi route.

The **Folder Section** tab contains the following buttons:

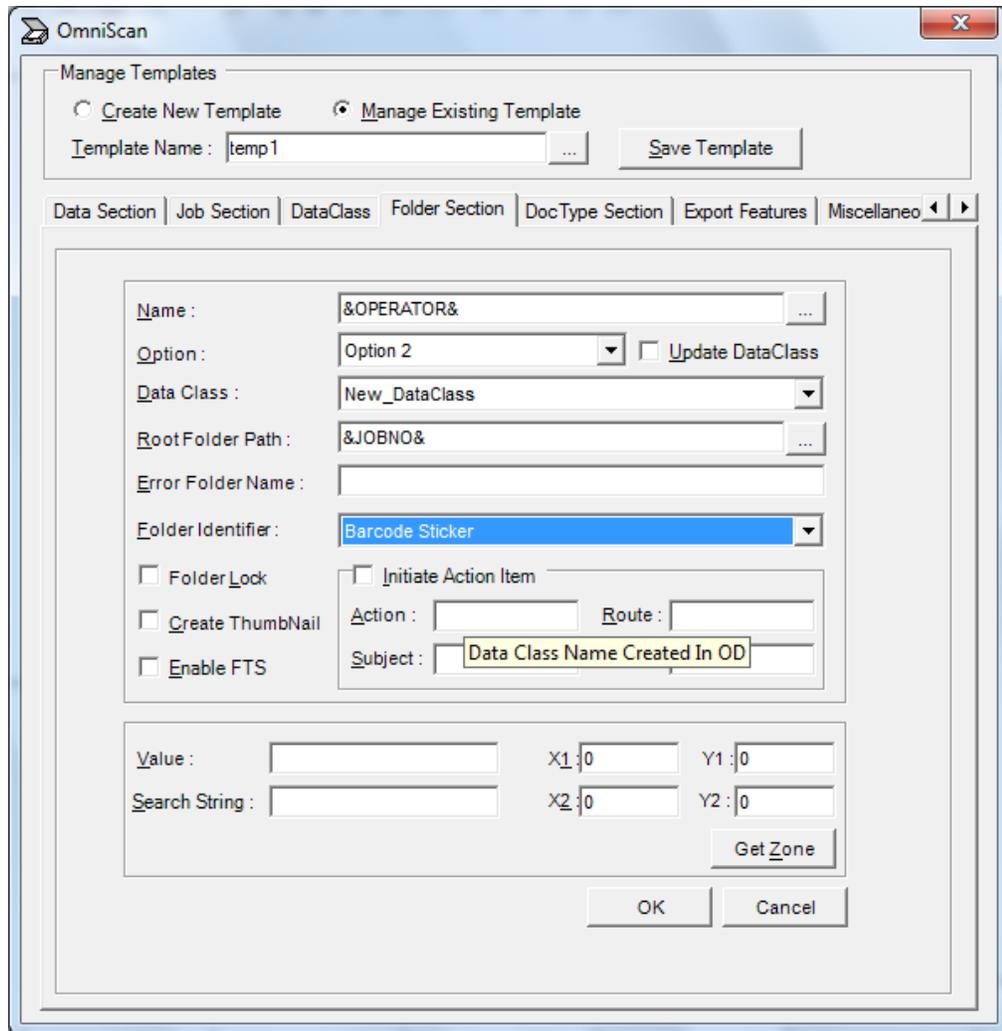
- Ellipsis button next to the **Name** text box: Allows you to select any data index field. When clicked, it creates a drop-down list in the **Name** text box, as shown in the following figure:



When the user selects any field from this drop-down list, it gets displayed in the **Name** text box with an ampersand (&) sign at both the beginning and the end of the field name. The ampersand sign implies that OmniScan™ picks up the index value of the specified field.

- Ellipsis button next to the **Root Folder Path** text box: Displays a drop-down list in the **Root Folder Path** text box from where the user can select a data index field.
- **OK**: Saves the changes made in the **Folder Section** tab to the database.
- **Cancel**: Cancels the current settings and displays the last saved settings.

When the user selects the **Barcode** or **Barcode Sticker** option from the **Folder Identifier** drop-down list, a new section appears in the **Folder Section** tab, as shown in the following figure:



This section contains the following fields and buttons:

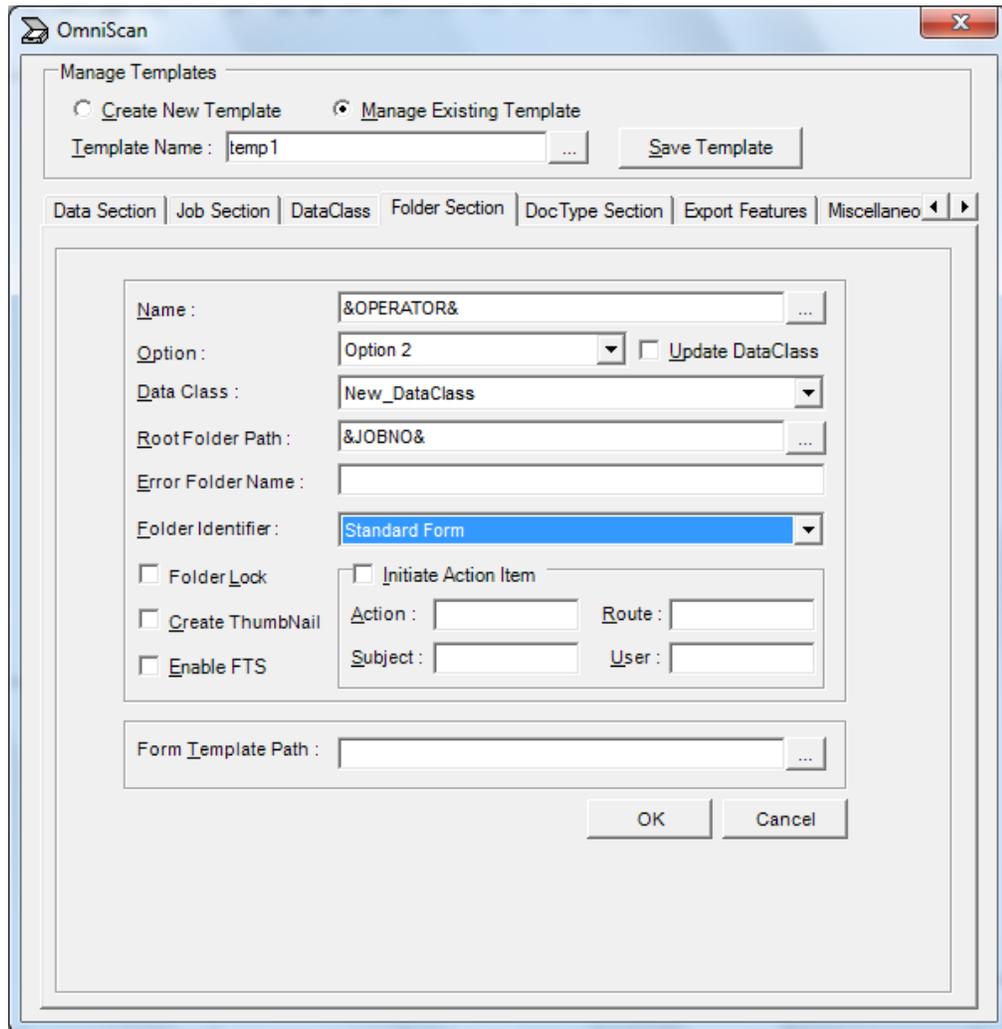
- **Value:** This text box specifies the barcode value that is compared with the barcode value extracted from the document. If the value does match with the specified value, OmniScan™ considers that document as an identifier.
- **Search String:** This text box is used to type a string value (including wild characters) and search the specified barcode string value from the extracted value of the barcode from an image.
- **X1:** This text box specifies the X1 coordinate of barcode position.
- **Y1:** This text box specifies the Y1 coordinate of barcode position.
- **X2:** This text box specifies the X2 coordinate of barcode position.
- **Y2:** This text box specifies the Y2 coordinate of barcode position.
- **Get Zone:** This button is used to open a new window for defining the barcode zone, extracting the barcode from any existing image, and then setting that barcode as separator for the current template.

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If the barcode position is defined, OmniScan™ extracts the barcode value faster.

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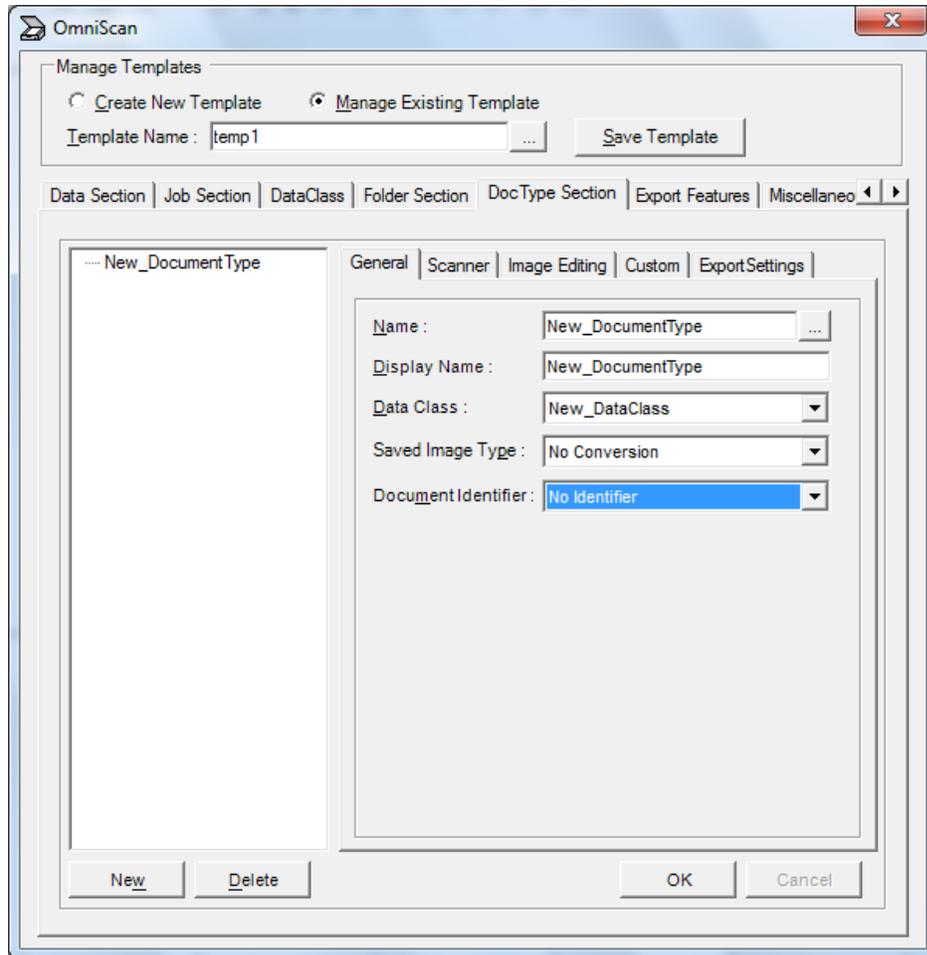
When the user selects the **Standard Form** option from the **Folder Identifier** drop-down list, the **Form Template Path** text box and an ellipsis button next to it appears, as shown in the following figure:



The **Form Template Path** text box specifies the path of the standard form that is to be matched with the scanned page. You can either type the path or click the ellipsis button to choose the path.

## Doc Type Section

The **Doc Type Section** tab is used to define the document types. The **Doc Type Section** tab is shown in the following figure:



In the left pane of the tab, a list of created document types is shown in a tree view structure. You can select a document from the tree view to populate the document type's details on the right side of the screen.

The **Doc Type Section** tab contains the following sub tabs:

- **General**
- **Scanner**
- **Image Editing**
- **Custom**
- **Export Settings**

## *The General Sub tab*

The **General** tab contains the following fields:

- **Name:** This text box specifies the name of the document type. When you click the ellipsis button next to this text box, a drop-down list appears in the **Name** field. This drop-down list contains the field names of the document type.
- **Display Name:** This text box is used to specify the display name for the doc type. The doc types are displayed in the OmniScan™ screen according to their display names. If the display name is not specified then the doc types are displayed as the data class name. In this case, the data class should be different for each doc type. If the display name is defined then doc types are displayed on the basis of the defined display names, that is, doc types with different display names can have the same data class. In this way, the user can associate the same data class with different doc types.
- **Data Class:** This drop-down list allows you to select a data class, which is associated with the specified document.
- **Document Identifier:** This drop-down list is used to specify the position from where the document needs to be divided. The document can be divided on the basis of specified document identifiers. The various document identifiers are:
  - **No Identifier:** Signifies that no identifier is selected.
  - **Blank Page:** Signifies that the document is divided from where a blank page is identified. The blank page, after being identified, does not become a part of the document.
  - **Barcode:** Signifies that the document is divided from where a separate page with the barcode is identified. The barcode page, after being identified, does not become a part of the document.
  - **Barcode Sticker:** Signifies that the document is divided from where a barcode with sticker is identified. The barcode page, after being identified, becomes a part of the document.
  - **Standard Form:** Signifies that the document is divided from where the standard form is identified. The standard form, after being identified, becomes a part of the document.
  - **Fix Page:** Signifies that the record type is defined as fix page. The document gets separated with the specified number of pages.
  - **Extract From the defined Document:** Signifies that the image of the specified document type is extracted from the defined document type.

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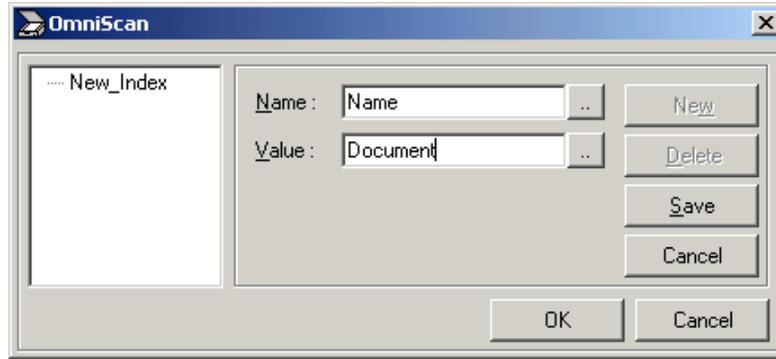
When the user selects the **Barcode** or **Barcode Sticker** option a new section appears in the **General** tab. This section is discussed later.

If the user selects the **Standard Form** option, the **Form Template Path** field appears, which is discussed later.

If the user selects the **Fix Page** option, the **Page Count** field appears where the user can specify the page count.

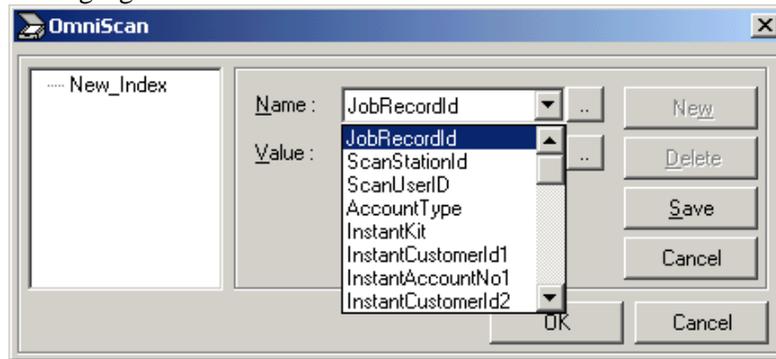
---

- **Global Index:** This check box, when selected, allows you to create a global index in the DMS. If the check box is selected, the ellipsis button next to this check box becomes enabled. On clicking the ellipsis button, the following dialog box appears:

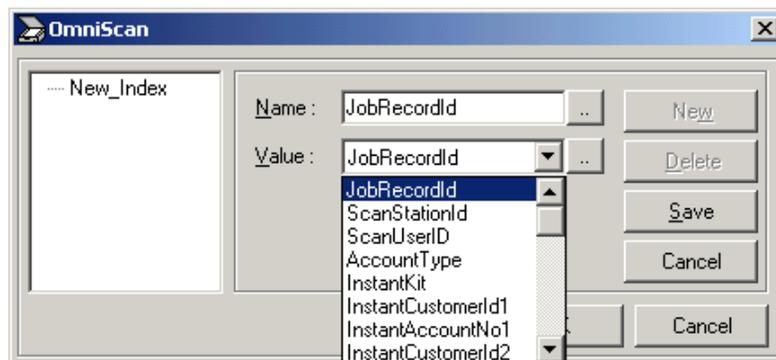


The index specified using this dialog box, is created as a global index in OmniDocs™. The value specified in the INI is set using this dialog box. This dialog box contains the following fields:

- **Name:** This text box allows you to specify the name of the global index. It can include values either from the field names defined in the **Data Section** tab, the doc types, or any value specified by the user. Click the ellipsis button to display a drop-down list of field names defined in the **Data Section** tab, as shown in the following figure:



- **Value:** This text box allows you to specify the value of the global index. The **Value** field may contain either the hard coded value directly specified by the user or it may contain values corresponding to the fields specified in the **Data Section** tab. The value is defined in between ampersands. For example, &contract&. Here, the value of the global index will be the value of the field Contract. Click the ellipsis button next to the **Value** text box to display the drop-down list of values calculated on user inputs, as shown in the following figure:



If the index name is "Doctypes" and if the value is defined as &doctype& then the class name associated with the document will be taken as value. Otherwise, the value specified in the **Value** text box will be taken as such.

This dialog box contains the following buttons:

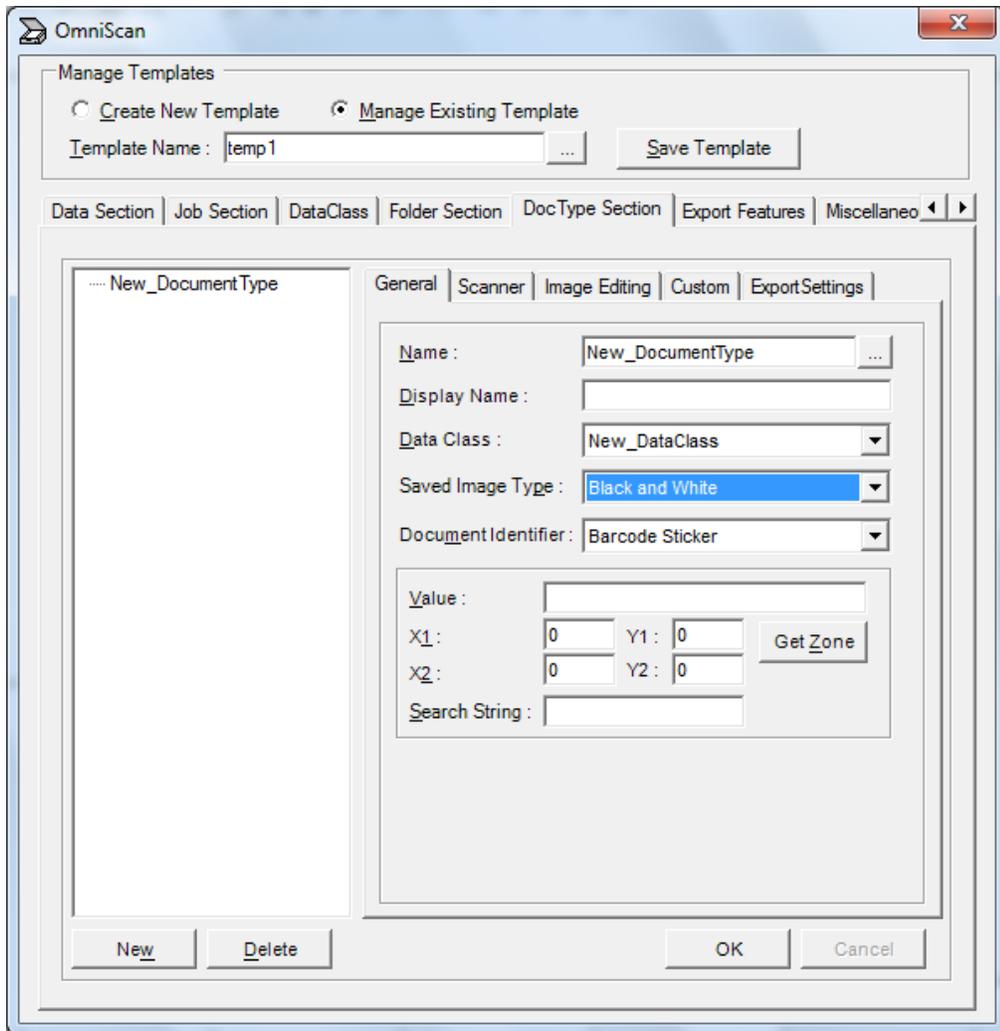
- **New:** Allows you to create a name for the global index.
- **Delete:** Deletes the name created for the global index.
- **Save:** Saves the settings in the tree view.
- **Cancel:** Cancels the settings for the global index.
- **OK:** Saves the settings in the data structure and closes the dialog box.
- **Cancel:** Closes the dialog box without saving the changes.

When the user selects the **Barcode** or **Barcode Sticker** option from the **Document Identifier** drop-down list, a new section appears in the **General** tab, as shown in the following figure:

This section contains the following fields and buttons:

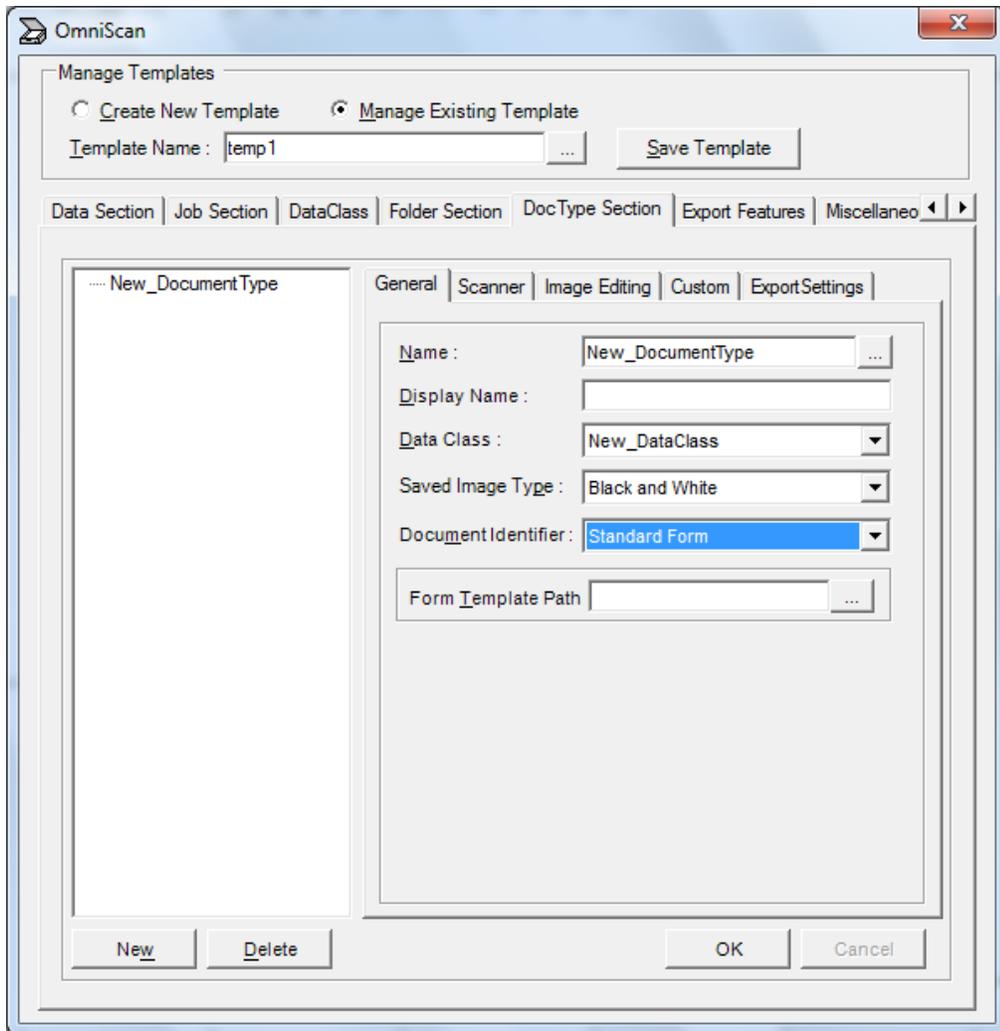
- **Value:** This text box specifies the barcode value that is compared with the barcode value extracted from the document. If the extracted value does match with the specified value, OmniScan™ considers that document as an identifier.
- **X1:** This text box specifies the X1 coordinate of barcode position.
- **Y1:** This text box specifies the Y1 coordinate of barcode position.
- **X2:** This text box specifies the X2 coordinate of barcode position.
- **Y2:** This text box specifies the Y2 coordinate of barcode position.
- **Search String:** This text box is used to specify a string value (including wild characters) and search the specified barcode string value from the extracted value of barcode from an image.
- **Get Zone:** This button is used to open a screen for defining the barcode zone, extracting the barcode from any existing image, and then setting that barcode as a separator for the current template.

If the barcode position is defined, OmniScan™ extracts the barcode value faster.



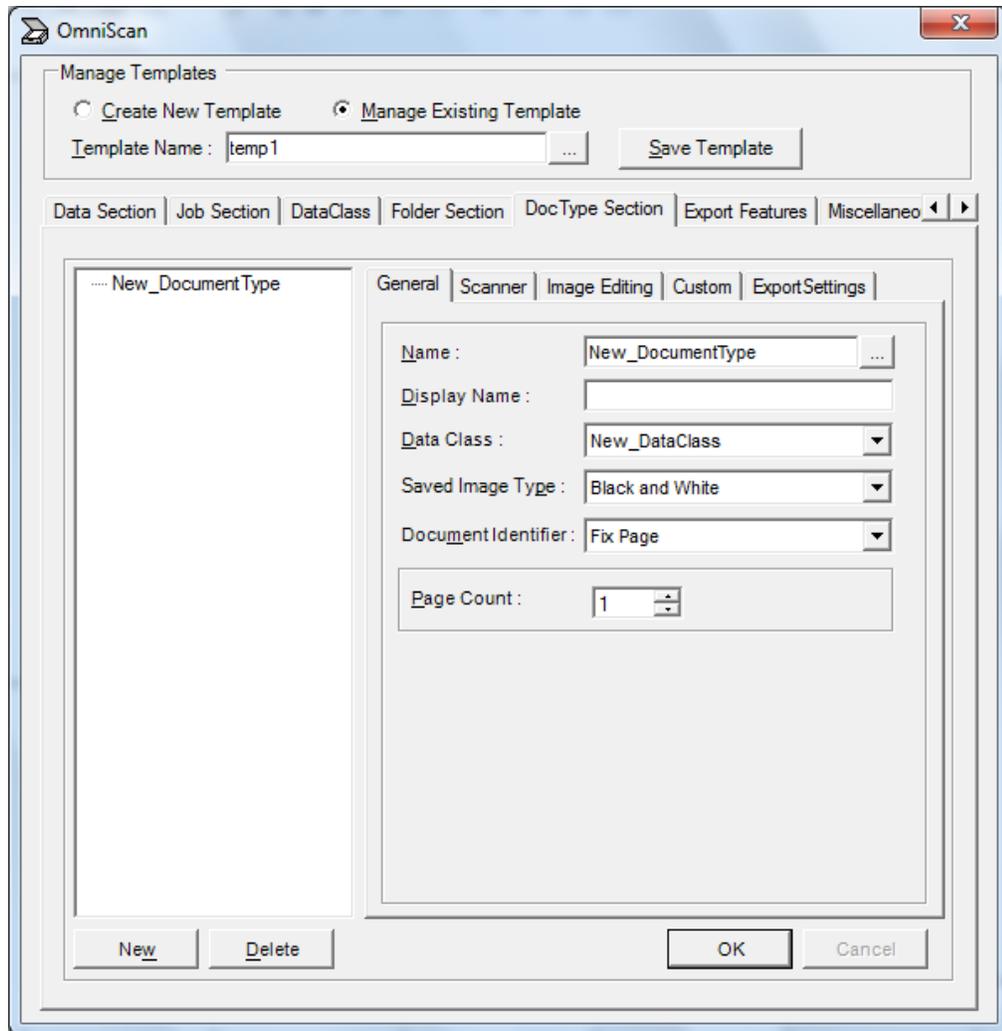
If the user selects the **Standard Form** option from the **Document Identifier** drop-down list then the user is required to specify the standard form template path. The user can either type the path or click the ellipsis button to specify the path.

The **Form Template Path** field implies the path of the standard form that is to be matched with the scanned page.



If the user selects the **Fix Page** option from the **Document Identifier** drop-down list then the following field is displayed to get the page count information:

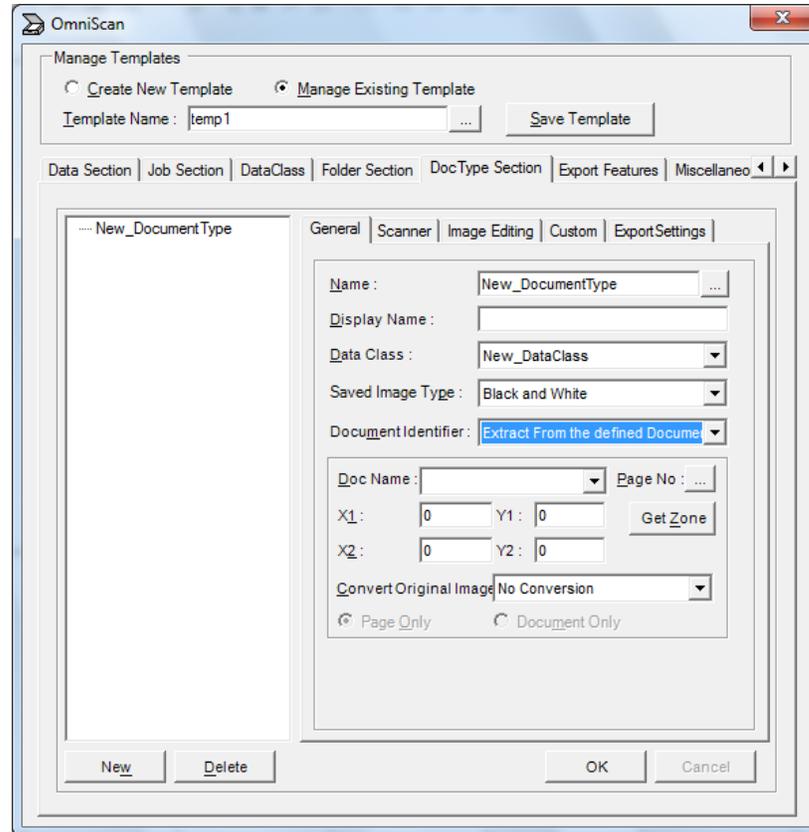
**Page Count** specifies the number of pages after which document separation will be done.



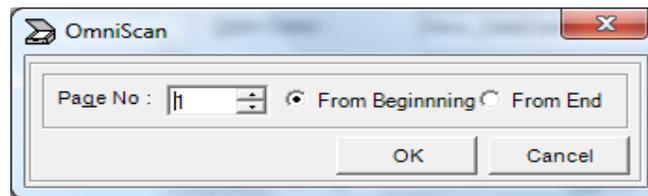
If the user selects the **Extract From the defined Document** option from the **Document Identifier** drop-down list then a new section displaying the document information appears, as shown in the following figure:

This section contains the following fields:

- **Doc Name:** This drop-down list displays the list of defined documents.



- **Page Number:** This field is used to specify the page number from where the image will be extracted. When the user clicks the ellipsis button next to this field, the following dialog box appears:



This dialog box contains the following fields:

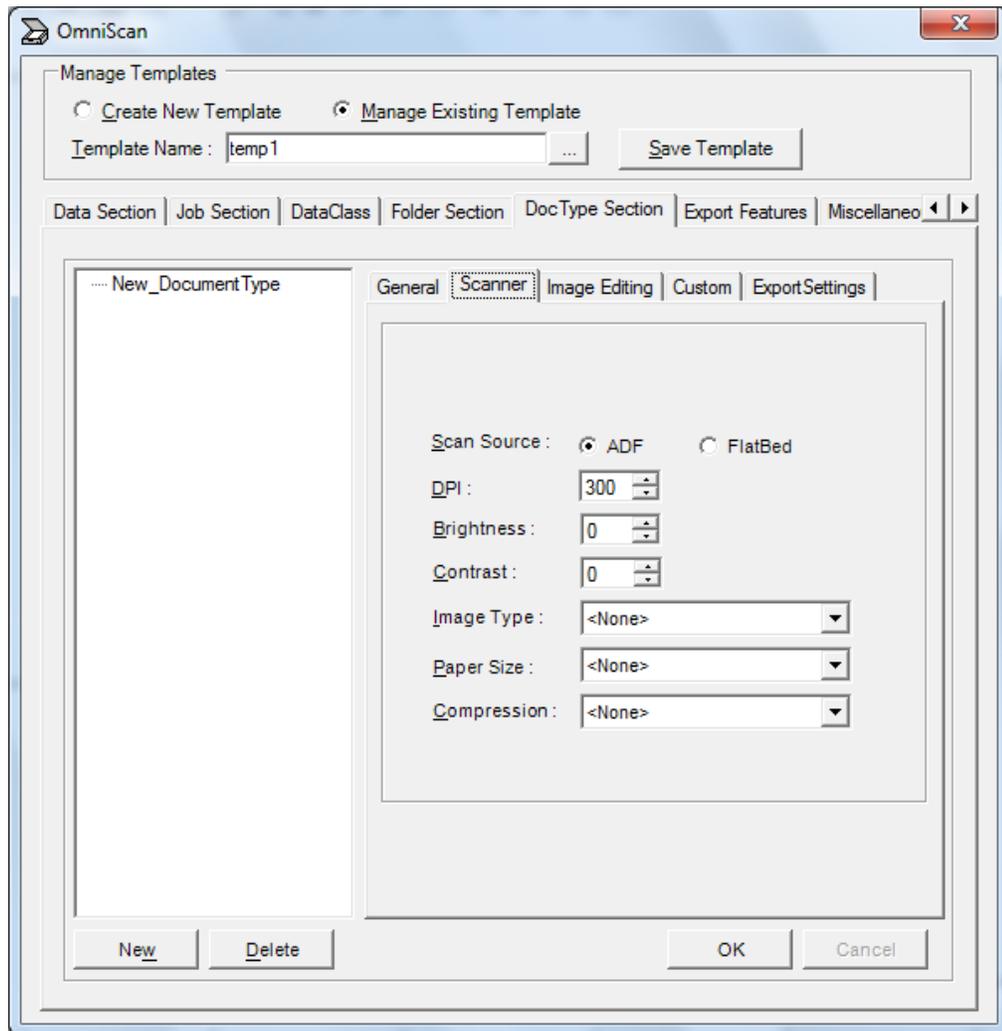
- **Page No:** This selection box is used to choose a page number.
  - **From Beginning:** This radio button is used to specify that the page number selected in the **Page No** field is from the beginning of the doc type.
  - **From End:** This radio button is used to specify that the page number selected in the **Page No** field is from the end of the doc type.
  - **OK:** This button is used to save the changes and close the dialog box.
  - **Cancel:** This button is used to cancel the changes and close the dialog box.
- **X1:** This text box specifies the X1 coordinate.
  - **Y1:** This text box specifies the Y1 coordinate.
  - **X2:** This text box specifies the X2 coordinate.
  - **Y2:** This text box specifies the Y2 coordinate.
  - **Convert Original Image:** This drop-down list is used to specify the image type. After the image is cut from the specified page of the defined document type, the original image page

is converted to Color Depth type. If the user selects any option other than **No Conversion** from the drop-down list, the following radio buttons become enabled:

- **Page Only:** When the user selects this option, only the page specified in the **Page No** field is converted on the basis of the value specified in the **Convert Original Image** field.
- **Document Only:** When the user selects this option, the entire document type specified in the **Doc Name** field is converted on the basis of the value specified in the **Convert Original Image** field.

### *The Scanner Sub tab*

The **Scanner** sub tab is shown in the following figure:



The **Scanner** sub tab contains the following fields:

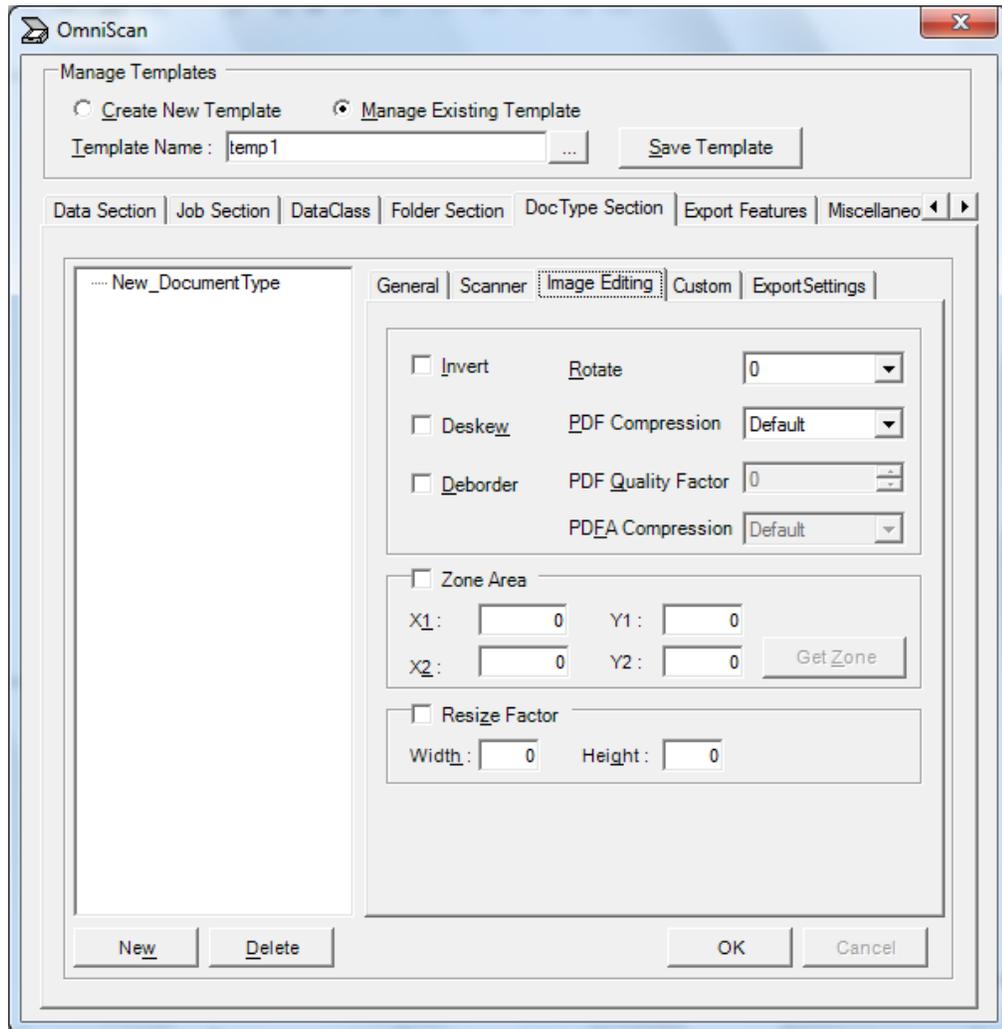
- **Scan Source:** This field has radio buttons to specify whether the scanning has to be performed from ADF or FlatBed.
- **DPI:** Specifies the DPI of the document that needs to be scanned.

- **Brightness:** Specifies the brightness for the image.
- **Contrast:** Specifies the contrast value for the image.
- **Image Type:** This drop-down list allows you to select the image type of the document, which needs to be scanned. It includes the following options:
  - **Black and White:** Signifies that document to be scanned is black and white.
  - **Gray Scale 4 bit:** Signifies that the document to be scanned is a gray 4-bit image.
  - **Gray Scale 8 bit:** Signifies that the document to be scanned is a gray 8-bit image.
  - **Color 8 bit image:** Signifies that the document to be scanned is a color 8-bit image.
  - **Millions of colors:** Signifies that the document to be scanned contains millions of colors.
  - **Color 4-bit image:** Signifies that the document to be scanned is a color 4-bit image.
  - **Gray Image:** Signifies that the document to be scanned is a gray image.
- **Paper Size:** This drop-down list allows you to select the paper size of the document, which has to be scanned. Multiple paper sizes are supported, such as:
  - A4 (210x297 mm.)
  - Exec (7.5x10.5 inch.)
  - Letter (8.5x11 inch.)
  - Legal (8.5x14 inch.)
  - A3 (297x420 mm.)
- **Compression:** This drop-down list allows you to select the compression scheme to be applied to the image. When **JPEG** is selected from the **Compression** drop-down list, the **Quality Factor** field appears, as shown in the following figure:

The **Quality Factor** field is used to specify the quality of the image. It contains values from 0 to 100. The higher the quality factor, higher will be the quality and lesser will be the compression of the image.

### The Image Editing Sub tab

The **Image Editing** sub tab is shown in the following figure:



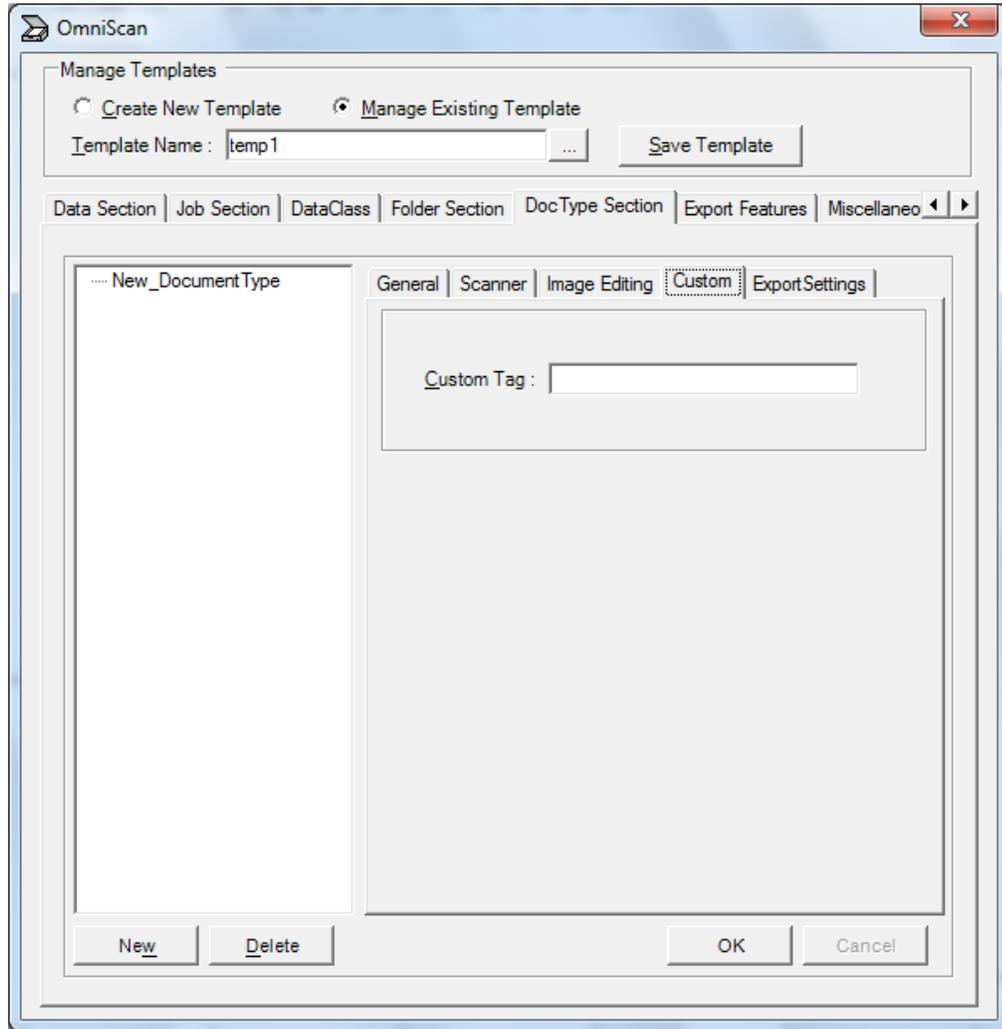
The **Image Editing** sub tab contains the following fields:

- **Invert:** This check box, when selected, inverts the scanned image.
- **Deskew:** This check box, when selected, specifies that the scanned document has to be deskewed.
- **Deborder:** This check box, when selected, specifies that the scanned document will not have a border.
- **Rotate:** This drop-down list is used to specify the degree of rotation of the scanned document. The various degrees of rotation are 90, 180, and 270.
- **Resize Factor:** Used to define the resize factor for a document to resize it after documents are imported. When the ResizeFactor checkbox is checked, the resize height and width can be defined in the height and width textboxes respectively.
- **Zone Area:** Used to define the zone area for cropping the documents. When the Zone Area checkbox is checked the zone coordinates ie X1, Y1, X2, Y2 can be defined in the X1, Y1, X2, Y2 textboxes respectively.

- **PDF Compression:** Used to define PDF Compression for converting a TIF file to PDF file while exporting documents to OmniDocs.
- **PDFA Compression:** Used to define PDFA Compression for converting a TIF file to PDFA file while exporting documents to OmniDocs.

*The Custom Sub tab*

The **Custom** sub tab is shown in the following figure:

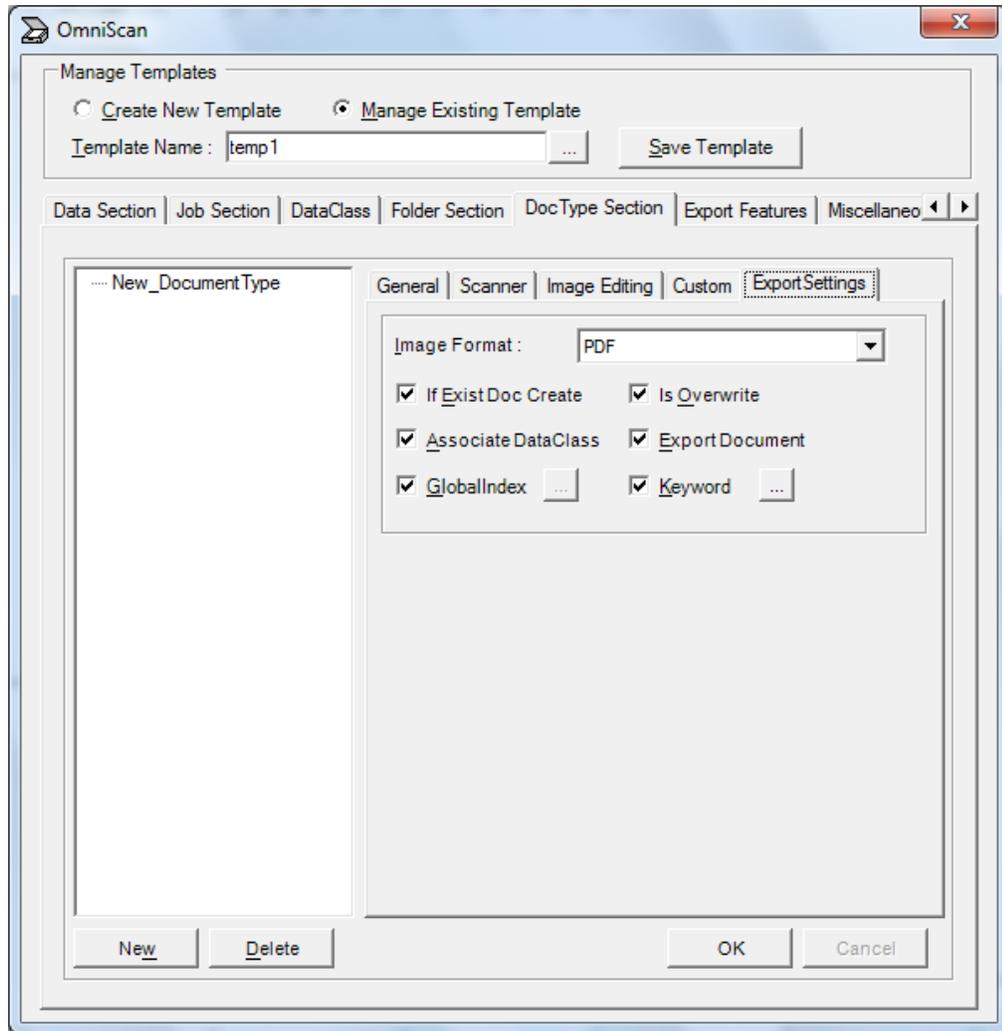


The **Custom** sub tab contains the **Custom Tag** field. This field is used to add a Custom tag with a document type in INI.

The user can add single or multiple custom tags using the **Custom Tag** text box. For example, to add a single custom tag, in the **Custom Tag** text box, type **IsValidate=Y**. To add multiple custom tags, in the **Custom Tag** text box, type **IsValidate=Y, IsMandatory=N, IsChar=Y**. The user gets three custom tags by using the comma separator to parse the string.

### The Export Settings Subtab

The **Export Settings** sub tab is shown in the following figure:



The Export Settings sub tab contains the following fields:

- **Image Format:** This drop-down list specifies the format in which the document is to be exported. The options available are TIFF and PDF. By default, TIFF is selected.
- **If Exist Doc Create:** This check box, when selected, creates the document even if the same document is already present.
- **Is Overwrite:** If both **Is Overwrite** and **If Exist Doc Create** check boxes are selected, the existing document is overwritten by the new document with the same name.
- **Keyword:** This checkbox when checked, associates keyword with the specified document.
- **Associate Data Class:** This check box, when selected, associates the specified document with the specified data class.
- **Export Document:** This check box, when selected, implies that the specified document is to be exported to OmniDocs™.

The **Doc Type Section** tab contains the following buttons:

- **New:** Add the document name in the tree view and sets focus to the **Name** text box. This button does not create the document permanently.
- **Delete:** Deletes the selected document type.
- **OK:** Saves the document properties. If a new data class is selected then it creates entry for the new document type.
- **Cancel:** Cancels the new document operation.

## Export Features

The **Export Features** tab allows you to specify the information, which is used while exporting Omni Scan's records to any Document Management System. When you click the **Export Features** tab, the following screen appears:

The screenshot shows the 'OmniScan' application window with the 'Export Features' tab selected. The dialog box is titled 'OmniScan' and has a close button in the top right corner. It contains several sections for configuring export options:

- Manage Templates:** Includes radio buttons for 'Create New Template' and 'Manage Existing Template' (selected). Below is a 'Template Name' text box containing 'temp1' and a 'Save Template' button.
- Navigation:** A series of tabs: 'Data Section', 'Job Section', 'DataClass', 'Folder Section', 'DocType Section', 'Export Features' (active), and 'Miscellaneous'.
- Export Options:** A group of checkboxes: 'Show Message Box While Exporting', 'Generate Export Audit Log', 'Show Export Message on Closing', and 'Allow Blank Value In Folder Name' (checked). To the right, under 'After Export Options', are radio buttons for 'Delete Job After export', 'Close Job', and 'None' (selected).
- Export Options (Description):** A text box stating 'Export Options defined where the user can export the saved job(s)' with a 'Define...' button.
- Ready For Export:** A checkbox 'Ready For Export' and a text box 'Export To Folder Name:' with a browse button.
- Auto Upload:** A checkbox 'Auto Upload' and a text box describing the feature: 'Auto Upload gives user the feature to export the job(s) just after the creation of records.' with a 'Define...' button.
- External User Table:** A checkbox 'External User Table' and a text box describing the feature: 'External User Table provides feature to specify the folder and document name on the basis of column(s) value.' Below is an 'External Table Name:' text box and a 'Define Where Clause' button.

At the bottom right, there are 'OK' and 'Cancel' buttons.

The **Export Features** tab contains the following fields:

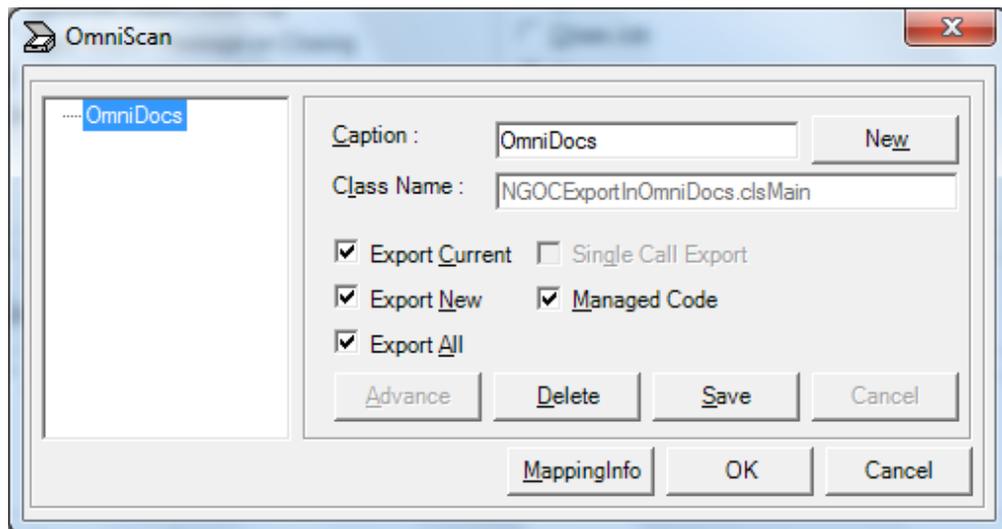
- **Show Message Box While Exporting:** If this check box is selected then OmniScan™ checks whether all the document types are associated with the page range and whether all the document pages are associated with the document types. If any OmniScan™ record does not fill this criterion, an error message appears.
- **Generate Export Audit Log:** If this check box is selected then the audit logs are generated while exporting.
- **Show Export Message on Closing:** If this check box is checked export completed message box will be displayed when export is completed.
- **Allow Blank In Folder Name:** If this check box is checked then, Blank field value will be allowed to Create Folder Name in OmniDocs.
- **After Export Options:** This section allows you to specify actions after successful export. It contains the following radio buttons:
  - **Delete Job After Export:** If it is clicked then the MDB and the images of the job are deleted after the successful export of all the records of the job.
  - **Close Job:** If it is clicked then the job is closed after successful export.
  - **None:** If it is clicked then the job remains open after export.

The **Export Features** tab also contains the following sections:

- Export Options
- Ready For Export
- Auto Upload

### The Export Options Section

The **Export Options** section contains the **Define** button. On clicking the **Define** button, the following dialog box is displayed:



This dialog box contains the following fields:

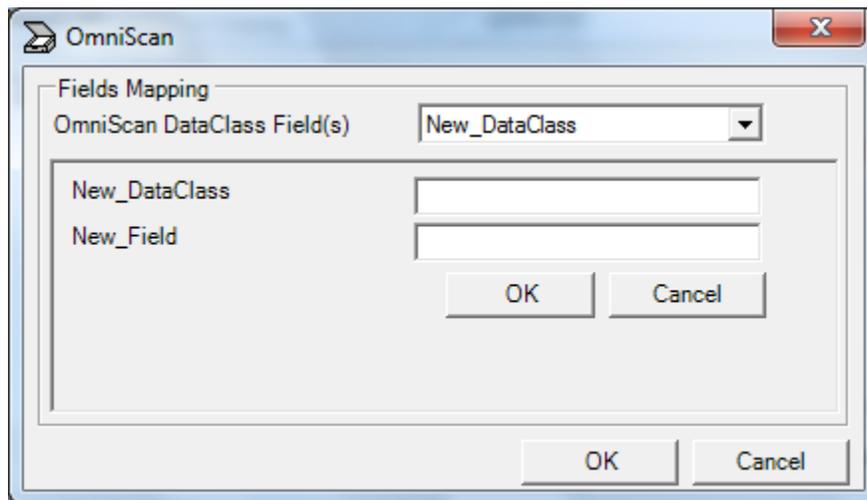
- **Caption:** This text box specifies the name of the export section.
- **Class Name:** This text box specifies the name of the class, which needs to be called.

- **Export All:** This check box, when selected, allows you to export all the records in the DMS.
- **Export New:** This check box, when selected, allows you to export records, which have not been exported.
- **Export Current:** This check box, when selected, allows you to export the current records.
- **Single Call Export:** This check box is disabled for OmniDocs™.
- **Managed Code:** This check box is used to define whether to use the .Net DLL or the VB DLL for export. If this check box is selected, the users are allowed to use the .Net DLL. If this check box is not selected, the users are allowed to use the VB DLL.

This dialog box contains the following buttons:

- **New:** Adds a new DMS name to the tree view in the left pane and sets the focus to the **Caption** text box. This button only adds a DMS name in the tree view but does not save it permanently.
- **Advance:** This button is disabled for OmniDocs™.

Clicking the **Mapping Info** button opens the following screen if **OmniDocs** is selected:



The above screen displays a drop-down list that contains all the data class fields defined by the user.

- Select a data class field from the drop-down list to display the index fields corresponding to the selected data class field.
- Define the mapping string corresponding to the index fields in the text boxes next to the index field names and click **OK**.
- Similarly, define the mapping string for index fields of all the data class fields.
- After defining the mapping string for all the data class fields, click the **OK** button placed at the bottom of the screen to save the changes.
- Click **Cancel** to discard the changes and close the dialog box.

### The Ready for Export Section

The **Ready for Export** section allows the user to specify the path at which the MDB file of the job is to be exported. This section contains the **Export To Folder Name** text box, which gets enabled when the **Ready For Export** check box is selected. On clicking the ellipsis button next to it, the **Browse For Folder** dialog box appears, as shown in the following figure:



Browse to the required location where you want the MDB file to be exported and click **OK**. The specified location gets displayed in the **Export To Folder Name** text box.

### The Auto Upload Section

The **Auto Upload** section is used to export documents automatically to OmniDocs™ based on the value specified by the user. This section contains the **Define** button, which is enabled when you click the **Auto Upload** check box. On clicking the **Define** button, the following dialog box is displayed:



This dialog box contains the following fields:

- **Export To:** This drop-down list is used to specify the destination where the automatic export will take place.

### External User Table Section

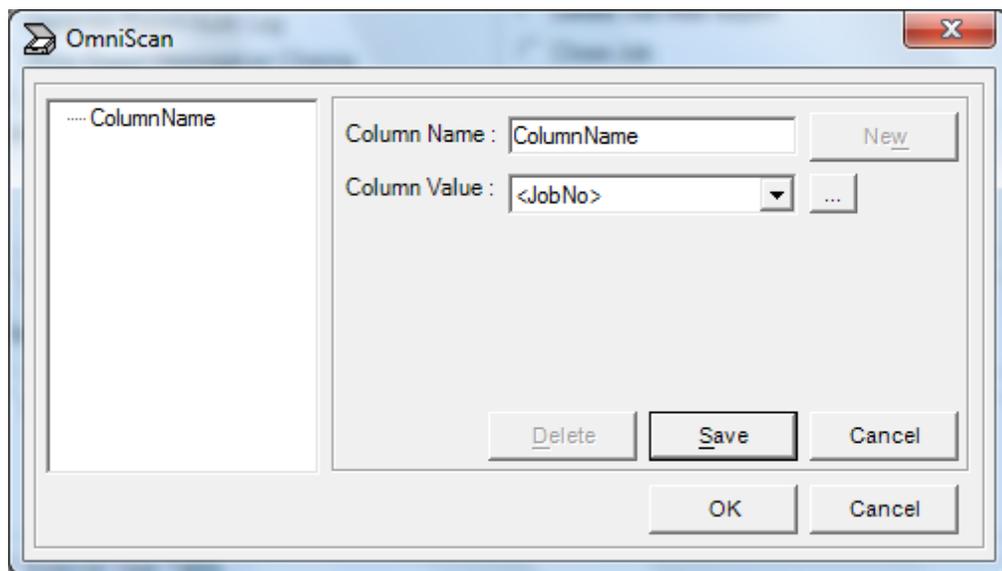
If a user requires fetching document name and folder name values from external table, then user has to define external table in the export section.

*Steps to be followed:*

1. Define external table using manage table in export section.
2. Fetch document name and folder name from external table by defining the where clause.

**External Table Name:** Used to enter the external database table name from where the row data will be extracted.

**Define Where Clause:** On clicking this button a window will open where the where clause can be defined.



**Column Name:** Used to enter the column name

**New:** The new button creates a new column

**Column Value:** This combo box displays a list of column values.

**...:** On pressing this button a list of column values will be displayed in the combo box.

**Save:** This button save the changes made in the window.

**Cancel:** Undo's the new changes

**OK:** This button saves changes and closes the window.

**Cancel:** Exits the settings window without saving any changes.

## Miscellaneous

The **Miscellaneous** tab contains the Scan Section, Record Section, External Interface, and Add-ins Section. When you click the **Miscellaneous** tab, the following screen appears:

The screenshot shows the 'Miscellaneous' tab of the OmniScan configuration window. The window title is 'OmniScan'. At the top, there is a 'Manage Templates' section with two radio buttons: 'Create New Template' (unselected) and 'Manage Existing Template' (selected). Below this is a text field for 'Template Name' containing 'temp1' and a 'Save Template' button. A tabbed interface below shows 'Job Section', 'DataClass', 'Folder Section', 'DocType Section', 'Export Features', 'Miscellaneous' (selected), and 'ImageSetti'. The main area is divided into several sections: 'Scan Section' with dropdowns for 'Scan Protocol' (Twain), 'Scan Type' (Simplex), and 'Scan Preference' (Both), and checkboxes for 'Auto Blank Page Removal' and 'Dual Stream Scanning'; 'Record Section' with a checkbox for 'Trigger On Next Record'; 'External Interface' with a text field for 'External Data Source' and a checkbox for 'Managed Code'; 'Addins Section' with a 'Define...' button; 'Black And White Conversion Section' with a 'Define...' button; and 'Disable Controls' with a 'Define...' button. At the bottom, there are checkboxes for 'View Doctype With Valid Page Range', 'Create Dynamic Doc Type', and 'Show Spaces In Name', along with a 'DefaultDocType' dropdown set to '<None>'. 'OK' and 'Cancel' buttons are at the bottom right.

## The Scan Section

The **Scan Section** contains the following fields:

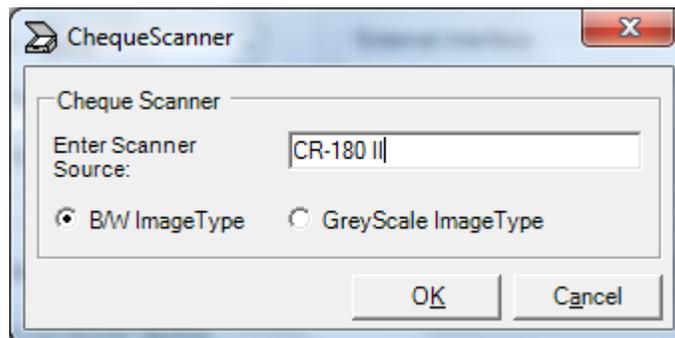
- **Scan Protocol:** This drop-down list is used to specify the scan protocol as TWAIN or ISIS. This is a mandatory field.
- **ScanType:** This drop-down list is used to specify the scan type as 'simplex' or 'duplex'. This is a mandatory field.

---

If the scanner does not support duplex scanning then the value from the drop-down list must be set as 'simplex'.

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- **Scan Preference:** This drop-down list provides the options for setting the scan preference. This field is mandatory and provides values such as 0, 1, or 2 to specify the options. Value 0 specifies Do Scanning, value 1 specifies Page-By-Page scanning, and value 2 specifies both (Do Scanning and Page-By-Page). By default, the value is 2.
- **Auto Blank Page Removal:** This check box, when selected, removes the blank page(s) automatically while scanning or importing the document file.
- **Dual Stream Scanning:** This checkbox when checked scans a black and white and coloured copy of a coloured page. By default this option is unchecked.
- **Cheque Scanning:** When the Cheque Scanner option is selected from the Scan Protocol combo box, the Cheque Scanner button gets enabled. On clicking on this button a Cheque Scanner settings screen pops up where the user can define settings for Cheque Scanning as shown in the following figure.



- **Enter Scanner Source:** This textbox is used to specify the scanner source used for cheque scanning.
- **B/W Image Type:** This radio button when selected specifies that B/W image conversion is being used.
- **GreyScale Image Type:** This radio button when selected specifies that GreyScale image conversion is being used.

## The Record Section

The **Record Section** contains the following field:

- **Trigger On Next Record:** This check box, when selected, shifts the control to a defined external data source DLL when a user moves to the next or previous record in OmniScan™.

### The External Interface Section

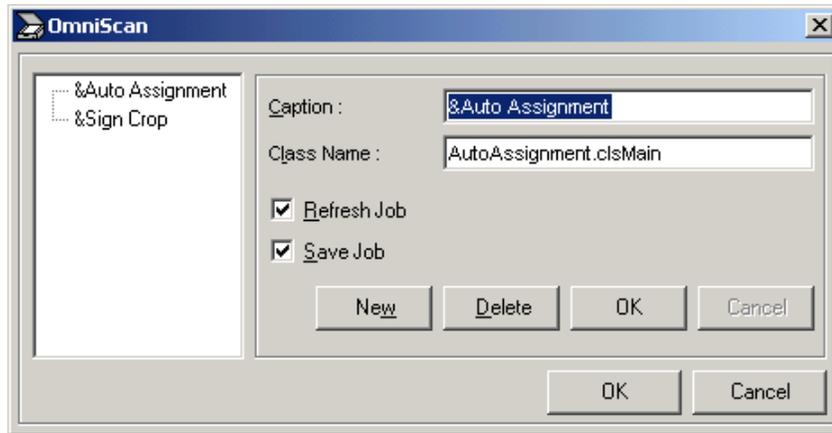
The **External Interface** section is helpful when the user needs to connect the OmniScan™ application with any other external application. The external application is a DLL and is useful for validation or changes in a data class field's value. The **External Interface** section contains a field, **External Data Source**, which displays the name of the external interface source with its interacting class name. For example, if class1.GetValue is the external data source name then the defined external data source DLL is called from OmniScan™ while saving, exporting, and moving the records. OmniScan™ passes the following parameters:

- **Document Location:** Specifies the location of the job.
- **Operator:** Specifies the name of the operator.
- **Template Name:** Specifies the name of the template.
- **Template File Path:** Specifies the template path.
- **Field Name:** Specifies the field name from where the GetValues function is called.
- **Input String:** Contains the field(s) value. Multiple fields value is separated by semicolon.
- **Output String:** Returns Data definition field(s) value and multiple fields value is separated by semicolon.
- **ReturnOnError:** Returns the field number where the DLL finds any invalid data field value.
- **NewEventId:** Specifies the event form where the DLL is called. The possible values are:
  - 0 = KEY\_EVENT\_GOT\_FOCUS
  - 1 = KEY\_EVENT\_LOST\_FOCUS
  - 1= KEY\_EVENT\_SAVE\_FROM\_LOAD
  - 2= KEY\_EVENT\_SAVE
  - 3= KEY\_EVENT\_BEFOREIMPORTING
- **RecordNo:** Specifies the current record position.
- **mdbPath:** Specifies the database path.

The **External Interface** section contains another field, the **Managed Code** check box. This check box, when selected, allows the user to use the .Net DLL. If this check box is not selected, the user is allowed to use the VB DLL.

## The Add-ins Section

The **Add-ins Section** invokes the add-in utility from OmniScan™. It contains the **Define** button, which when clicked opens the following dialog box:



This dialog box contains the following fields:

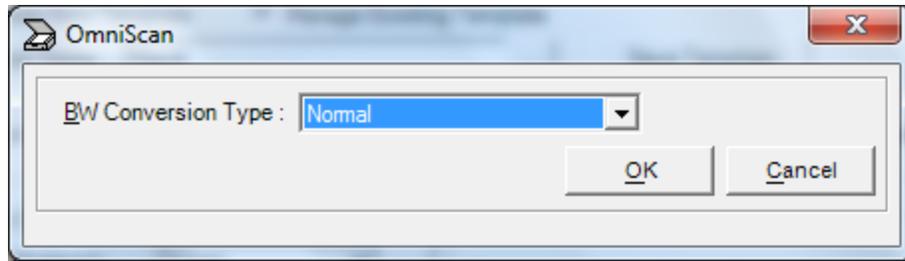
- **Caption:** This text box displays the caption of the add-on that will be shown under the Add-ins menu item of OmniScan™. It is a mandatory field.
- **Class Name:** This text box displays the external data source name. . It is a mandatory field.
- **Refresh Job:** This check box, when selected, enables users to refresh the current record. It is not a mandatory field.
- **Save Job:** This check box, when selected, saves the current record after getting controls from the external DLL. It is not a mandatory field.

This dialog box contains the following buttons:

- **New:** Adds a new Add-ins name in the tree view and sets the focus to the **Caption** text box. This button only adds an Add-ins name in the tree view but does not save it permanently.
- **Delete:** Deletes the selected Add-ins name.
- **OK:** Saves the Add-ins name properties.
- **Cancel:** Cancels the new Add-ins operation.

**Black and White Conversion Section:** Use this feature to convert image into black and white.

**Define:** On pressing the define button a setting window opens where Black and White Conversion settings can be defined.



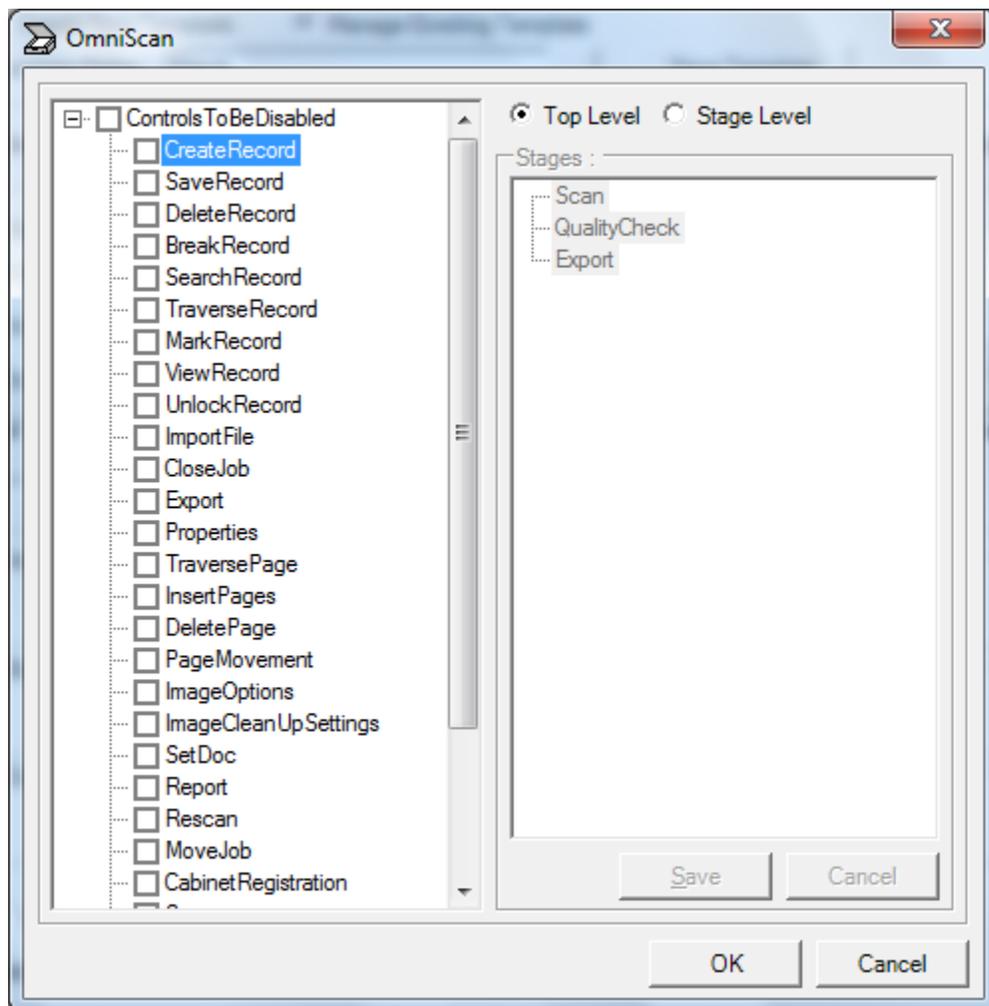
**B/W Conversion Type:** From this Combo box user can select various B/W Conversion options

**Ok:** On pressing this button changes will be saved and the setting window will close.

**Cancel:** On pressing this button window will close without saving any changes.

**Disable Controls Section:** Use this feature to enable/ disable toolbars, buttons and controls.

**Define:** On pressing the define button a setting window opens where Disable Controls settings can be defined.

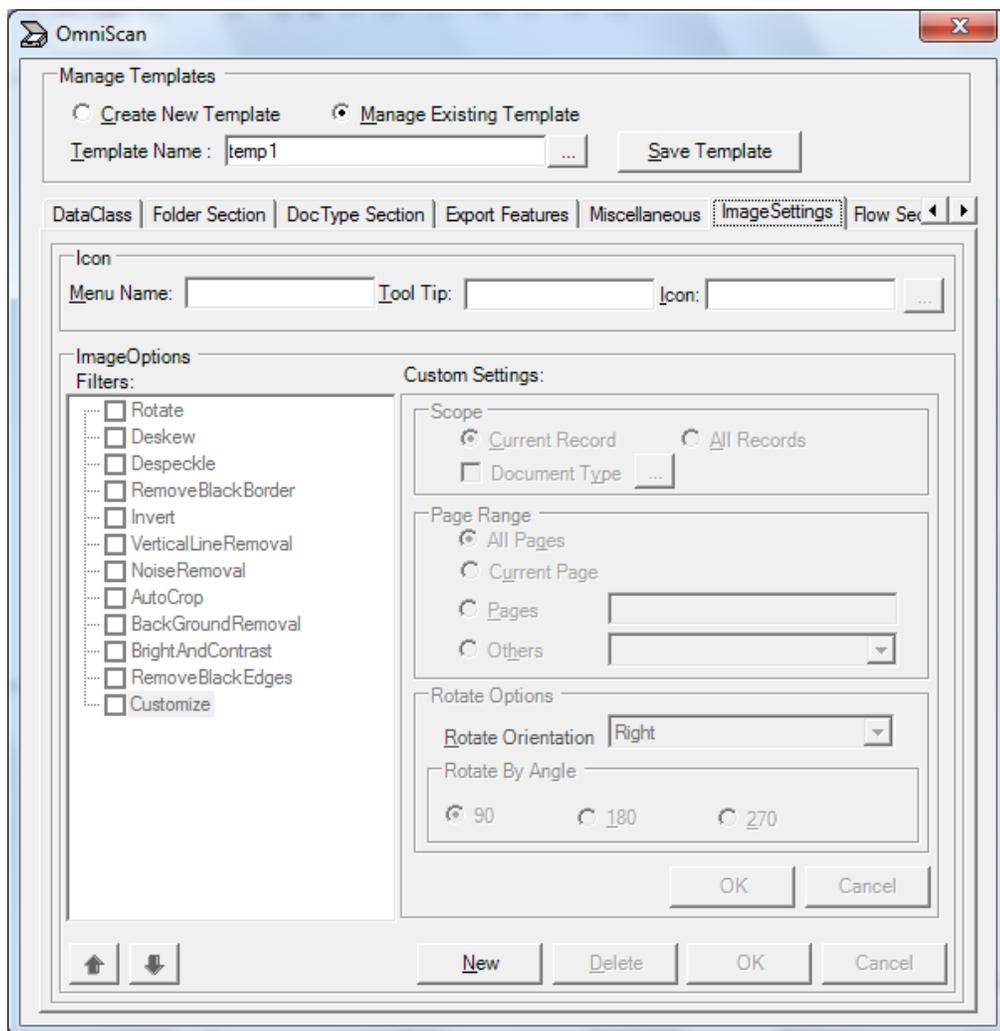


The **Miscellaneous** tab also contains the following fields:

- **Default DocType:** This field is used to represent the doc type that has been set as default. If the page range of the default doc type happens to be 0 to 0 then this doc type will get the page range, which has not been specified in any other doc type. For example, assume that a record contains total 8 pages and three doc types are defined, A1, A2, and A3 in that record. Suppose that A3 is set as the default doc type. Also, the page range defined for A1 is 1 to 2, the page range defined for A2 is 3 to 6, and no page range is defined for A3. Then the page range of A3 doc type will be set as 7 to 8.
- **View Doctype With Valid Page Range:** This check box, when selected, is used to display only the doc types for which some page range is specified. If this check box is not selected, the doc types for which no page range has been specified also get displayed.
- **Show Spaces in name:** This checkbox when checked allows doctype names to have spaces. By default this control is unchecked.

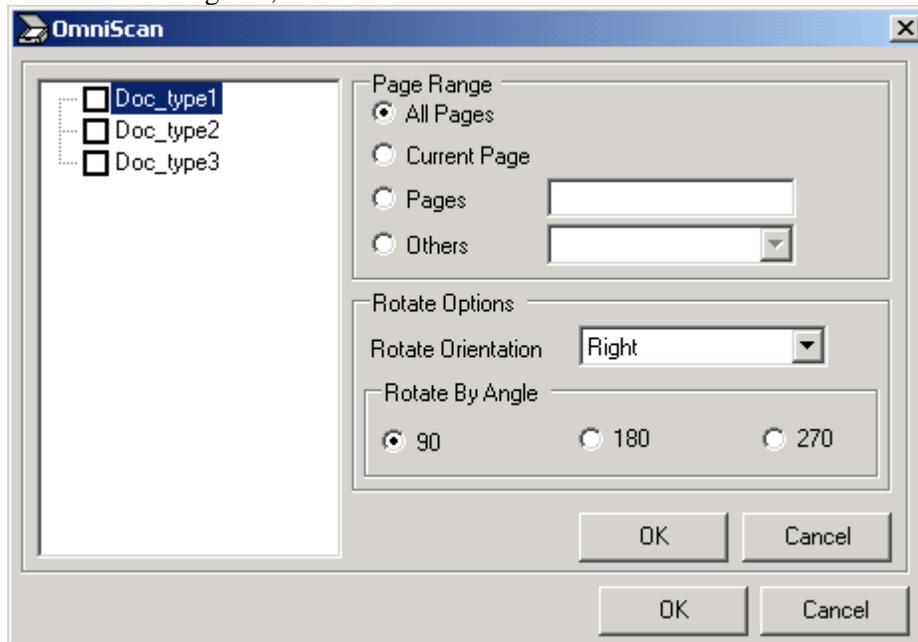
### Image Settings

The **Image Settings** tab allows you to specify various image settings. The **Image Settings** tab is shown in the following figure:



The **Image Settings** tab contains the following fields:

- **Menu Name:** This text box is used to specify the menu name that will be created in OmniScan™ during creating or opening a job.
- **Tool Tip:** This text box is used to specify the tool tip that appears with an icon.
- **Icon:** This text box displays the path where the image icon is stored.
- **Ellipsis button next to Icon text box:** This button is used to specify the path of the image icon.
- **Filters:** This pane displays the options that can be used to modify the appearance or settings of an image. To apply an image option on the image, you need select its corresponding check box.
- **Scope:**
  - **Current Record:** This radio button, when clicked, is used to specify that the image is located in the current record.
  - **All Records:** This radio button, when clicked, is used to specify that the image option is applicable to all records.
  - **Document Type:** This check box is used to specify the document type in which the image is located. When you click this check box, the ellipsis button next to it is enabled.
  - Ellipsis button next to **Document Type** check box: This button, when clicked, opens the dialog box, as shown:



This dialog box contains the following fields:

- **Left pane:** This pane displays the list of document types.
- **Page Range:**
  - **All Pages:** This radio button, when clicked, specifies the page range as all pages.
  - **Current Page:** This radio button, when clicked, specifies the page range as the current page.
  - **Pages:** This text box is used to specify page numbers for the page range.

- **Others:** This button, when clicked, enables the drop-down list associated with it. The drop-down list has options such as **First Page**, **Last Page**, **Even Pages**, and **Odd Pages**. You can use this option to specify the page range.
  - **Rotate Options:**
    - **Rotate Orientation:** This drop-down list is used to select the right or left orientation of the image.
    - **Rotate By Angle:** This section provides options such as **90**, **180**, and **270**. You can use these options to specify the angle of rotation of the image.
  - **OK:** This button is used to save the settings associated with a document type. You first need to select a document type for the specified settings and then click this button to save those settings with the selected document type.
  - **Cancel:** This button is used to cancel the settings associated with a document type. You first need to select a document type for the specified settings and then click this button to cancel those settings for the selected document type.
  - **OK button for the dialog box:** This button is used to save the settings specified for different document types and close the dialog box.
  - **Cancel button for the dialog box:** This button is used to cancel the settings specified for different document types and close the dialog box without saving any changes.
- **Page Range:**
  - **All Pages:** This radio button, when clicked, specifies the page range as all pages of the selected document type.
  - **Current Page:** This radio button, when clicked, specifies the page range as the current page of the selected document type.
  - **Pages:** This text box is used to type the page numbers for specifying the page range of the selected document type.
  - **Others:** This button, when clicked, enables the drop-down list associated with it. The drop-down list has options such as **First Page**, **Last Page**, **Even Pages**, and **Odd Pages**. You can use this option to specify the page range of the selected document type.
- **Rotate Options:**
  - **Rotate Orientation:** This drop-down list is used to select the right or left orientation of the image.
  - **Rotate By Angle:** This section provides options such as **90**, **180**, and **270**. You can use these options to specify the angle of rotation of the image.
- **OK:** This button is used to save the settings associated with a document type. You first need to select a document type for the specified settings and then click this button to save those settings with the selected document type.
- **Cancel:** This button is used to cancel the settings associated with a document type. You first need to select a document type for the specified settings and then click this button to cancel those settings for the selected document type.

**Note:** If you select the **Document Type** check box, the following fields of the **ImageSettings** tab become disabled:

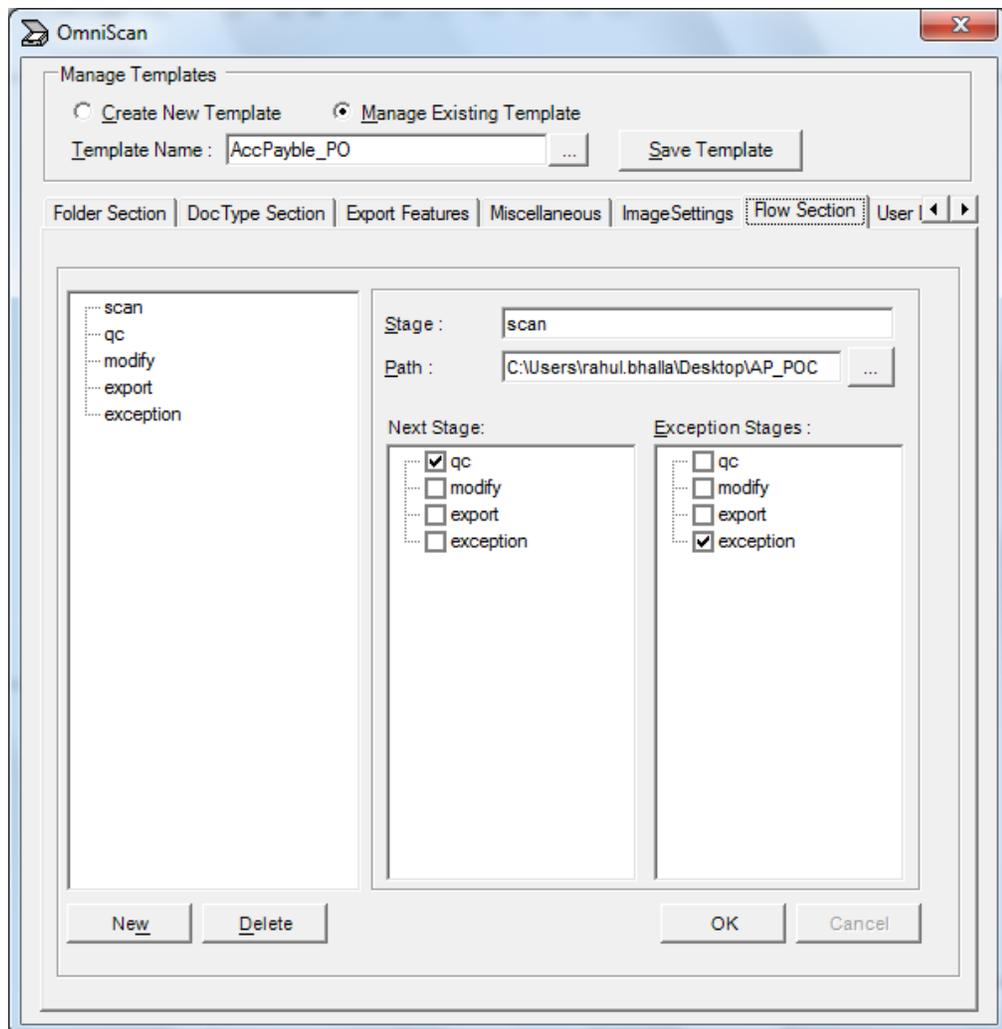
- The **Page Range** section options: **All Pages** radio button, **Current Page** radio button, **Pages** text box, and **Others** drop-down list.
- The **Rotate Options** section options: **Rotate Orientation** drop-down list, **Rotate By Angle** options, **OK** button of the **Custom Settings** section, and **Cancel** button of the **Custom Settings** section.

The **Image Settings** tab also contains the following buttons:

- **New:** This button is used to clear all the fields of the **Image Settings** tab so that you can specify new settings. The **Current Record**, **All Pages**, and **90** radio buttons are selected, by default.
- **Delete:** This button is used to clear all the fields of the **Image Settings** tab.
- **OK:** This button is used to save the settings specified in the **Image Settings** tab.
- **Cancel:** This button is used to cancel the settings specified in the **Image Settings** tab.
- **Up:** This button is used to move the selected image option up in the **Filters** pane.
- **Down:** This button is used to move the selected image option down in the **Filters** pane.

## Flow Section

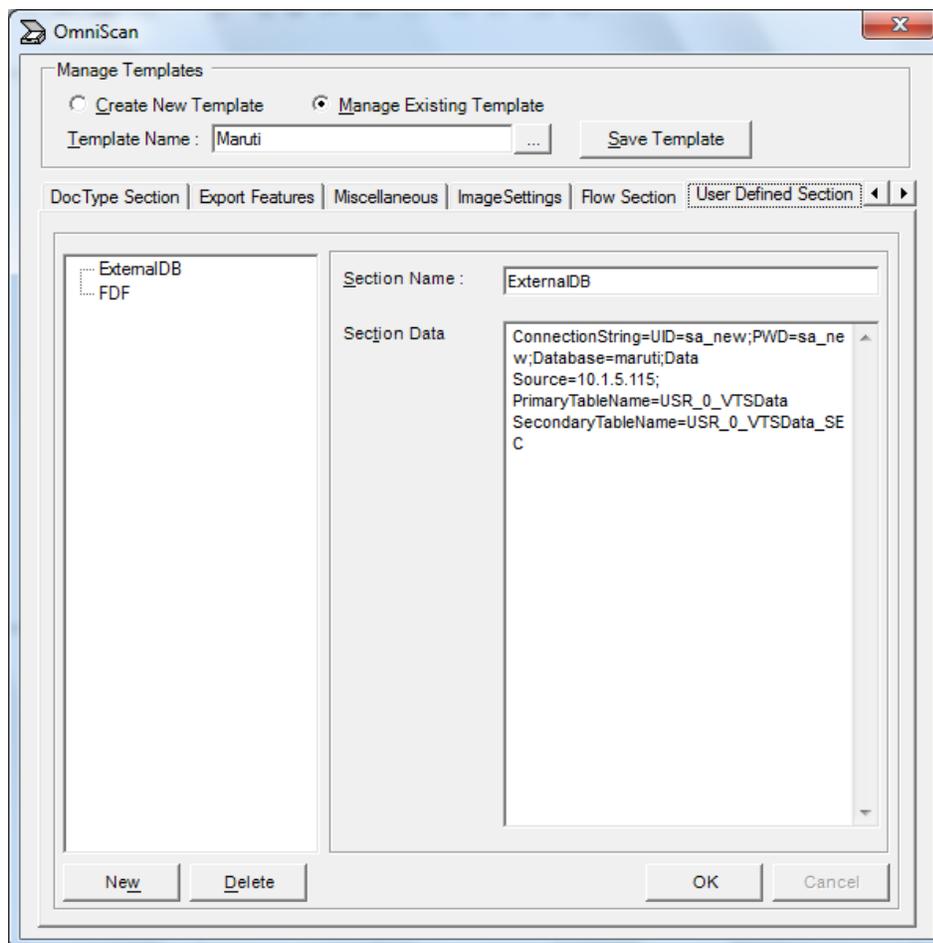
The **Flow Section** tab allows you to specify the flow of the job. The **Flow Section** tab is shown in the following figure:



The **Flow Section** tab contains the following fields:

- **Left pane:** This pane displays the stages of flow: **Scan**, **QC**, **Modify**, and **Export**. You can click a stage to select it.
- **Stage:** This text box displays the stage of flow selected from the left pane. You can also type the stage name in the text box.
- **Path:** This text box displays the path where stages are stored. You can also type the path in the text box.
- **Ellipsis button:** This button is used to specify the path where the stages of flow are stored. When you click this button, the **Browse For Folder** dialog box appears where you can choose the path for the folder.
- **Exception Stage:** This pane displays the stages of flow where you want to specify an exception. You can select a check box to select that stage for exception. It is mandatory to specify at least one exception stage. **Note:** If you select a stage in the left pane, that stage will not appear in the **Exception Stage** pane.
- **New:** This button is used to specify a new stage of flow. When you click this button, **New\_Stage** is added in the left pane.
- **Delete:** This button is used to delete a stage. You need to select a stage in the left pane and then click this button to delete that stage.
- **OK:** This button is used to save the settings specified for a new stage.
- **Cancel:** This button is activated only when you click **New**. The **Cancel** button is used to cancel settings specified for the new stage.

## The User Defined Section



### 1.4.2 Saving INI File Using GUI

After specifying all the properties in the required sections, the user needs to save the template. To save the template, click the **Save Template** button present in the OmniScan™ GUI screen to display the following message box:

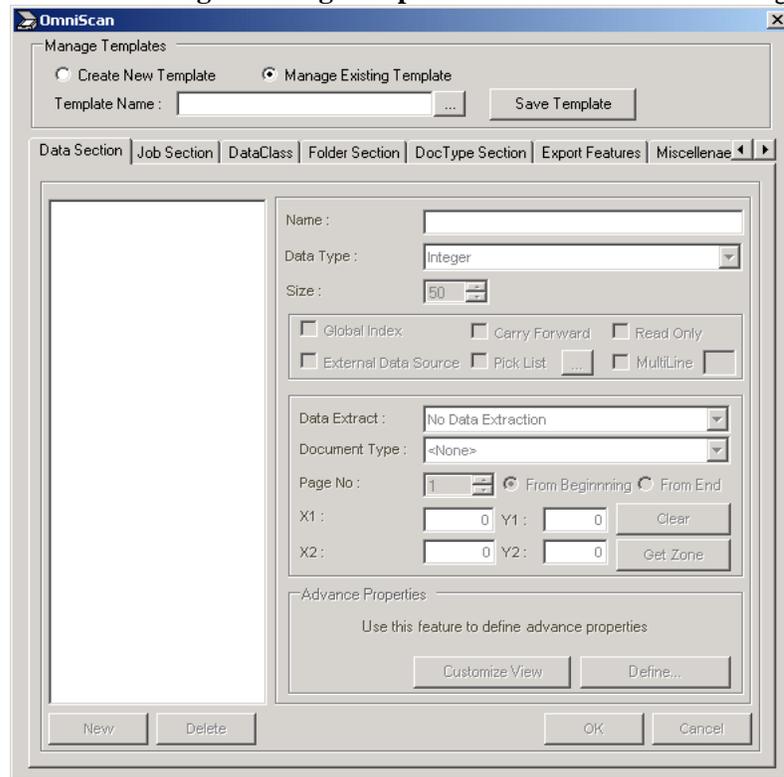


Click **OK** to save the template and close the message box.

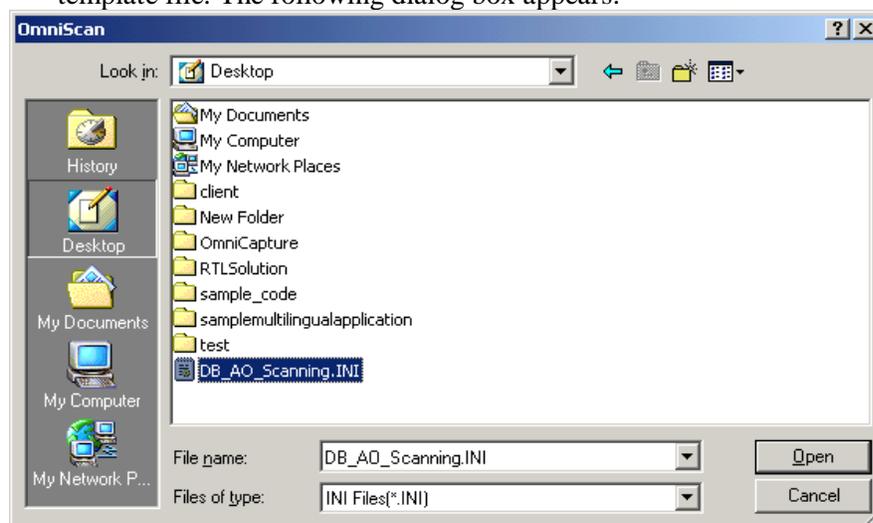
### 1.4.3 Managing INI File Using GUI

You can also use OmniScan™ GUI to manage the already existing INI files. You can modify an existing INI file by making appropriate changes in the sections using the various tabs of the OmniScan™ GUI screen and then saving the file. To manage an INI file using GUI:

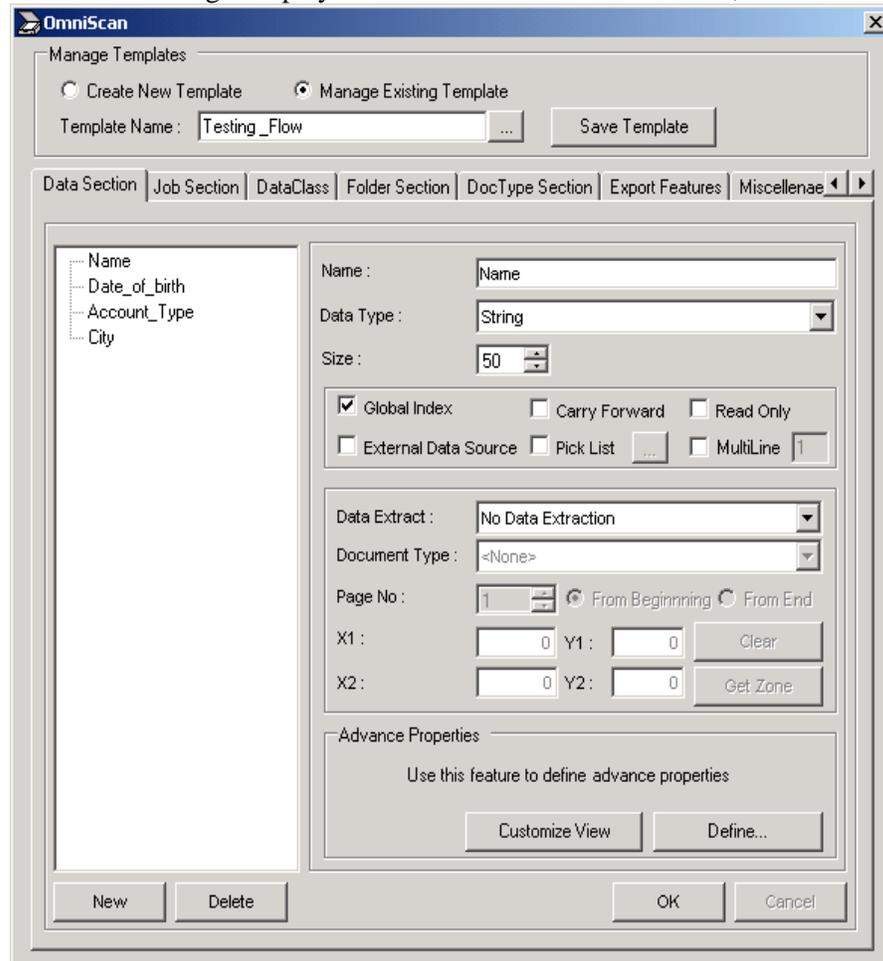
1. Open the OmniScan™ GUI screen.
2. Click the **Manage Existing Template** radio button. The following screen appears:



3. Click the ellipsis button next to the **Template Name** text box to browse for the template file. The following dialog box appears:



4. Locate the path where the INI file is stored and click **Open**. The properties of the selected INI file get displayed in the OmniScan™ GUI screen, as shown:



5. Make the required changes in the sections of the INI file in the OmniScan™ GUI screen.
6. Click the **Save Template** button to save the updated file.

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You can also change the name of the existing INI file by specifying a new name in the **Template Name** text box.

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