

## Using Zonal Form Definitions

As a Zonal Form Definitions User, you can create a project that contains important form data and reference field definitions for multiple document types by using the Zonal Form Definitions tool. In addition, you can train and test the Zonal Form Definitions tool to identify and recognize field definitions and their locations by using a collection of similar forms.

The information derived from defined, trained, and tested fields become templates that the AccuRoute Server will use to extract the same data fields from new documents and route those fields appropriately to a company's resource for additional form processing and automation.

### Before you begin

- A Zonal Form Definitions Client installation is required for each designated Zonal Form Definitions User. Contact your Administrator for installation details.
- Using the Zonal Form Definitions tool, you can have multiple projects and a project can have one or more document types; for example, a single-page form or a multiple-page form separated into individual document types.
- The Zonal Form Definitions tool is designed to recognize single-page structured forms. You must separate multiple-page forms; for example, a PDF into separate PDF files as individual document types. If you attempt to add a multiple-page form as a document type to the Zonal Form Definitions tool, it will recognize the first page only and ignore the other pages.

### Understanding the Zonal Form Definitions Role and Tasks

- **Collect Forms and Convert to a Supported File Format** – Single-page structured forms with the required data fields are collected from a company's documentation resources by the Zonal Form Definitions User and converted to PDF, TIF, JPG, PNG, or BMP file formats.
- **Create a Zonal Form Definitions Project** – The Zonal Form Definitions tool is used to create projects that contain field definitions, training, and testing layouts.
- **Define Layout** - is used to identify and define the data and reference fields on the form.
- **Train Layout** - A series of files are selected for training and to adjust field variations that may appear in the files selected. The purpose of Train Layout is to increase the project's ability to correctly identify and extract data fields.
- **Test Layout** - A series of files are selected for testing and to determine if the test failed or succeeded. In addition, a Zonal Form Definitions User can add failed forms to a training batch or remove test files that do not meet the testing criteria or are no longer needed. The purpose of Test Layout is to test the forms used in Train Layout. Test Layout mimics the data field identification and extraction that the Zonal OCR Connector will do. For example, if a data field is not identified during testing, it will not be identified by the Zonal OCR Connector when processing the same form.

**Note:** Field locations “zones” are automatically defined during the training and testing of the forms. No additional step is required to define field locations.

- **Save Zonal Form Definitions Template** - After the form definitions are defined, trained, tested, and saved, a Zonal Form Definitions template is automatically saved to the AccuRoute Server.

**Note:** Zonal Form Definitions should be saved periodically throughout the defining, training, and testing tasks to ensure the latest template information is saved on the AccuRoute Server. An asterisk (\*) appears next to the project name as an indicator that the project needs to be saved.

### Zonal Form Definitions Project at a Glance

Define Layout - W2 Form\*

Best Fit

1

2

3

4

**Data Fields**

Name	Text
WagesDF	87477.54
EINDF	34-0000000
EmployeeNameDF	JANE DOE
StateWagesDF	87477.54
StateIncomeTaxDF	547.45

**Reference Fields**

Name	Text
WagesRF	Wages, tips, other compensa
EINRF	Employer identification numbe
EmployeeNameRF	Employee's first name and init
StateWagesRF	State wages, tips, etc.
StateIncomeTaxRF	State income tax

Close

Table 1:

Zonal Form Definitions Project Legend	Description
1. Zonal Form Definitions Project tool bar	Use the ZFDP tool bar to: (from left to right) <ul style="list-style-type: none"> <li>• Pointer – point, move, and resize data and reference field boxes.</li> <li>• Add Data Field – draw a box and define data fields.</li> <li>• Add Reference Field – draw a box and define reference fields.</li> <li>• Best Fit (Zoom) drop-down list box – choose a Zoom level to view the form.</li> <li>• Best Fit – reset the Zoom level to the Best Fit default.</li> </ul>
2. Preview pane	Use the Preview pane to: <ul style="list-style-type: none"> <li>• View and define data and reference fields in Define Layout.</li> <li>• View and train forms in Train Layout.</li> <li>• View and test forms in Test Layout.</li> </ul>
3. Data Fields pane	Use the Data Fields pane to: <ul style="list-style-type: none"> <li>• View data field definitions.</li> <li>• Rename data fields.</li> <li>• Configure data fields to be a specific format; for example, date. Text is the default.</li> </ul> <p><b>Note:</b> Zonal Form Definitions Users must verify that data and reference field definitions are clear, intact, and not truncated for best form processing results.</p>
4. Reference Fields pane	Use the Reference Fields pane to: <ul style="list-style-type: none"> <li>• View reference field definitions.</li> <li>• Rename reference fields.</li> <li>• Delete reference fields.</li> </ul>

### Create a Zonal Form Definitions Project

You can create a Zonal Form Definitions project by using the Zonal Form Definitions tool. Document types are added, data and reference fields are defined, trained, tested, and saved to the AccuRoute Server.

To create a Zonal Form Definitions project

- 1 Open the **Zonal Form Definitions** tool. The Zonal Form Definitions Project window appears.
- 2 Click **File > New Project**. The Project Properties dialog box appears.
- 3 Type a project name in the **Name** box and select a language on the **Language** drop-down list box, if necessary.
- 4 Click **OK**. The Add New Document Type tile appears.
- 5 Click the **Add New Document Type** tile. The Document Type dialog box appears.
- 6 Type a document type name in the **Name** box and select a language on the **Language** drop-down list box, if necessary. The Document Type Layout tile appears.

### Define Layout

- 1 Click **Define Layout**. The Define Layout window appears.
- 2 Click **Select Image** at the bottom-left of the Define Layout window.
- 3 Find and open the form image with the required fields. The form appears in the Preview window.
- 4 Use the **Best Fit (Zoom)** drop-down list to adjust the size of the form in the Preview window. Increase the size of the form to view the required data and reference fields before defining the fields, if necessary.
- 5 Select the **Add Data Field** icon. A cross-hair (+) icon appears.
- 6 Find the required data field you want to define on the form and use the cross-hair icon to draw a rectangular box around it. The data field appears in the Data Field pane with a field and number label; for example, Field1.
- 7 Click on the **Field1** label. The Field Name dialog box appears.
- 8 Type a field name in the **Name** box. The field name must begin with a letter and can be alphanumeric. No spaces, special characters, or punctuation can be used in the field name.
- 9 Find the required Reference field you want to define on the form and use the cross-hair icon to draw a rectangular box around it. The reference field appears in the Reference Field pane with a Field label.

**Note:** You must have at least one reference field defined. Reference fields are highlighted in green on the form. Reference field information is used to identify, distinguish, and classify the forms if multiple form types are added in a project. Reference fields are also used to identify data field locations on the form.

- 10 Click on the **Field1** label. The Field Name dialog box appears.
- 11 Type a field name in the **Name** box. The field name must begin with a letter and can be alphanumeric. No spaces, special characters, or punctuation should be used in the field name.
- 12 Repeat Steps 5 – 11 until you are done with your data and reference field definitions.
- 13 Click **Close**.

### Train Layout

- 1 Click **Train Layout**. The Train Layout window appears.
- 2 Click **Add Images** at the bottom-left of the window.
- 3 Select a form image that you have designated as a training form. The training form appears in the Preview window.

**Note:** The Zonal Form Definitions tool starts to review the training form and automatically identifies the data and reference fields you defined in Define Layout. The data and reference fields appear in the Data and Reference Fields pane.

- 4 Click **Add Images** to continue to select more training forms, if necessary.
- 5 Click the **Back** and **Next** buttons in the Navigation bar at the top of the Preview window to review all training forms and ensure that all data and reference fields are identified correctly.
- 6 Make adjustments and/or add any missing data and reference fields, if necessary.

**Note:** The name of the form appears at the top-center of the Preview window so that you know which form you are reviewing.

- 7 Click the **Remove** button to remove any training form that does not meet your requirements from the Train Layout, if necessary.
- 8 Click **Finish** when you are done with your review and field adjustments.

### Test Layout

- 1 Click **Test Layout**. The Test Layout window appears.
- 2 Click **Add Test Files**.
- 3 Select a form image that you have designated as a testing form. The testing form appears in the Preview window.

**Note:** The Zonal Form Definitions tool starts to review the testing form and automatically identifies only the data fields you defined during Define Layout. The data fields appear in the Data Fields pane. Reference fields are not shown because they are part of the Define and Train Layout process.

- 4 Click **Add Test Files** to continue to add test files to the Test Layout, if necessary.
- 5 Review and determine if you want to add to the training batch of forms or remove the testing file.
- 6 Click **Add to Training Batch** or **Remove from Test Files**.

**Note:** Testing files added to a training batch must be reviewed and adjusted; if necessary, in Train Layout.

- 7 Review and determine if the test failed or succeeded.
- 8 Click either **Failed** or **Succeeded** at the bottom-right of the Data Fields pane.
- 9 Click **OK** on the All testing files have been processed message.
- 10 Repeat Steps 1 – 8 until all testing forms have been reviewed and tested, if necessary.

#### Link separate pages of a multiple-page form

You can use the Add Document Type tile and Link icon for multiple-page forms. After adding the separate pages of a form as individual document types to a project and defining, training, and testing each one of them, the Link icon can be used to link and process the separate pages of the form as a multiple-page form.

#### To link separate pages of a multiple-page form

- 1 Click the **Link** icon on the document type in your project that you want the other document types to link to. The Link Document Type dialog box appears.
- 2 Click **Add**. The Select Document Type to Add dialog box appears.
- 3 Select the document type.
- 4 Click **OK**.
- 5 Repeat Steps 2 – 4 until you are done.

**Tip:** Use the arrows to move the document types up or down in the list.

#### Edit a Saved Zonal Form Definitions Project

If a Zonal Form Definitions project is edited by adding, renaming, or deleting data and reference field definitions then the process of training and testing must occur again. The project must be saved so that the AccuRoute Server has the latest data field definitions. Contact your Administrator if a Zonal Form Definitions project has changed so that the Administrator can take the appropriate action and update the Zonal OCR Connector and associated workflows, if necessary.

### Manage Form Exceptions

An Administrator may create a rule to route form exceptions to a Zonal Form Definitions User for review and resolution. Exceptions may occur if jobs submitted by your colleagues do not match a form's definitions or if form definition changes are made that do not match job properties created and mapped to a form project by an Administrator. Data extraction may not occur completely with form exceptions flagged as **"Unrecognized"** by the Zonal OCR Connector.