Remark Classic OMR 6

User's Guide

Revision 6.0

Contents

Chapter 1: Remark Classic OMR Overview

Software Overview

Remark Classic OMR is a software package designed to collect data from marks (bubbles, checkboxes) on plain paper forms. The software works in conjunction with an OMR scanner to collect the data. The software then analyzes that data and/or allows you to export it to various file formats.

The software is commonly used to grade tests and analyze various types of surveys. The following overview provides the basic steps to using the software. Click the links below to learn more about processing forms for your specific application.

General Use:

- Choose an OMR form to use**.** Standard forms are included in the software. Custom forms can be purchased from Scantron.

- Create or locate a form template file. The form template tells Remark Classic OMR how to read your form. Form templates are created and/or Edited in the Remark Classic OMR Template Editor. Each form you wish to process requires a form template, but the form template is a one-time setup that tells the software how to read your particular form. Most standard forms already have a corresponding form template in the software.

   Note: Remark Classic OMR contains pre-defined form templates for many form types. The Template Editor is used when form templates need to be created for those form types that do not have pre-defined form templates (custom forms) or to make changes to existing form templates.

- Process filled-in forms using an OMR scanner. Remark Classic OMR displays the data in a spreadsheet style grid based on the form template you used. Each row of this grid corresponds to one scanned form in its entirety and each column corresponds to one question or variable on the form.

- Save data and/or use the built-in analysis tool, Remark Quick Stats®. Save the data to many output formats, including Access, Excel, SPSS, Oracle, SQL Server, ODBC, etc. Or, use the analysis program included with the software, Remark Quick Stats, to tabulate your survey or grade your test. If you use Remark Quick Stats, you can take advantage of powerful grade results, crosstabulations, graphs, charts and more.

This user's guide file is designed to provide information about all of the features of the software as well as guidelines for using the software. Software features are not only described, but you are also given steps for how to use the features. Items taken directly from the software, such as menus, buttons and dialogs, are in bold format whenever they are used in an instructional context.

You are encouraged to read the user's guide before using the software with your own forms. The Help file and the user's guide contain answers to many of the common questions and/or problems users potentially face.

Optical Mark Reading Basic Concepts

Traditional Optical Mark Reading (OMR) involves two major components: OMR scanners and OMR forms. OMR scanners are peripheral machines attached to your computer that are made to specifically read and interpret the marks on OMR forms. OMR forms are bubble sheets that are created to precise specifications so that they can be read by an OMR scanner. These forms are used for testing, surveying or anything else that requires the collection of information.

OMR forms are set up in terms of rows and columns. There are two characteristics of an OMR form that allow the OMR scanner to recognize data:

- **Timing Marks**- small, black marks that signify the vertical position of each row of data on the sheet.
- **Columns**- the number of columns (channels) that are contained on the form. Each bubble on the form lines up with a particular column. OMR scanners can typically read either 12 or 48 columns, though there are other variations. See your OMR scanner's documentation for the specifications for your model.

OMR forms can optionally have other characteristics. Here are some other terms with which you should be familiar:

- **Sheets**- the number of physical pieces of paper a form contains. For example, a double sided form on one piece of paper would contain one sheet with two sides.
- **Page ID Marks**- pre-printed sequence of marks on an OMR form that when taken together produce a unique ID for the sheet.
- **Respondent Tracker (Lithocode)**- a respondent ID that identifies a particular respondent's form as it is being read by the OMR scanner. Respondent trackers can be represented by OMR bubbles or barcodes.

The following example shows you how timing marks and columns work, followed by a sample OMR form.

Column 1   Column 48
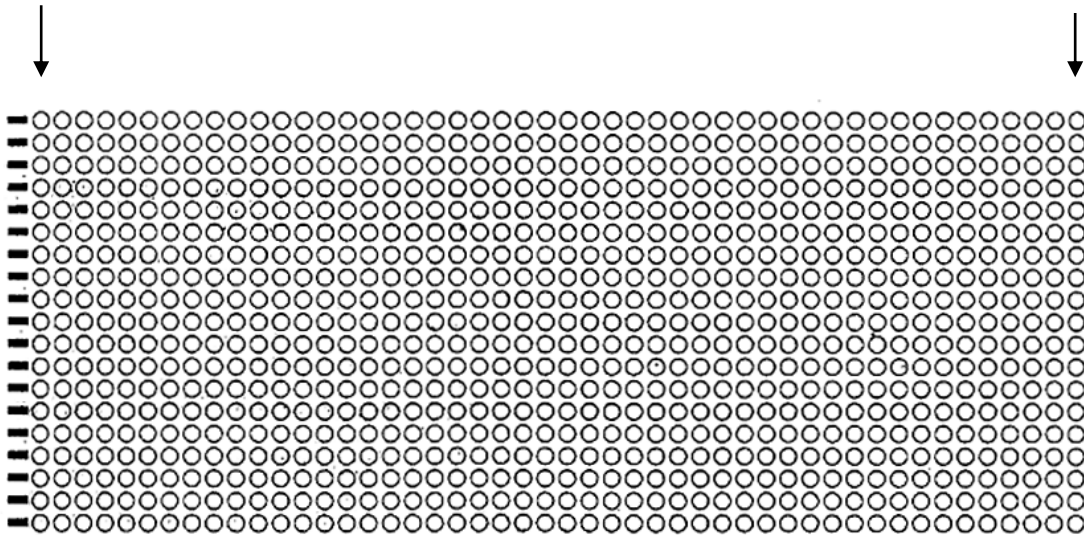
This grid sample represents a fairly common 48-column form layout and allows you to count timing marks and columns on a form. Each region on a form lines up with a particular timing mark and a particular column (e.g., a region might start in row 10, represented by timing mark number 10, and column 12, represented by column 12). An OMR scanner uses the timing marks and columns on the form to locate regions containing OMR bubbles.

The form on the following page is an example of an OMR form. You can see that the timing marks run down the left side of the form. There are 64 timing marks. This form also has 48 columns. Each row or column of bubbles lines up with a particular timing mark and a particular column number.

The OMR scanner finds the OMR bubbles on the sheet using these timing marks and columns. When creating form templates in Remark Classic OMR, you also identify OMR bubbles to be processed using the timing marks and columns.

NAME: _____

CLASS NUMBER: _____

INSTRUCTIONS:

Make dark marks.

Erase completely to make a change.

Do not make stray marks.

IDENTIFICATION NUMBER

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Getting to Know Your Software

The Remark Classic OMR software has three basic parts:

- The Template Editor: You use the Template Editor to create template definitions for the forms you want to process.
- The Data Center: You use the Data Center to read filled in forms, clean up the data and save the data.
- Remark Quick Stats: You use Remark Quick Stats to analyze a survey or grade a test.

Each part of the software has a similar layout with a main working window and a task pane to the left. The task pane shows you the possible things you can do based on where you are in the software. For example, if you just scanned filled in forms, the task pane gives you options to run Review Exceptions to clean your data and save options for saving your data. All of the functions in the task pane can also be found on the toolbar and in the main menus. You can also access Help from any screen via the HELP menu or by pressing F1. Remark Classic OMR supports basic Windows functions that you see in most desktop software, such as:

- Cut, Copy, Paste from the Edit Menu (shortcut keys also supported)
- Home and End Keys in the Data Grid
- file|Save and file|Save As
- file|Print
- file --> Recent file Access
- Edit|Find/Replace
- Edit|Sort

You can also customize the toolbar by right clicking on the toolbar and choosing Customize. There are several options that allow you to decide what toolbars you want to use as well as commands and shortcut keys.

Support and Maintenance

Remark Classic OMR includes a user's guide and online help. You will also find a knowledgebase on the Gravic website, where you will find the answers to frequently asked questions and training videos.

If a problem with Remark Classic OMR arises that cannot be solved using the materials above, customers who purchased Technical Support and Maintenance may contact Gravic technical support. Technical Support and Maintenance includes unlimited phone and email support as well as software updates. Technical support and Maintenance is renewable annually.

Before contacting technical support, please gather the following information:

- The version and serial number of the Remark Classic OMR software (you can find this information by selecting the HELP menu and then clicking About in the software or look in the lower right hand corner of the Data Center)

- The steps required to reproduce the problem

- The type, model and configuration of your computer and scanner, if applicable

Gravic's technical support team provides product support to customers with valid Technical Support and Maintenance via [email](#), [web](#), phone (610.647.8595) and fax (610.647.8771). In addition, you will find free support tools on our [website](#).

Chapter 2: Software Installation and Activation

Remark Classic OMR is installed on a Windows based computer. Once installed the software is activated. See the following sections for further details on installation and activation. If you need to uninstall the software, you may do so via the Windows Control Panel under Programs.

System Requirements

The following section provides the system requirements for running Remark Classic OMR.

Minimum requirements:

- Personal computer with 2 GHz or faster processor

- Windows® 32-bit and 64-bit operating systems: Windows 7 SP1, Windows 8.1, Windows 10 (Note: SP stands for "Service Pack")*

- .NET 4.6.1 (or higher) framework

- 2 GB RAM

- 1 GB free fixed disk space

- Screen/monitor resolution of 1024x768 or higher and at least 32-bit color

- Supported OMR scanner

- Mouse or other pointing device

Recommended optional requirements:

- Windows-supported printer

- PDF Viewer required to view installed documentation

- Microphone for speech recognition

- Microsoft Outlook 2007 or greater can be used for email functionality; if not present an internal Remark Classic OMR email client (using your SMTP server) may be used

*The software uses activation for license regulation. If you choose to install on a virtual machine (VM), due to the nature of how virtual environments behave, activation is required every time the software is run.

Installing the Software

You must run the Remark Classic OMR installation program in order to use the software. Install Remark Classic OMR on a fixed drive with at least 1GB of free disk space. To scan into Remark Classic OMR, you must install the software on the same system to which the scanner is attached. Before installing the software, make sure you are an administrator on your computer. Each single license of the software can only be installed on a single computer.

If you are upgrading to the latest version of Remark Classic OMR from an earlier version, do not install the software in the same directory as your previous version. Once the installation is complete, you can copy information from your old installation that you want to use in the new version (e.g. form templates, data, etc.).

- **Note:** Form template files, RMK/RMX data files, answer keys (AKY) and survey definition files (SDF) are not backwards compatible. Remark Classic OMR converts these files from previous versions of the software automatically. However, once a file has been converted, it cannot be opened in a previous version of the software. Always make copies of these files before converting them.

To install Remark Classic OMR

1. Double click the file you downloaded when you purchased the software.

2. Follow the on-screen instructions to display the **Remark Classic OMR Installation** window.

   - **Note:** The .NET 4.6.1 Framework is required to install Remark Classic OMR. If you do not have it installed on your system, you are prompted to install it. Once the .NET Framework installation completes, the Remark Classic OMR installation resumes normally.

3. Follow the on-screen instructions to complete the installation. You are prompted for a serial number and authentication code. You can find this information in the email that you received when you purchased the software.

4. Some operating systems may ask whether you wish to install the software for all users or only the person currently logged into the computer. In most cases, and especially if multiple people use this computer and need to use Remark Classic OMR on this computer, you should choose the option for "all users."

5. When the installation completes, click the **Finish** button to close the installation program.

Please retain the download in case you need to reinstall the software in the future. Once the installation completes, you may run the software. When you first run the software, folders are created in your Documents folder under Remark Classic OMR for you to store files for use within the software (using these folders is optional).

Software Activation

Remark Classic OMR requires activation in order to run on your computer. Activation means that the copy you have installed is licensed to the computer. *Once the software is activated, it cannot be installed on another computer without deactivating it from the current computer.* You may activate your software over the Internet (recommended) or through a manual (offline) method.

The first time the software runs it attempts to activate. If you are connected to the Internet, the activation is seamless. It will connect to the server to ensure that the license is not already in use, and then activate automatically. There is nothing else you need to do. Note that the software also validates activation periodically.

Manual Activation

If you do not have an Internet connection, you can activate the license manually. You are provided with a "token," which is a file with a ".key" extension. You save that file and then take it to a computer with Internet connectivity. You upload the token, which activates your software. Then an activation key is returned to you to take back to the computer without Internet connectivity.

We strongly suggest printing the manual activation steps so that you can easily follow them.

Please use the following steps:

1. When the **Software Activation** Required window appears, click the link for **Want to activate manually?**

2. Under Step 1, click the blue "here" text to receive an activation token (file). Save the file on your computer or network.

3. Take this token to a computer with Internet access.

4. Log on to **https://activations.gravic.com**.

5. Upload the token from Step 2.

6. You receive an activation key in return.

7. Go back to the computer with Remark installed and click the link for **Do you have an activation key?**

8. Select the key from Step 6 and click **OK**.

The software is now activated. Note that the software also validates activation periodically so you may need to repeat these steps if the computer running Remark is always offline (not connected to
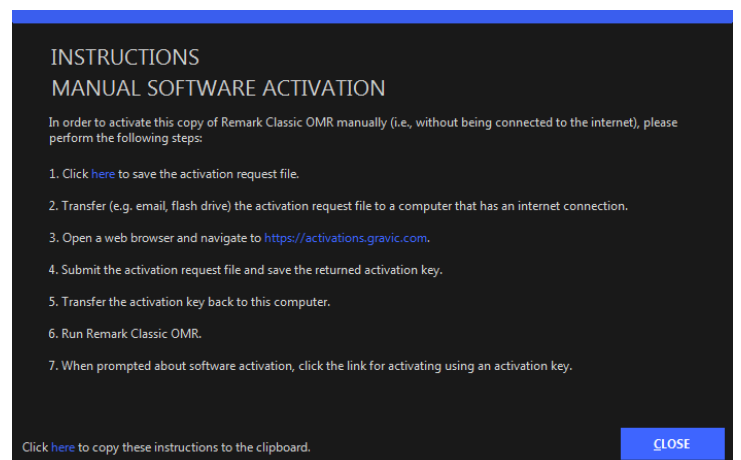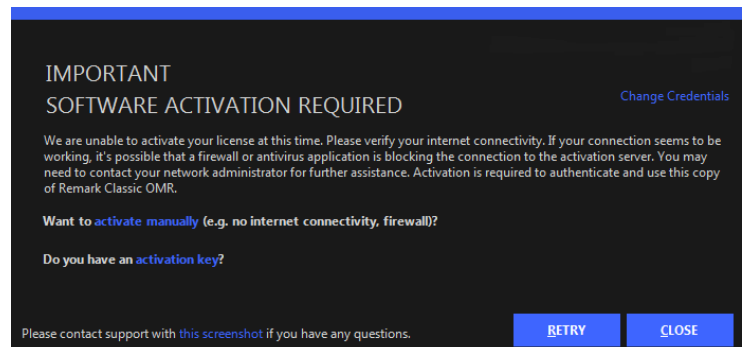
the Internet). In this case, you receive messages that you need to activate. There is a Software Activation link under the Help menu that you can access to perform the same steps above.

Transferring a License

The software license agreement states that any one copy of the software can only be installed on one computer. If you need to transfer your software to another computer, you may deactivate the license on one computer and then activate the software on the new computer. Transferring a license typically occurs when something happens to your computer and you acquire a new one, or when the person using Remark leaves and you need to assign the license to a new person. Note that once a license is deactivated on a computer, it cannot be activated on that computer again. You will need to contact Remark Support in this case.

To Transfer a License:

1. Install the software on the new computer.

2. Run Remark. You are prompted that a message indicating there are no activations available. Click the link for **Want to transfer your license?**

3. A list of previous activated computer(s) is presented. You can choose to deactivate the license from a computer in the list and activate it on the current computer. This action is most likely if you reformatted your computer or received a new computer. If you do not recognize the computer(s) listed we recommend contacting your IT department to ensure that you deactivate the proper computer. Once a computer is deactivated, Remark will no longer run on that computer.

   - **Note:** Scantron Support cannot help you decipher the list of activated computers, as this is internal to your organization. If you are unsure what to deactivate, you must contact your internal IT help desk to assist you.

4. Read the warning that states **I understand that Remark Classic OMR will no longer run on my old computer** and then mark the checkbox next to it to accept this statement.

5. Click the **Transfer** button.

The license is now transferred to the new computer. After a few seconds, Remark Classic OMR will run on your system. The software is now inoperable on the old computer and can be uninstalled (if available).
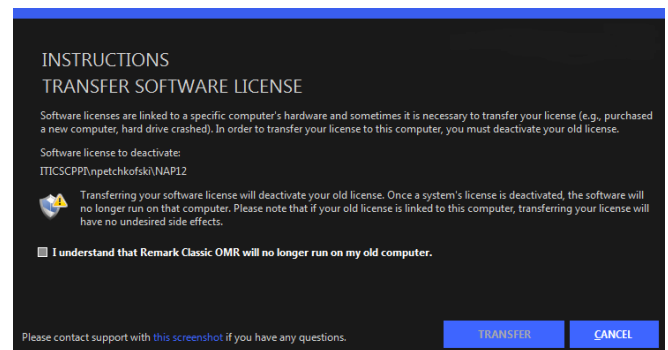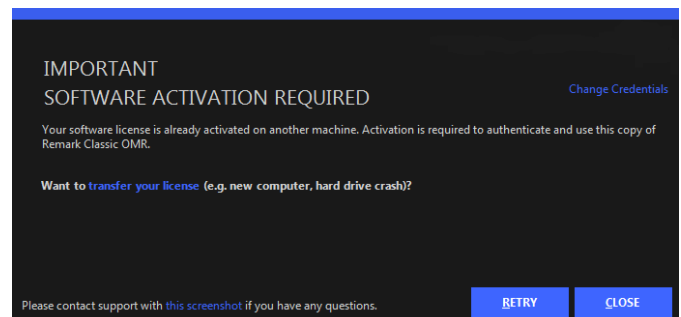
Chapter 3: Setting up Your OMR Scanner

Overview

This chapter provides general information about OMR scanners and how to configure your scanner in Remark Classic OMR. You should already have your scanner connected to your computer and, if necessary, the drivers installed that allow the scanner to work before attempting to use your scanner with Remark Classic OMR.

OMR Scanners- General Information

An OMR scanner is a peripheral device attached to a computer that is used to scan paper-based documents, such as standardized tests, evaluations and other form types. OMR scanners come in two basic types: hand feed and automatic feed. You feed sheets through a hand feed scanner one at a time. An automatic feed scanner can handle batches of sheets at one time. Some scanners connect to the computer with a serial cable and some connect using a USB cable (a driver is typically required for a USB connection). If your scanner uses a serial connection and your computer does not have a serial port, you may need to purchase an adapter. Please contact your scanner manufacturer for recommended adapters.

OMR Forms

OMR forms are created specifically to be read by OMR scanners. For this reason, these forms are created to very precise specifications. It is important to Review these concepts here before you begin scanning forms.

Aside from the bubbles on the form, the two major characteristics of an OMR form are the **Timing Marks** and the **Columns**.

Timing Marks

Timing marks are small, black marks that signify the vertical position of each row of data on the sheet. These marks are placed along the edge of the form and indicate the presence of mark information to the OMR scanner.

Columns

Columns refer to the number of columns (sometimes called channels) that are contained on the form. OMR scanners can typically read either 12 or 48 columns, although 5, 14 and 40 are also possibilities. Each mark on the form lines up with a timing mark and a column. See your OMR scanner's documentation for the specifications for your model.

The following example shows the typical layout of timing marks and columns on a form. The timing marks go down the left side of the form and the columns are numbered from left to right. The actual bubbles for each field on the form could correspond with any combination of timing marks and columns (e.g., a region on the form may be present beginning with timing mark three and column five).

Column 1   Column 48
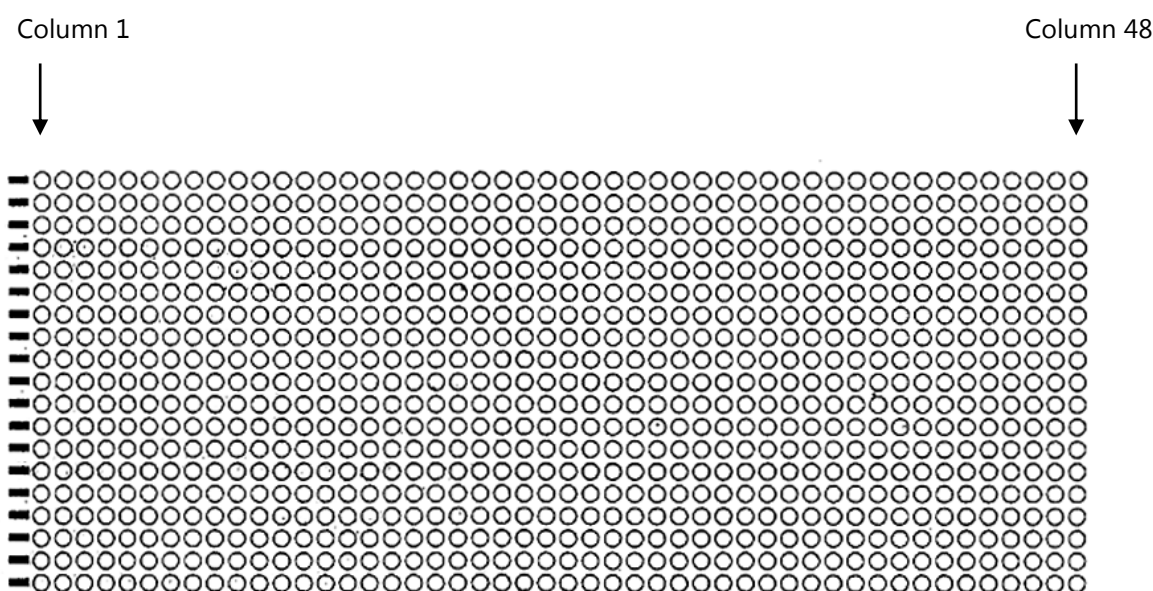
Selecting Your OMR Scanner

Remark Classic OMR currently supports several OMR scanners. To use an OMR scanner with the Remark Classic OMR software, you must first select your OMR scanner from the list of supported OMR scanners. Please note that if your scanner requires a separate driver to operate, you must install that driver prior to using the scanner in Remark Classic OMR. Please see your scanner documentation for assistance with drivers and installation.

To select your OMR scanner

1. From the **Remark Classic OMR Data Center**, select the **Tools** menu and then click **OMR Scanner**.
2. Click the **Scanner Type** down arrow to display a list of available scanner types. Choose the scanner you are currently using.

Based upon your scanner selection, default settings are displayed. You may change the settings if it is appropriate to your system's setup. The following table details the scanner options:

Area	Options	Meaning
	Scanner Type	Shows the available OMR scanner models.
Scanner Settings	Recognition Threshold	Sets how leniently or strictly the software interprets the marks. This setting specifies a value at which a mark is considered filled.
	Mark Discrimination	Sets the value that determines the difference between two marks that are filled or partially filled, as in the case of erasures.
	Discrimination Cut-off	Sets the value at or above which any mark is considered filled regardless of how other marks in the region are filled.
	Erasure Threshold	Sets the threshold to use when determining if an answer was erased. Lower thresholds are less discriminate (will pick up more erasures) and vice versa. This information is used for changed answer reporting in Remark Quick Stats.
	Scanner Timeout	Sets the number of seconds for the scanner to respond before timing out.
	System Pause	Sets the amount of time in milliseconds (1/1000th of a second) that the system pauses to ensure that all internal OMR scanner operations are complete.
	Feeder option installed	Mark this checkbox if your scanner has an automatic sheet feeder.
	Duplex option installed	Mark this option if your scanner has duplex capabilities, meaning it can scan both sides of a sheet of paper in one pass through the scanner.
	Select stacker installed	Mark this option if your scanner has a select stacker installed (sometimes referred to a reject stacker or reject hopper). The select stacker is a separate tray where forms containing problems reside (e.g., if a form is scanned but cannot be recognized).
	Transport printer installed	Mark this option if your scanner has a printer.
	Barcode option installed	Mark this option of your scanner has a barcode reader.

Area	Options	Meaning
	SelfScore option installed	Mark this option if your scanner can run in SelfScore mode (where grading is handled on the scanner using the scanner's panel).
COM Port Settings	Port Number	Use this setting to select the com port number on the computer to which the scanner is connected. If your scanner is connected via a USB converter, there will still be a com port listed.
	Baud Rate	Use this setting to set the default data transfer rate. This setting controls the speed of the transfer of data.
	Data Bits	Use this setting to set the default value for data bits, which are the smallest unit of information on the computer. Information is gathered by combining data bits into bytes of information.
	Parity	Use this setting to set the parity, which is an error detection method used to verify the integrity of individual characters in the data being transferred.
	Stop Bits	Use this setting to set the default value for stop bits, which are bits that indicate that a byte has just been transmitted. Every byte is preceded by a start bit and followed by a stop bit.
	Flow Control	Use this setting to set the default value for flow control, which is the process of adjusting the flow of data from one device to another to ensure that the receiving device can handle all of the incoming data.

- **Note:** Once you select your scanner model, the default settings are often appropriate. You may just need to tell the software which options your scanner has installed.

3. Mark the appropriate options for your scanner. The settings you choose for the COM port must match the settings on the scanner exactly. Some scanners require you to manually configure or run configuration sheets through the scanner in order to establish settings. Please use your scanner's user's guide for configuration steps. Once the scanner is configured, use the same settings in Remark Classic OMR.

4. Click the **OK** button to save your scanner setup options.
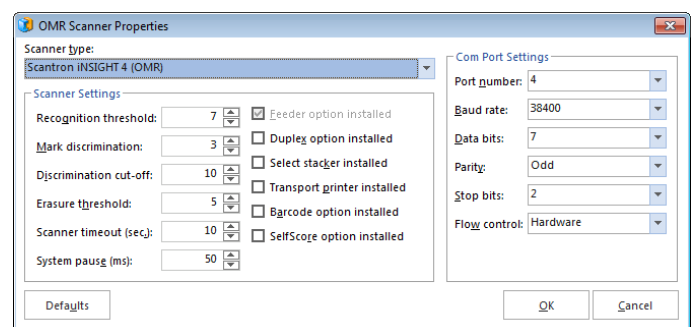
- **Note:** Once you have selected your scanner, clicking the **Defaults** button sets the scanner's properties back to original software installation state.

You are now read to scan forms or if necessary, create a template in the Remark Classic OMR Template Editor. Go to Chapter 5 if you need to create a form template for your form. If you already have a form template for your form, you may go to Chapter 6 to learn how to scan filled in forms.

- **Tip:** Many standard forms already have form templates in the software. Check the Templates folder of your Remark Classic OMR installation directory to see the form templates that ship with the software (the default path \MyDocuments\Remark Classic OMR 5\Templates).

Chapter 4: Template Editor

Template Editor Overview

The Remark Classic OMR Template Editor is used to create form templates for the forms you process in Remark Classic OMR. You must create one form template file for each form that you process with the Remark software. The form template file defines all of the information needed for the software to process your form correctly. Once a form template is created, the form can be used as often as desired without needing to create a new form template (as long as the form does not change).

Remark Classic OMR contains pre-defined form templates for many commonly available forms. If your form does not have an associated form template, you need to make a form template in order to use the form. If a form template already exists for your form, you do not need to use the Template Editor at all. You can skip to Chapter 5, Scanning Forms, and start scanning your forms.

- **Tip:** Before attempting to use the Template Editor, check to see if your form already has a template created. By default, form templates are installed in this location: \MyDocuments\Remark Classic OMR\Templates. If you see folders that contain form templates you do not use, please do not delete the folders; this will force Remark Classic OMR to try to reinstall them when you next run the software.

Form templates are created by looking at the physical form and then recreating the bubble areas in the Remark Classic OMR Template Editor. You use the mouse to drag boxes (called regions) around the marks (e.g., bubbles) and other areas you want to have recognized on your form. These regions tell the software where each piece of information you want to capture is located on the page and other pertinent information about the form. They also tell the software what type of data you need the software to output from each area.

Important Keyword:
Region: A region is an Input, Barcode, or OMR area that you define. A single OMR region can contain one or more questions.

The Remark Classic OMR Template Editor contains two basic components that you use to create and Edit your form templates. The left portion of the template Editor window contains a tree view (an item list) with nodes representing each region in your template. The right side of the window contains a visual representation of your form. You may use the tree view and the form representation area to work with your form template. Each region in the tree view contains the properties of that region, which are accessed by double clicking the region. You may think of a region as a question or item on your form. You may also double click within a region in the page representation area to view the region's properties.

Once the form template is created, use the **File** menu to save it (it will have a .rco file extension). Form templates can be shared among Remark Classic OMR users if you process the same form types.

Creating New Templates
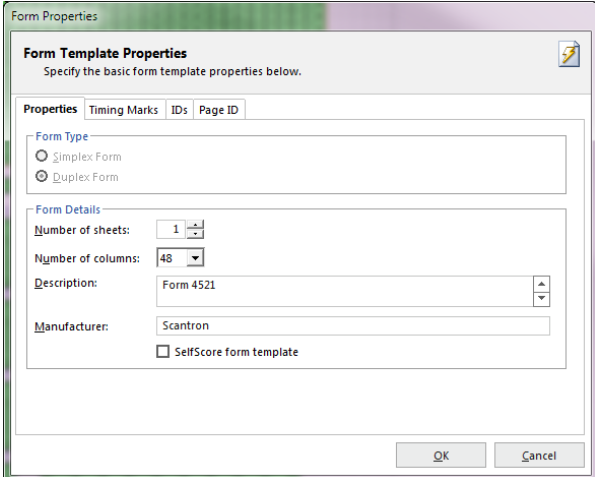
Form templates are created in the Remark Classic OMR Template Editor. There are two main ways to access the Template Editor to create a new form template:

1. From the **Remark Classic OMR Data Center**, select the **file** menu and then click **New Form Template**. Alternatively, with the **Templates** tab selected in the task pane, click **New form template**.

2. From your **Windows Start** menu, click **Start|Programs|Remark Classic OMR|Remark Classic OMR Template Editor**.

To create a new form template

1. From the **Remark Classic OMR Template Editor**, select the **file** menu and then click **New**, to begin a new form template. The **Properties** window appears.

2. Click the **Next>>** button to get started.

3. In the **Form Type** section, choose **Simplex Form** or **Duplex Form**. A simplex form contains a single sided sheet or sheets and a duplex form contains a double sided sheet or sheets. Here are some examples of form types:

   - One sheet of paper with OMR marks on one side is a simplex form with one sheet.
   - One piece of paper with OMR marks on both sides is a duplex form with one sheet.
   - Two pieces of paper with OMR marks on both sides is a duplex form with two sheets (this is often in booklet form).

5. In the **Form Details** section, choose the **Number of Sheets** and the **Number of Columns** in the form. The number of sheets corresponds with the how many pieces of paper the form contains (not the number of sides). For example, a one page duplex form would have one sheet with two sides.

6. In the **Form Description** box, enter a brief description of the form, if desired.

7. In the **Form Manufacturer** box, enter the name of the form manufacturer, if desired.

8. If this form template will be used to scan in SelfScore mode (specially equipped scanners only), mark the checkbox titled **SelfScore form template**.

9. Click the **Next>>** button to continue.

The **Step 2** window appears.

10. If all of the sheets within the form have the same number of timing marks, mark the checkbox for **Pages Contain the Same Number of Timing Marks** and then enter the number of timing marks on the form. If each sheet has a different number of timing marks, deselect the checkbox and type in the number of timing marks on each side of each sheet.

11. If your form does not contain page ID marks or respondent trackers, click the **Finish** button and proceed to the next section. Otherwise, click the **Next>>** button to continue.

The **Step 3** window appears. This window allows you to specify page ID marks and/or respondent trackers (lithocodes) if either is present on your form. Page ID marks are used to identify a sheet within a form. A respondent tracker, often called a lithocode, is used to identify a particular respondent. A respondent tracker can be an OMR region or a barcode. In order to use respondent trackers, you must have a multi-sheet form. You can use respondent trackers and page ID marks independently or together. If you use a page ID mark in conjunction with a respondent tracker, Remark Classic OMR can identify specific sheets as belonging to a specific respondent when reading forms. This feature is useful when scanning multi-page forms, such as booklets. If the pages are scanned out of order, the software is able to collate the data together based on the page IDs and respondent trackers.

12. If identifying a page ID mark, mark the checkbox for **Page ID Mark Present**.

13. Select whether the page ID mark is oriented by **Column** or **Row**. The specific information about the mark's location changes depending on its orientation.

14. Enter the information about the page ID mark's location (e.g., location row or column, start row or column and end row or column). You will be able to specify specific locations in the next step. Use caution when entering the end column. If you instruct the software to read all the way to the end of the form, any stray marks in that area can be picked up, causing the page not to be recognized. It's advisable to use an End Column that is one after your last page ID mark.

15. If identifying a respondent tracker, mark the checkbox for **Respondent tracker present**.

16. Mark the checkbox for **Display Respondent tracker in grid** if you would like the data from the respondent tracker to be visible in the data grid during form processing.

17. Select the type of region being used for the respondent tracker in the box titled **Recognition type.** This region can be an OMR region or a barcode region.

- **Note:** If using an OMR region as a respondent tracker, the OMR region must output a single piece of data.

18. If the form you will be scanning has a read head test row (a sequence of marks that tests the read heads on the OMR scanner), mark the checkbox for **Read head test in row** and then enter the row number in the adjacent box. If your form does not have a read head test row, you may skip this step (it is not common).

19. Click the **Next>>** button to continue.

The **Step 4** window appears. This window allows you to select properties pertaining to the page ID marks.

20. Select the column(s) that contain the page ID marks.

21. If scanning a double sided form, mark the checkbox for **Sheets have the same page ID values on both sides** if the page ID marks are identical on both sides of the sheet. If the same page ID marks are not present on all sides of all sheets, deselect this checkbox and place checkmarks in the appropriate columns where the page IDs are located on each sheet.

22. If you have chosen to use respondent trackers (lithocodes), click the **Next>>** button and go to step 22. Otherwise, click the **Finish** button to complete the **Form Template Creation Wizard**.

23. If you are using respondent trackers, the **Step 5** window appears. In the **Template sheets containing respondent tracker regions** area, select the location of the respondent trackers on the various sheets. Respondent trackers do not have to be present on each sheet. The default options for duplex forms are: **All the odd numbered sheets** or **All the even numbered sheets** and. The default option for simplex forms is **All sheets**. You may also enter custom locations by selecting the **Custom** option button. If using custom locations, enter them in the **Respondent Tracker Present** grid on a per sheet basis.

24. Click the **Properties** tab to enter properties for the respondent trackers. This information tells the software where to locate the respondent tracker on the form.

25. In the box titled **Region Name**, enter a name for the region. The default name is Respondent ID but you may enter a different name.

26. In the **Region Options** section, choose a region type.

   • If the respondent tracker region is an OMR region, it must output a single piece of data. Therefore, you are limited to the **Grid**, **Add** and **Binary** region types.

   • If the respondent tracker is a barcode region, you can choose the **Text** or **Numeric** data type and enter the **Measurement Options** for the barcode. Barcodes must be vertical in orientation.

27. If using an OMR region, select the orientation in the **Orientation** drop-down box. Orientation can be by **Row** or **Column**.

28. In the **Region Size** section, enter the location of the respondent tracker region. Enter the following information: **Start column**, **Number of columns**, **Column gap**, **Start row**, **Number of rows** and **Row gap**. This information translates to the location of the region on the paper form.

   • **Note:** Specific properties of regions are described in greater detail later in this chapter. If you require more information about region types and region sizes, please refer to the next section.

29. Click the **Finish** button to complete creating your template.

Remark Classic OMR opens a window with a tree view (item list) on the left and a visual representation of your form on the right. In this window you outline the areas to be recognized.

Region Types Overview

There are three types of regions you can create. A region is an area on the form for which you want Remark Classic OMR to recognize and output data.

OMR (Optical Mark Recognition) Regions:

OMR regions are used to capture marks, such as bubbles and checkboxes, on your form. Marks can be used to collect many varying types of information, ranging from multiple choice questions to ID numbers to names.

How are they represented?

Bubbles or checkboxes, often used for answering multiple choice questions, filling in names and codes, etc.

Barcode Regions:

Barcodes are used to encode just about any desired information, ranging from names to ID numbers to other demographic information.

- **Note:** Barcode support is not currently supported if using OMR/Imaging as your scanner source.

How are they represented?

Vertically positioned on a form, often to capture demographic and descriptive information.

Input Regions:

Input regions allow you to manually enter information into your data set. For example, you can use Input regions to capture handwriting from comment areas and other open ended questions. The software does not automatically interpret handwriting, but it does allow you to hand enter the written information.

How are they represented?

An area for handwritten text, or other information that cannot be automatically converted to data.

OMR Regions

An OMR region is an area on the form containing OMR bubbles, checkboxes, or some other complete shape. The respondent darkens the marks that correspond with his or her answer choice. Each OMR region contains a specific number of rows and columns. A single OMR region can contain one or more questions. When an OMR region is created, you must specify certain properties pertaining to the region, including the size of the region, the type of region and what output (data) Remark Classic OMR should generate.

Types of OMR Regions

There are seven types of OMR regions. The most commonly used regions are:

- **Multiple Region:** A Multiple region designation is used for multiple-choice style questions. These questions can allow a single response or multiple responses. One Multiple region may contain more than one question, depending on how the marks are arranged on your form (e.g., a test answer sheet with rows of questions).

- **Grid Region:** A Grid region designation is used for questions where the output from the rows and columns of bubbles represents one piece of data. The respondent typically fills in several bubbles that make up one response (e.g., student ID numbers, names, social security numbers).

The less commonly used regions are:

- **List Region:** List region designation is used for regions that contain multiple choice style questions, but the response bubbles are not contained in a single row or column. Each bubble has a unique output value.

- **Add Region:** An Add region designates a region where the values of all of the chosen OMR bubbles are added together to produce one value. You can assign individual values to each answer choice (or mark on the form).

- **Boolean Region:** A Boolean region designation is used when you want a user-defined value (e.g., Yes) to be output if an answer choice is selected and another user-defined value (e.g., No) for answer choices that are not selected. Each response is output to a separate cell in the data grid during form processing. In comparison, when you use the Multiple or List region types for questions that allow multiple responses, Remark Classic OMR places the data in a single cell, delimited by commas. The Boolean region type is useful for questions that allow multiple responses but for which you need the data in separate cells.

- **Binary Region:** A Binary region designation is used when you want a pre-defined value (1) to be output if an answer choice is selected and another pre-defined value (0) for answer choices that are not selected. Binary regions output all responses to one cell.

OMR Region Orientation

The region orientation property determines how the region is laid out: by column or by row.

Column: Regions oriented by column contain questions that are positioned on the form in columns when the sheet is viewed in portrait position with the timing marks on the left.

Example:

■　　ⓐ
■　　ⓑ
■　　ⓒ
■　　ⓓ
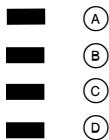
Row:　　　　Regions oriented by row contain questions that are positioned on the form in rows when the sheet is viewed in portrait position.

Example:

■　　ⓐ　ⓑ　ⓒ　ⓓ
■　　ⓐ　ⓑ　ⓒ　ⓓ
■　　ⓐ　ⓑ　ⓒ　ⓓ
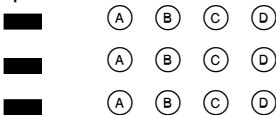
Creating an OMR Region

There are two ways to create any region type:

Toolbar: Click the **OMR** toolbar button. This option creates a new OMR region after the item you currently have selected in the tree view (question list).

Menu: Click the **Region** or **Page** menu (depending on your selection point) and then choose either OMR Region After or OMR Region Before, depending on where you want the region placed in the tree view (question list).

Remember that the order in which the regions appear in the tree view is the order in which they are read during form processing.

To Create an OMR Region

1. Use one of the methods mentioned above to begin inserting an OMR region. If you insert from the menu you are immediately presented with the OMR Region Properties window. If you insert from the tree you first drag a box around the area on the form where the marks are present (if it is not drawn perfectly, you can make corrections in the properties window).

The **Properties** window appears. Learn more about how to [define an OMR region](#) by continuing to the next section.

Defining an OMR Region's Properties

Once you have inserted an OMR region, the **Properties - OMR Region** window appears. The following table contains a brief summary of the OMR region properties.

Property	Function
Region name	A name assigned to an OMR region. Region names are used as grid column headers in the data grid window and are exported when saving data to common file formats. Region names are limited to 60 characters.
Type	The type of OMR region being described. Region types include: *Multiple-* indicates a region containing multiple-choice questions. *Grid-* indicates a grid or matrix of marks (bubble, checkbox) that equates to a single piece of data (e.g., student ID number). *List-* indicates a region where each mark is assigned a unique output value, but the marks are not contained in a single row or column (e.g., a list of answer choices). *Add-* indicates a region where the values for each of the answers that are filled by the respondent are added together to produce a single value for numeric data, or concatenated together for textual data. *Boolean-* indicates a region where a user-defined value (e.g., Yes) is output for filled responses and another value (e.g., No) is output for non-filled responses. Boolean regions output one piece of data for each mark (answer choice) in the region. *Binary-* indicates a region where a value of 1 is output for filled responses and a value 0 is output for non-filled responses. Binary regions output a string of responses (1s and 0s) to a single cell.
Orientation	Sets the orientation of the region in terms of columns and rows: Column- the region contains questions that are oriented in columns. Row- the region contains questions that are oriented in rows.
Start column	Sets the first column number in the region. Columns correspond to the column number on the paper form (1-48).
Columns in region	Sets the number of columns of marks contained in the region.
Column gap	Sets the distance between columns of bubbles in the region. If bubbles are right next to each other, this number is typically 1. If there is a one bubble gap between bubbles, the column gap is typically 2 (or -2 if working on the backside of the form).

Property	Function
Start row	Sets the first row number in the region. Rows correspond to the timing marks on the left side of the form. For example, if the first bubble in the region corresponds with the fifth timing mark, the start row is 5.
Rows in region	Sets the number of rows of marks contained in the region. Remark Classic OMR attempts to determine the number of rows in the region for you but you should check this value.
Row gap	Sets the distance between rows of bubbles in the region. If bubbles are right above one another, this number is typically 1. If there is a timing mark gap between rows of bubbles, the row gap is typically 2 (or -2 if working on the backside of the form).
Data type	Sets whether the data should be considered text or numeric when saved/exported.
Possible label scales	Sets a range of pre-determined values as output **Labels** (e.g., A-E or 1-5). Use this setting to quickly enter labels into the **Labels** grid as opposed to entering each label individually. Each mark on your form is represented by a label. The label is the output when the filled in form is processed. Note that only label scales corresponding to the number of answer choices you have selected appear in this list.
Labels	Sets the output data that appears in the data grid when reading forms. Each mark on your form is represented by a **Label**. The **Label** is the output when the filled in form is processed. You cannot use the following reserved characters in the list of labels: commas, quotation marks, semicolons or parentheses. Enter labels carefully because once you have processed data, you cannot change your labels without reprocessing your forms.
Values	Use this setting to associate a numeric value with each textual answer choice (label). Values are used for calculating statistics for responses that are set to the textual data type. Values are also used when saving to the SPSS file format.

Note: Values are not used as point values when grading tests. You cannot use them to assign partial crEdit to individual answer choices when performing test grading. If you need to assign partial crEdit, use Advanced Grade.) |
| Possible value scales | Sets a range of pre-determined numbers as **Values**. Use this setting to quickly enter **Values** for each of your textual output Labels into the Values grid as opposed to entering each **Value** individually. |
| Scale | Saves a scale of user-defined labels and values as output **Labels** that you can save and use over again (e.g., Excellent, Good, Fair, Poor). Click the **Save Current Scale** button after entering your labels in the **Labels** grid to save the scale for future use. |

Property	Function
Define Format	The **Define Format** feature applies to Grid OMR regions only. Mark this checkbox to enter a pattern for the data that is output during form processing. The default setting (*) indicates that the characters are displayed one after the other with no separators. The * is a placeholder for your data. You may change this pattern to enter items such as slashes for a date, decimal points, etc. Enter the appropriate character in the proper position (e.g., for a date: **/**/****).

5. In the **Properties** window, enter the appropriate properties for the region, as described above. There are additional advanced features that may be defined.

6. Click the **OK** button to create the region.

After creating an OMR region, you can see the region in the page representation area and a new node is added to the tree view. Each OMR region in the page representation area is shaded in gray or yellow to differentiate the regions. A selected region is outlined in red.
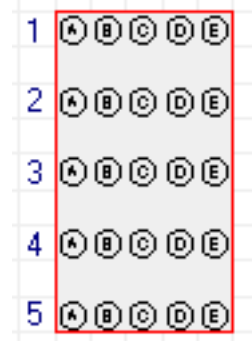
Combining OMR Regions (Linking)

Marks that are separated by text, lines or graphics cannot be selected in one region definition. When creating an OMR region in an area that contains items such as text or lines, you can only select the marks. The Add Linked Region function allows you to link these types of marks into one OMR region. OMR region types that can be linked include Multiple, Grid, List, Binary and Add. The following is an example of a question layout that would require a linked OMR region:

What is your gender?

O   Female   O   Male

The marks (bubbles) are separated by the response text in between them, but are still logically considered one question. However, you cannot select the word "Female" within your OMR region. Therefore, you create a region around just the mark for Female and then link the mark for Male to the original region.

To use the add linked region function

1. Create an OMR region around the first region to be linked as if it were its own region (in the example above, you would select the bubble for "Female"). Enter all of the region details as previously described. For the region size, only enter what pertains to what you have defined so far (in the example, the region is only one row by one column at this point).

2. After defining the first part of the region, select the **Region** menu and then click **Add Linked Region**. The mouse turns into a crosshair.

3. Drag a box around the second area to be defined (in the example, you would select the OMR bubble for Male).

4. When you release the mouse button the **Properties** window appears. This window contains the same settings that were defined for the first part of the region that you selected. You need only define the **Labels** and **Values** (if desired) section of the window (unless the number of bubbles in each appended region varies, in which case you can adjust the number of columns or rows).

5. Make any necessary changes to the region definition and then click the **OK** button.

Regions that are defined with the Add Linked Region feature are automatically linked to the previous region. These regions are colored blue in the page representation window.

- **Tip:** Only regions of the same OMR type, data type and orientation can be linked. However, the columns/rows of marks do not have to have the same number of answer choices in order to be linked.

To make changes to a region that is already linked, first separate the regions by breaking the link, then make the changes and relink the regions. Many properties can only be accessed by first separating the linked regions.

To break a linked region

1. Use the tree view or page representation area to select one of the OMR boxes within the linked set you want to separate.

2. Select the **Region** menu and then click **Unlink**.

The regions are separated into individual OMR regions. If you need to make changes to the regions, Edit the regions and then relink them.

To relink regions

1. While holding down the **Shift** key, select each OMR region to be linked by either clicking its node in the tree view or clicking it in the page representation area.

2. After all regions are highlighted, select the **Region** menu and then click **Link**.

Barcode Regions

Remark Classic OMR can capture data from barcodes on your forms. In order to use barcodes, your OMR scanner must include a supported barcode reader. You must set the barcode guides on the barcode reader component of the OMR scanner so that they begin with the column containing the barcode. Remark Classic OMR then reads the barcodes that are in that column. Barcodes must be oriented vertically on the form. Consult your OMR scanner's documentation for specific information about the barcode reader function on your OMR scanner and any limitations on how many barcodes you may place on one form.

- **Note:** Most barcode readers allow for a certain number of barcodes per column. Check your OMR scanner's specifications for this information.

Barcodes are often placed on forms using stickers. Remark Classic OMR cannot determine how many barcode stickers are on a form and whether barcodes are missing. Therefore, if you are in this situation, it is advisable to create a barcode that reads "blank" and use it as a placeholder for the missing barcode. For example, suppose you are anticipating having five barcodes on your form. However, on some forms there are only four barcodes. Suppose the four barcodes are in positions 1, 2, 3 and 5 (the space allocated for the 4th barcode is not used). On the affected forms, put a barcode that reads "blank" in the space occupied by the 4th barcode. Otherwise, Remark Classic OMR will read the 5th barcode as the 4th barcode. By having the "blank" barcode, you can easily discern which barcode was missing.

Property	Function
Region name	A name assigned to a Barcode region. Region names are used as grid column headers in the data grid window and are exported when saving data to common file formats. Region names are limited to 60 characters.
Barcode orientation	Barcodes are always in vertical (top to bottom) orientation.
Data type	Sets whether the data should be considered textual or numeric when saved/exported.
Measurement	Sets the number of millimeters from the leading edge of the form to the leading edge of the barcode (used for Sekonic OMR scanners only).

There are two ways to create any region type:

Toolbar: Click the **Barcode** toolbar button. This option creates a new barcode region after the item you currently have selected in the tree view (question list).

Menu: Click the **Region** or **Page** menu (depending on your selection point) and then choose either Barcode Region After or Barcode Region before, depending on where you want the region placed in the tree view (question list).

Remember that the order in which the regions appear in the tree view is the order in which they are read during form processing.

To create a barcode region

1. Use one of the methods above to insert a Barcode region.

2. In the **Properties** window, enter the appropriate properties for the region on the Barcode region, as described above. There are additional more advanced features that may be defined.

3. Click the **OK** button.

After creating a Barcode region, a new node is added to the tree view. You do not see the region in the page representation area.

Input Regions

Input regions reserve space in the data grid for the manual insertion of text during or after scanning. Use Input regions to capture handwritten information (e.g., a person's name). You can manually type the information contained in the Input region into the data grid.

An Input region has the following basic properties:

Property	Function
Region name	A name assigned to an Input region. Region names are used as grid column headers in the data grid window and are exported when saving data to common file formats. Region names are limited to 60 characters.
Default fill	Sets a default entry to be used in the Input region. The information typed here is automatically output to the data grid when forms are processed.
Auto increment	When used in conjunction with Default Fill, Remark Classic OMR assigns the next value in the range you define to the Input region in sequential order. For example, you can enter the number 1 as the default fill and then mark the Auto increment fill value checkbox. Remark Classic OMR automatically places sequential numbers in the Input region during form processing.
Prompt me for the fill value at the start of the read session	Use this setting to enter a custom value for the image region at the time of reading the filled in forms. This fill value may be something that describes the forms you are processing. For example, if you are processing conference session evaluations, you could type in the name of each session and it is added to each data record.

29

Property	Function
Data type	Sets whether the data should be considered textual or numeric when saved/exported.

There are two ways to create any region type:

Toolbar: Click the **Input** toolbar button. This option creates a new Input region after the item you currently have selected in the tree view (question list).

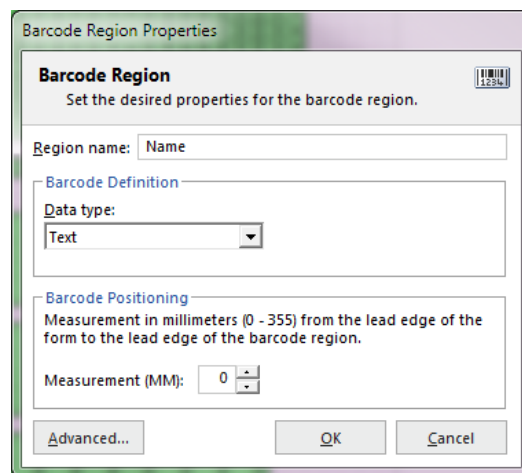**Menu:** Click the **Region** or **Page** menu (depending on your selection point) and then choose either Input Region After or Input Region before, depending on where you want the region placed in the tree view (question list).

To create an input region

1. Use one of the methods above to insert an Input region.

2. In the **Properties** window, enter the appropriate properties for the region, as described above. There are additional more advanced features that may be defined.

3. Click the **OK** button.

After creating an Input region, a new node is added to the tree view. You do not see the region in the page representation area.

Advanced Template Options

There are many advanced properties that can be set to Help you refine survey tabulation, test grading, form tracking and utilizing external databases for verification of information. Please read the following sections for more details.

Advanced Region Properties - General

Once you have defined the basics of a region, there are several additional options under Advanced, all of which are optional. You can set up these additional options when you create a region or go back into a region's properties at any time to make changes. To get to the advanced properties for any region, open the region's properties window and then click the Advanced button.

The **Advanced Region Properties - General** window allows you to adjust the following items:

Include Region in Read Operation

Remark Classic OMR allows you to set whether to read a region that has been defined. Most of the time, you want to read each region you define, thus this property is on by default. However, there may be an occasion where you wish to turn off recognition of a particular region for your application. You can deselect the **Include region in read operation** checkbox to exclude data from this region when

30

processing forms. If this checkbox is not marked the region exists in the form template, but no data is captured during form processing. This checkbox is on by default.

Required Item

Remark Classic OMR allows you to make items required to be filled during scanning. If an item is marked as required in the form template and you are using the Review Exceptions feature, Remark Classic OMR flags any items that are left blank. If you are using Review Exceptions during scanning, the scanning stops so that you may Review the unrecognized item. If you are using Review Exceptions after scanning, Remark Classic OMR includes the unrecognized item during the Review operation.

Question Text

Question text may optionally be added to make reports more meaningful. When question text is present, it is used on the reports to identify the question. If no question text is entered, the region names are used on the reports.

You may manually type question text into the question text grid or paste text from the Windows clipboard by using the keyboard shortcuts (Ctrl + V) or by double clicking a cell, then right clicking and choosing Paste from the menu. In order to paste information, you must first copy it from another location (e.g., a Word document). You may select multiple rows in the grid to paste multiple lines of question text. There is one grid row for each question you have included in the region.

Question Names

When defining an OMR region with multiple questions in the same region, you can specify individual question names for each question in the region. By using individual question names, it is easier to save data to existing databases and other file types that may already be set up with specific fields. If you want to enter individual names, deselect the checkbox for **Use default region names**.

By default, Remark Classic OMR uses sequential region names for each question in the same region. Sequential region names consist of adding numbers sequentially onto the region name you provide in the Properties - window. For example, if you enter a region name of Question, Remark Classic OMR calls the individual question names within the region Question1, Question2, Question3, etc.

In contrast, if you use the Question Names section of the Question Properties window to enter individual question names, you are able to customize the question name for each question within the region. Question names are limited to 60 characters each.

- **Tip:** The following characters are not allowed in region/question names due to the problems they could cause when exporting data to certain formats:

  . - Period

  ! - Exclamation

  ' - Singe quote

  [- Left bracket

  ] - Right bracket

  , - Comma

  " - Double quote

  (- Left parenthesis

) - Right parenthesis

31
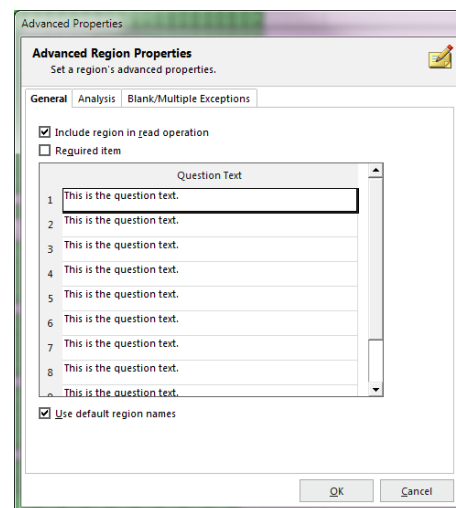
Advanced Region Properties - Analysis

Once you have defined the basics of a region, there are several additional options under Advanced, all of which are optional. You can set up these additional options when you create a region or go back into a region's properties at any time to make changes. To get to the advanced properties for any region, open the region's properties window and then click the Advanced button.

The **Advanced Region Properties - Analysis** window allows you to adjust the following items:

Test Settings

Choose whether or not to grade an item. By default, Multiple, Boolean and List regions have grading turned on by default. All other region types are off by default. In addition, if you are scoring multiple versions of the test you should have a region on the form that tells the software which version of the test is being scanned. You can mark the Designate as test version ID option to tell Remark Classic OMR to look at this region to determine each student's test version. You can then use the available multiple answer key scoring options in the Advanced Grade feature of the Data Center.

Survey Settings

Choose whether or not to include an item when running survey analysis in Remark Quick Stats. By default, Multiple, Boolean and List regions have tabulating turned on by default. All other region types are off by default.

Testing Point System

Questions can be designated as Objective or Subjective questions:

An **objective** question is one where respondents choose one or more pre-defined answers on a form by darkening in a mark (e.g., bubble). These questions are typically multiple choice or true/false questions. You may select the number of points to award for correct, incorrect and blank responses.

A **subjective** question is one that is open ended and must be graded by a teacher, such as an essay or short answer question. Remark Classic OMR cannot automatically read this type of question; however, you can include points from a subjective question when grading. First, place a region on the form where the teacher can enter the appropriate amount of points earned on the subjective portion of the test. This is typically an OMR region where the teacher bubbles in the points earned. Then designate the region as a subjective item in the form template. This region must be set to the numeric data type in order to use the region as a subjective region. When setting up your answer key, enter the maximum number of subjective points that can be earned. When grading, Remark Classic OMR displays the overall, objective and subjective scores.

Extra crEdit is available using the **All points awarded should be treated as extra credit** checkbox. This feature allows you to use Quick Grade to grade the tests and still designate a question as extra crEdit. When this checkbox is selected, any points awarded for the question are added to the total score (therefore it may be possible to score greater than 100%).

Analysis Respondent ID

You may also set a particular region as a Respondent ID region so that it can be used as an identifier on reports. This feature is useful when you are capturing items such as ID numbers or names. When set as a Respondent ID region, the resulting reports show the information captured in the region alongside of the results. For example, if you administer a test where the students enter their ID number, the grade report shows the ID number and then that student's grade. When exporting data to some gradebook packages, you may also be required to set a Respondent ID.

Note: Respondent IDs are included as identifiers in the analysis, but they are not tabulated or graded. In order to set a region as a Respondent ID, make sure it is set to **Do not grade this item** and **Do not tabulate this item**.

Advanced Region Properties – Blank/Multiple Exceptions

Once you have defined the basics of a region, there are several additional options under Advanced, all of which are optional. You can set up these additional options when you create a region or go back into a region's properties at any time to make changes. To get to the advanced properties for any region, open the region's properties window and then click the Advanced button.

The **Advanced Region Properties - Blank/Multiple Exceptions** window allows you to adjust the following items:

Blank and Multiple Exception Handling

When people fill out forms, inevitably they will mismark them by leaving questions blank, filling in too many responses or leaving stray marks or erasures that might be interpreted as filled bubbles. You can specify how Remark Classic OMR should handle blank, multiple and duplicate responses in OMR regions when processing forms and exporting data. The default settings are:

- Blank responses: The word BLANK is inserted for items that are not answered.
- Multiple responses: All responses are shown but flagged with green when more than one response is chosen and not permitted.

Color coding is also applied to the data grid, making the exceptions easier to locate: yellow for blanks and green for mults. Also by default, only one answer response is allowed. You can replace these values on a region-by-region basis. You may choose one of the default options listed or type in a custom value. The default options include Asterisk (*), Nothing, Space Character and Tilde (~). In addition, the word VOID is available for blank responses.

Additional Options for Blank Responses: For a blank response, you can choose how you want to flag the region. Sometimes there are intentional blank characters in grid regions, for example, that you wouldn't want flagged. Suppose you are capturing a name and allow 10 letters. If a person's name is only 5 letters, you wouldn't want the region to appear as blank because they only used half of the allotted characters.

Therefore, you have the following options available under Flag blanks:

- Always: If any character in the region is left blank, or the entire question is left blank, regardless of the replacement characters being used, the region is considered blank. Replacement characters, if used, are still utilized, but the region contains the yellow BLANK exception color.

- Ignore Leading/Trailing: If a leading or trailing character in the region is left blank, it is ignored. This allows you to capture data smaller than the allotted region without it being considered blank. You will see whatever data is captured and the region will not contain a yellow BLANK exception color. This setting applies to Grid regions only.
- Never: If any character within the region is blank, or the entire question is left blank, Remark Classic OMR ignores it. The region never appears with a yellow BLANK exception color in the data grid.
- Ignore Leading: If a leading character in the region is left blank, it is ignored. This allows you to capture data smaller than the allotted region without it being considered blank. You will see whatever data is captured and the region will not contain a yellow BLANK exception color. This setting applies to Grid regions only.
- Ignore Trailing: If a trailing character in the region is left blank, it is ignored. This allows you to capture data smaller than the allotted region without it being considered blank. You will see whatever data is captured and the region will not contain a yellow BLANK exception color. This setting applies to Grid regions only.

Additional Options for Multiple Responses: By default, questions only allow one response. If you wish to allow more than one response, you can choose the number of allowed responses in the Limit the number of multiple responses to drop-down list. If you set a limit, anything marked above the limit forces the question to be considered a multiple response and is flagged as such in the data grid. There is also an option to choose Select most filled response, which tells Remark Classic OMR to determine the mark it thinks is the most filled when two or more responses are detected. Use caution when using this option, as you will never see a multiple response for your Review.

Advanced Region Properties - Database Lookup

Remark Classic OMR has a Database Lookup feature that can: 1) verify that recognized data from a region appear in an external database, and 2) lookup and replace recognized data with additional fields from an external database. To use this feature, you link a region in the form template to an external database. As each form is processed, Remark Classic OMR verifies that the recognized data appear in the selected database field. If the data are not present, Remark Classic OMR flags the question as a Database Lookup error for correction. Database Lookup can be used with OMR, Input and Barcode regions.

This feature is useful for validating names, identification numbers, zip codes, etc. It is also useful for pulling information you have already collected out of a database and inserting it into your processed form data. When you set up a Database Lookup region, you tell the software what field to validate, and whether to replace the output with a field from the external database and/or append additional fields from the external database.

For example, suppose you are grading tests and you have the students fill in their ID numbers on the forms being processed. You could verify the ID numbers in a database to ensure the right forms are being

scanned, and then specify another value that corresponds to the ID number (e.g., a name). If the ID number is found in the database, Remark Classic OMR automatically displays the corresponding value (student name in this case) for that ID number in the data. When you run your grade reports, they are produced with each student's name, yet you did not have to type in that information (or have students bubble it in on the form).

To use database lookup

1. Create a region.

2. From the **Properties** window, click the **Advanced** button.

3. Click the **Database** tab.

4. Mark the checkbox for **Use Database Lookup**.

5. In the **Database Selection** area, use the **Type** drop-down list to select the type of database to which you want to connect this region (e.g., Access, Excel, etc.).

6. Click the **Browse...** button to locate and select the database file.

7. Select a file and then click the **Open** button (or double click the file name).

If using an ODBC connection, perform the Steps 7-9 (you need to obtain specific information from your database administrator to complete these steps). Otherwise, skip to Step 10.

7. [OPTIONAL]: Select your database type from the **DSN** drop-down list.

8. [OPTIONAL]: Select the appropriate checkbox to indicate whether your database is Directory or DSN based: **Directory based** or **DSN based**.

9. [OPTIONAL]: If your database utilizes password protection, use the **Username** and **Password** boxes to enter your login information. If the database is not password protected, you may skip this step.

10. In the **Lookup & Return** section, click the **Connect to Database** button to link the database to the region.

11. Use the **Table** drop-down list to select the table in the database containing the fields to which you are linking the region.

12. Use the **Lookup** drop-down list to select a field in the connected database to which you want to link this region. When the forms are processed, the respondents' answers are verified against the values in this database field. If the answer is found in the database field, Remark Classic OMR outputs the Replace value. If the answer is not found in the database field, Remark Classic OMR flags it for Review.

13. Use the **Replace** drop-down list to select a field in the connected database to return when the Lookup field is verified. If you only want to verify data and not replace it with anything else, use the same field in both the **Lookup** and **Replace** lists. If you want to look up the value and then replace it with a different database field's information, select the appropriate field in the Replace list.

35

If you would like to pull other data out of your database to include in your Remark data, continue with steps 14-17. This is a quick and easy way to get information out of the existing database and into your processed data without having to put on the physical form. Otherwise skip to step 18.

14. [OPTIONAL]: If desired, select database fields from the **Additional Return Fields** list to insert additional information from the database into the data grid during form processing. You may look up a field once but return several database fields' worth of information. Fields are listed in the data grid in the order in which they appear in the **Additional Return Fields** list.

15. [OPTIONAL]: If desired, use the **Return Names** column to specify region names for the **Return** fields. By default, the name is taken from the external database to which the region is connected. You may type a new name in the **Return Names** cell if desired.

16. [OPTIONAL]: Use the drop-down arrow to select **Yes** in the **Respondent ID** box to include the **Return** field in the reports as a respondent identifier. If this setting is set to **Yes**, the data collected from this region is used on the appropriate reports to identify the respondent.

17. Click the **OK** button to save the changes and return to the tree view.

When you process your filled in forms, Remark Classic OMR looks up the captured data in the database and if found, returns your Replace and Additional Return Field data. If the captured data does not match what is in the connected database, Remark Classic OMR flags it for your Review.

- **Tip:** If your database name or location changes once you have set up your database lookup, when you open the template in the Data Center for processing, you are prompted to restore the connection settings. Click here to learn more about this window.

Advanced Region Properties – Tracking

Respondent Trackers, or lithocodes, can be used during scanning to place all of one respondent's data together in a single data record. You designate a unique OMR or barcode region in the form template as your respondent tracker. Then, along with page ID marks, Remark Classic OMR matches data from the sheets scanned to their appropriate data records. Respondent trackers can only be used on multi-sheet forms and must be used with page ID marks.

Setting up a respondent tracker has two parts. The first part is to tell Remark Classic OMR that you are using a respondent tracker in the form template properties. This step is covered here. Once you hav e told the software you are using a respondent tracker, and entered information about the respondent tracker region's properties, the region is created automatically for you. You have successfully set up a respondent tracker at this point. If you need to modify the respondent tracker, you may use the instructions below.

To modify a respondent tracker

1. When setting up the form template, ensure you have entered the appropriate page IDs and respondent tracker information.
2. The respondent tracker region is created automatically for you. If you need to make changes to the field, continue. Otherwise, you have set up the respondent tracker field.
3. Open the properties for the Respondent tracker region.
4. If you need to make any modifications to the region's set up, do so in this window.
5. From the **Properties** window, click the **Advanced** button.
6. Click the **Tracking** tab. Use the Set as a respondent tracker (lithocode) region checkbox to turn on or off respondent tracking on this region.
7. Click the **OK** button twice to return to the tree view.
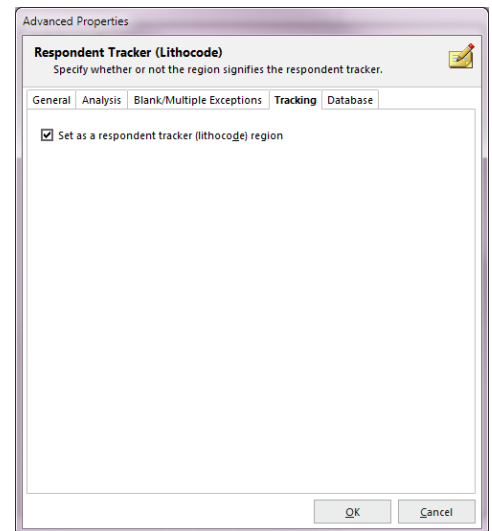
Editing Regions

Regions can be modified after they have been created in order to change properties such as region names, data types, orientation, labels, etc. If you select the entire region, you have access to all of the properties that are valid for that region.

- **Note:** Changing regions in a form template does not change data that have already been processed. To update data that have been read you need to process the forms again, or use the Find/Replace option to change the existing data to match the revised form template. Changing a form template can also invalidate Grade/Survey analysis files. If you have already created these files, it is recommended that you recreate them based on the current form template settings.

To edit regions

1. Double click within the boundaries of the region you want to Edit, or double click the item in the tree view, to display the **Properties** window.

2. Make the desired changes and then click the **OK** button.

3. Save the form template when finished Editing.

Working with Regions

Once regions are created, you can use basic Windows functions to make modifications, including:

- Drag/drop

- Cut, copy, paste

- Delete

There are various ways to access these basic functions, including the keyboard, menus and toolbar. You can use whichever way is comfortable for you.

Drag/Drop, Cut, Copy, Paste, Delete

When you create templates, the tree view (question list) on the left defines the order in which the regions are read when the forms are processed. If you need to rearrange the order, simply drag the regions into the right order. Holding Shift while you drag places the item before the selected item. Alternatively, you can cut a region and paste it elsewhere. You can also utilize the Windows copy function to create similar regions. When you copy a region, you need to then drag it to its proper location on the page representation. You can double click the copied region to make any adjustments to the properties. If you want to remove a region entirely, click the Delete button on the keyboard.

Chapter 5: Scanning Forms

Scanning Forms Overview

The Remark Classic OMR Data Center is used to process your filled in forms. You can scan forms directly into the software with an OMR scanner. When you process forms, you use a grid that is similar to an Excel spreadsheet. It utilizes all the familiar functions, such as:

- Cut, copy, paste

- Delete data or delete entire grid row

- Find and Replace

- Spell Check

- Sorting

- Freezing columns or rows

- Print

- Save/Save As

There are various ways to access these basic functions, including the keyboard, menus and toolbar. You can use whichever way is comfortable for you.

The *Read* feature is used to process filled in forms. Any problem areas are flagged for you with colors and special words, such as BLANK. You can click a cell to change a response or use the Review Exceptions feature for more automated data clean up. Once the data is cleaned, you can save it to various formats, including Excel, Access, SPSS, Oracle, SQL Server and CSV. You can also use Remark Quick Stats to grade tests and analyze surveys.

Scanning Forms

When scanning forms in the Remark Classic OMR Data Center, the software reads pages directly from an OMR scanner connected to the computer. Before attempting to read any pages from the scanner, turn on your scanner, ensure it is set up in Remark Classic OMR and open the form template that corresponds to your forms. (See Chapter 4 for information about setting up your scanner.)

To read pages from the scanner

1. In the **Remark Classic OMR Data Center**, open the correct form template.
2. Select the **Tools** menu and then click **Read**. Alternatively, you may select the **Read** link from the task pane or **Read** toolbar button.
3. The first time you read forms you should click the **Next** button to configure how scanning takes place. You can optionally skip this step on subsequent scans.

4. In the **Welcome** window, your scanner is listed. Beneath the scanner are the options you have indicated are installed on your scanner in the Scanner Properties window. The following options may be available to you depending on your scanner's capabilities:

Option	Description
Duplex scanning	You may use this option if your OMR scanner has duplex capabilities, meaning it scans both sides of the sheet in one pass through the scanner. If scanning a single sided (simplex) form, you do not need to turn off duplex scanning.
Barcode	You may use this option if your OMR scanner has a barcode reader.
Select stacker	You may use this option if your scanner has a select stacker (rejecter). When forms cannot be read, they are sent to the select stacker to be reviewed, without collecting data from them.
Printer	You may use this option if your OMR scanner has a printer. You can print certain items, such as score information and dates, on forms as they are scanned.
Grading/Scoring	You may use this option if your OMR scanner has grading capabilities built into the scanner. Grade-enabled scanners often print student scores on the forms as the forms are scanned (see your scanner manufacturer's documentation for information about scoring scanners).

Items in green are available and enabled. Items in red are not enabled. If you would like to change any of these options, click the **Scanner Properties** button (remember to click **OK** in the **Scanner Properties** window to return to the Read window). (Note you may only enable items that are installed on your OMR scanner.)

5. If your OMR scanner has a printer installed and you have indicated that you have a printer in the **Scanner Properties** window, you may optionally mark the checkbox for **Print on forms**.

- Use the drop-down list to choose an item to print or enter free form text. Click the Insert button. Note that scanners use print buffers and can print a limited amount of text. Therefore, choose your items carefully to ensure you do not select more text than can be printed with your OMR scanner. If there is too much text it is truncated during printing.
- Certain OMR scanners can print on the last two inches of the form only. In the **Print position** box, specify where to print the information on each sheet by entering a value of 0-63 for the start position (the number varies from scanner to scanner).

6. [Optional] If your OMR scanner has a select stacker (rejecter) and you have it enabled, you may click the **Next** button to configure the **Reject Sheets**. When the select stacker is enabled, forms that are not properly read are sent to the select stacker without any data being captured. You may Review the forms, correct any problems and rescan them if desired. The reject options are covered in detail here.

   - In the **Reject Sheets** window, specify whether to reject exception cases during the scanning process by marking the **Enable Reject Exceptions** checkbox.
   - In the **Reject Exceptions Options** area, mark the checkboxes for those cases that you wish to reject during scanning.

7. If you would like to configure **Review Exceptions** options (whether to stop scanning when exceptions are found), click the **Next** button to continue. Otherwise click the **Read** button to begin scanning pages, ensuring the pages are in the scanner.

   - **Note:** If desired you can click the drop-down arrow on the Read button and choose **Save** to have your Read settings saved as an Automation file (.RCEZ). The Automation Control Center is used to automate form processing.

8. [OPTIONAL] If you have an Input region on the form that is set to prompt for a fill value, when the read process begins, a window appears where you can type the desired value.

9. Remark Classic OMR continues scanning pages until the scanner's sheetfeeder (ADF) is empty.

10. After processing all of the pages, you are prompted to continue scanning. Click **Yes** to scan more pages or **No** to end the scanning process.
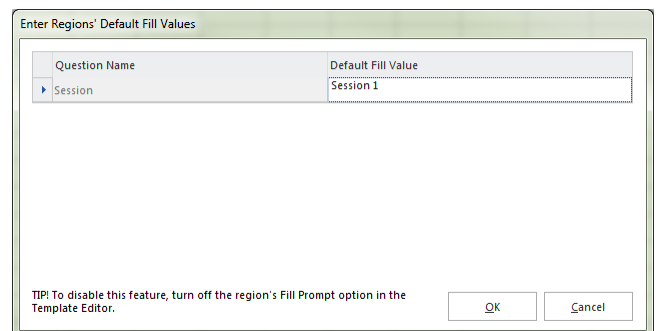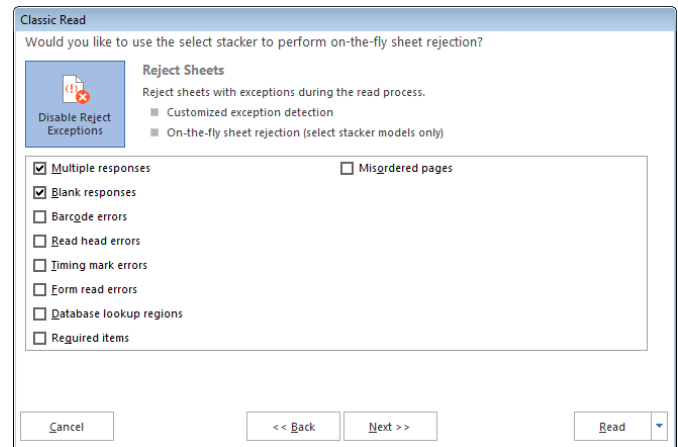
Once you have run through the Read window's configuration settings, you may optionally use the **Quick Scan** button on the toolbar for future scans with this template and all of your template's Read settings are utilized. We recommend returning to the Read window for any new templates you use to scan. If the Quick Scan button is not enabled, you may not have a scanner set up in the software (**Tools|Scanner Properties**).

- **Tip:** You can overwrite specific grid rows of data by highlighting the row(s) first and then initiating the read process.

Scanning Multiple Sheet Forms with Page ID Marks

If you have page ID marks on a form, Remark Classic OMR uses the page ID marks to know whether the correct sheet of the form is being processed. If the sheets are out of order, they are flagged with an error message. The page ID marks act as a sheet identifier. When you create a form template with page ID marks, you specify the location of the marks on the form so that Remark Classic OMR can identify the various sheets of each form that is scanned. In order to recognize different sheets within one form, the sheets must have different page ID marks. If the page ID marks are identical from sheet to sheet, Remark Classic OMR is able to tell if you are scanning the correct form, but it is not able to differentiate sheets within that form. In addition, you must keep all of the sheets belonging to one respondent together, unless you are also using respondent trackers.

To read multiple sheet forms with form ID marks

1. Open the correct form template in the Remark Classic OMR Data Center.
2. Place the completed forms in the scanner.
3. Select the **Tools** menu and then click **Read**. Alternatively, you may select the **Read** link from the task pane.
4. In the **Welcome** window, your scanner is listed. Beneath the scanner are the options you have indicated are installed on your scanner in the **Scanner Properties** window. If you would like to change any of these options, click the **Scanner Properties** button.
5. [Optional] If your OMR scanner has a printer installed and you have indicated that you have a printer in the **Scanner Properties** window, you may optionally mark the checkbox for **Print on forms**. (Printing options are covered in more detail here.)
6. [Optional] If your OMR scanner has a select stacker (rejecter) and you have it enabled, you may click the **Next** button to configure the **Reject Exceptions**. Otherwise click the **Read** button to begin scanning pages. When the select stacker is enabled, forms that are not properly read are sent to the select stacker without any data being captured. You may Review the forms, correct any problems and rescan them if desired. Detailed information select stackers is found here.
7. [Optional] If you would like to configure **Review Exceptions** options, click the **Next** button to continue. Otherwise click the **Read** button to begin scanning pages. Review Exceptions is a way to correct exception cases found on forms, such as blank and multiple responses. (Review Exceptions is covered in more detail here.)

- **Note:** Review Exceptions can also be run after all the forms are scanned if you prefer not to stop scanning when problems occur.

8. Click the **Read** button to begin scanning pages.

Remark Classic OMR reads forms until it cannot interpret the page ID mark or until all pages in the scanner are scanned. The software alerts you to an incorrect sheet, at which time you have several options, depending on how you are set up. If using a select stacker and rejecting misordered pages and form read errors, any sheets that are scanned out of order are simply be sent to the select stacker. Upon scanning completion, you can View a log of showing why sheets were rejected. If you are not using a select stacker, you receive a message that the sheet cannot be identified and when you click the OK button, you can decide whether to continue scanning. In either case, you can remove the sheet and replace it with the correct sheet and then click **Yes**. Or, you can remove the sheet and then move onto the next sheet by simply clicking **Yes**. To stop scanning all together, select **No**. To View the reject log, click **View Log…**. (The reject log can also be accessed any time by clicking **Tools|View Reject Log**).

Reading Multiple Sheet Forms with Respondent Trackers

Page ID marks alone act as sheet identifiers, but with the addition of respondent trackers (lithocodes), you can also keep respondents' data together. A respondent tracker acts as a respondent ID and must be used in conjunction with page ID marks, which act as sheet identifiers, as explained in the previous section. If you have respondent trackers and page ID marks on your form, you can scan forms in any order and Remark Classic OMR is able to match sheets using the page ID marks and respondents to the appropriate record using the respondent trackers. Respondent trackers can be OMR or barcode regions. Setting up respondent trackers in your form template is covered [here](#).

1. Open the correct form template in the Remark Classic OMR Data Center.
2. Place the completed forms in the scanner.
3. Select the **Tools** menu and then click **Read**. Alternatively, you may select the **Read** link from the task pane.
4. In the **Welcome** window, your scanner is listed. Beneath the scanner are the options you have indicated are installed on your scanner in the **Scanner Properties** window. If you would like to change any of these options, click the **Scanner Properties** button.
5. Click the **Next** button to continue.

6. [Optional] If your OMR scanner has a printer installed and you have indicated that you have a printer in the **Scanner Properties** window, you may optionally mark the checkbox for **Print on forms**. (Printing options are covered in more detail here.)

7. [Optional] If your OMR scanner has a select stacker (rejecter) and you have it enabled, you may click the **Next** button to configure the **Reject Exceptions**. Otherwise click the **Read** button to begin scanning pages. When the select stacker is enabled, forms that are not properly read are sent to the select stacker without any data being captured. You may Review the forms, correct any problems and rescan them if desired. (Please click here for detailed information about using a select stacker.)
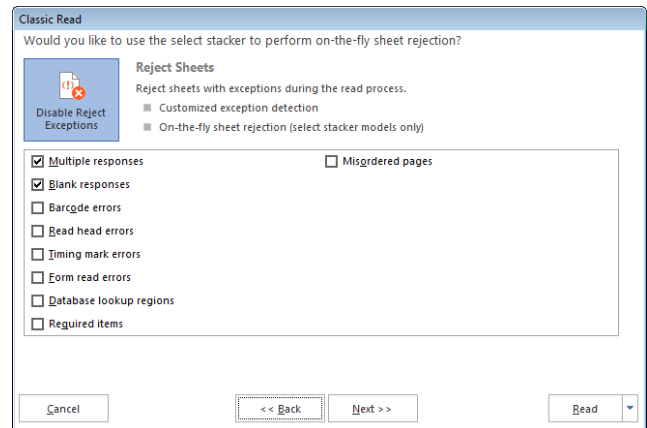
8. [Optional] If you would like to configure **Review Exceptions** options, click the **Next** button to continue. Otherwise click the **Read** button to begin scanning pages. Review Exceptions is a way to correct exception cases found on forms, such as blank and multiple responses. (Review Exceptions is covered in more detail here.)

   • **Note:** Review Exceptions can also be run after all the forms are scanned if you prefer not to stop scanning when problems occur.

9. Place the completed forms in the scanner.

10. Click the **Read** button to begin scanning pages.

Remark Classic OMR scans the forms and matches the sheets and records together. The software uses the page ID mark to know what sheet number is being scanned and the respondent tracker to determine the record to which the scanned data belongs. If a duplicate page is scanned, a message appears letting you know that data for the page already exists. You may click **Overwrite** to overwrite the existing data record, **Ignore** to ignore the new page's data (discarding it) and leave the original data intact, or **End Read** to stop scanning altogether. Note that if you overwrite, you may be prompted for each page within a single record.

Using an OMR Scanner's Select Stacker

Some OMR scanners have a select stacker (also called reject stacker or reject hopper) that is used to collect forms during scanning that contain errors. If your OMR scanner includes a supported select stacker, you must select it in the OMR Scanner Properties window in order to use it. If you are using Prisma, the select stacker is automatically detected if your scanner has one. The following items can be rejected during scanning:

Option	Description
Multiple responses	Sends sheets to the select stacker if multiple responses are marked but not allowed in the form template.
Blank responses	Sends sheets to the select stacker if items are left blank.
Barcode errors	Sends sheets to the select stacker if the barcode cannot be read.
Read head errors	Sends sheets to the select stacker if the read head test fails. A read head test is only performed if the read head test checkbox is turned on in the form template properties.
Timing mark errors	Sends sheets to the select stacker if the timing marks on the form cannot be read. This type of error could be the result of choosing the wrong form template file, entering the wrong amount of timing marks for the form in the form template's properties or a skewed form.
Form read errors	Sends sheets to the select stacker if form errors occur. Examples of form read errors include when page IDs cannot be identified or when the timing marks cannot be properly read (and you are not already rejecting on them).
Database lookup regions	Sends sheets to the select stacker if the database lookup region cannot be recognized.
Required items	Sends sheets to the select stacker if an item marked as required has an error (e.g., is left blank or has multiple marks).
Misordered pages	Sends sheets to the select stacker if pages are read out of order and you are not using respondent trackers (which allow scanning of respondents' pages out of order). This feature is useful if using page identifiers and you want to reject any pages that are scanned out of order.

To select the reject stacker option

1. Select the **Tools** menu and then click **OMR Scanner**.
   - **Note:** If you are using an OMR/Image or Prisma scanner, the setting for enabling the select stacker may be turned on by default if your scanner has a select stacker.
2. After selecting your OMR scanner, mark the checkbox for **Select Stacker Installed**.
3. Click the **OK** button to save the changes.

Once you have selected the **Select Stacker Installed** option in the software, you may read forms and specify what types of errors you want to apply to the select stacker.

4. Open the correct form template in the Remark Classic OMR Data Center.
5. Place the completed forms in the scanner.
6. Select the **Tools** menu and then click **Read**. Alternatively, you may select the **Read** link from the task pane.
7. In the **Welcome** window, your scanner is listed. Beneath the scanner are the options you have indicated are installed on your scanner in the **Scanner Properties** window. If you would like to change any of these options, click the **Scanner Properties** button.

8. [Optional] If your OMR scanner has a printer installed and you have indicated that you have a printer in the OMR **Scanner Properties** window, you may optionally mark the checkbox for **Print on forms**. (Printing options are covered in more detail [here](#).)

9. Click the **Next** button to continue.

10. In the **Reject Exceptions** window, specify whether to reject exceptions by selecting or deselecting the **Enable Reject Exceptions** checkbox. Then choose the options that will trigger an exception: **multiple responses**, **blank responses**, **barcode errors**, **read head exceptions**, **timing mark errors**, **form read errors**, **database verification errors**, **required item errors** or **misordered pages** (applicable if using sheet identifiers and/or respondent trackers).

11. [Optional] If you would like to configure **Review Exceptions** options, click the **Next** button to continue. Otherwise click the **Read** button to begin scanning pages. Review Exceptions is a way to correct exception cases found on forms, such as blank and multiple responses. (Review Exceptions is covered in more detail [here](#).)

   • **Note:** Review Exceptions can also be run after all the forms are processed if you prefer not to stop processing when problems occur.

12. Click the **Read** button to begin scanning pages.

During scanning, any forms that contain the specified reject options are sent to the reject stacker. A log is kept of each form that is sent to the reject stacker, explaining why it was rejected. When you finish scanning forms, you have an option to View the log in the dialog that appears at the end of each scanning session. You may also select the **View** menu and then click **Reject Log** to view the log file.

Using an OMR Scanner's Printer

Some OMR scanners have a printer installed that allows you to print specific information on each form as it is scanned. The printer can be used to print items such as a form number, date, field on the form (e.g., an ID field), etc. If you are using Prisma, the printer is automatically detected if your scanner has one.

The following items can be printed on the forms:

- Time Stamp
- Date Stamp
- Time and Date Stamp
- Sheet Number
- Record Number

- Sequence Number
- Record and Sheet Number
- Any Region in the Template
- Customized Text
- Grade Information

If your OMR scanner contains a supported printer, you must select it in the OMR Scanner properties window in order to use it.

To select the printer option

1. Select the **Tools** menu and then click **OMR Scanner Properties**.

   - **Note:** If you are using an OMR/Image scanner or Prisma scanner the setting for enabling the printer may be turned on by default if your scanner has a printer.

2. After selecting your OMR scanner, mark the checkbox for **Printer option installed**.

3. Click the **OK** button to save the changes.

Once you have selected **Printer option installed** in the software, you may select what to print when you begin reading forms.

To select print options

1. Open the correct form template in the Remark Classic OMR Data Center.

2. Place the completed forms in the scanner.

3. Select the **Tools** menu and then click **Read**. Alternatively, you may select the **Read** link from the task pane.

4. In the **Welcome** window, you see your scanner listed. Beneath the scanner are the options you have indicated are installed on your scanner in the **Scanner Properties** window. If you would like to change any of these options, click the **Scanner Properties** button.

5. If your OMR scanner has a printer installed and you have indicated that you have a printer in the OMR Scanner Properties window, you may optionally mark the checkbox for **Print on forms**.

   - For Scantron OMR scanners only: Scantron OMR scanners can print on the last two inches of the form only. In the **Print position** box, specify where to print the information on each sheet by entering a value of 0-63 for the start position.

6. Use the drop-down list to choose an item to print or enter free form text. Note that scanners use print buffers and can print a limited amount of text. Therefore, choose your items carefully to ensure you do not select more text than can be printed with your OMR scanner. If there is too much text it is truncated during printing. You may choose standard items such as **date**, **record number**, etc. Or you may choose grading items, such as **Grade**, **Total Score** or **Percent Score**. If you wish to print grade information, the first form you scan must be the answer key.

7. [Optional] If your OMR scanner has a select stacker (rejecter) and you have it enabled, you may click the **Next** button to configure the Reject Exceptions. Otherwise click the Read button to begin scanning pages. When the select stacker is enabled, forms that are not properly read are sent to the select stacker without any data being captured. You may Review the forms, correct any problems and rescan them if desired. (Using a select stacker is covered in more detail here.)

8. [Optional] If you would like to configure Review Exceptions options, click the **Next** button to continue. Otherwise click the Read button to begin scanning pages. Review Exceptions is a way to correct exception cases found on forms, such as blank and multiple. (Review Exceptions is covered in more detail [here](#).)

    - **Note:** Review Exceptions can also be run after all the forms are scanned if you prefer not to stop scanning when problems occur.

9. Click the **Read** button to begin scanning pages.

As the forms are scanned, the item or items you selected to print are printed on the forms.

Using Batch Headers

The Remark Classic OMR Data Center includes a batch processing feature that allows you to process batch header forms along with your forms. Batch header forms provide further information about the group of forms being processed that make your data more meaningful. For example, if you are processing student tests or course evaluations, you can process a batch header form containing information such as instructor name, class name, class section, and so forth. The batch header form is processed once, at the beginning of each batch. Then the forms that correspond to that batch header form are processed subsequently. The data from the header form is pre-pended to (added to the beginning of) each data record. You can start processing a new batch and its corresponding forms at any time. The header data is also available when it comes time to report on the data in Remark Quick Stats.

To create a batch, you create form templates for the batch header form(s) and the form you wish to process with that batch header form (called a primary form template). You can use multiple batch header forms but only a single primary form template. You then combine these form templates into a batch file. Both forms must have unique Page IDs on them. Remark Classic OMR uses the page IDs to understand when a batch header form is being read versus a regular form. Therefore page IDs are required, even for single page forms.

To use batch headers

1. Create or locate a form template for the form you wish to process as a batch header form. Ensure the form has a [Page ID](#).

2. Create or locate a form template for the form you wish to process along with the batch header form. Ensure the form has a unique [Page ID](#).

3. In the **Remark Classic OMR Data Center**, select the **file** menu and then click **Batch Creator**.

4. In the **Batch Creator (Step 1)** window, select the form template that is being used as the primary form template (not the header form). This is the form template that corresponds to
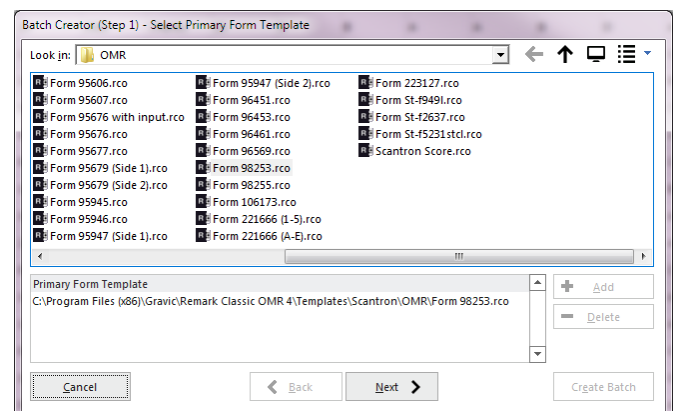
the form you wish to process after each batch header form. Click the **Add file(s)** button to add the form template to the **Primary Form Template** box.

5. Click the **Next** button to continue.

6. In the **Batch Creator (Step 2)** window, select the form template corresponding to your batch header form. Click the **Add file(s)** button to add it to the **Batch Header Form Templates** box. You may select multiple batch header form templates if desired.

7. Click the **Next** button to continue.

8. In the **Batch Creator (Step 3)** window, enter a file name for the new combined batch file. The Data Center combines the form template and batch header form template(s) into one batch file. The new combined file has a .rbf file extension.

9. Click the **Create Batch** button to combine the templates and exit the Batch Creator. When the batch file opens in the data grid, a dark line defines the end of the batch header form template regions from the beginning of the primary form regions.

10. Process the first batch header form (or forms) by starting the Read process. If you need information about how to use the Read window, click here.

11. Follow the batch header form with the forms that correspond with the group identified on the batch header form.

12. When the first group of forms has been processed, insert a new batch header form and follow it with the corresponding forms.

13. Continue processing forms in this fashion until you have processed all of your batches. In the end, you see an entire data set with all of the batch header information pre-pended to the records.

- **Tip:** If you have already created a batch file and want to open it without using the Batch Creator, select the **file** menu and then select **Open Form Template**. Change the **files of type** drop-down list to **Remark Classic Batch files** to view available batch files. Recently used batch header files are also included in the Recent list in the task pane.

49
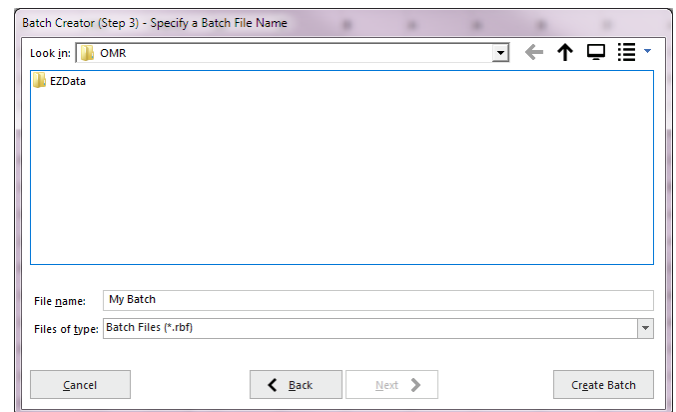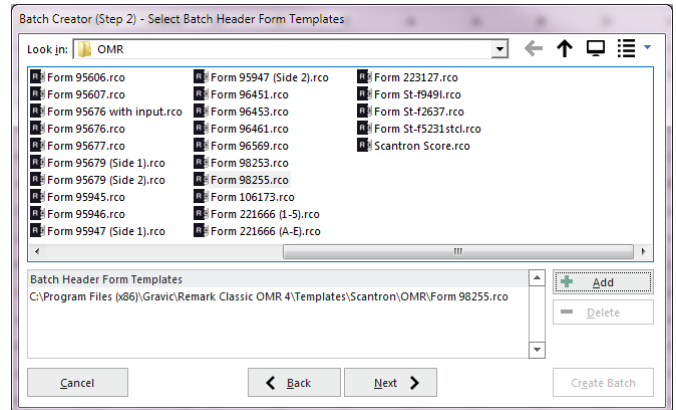
Respondent Detection

Remark Classic OMR includes the ability to determine which respondents' forms have been processed, as well as locating duplicate respondents. This feature, called Respondent Detection, is used in conjunction with Database Lookup. If a region is linked to an external database using Database Lookup, the software provides a report of which respondents listed in the external database have been processed, not been processed or have been processed more than one time. For example, suppose you have a region on your form where the respondent fills in an ID number. You can link this ID number region to an external database that has all of the ID numbers of your expected group of respondents. You can then use Respondent Detection to compare IDs collected in the data set to IDs in the external database. Any time you use the Respondent Detection feature, you also have the option to return additional data from the external database if desired (this is not required to use Respondent Detection). When you process your forms, Remark Classic OMR confirms which ID numbers from the external database exist in the processed data. The software then provides a report showing found ID numbers, missing ID numbers and duplicate ID numbers. If you are returning additional fields, this information is also available in the report. You can save this report as a text file to use outside of Remark Classic OMR.

To use Respondent Detection

1. Setup a form template that uses the Database Lookup feature.

2. Process forms using the scanner or by reading from image file using the **Read** window. If you need information about how to use the Read window, click here.

3. Once the forms have been processed and the data cleaned, select the **Tools** menu and then click **Respondent Detection**.

   - **Note:** You can run Respondent Detection with multiple data sets open. The **Data Sets** window opens, allowing you to choose the open files you wish to include in the save operation. Mark the checkboxes of all data sets you wish to include in the operation. You may use **Select All** to select all data sets in the list. Please note that the data set must correspond to the active form template in order for it to be included.

4. Choose the template region identifying respondents from the **Respondent region** drop-down list.

5. If the region is linked to a database containing additional fields, you may optionally select those fields from the **Database Field List**. Use the arrow to move the desired fields into the **Additional Fields** box. Any fields moved to the **Additional Fields** box are also used for detecting respondents.

6. Click the **Search** button to continue. The **Detection Results** window appears.

7. Use the **Detection Results** window to view your results. The main region on which you are basing the detection is listed first. You then see a **Detected** column that marks the values that were detected. The **Duplicates** column is next, which marks any duplicate values that are found. After the **Duplicates** column, you see any additional return fields from the external database that you selected in Step 5 (if you selected any).

8. If desired, use the **Export** button to save the results to an external file. You may click the **Export** button to export the entire set of results, or use the arrow on the **Export** button to select which portions of the results to export. The export options are as follows:
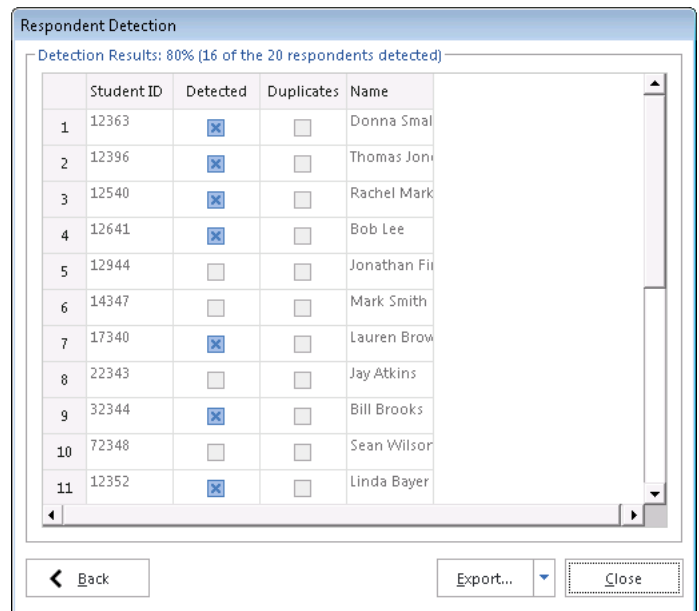
Option	Function
Export	Exports all results (region, detected, missing, duplicates and additional fields).
Export Missing	Exports only the missing respondents, those that exist in the external database but were not processed as part of the data file.
Export Detected	Exports only the detected respondents, those that both exist in the external database and were processed as part of the data file.
Export Duplicates	Exports only the duplicate respondents, those that appear more than once in the data file. The software only detects duplicate entries that have also been verified as existing in the linked database.
Print Results	Prints all results to the default printer on your computer.

9. Click the **Close** button to return to the Remark Classic OMR Data Center.

Reviewing Duplicate Responses

Remark Classic OMR includes a feature to detect duplicate responses even when not using the Database Lookup feature with Respondent Detection. The Review Duplicates feature allows you to choose any region in the data grid in which to search for duplicates. When a duplicate entry is found, you are prompted to take one of four possible actions: Review the duplicates, keep only the first duplicate record, keep only the last duplicate record or delete all duplicate records. During the Review process, the data grid is automatically sorted on your duplicate identifier region so that you can easily Review the data. This feature is useful if you accidentally process a form multiple times, or someone fills out a form multiple times when this is not permitted.

To use Review Duplicates

1. Open a form template and process forms with the **Read** option. If you need information about how to use the Read feature, click here.

2. Once the data is collected and cleaned, select the **Tools** menu and then click **Review Duplicates,** or select the **Review Duplicates** link in the task pane.

3. In the **Review Duplicates** task pane on the left side of the window, use the **Which column contains the respondent ID** drop-down list to choose a region or image files from your data that you want to check for duplicate entries. If you have an image enabled scanner, using the **Image Names** option is useful if an entire set of forms was accidentally processed twice. If the same set of images exists more than one time (based on the image file names), the images are flagged as duplicates.

4. Click the **SEARCH** button to begin the search for duplicate entries. Remark Classic OMR tells you how many duplicate records are found.

5. Determine the action you wish to take:

   - **Review:** If you want to Review the duplicates before taking action, choose **Review Duplicate Records** and then click the **REVIEW** button. Remark Classic OMR highlights any sets of duplicate records it finds. The **NEXT** button takes you to the next duplicate record within the same group. The **Go To Next Group** drop-down arrow on the **NEXT** button takes you to the next group of duplicates (you may have more than one set of duplicates within the same region). Similarly, the **PREVIOUS** button takes you back to the previous duplicate record within the same group, and the **Go To Previous Group** drop-down arrow on the **PREVIOUS** button takes you back to the previous group of duplicate records. During the Review, you can click the **DELETE RECORD** button to delete the highlighted record.

   - **Keep First Duplicate Record Only:** If you select this option, the first record in every set of duplicate records found is kept and any duplicates are deleted. Click the **PURGE** button to take this action.

- **Keep Last Duplicate Record Only:** If you select this option, the last record in every set of duplicate records found is kept and any duplicates are deleted. Click the **PURGE** button to take this action.

- **Delete All Duplicate Records**. If you select this option, all duplicate records are deleted. Click the **DELETE** button to take this action.

6. If you choose any action that causes records to be deleted, you receive a warning message to ensure that you want to delete the records. Note that once the records are deleted, they cannot be recovered (unless you process the forms again). If you are sure you want to proceed, click the **Yes** button. The requested action is taken.

7. If you wish to search for more duplicates in other regions, repeat step 5.

8. When you are finished reviewing duplicates, click the **FINISH** button.

9. Click the **Back** arrow underneath **Review Duplicates** to return to the full task pane.

Database Connection Settings

If you set up a database connection in the form template, you can adjust the settings from the Data Center by using the Database Connection Settings link in the task pane. This feature allows you to change the database connection, the lookup criteria and save the settings to the existing or a new form template. This feature is useful if the database filename or file location changes. It also is useful if you want to save a connection for different users; you can set up the connection once, and then modify it for each user.

To use Database Connection Settings

1. Open the desired form template.
2. In the task pane, click **Database Connection Settings**. The **Database Connection Tool** window appears.
3. This window is the same as the window for setting up the database connection in the template editor. You can change the **Type**, **Lookup & Return Fields** and **Additional Return Fields**. Make the desired adjustments.
4. Choose whether to save the changes to the form template by clicking the **Save changes to the form template file** checkbox.
5. If you would like to rerun the lookup with an open data set, click the **Rerun lookup** checkbox. When you close this window, Remark Classic OMR will cycle through your data and apply the new database connection to the open data set.
6. [Optional] If you want to save the changes to a new form template (e.g. for a different user) click the **Save As…** button. Enter a **file name** and choose a **location** for the form template file, and then click the **Save** button. You are automatically returned to the Data Center.

7. If you did not use the Save As option, click the **OK** button to return to the Data Center and process your forms.

Reviewing Exceptions Overview

As forms are processed, exception cases can occur. You should Edit cells containing exception cases to validate your data before performing any analysis operations or exporting the data to another application. Each exception case is assigned a specific color so that you can easily distinguish different types of exceptions. The following table summarizes the types of exception cases and their possible causes.

Error Type	Text	Color	Possible Causes
Multiple Responses (Too Many Responses)	All multiple responses or MULT (depending on your template settings)	Green	More than one answer selected when multiple responses are not permitted. Partially erased forms. Carelessly marked forms.
Blank Responses (No Response)	BLANK	Yellow	Unanswered questions. Response not completely filled.
Input Regions	None	Light Blue	Signifies an input region where you need to type the information found in the region.
Database Lookup Errors	Selected Responses	Purple	Response not found within the selected database to which the region is linked.
Barcode Errors	???	Dark Orange	The OMR scanner cannot read the barcode. It could be misplaced on the form or a barcode type that the scanner is not capable of reading. Check your OMR scanner manufacturer's user's guide for information about supported barcodes.

Error Type	Text	Color	Possible Causes
Required item	None	Exception Color	Signifies that a required region was not properly answered. Typically, this means that another exception occurred, such as a Blank, Mult or Error. The data grid cell takes on the color of this exception (e.g., yellow for a blank response), but there is no text, indicating that the question was required. Flagging required questions is particularly useful when you use the Review Exceptions function during form processing (meaning the processing stops so that you can Review the problem). Note that you should use caution when making questions required and using the "Flag Blanks" setting. If Flag Blanks is set to Never, anything left blank does not display as a required item exception.
Multiple exceptions	None	Gray	Signifies that multiple exceptions were found in the region. For example, a barcode region that is also being used as a Database Lookup region might not be recognized properly. In this case, it is both a barcode recognition exception and a Database Lookup exception. The gray color lets you know that more than one issue was found.

- **Note:** The exception colors in the grid are only retained if you save data to the Remark data formats. Once you export your data to another format, if you reopen that format, the grid colors are not present.

Using Review Exceptions

Remark Classic OMR provides the Review Exceptions feature as a method to validate data. You may use the Review Exceptions feature to Review the following exception cases: blank responses, multiple responses, barcode errors, database lookup errors, required items, multiple exceptions or Input regions.

The Review Exceptions feature can be used in one of two ways:

After Form Processing: Review Exceptions can be used after the forms have been processed; therefore, you are not required to have the software stop processing forms when exceptions are encountered. When reViewing after processing, the software cycles through the data file to find exception cases and then allows you to make the appropriate changes. To use Review Exceptions after form processing, select the **REVIEW** button in the data header bar across the top of the data grid. You may also select **Review Exceptions** from the task pane, toolbar or **Tools** menu.

- **Tip:** When using Review Exceptions after form processing, you can Review the entire data set or sections of the data set. To review sections of the data set, select the column or row header(s) of

the area you wish to Review, or highlight a group of cells. For example, if you only want to Review a specific Input region so that you can hand enter data, select the column header of the comment region so that the entire column is highlighted. Then click Review Exceptions; only the selected column is reviewed.

During Form Processing: If used during the reading process, Review Exceptions provides an option to have the Data Center pause after encountering selected exception types. You can then select or enter the correct response. To use Review Exceptions during form processing, turn it on in the **Read** window and choose the exceptions you want to correct.

Regardless of how you use Review Exceptions, the software alerts you to the issue and allows you to make the appropriate updates in the data header bar. If you are using an OMR/Image or Prisma scanner and capturing scanned images, you can use the Image Viewer to assist you with the Review. The following table details the available Review Exceptions options:

Review Option	Function
Blank Responses	Review when a respondent fails to answer a question.
Multiple Responses	Review when a respondent chooses more responses than were permitted.
Input Regions	Review when a flagged Input region is encountered. Allows the hand entry or speech recognition of information into the data grid.
Database Lookup Errors	Review when a database lookup error is encountered, meaning that the response is not located in the database that was specified during the form template creation process. Once you correct the Database Lookup exception, if you are returning other fields from the database, they are updated automatically.
Barcode Errors	Review when Remark Classic OMR cannot read the barcode properly.
Required Items	Review when a required item has not been answered.
Multiple exceptions	Review when multiple exceptions occur. For example, a barcode region utilizing Database Lookup could be unrecognized, which would generate both a barcode exception and a Database Lookup exception.

To use Review Exceptions

1. Choose whether to Review during or after processing, as outlined above.

2. Once you access Review Exceptions, use the task pane to select the exception cases you would like to Review: Blank responses, Multiple Responses, Input Regions, Database Lookup Regions, Barcode Regions, or Required Items. You can also choose whether to search by rows or columns in the data grid.

3. Click the **NEXT** button to start the Review process.

- **Note:** You can optionally use speech recognition to assist you with reviewing exceptions.

4. The Data Center searches the data for the specified exception cases. When a selected exception case is found, it appears in the data header bar at the top of the data grid. The bar is color coded to match the exception type (e.g. yellow for a BLANK response). Use this window to make changes. If you are using an image enabled scanner and capturing scanned images, you can use the Image Viewer to assist you with the Review. You can use the drop-down list if applicable, or type a response. Note if there is a list of answer choices defined, as you begin typing, Remark Classic OMR attempts to auto-fill your answer based on your possible answer choices.
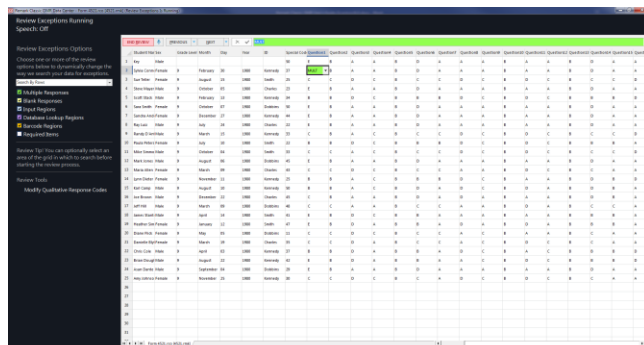
5. Once you have selected the appropriate response, press **Enter** on the keyboard or click the **NEXT** button. If you want to move to the next row of data instead, click the down arrow on the **NEXT** button and choose **Go To Next Record**. If you need to revisit the previous exception, click the **PREVIOUS** button. To go to the previous data record, click the down arrow on the **PREVIOUS** button and choose **Go To Previous Record**.

6. Continue reviewing exceptions in this manner.

7. Once you have finished reviewing, or if you click **END REVIEW**, if you made changes to the data, you are prompted to save the changes (note that if you did not make any changes, you are simply prompted to end the Review process). Click the **Save Changes** button to save your changes. Click the **Discard Changes** button to undo all changes made during the Review Exceptions session. Click the **Cancel** button to return to Review Exceptions.

Additional Things to Know About Review Exceptions:

There may be times when you are reviewing exceptions and the exceptions are legitimate, e.g. a question is left blank. By default, if you leave the exception as is, it always retains the color coding and exception text. If you prefer to remove the color coding once an item has been reviewed, go to **Tools|Preferences** and mark the checkbox for **Clear exceptions after they have been reviewed** in the section called **Review Exceptions**. After a cell is reviewed using Review Exceptions, the color disappears even if you did not make a change to the cell. If Review Exceptions is run again, the cell is not flagged as an exception.

If you Review data and then either start a new read process or open a data file, when you run Review Exceptions again, the software prompts you to read all the exceptions or begin from the last Review session. This feature can be a nice time saver if you have already reviewed the data, in which case you can choose **Yes** when the message appears to read from where you last read data.
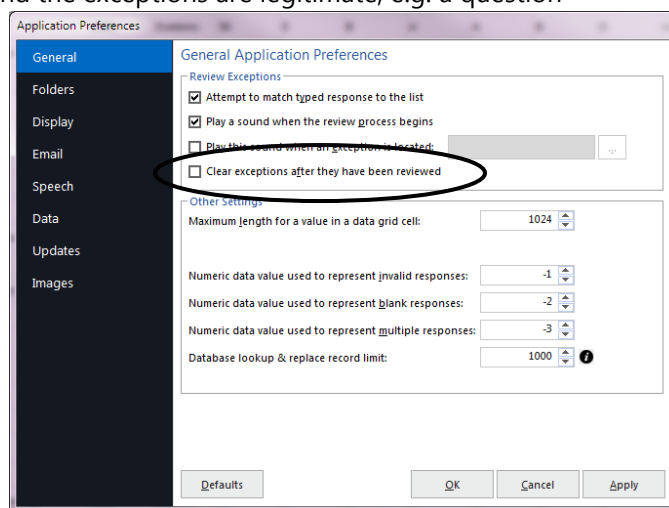
If you are using an OMR/Image or Prisma Scanner, in order to retain the link between the data and the corresponding image in the image viewer, you must save the data to the Remark (RMK/RMX) formats. If you plan on continuing your data Review at a later point, save the data to one of these formats so that when you resume Review Exceptions, you'll still have the form images in the image viewer.

If you need to Review Input regions, you can use the speech recognition portion of Review Exceptions by clicking the microphone.

Speech Recognition

Remark Classic OMR includes the ability to use speech recognition when running Review Exceptions. This feature is particularly Helpful if you have Input regions on your form that have long comments. Instead of clipping or typing the comments, you can use the image viewer on-screen and read the comments into the data grid. You can also use speech recognition to review other data types during Review Exceptions (e.g., actual answer choices from an OMR region). Ensure that you understand how to use Review Exceptions before attempting speech recognition.

Speech recognition relies on the Microsoft Windows built-in speech technology. Gravic has no control over the effectiveness of speech recognition. We strongly suggest you train your computer to recognize your voice using the Microsoft speech training options in the Windows Control Panel. If you encounter difficulties with speech recognition, ensure you have a good quality microphone and that you have conducted the speech recognition training. For speech recognition troubleshooting, consult the Microsoft website.

You may use the following commands when using speech recognition in Review Exceptions:

Next: Moves to the next exception

Previous: Moves to the previous exception

Finish: Ends the Review process

To use speech recognition

1. In the **Remark Classic OMR Data Center**, process forms or open a data file.

2. To begin speech recognition, first ensure you have a microphone attached to the computer and configured in the Windows Control panel. Then click the **REVIEW** button in the data header bar.

3. Click the microphone next to the red **END REVIEW** button.

   - **Note:** If you want to enter comments into a specific Input region, highlight the column representing the Input region before starting speech.

4. If necessary, choose the exception types to Review in the left task pane.
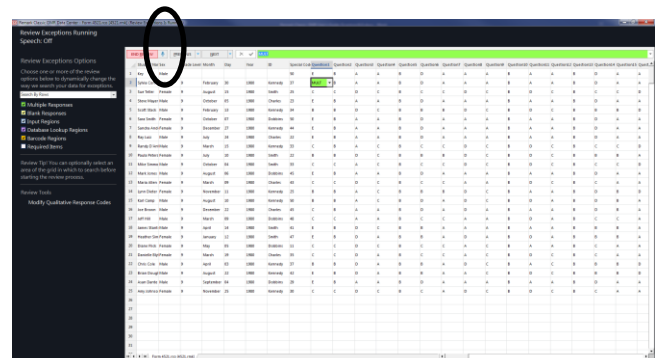
5. When you are ready to start speech recognition click or say the word **NEXT.** Remark Classic OMR locates the first exception based on the types of exceptions you are reviewing and any portions of the grid you have selected (if applicable).

   - If reviewing a multiple choice style question, speak the correct answer choice. You must say a valid answer choice for the question, as defined in the Labels in the template, for Remark Classic OMR to record your response.

   - If reviewing an Input region, use the Image Viewer to read what you see on the screen.

     - **Note:** If something is not interpreted correctly, you can place your cursor in the data header bar and re-read information.

6. Click or say **NEXT** to continue.

7. Continue in the same manner until you wish to end Review Exceptions. If you need to end reviewing early, click **END REVIEW** or say **Finish**.

8. If you made changes to the data, you are prompted to save the changes. Click the **Save Changes** button to save your changes. Click the **Discard Changes** button to undo all changes made during the Review Exceptions session. Click the **Cancel** button to return to Review Exceptions.

Saving Data

You can save the data in the data grid to dozens of different file formats. The Remark file format was specifically designed to optimize the data storage process in the Remark Classic OMR software. Saving data is also sometimes referred to as exporting data.

- **Tip:** When working with data in Remark Classic OMR, use the Remark file formats (RMK or RMX). This is the only format that preserves the exception colors. Export data to other formats after you have collected and cleaned all of your data.

When saving data, you have the option of using Save Data or Save Data As. The Save Data option can be used to save a data set for the first time or to overwrite the current data set. The Save Data As option allows you to save the current data set with new parameters (e.g. new file name, different folder, different file type, etc.).

- **Tip:** If you open a data set and add new records to it, make sure you overwrite the data file if using Save Data As (you are prompted to overwrite or append). Do not append in this case, or the old data will be repeated in the data file. Ideally once your new records are added to the old data, simply click FILE|Save or the Save toolbar button, which overwrites the data file with exactly what you see on the screen.

The following table lists the different save file formats, their extensions and a brief description:

file Format	Extension	Description
Remark Extended	RMX	Remark extended format; saves grid exception colors; includes information about changed responses for associated reports in Remark Quick Stats

file Format	Extension	Description
Remark	RMK	Remark format; saves grid exception colors and image links
SQL Server	MDF	Microsoft SQL Server format
Oracle 7.4 and later	*.*	Oracle format
Access 2007-2016	ACCDB	Microsoft Access 2007 - 2016 format (only available if the Microsoft Office 2007 or greater database engine is installed) *Note: If you are running a 64-bit version of Microsoft Office, you may install the 32-bit Office engine alongside of it.
Access 2000-2003	MDB	Microsoft Access 2000-2003 format
Access 95-97	MDB	Microsoft Access 95-97 format
Access 2.0	MDB	Microsoft Access 2.0 format
Access 1.0	MDB	Microsoft Access 1.0 format
Excel 2016	XLSX	Microsoft Excel 2016 format
Excel 2013	XLSX	Microsoft Excel 2013 format
Excel 2010	XLSX	Microsoft Excel 2010 format
Excel 2007	XLSX	Microsoft Excel 2007 format
Excel 97-2003	XLS	Microsoft Excel 97-2003 format
Questionmark	QSF	Perception Questionmark format (save only)
SPSS	SAV	SPSS 16 format
SPSS Legacy	SAV	SPSS 6 format
Survey Pro	SRV	Survey Pro standard format (Apian Software)
Survey Pro STL	STL	Survey Pro STL format (Apian Software)
CSV	CSV	Comma separated values format
Text	TXT	Tab delimited text format with quotes around textual data
Opinionmeter	ASC	Comma delimited format for Opinionmeter application

file Format	Extension	Description
StatPac	DAT	StatPac format for StatPac Survey Software
Survey System	DAT	The Survey System format (Creative Research Systems)
dBase V	DBF	dBase V format
dBase IV	DBF	dBase IV format
dBase III	DBF	dBase III format
Paradox 7-8	DB	Paradox 7-8 format; requires the Borland Database Engine (BDE) to be installed
Paradox 5.X	DB	Paradox 5.X format; existing files may only be overwritten (there are no append options)
Paradox 4.X	DB	Paradox 4.X format; existing files may only be overwritten (there are no append options)
Paradox 3.X	DB	Paradox 3.X format; existing files may only be overwritten (there are no append options)
Lotus WK3	WK3	Lotus Works 3 format
Lotus WK1	WK1	Lotus Works 1 format
Lotus WJ3	WJ3	Lotus 1-2-3 version 3 format
Lotus WJ2	WJ2	Lotus 1-2-3 version 2 format
Lotus 1-2-3	WKS	Lotus 1-2-3 format
LXR Test	MRG	LXR Test format
Report	RPT	Fixed format ASCII, cell text padded or truncated to specified record length
Data Interchange Format	DIF	Standard format using file header and data section
XML	XML	Extensible Markup Language format
HTML	HTM	Hypertext Markup Language
ODBC	*.*	Open Database Connectivity

file Format	Extension	Description
Custom	ASC, TXT	Custom Text format
Database Update	XLS, XLSX, MDB, ACCDB	Updates an existing database with new data (e.g., adds missing information, overwrites existing information).
ODBC Database Update	*.*	Updates an existing ODBC database with new data (e.g., adds missing information, overwrites existing information).

To save data

Before saving data to another data format, we suggest saving a copy of the data to the Remark (RMK or RMX) format to preserve exception colors. Once your project is complete, you may delete or archive the Remark file.

- **Note:** When exporting to a specific format (e.g., Access, Excel, etc.) make certain your data meets the format's specific requirements.

1. After processing forms, select the **file** menu and then click **Save Data** if saving the data set for the first time or to overwrite the data. Click **Save Data As** to save the data with new parameters.

   - **Note:** Clicking the toolbar button for **Save Data** overwrites the current data set.

2. If saving for the first time or using Save Data As, the **Save Data** window opens, allowing you to choose a file name, a file type, the folder in which you would like the file saved and **Advanced** saving options.

3. Select the desired folder location using the **Look in** drop down box.

4. Enter a name in the box titled **file name**.

5. Select the desired output format in the box titled **Save as type**.

6. If saving to a database type that supports internal table names, enter a table name in the box titled **Table name**.

   - **Note:** Each database format has different table name limitations. Refer to your database documentation for information on table name limitations. When saving to a database where one or more fields are too small to hold the data being saved, Remark Classic OMR attempts to resize the database column so that it can hold the data being saved.

7. When exporting, you can save the column headers for certain formats by selecting the **Save headers** checkbox. The Save headers checkbox only displays when appropriate.

8. Click the **OK** button to save the file. The data is saved to the format and location of your choice.
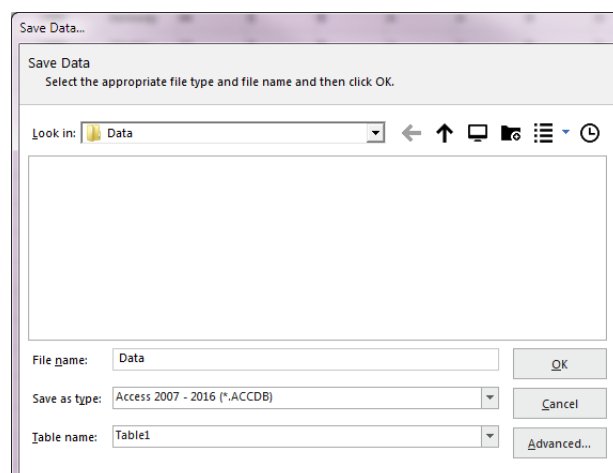
- **Tip:** If you use Google Drive or Dropbox, once you select the format and give the file a name, you can click the Google Drive or Dropbox icons in the Save window to place the file right in your Google Drive or Dropbox folder. If your computer is set up to automatically poll this folder for files, Google Drive or Dropbox will "see" the file and upload it to the cloud automatically. You must have Google Drive or Dropbox installed on your computer for this save to work.
- **Note:** The Remark products are not affiliated with or otherwise sponsored by Dropbox, Inc.

Advanced Data Saving Options

When saving data to certain formats, you have the option of setting advanced parameters. The Advanced Save window shows you each question and pertinent information about the question (region). You can then choose options about the region that you want included in your database. This feature can be useful if you are saving to a database format that has specific requirements. You can temporarily override the form template settings by using the advanced parameters. The Advanced Save window also allows you to save either the scanned form image or path to the scanned form images to your data file (if using an image enabled scanner).

- **Note:** Setting parameters in the Advanced Save window does not make any changes to the form template.

To use advanced saving options

1. Select the **file** menu and then click **Save Data As**. The Save Data window opens, allowing you to choose a file name, a file type, the folder in which you would like the file saved and advanced saving options.
2. Select the desired folder location using the **Look in** drop down box.
3. Enter a name in the box titled **file name**.
4. Select the desired output format in the box titled **Save as type**.
5. If saving to a database type that supports internal table or sheet names, enter a table name in the box titled **Table/Sheet name**.
6. Click the **Advanced** button.
7. [OPTIONAL] If you have previously saved a definition file for this data set, click the **Load...** button to locate the appropriate INI file containing your settings. Otherwise, continue to Step 8 to build a new data file.
8. Make any desired changes in the **Include**, **Name**, **Data Type** or **Size** columns, as described here:

Option	Description
Include	Mark this checkbox to include the region (question) in the data file. Note that you may include the paths to the stored images of each processed form. The last item(s) in the Name list is the form image(s) listed by page (e.g., Page 1 Image). Images are only available if using an image enabled scanner.
Name	Use this column to enter a new field name to be used in the exported data file, if desired. Changing the field name in this window does not affect the region's name in the form template.
Data Type	Use this column to change the data type for this question.
Size	Use this column to specify a field size for the data for this question. Do not specify a size that is smaller than what is in your data.

- **Note:** You can save the path of the form images or the actual form images to the file by using the Advanced options. Scroll to the bottom of the Names list to mark the form images. If you want the actual image to be stored, change the data type to binary. If the data type is not binary, the path to the images is stored. Images are only available if using an image enabled scanner.

9. [Optional] If desired, click the **Save** button to save the settings to a configuration file (.ini file). You can then open this configuration file for future save operations with this same form template. This feature can save time when saving future data sets.
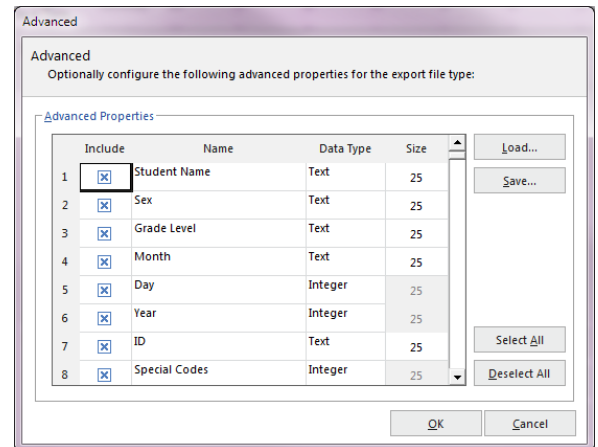
10. Click the **OK** button to save the changes.

11. In the **Save Data** window, click the **OK** button to save the data.

Save All Data

The Save All Data feature allows you to save multiple open data sets to one combined file (as long as the data sets correspond with the same Remark template). This feature is useful if you need to store and analyze data both on an aggregate and individual level. By maintaining separate files you can easily report on an individual data set. However, by combining the individual data files into one, you can also report on the data as a whole without having to open each data set individually any time you want to analyze all the data.

To use Save All Data

1. After reading forms or opening multiple data sets, select the **file** menu and then click **Save All Data**. The **Data Sets** window opens, allowing you to choose the open files you wish to include in the save operation.

2. Mark the checkboxes of all data sets you wish to include in the save operation. You may use **Select All** to select all data sets in the list. Please note that the data set must correspond to the active form template in order for it to be included in the save operation.

3. If needed, drag the row header area to move data sets into a different order. The order in which the files appear on the **Data Sets** window is the order in which they are saved.

4. If any of the open data sets had changes made to them prior to the save operation and were not saved, you receive a warning. The warning lets you know that during the save operation, all of the data sets being combined are closed. Click **Yes** to continue or **No** to cancel the operation, allowing you to go back and save the individual files first.
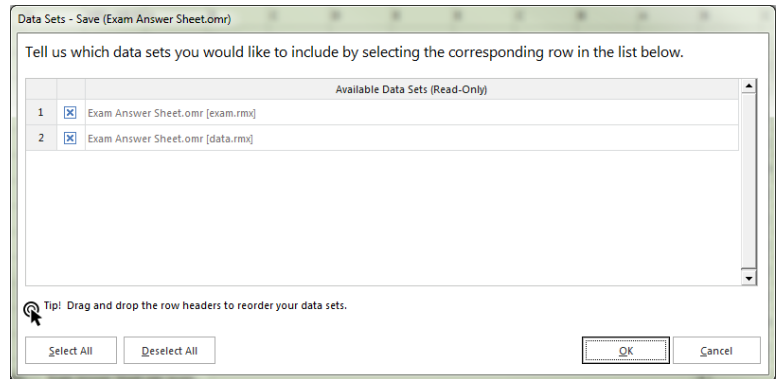
   - **Note:** If you made changes to your original data files and want those changes to be saved, save the individual files before using Save All Data. If you choose to ignore the warning, the changes to the individual data sets are not saved.

5. Click the **OK** button.

6. Select the desired folder location using the **Look in** drop down box.

7. Enter a name in the box titled **file name**.

8. Select the desired file format in the box titled **Save as type**.

9. If saving to a database type that supports internal table or sheet names, enter a table name in the box titled **Table/Sheet name**.

10. Click the **OK** button to save the file. All selected data sets are saved to the file specified and closed in the data grid. The combined data set is opened.
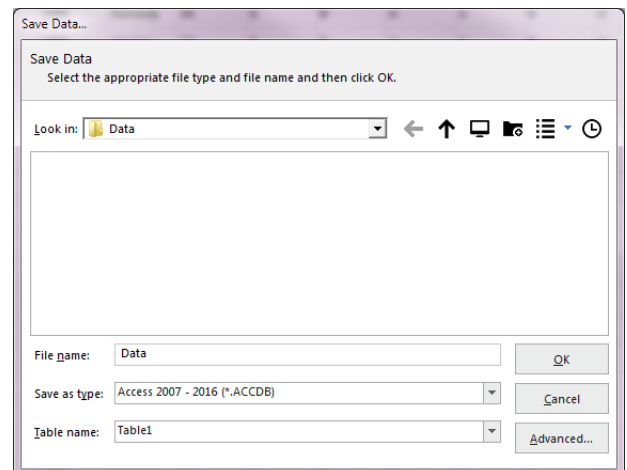
Saving Data - Organize & Save

The Organize & Save feature allows you to fine tune the data saving process by building dynamic file, folder and table names. Using the Organize & Save options, you can use information directly from your data set to name the data file, storage folder or table within the file.

To use Organize & Save

1. Select the **file** menu and then click **Organize & Save**. The **Organize & Save** window opens, allowing you to choose a file name, a file type, the folder in which you would like the file saved and table name saving options. The first step is to choose a file type and location for the data.

2. Under **Save file**, click the ... (ellipsis) button to select a file name and format for your data.

3. Select the desired folder location using the **Look in** drop down box.

4. Enter a file name in the **file name** box.

5. Choose the file format in the **Save as type** box.

6. If choosing a database format, also enter a **Table/Sheet Name**.

7. Click the **OK** button.

8. In the **Build Saved Data file** area, go to the **file base name** area of the window. The name you set in the previous screen is listed as the file name. You may modify it by typing in the box. You may also use the drop-down list to add a region from the processed data to the file base name. Choose the region from the drop-down list and then click the **Insert Data Into file Name** button. For example, if processing student test forms, you could add a student name region that is being collected from the form so that your data file name includes the name of each student (each time the student name changes, a new data file is created). Remember to place your cursor in the appropriate spot for where you want the region information to be inserted.

9. In the **Destination folder** area, you may choose to add a region from the processed data to the folder structure that holds the data file. Choose the region from the drop-down list and then click the **Append Data Onto Folder Path** button. Continuing with our example, if processing student test forms, you could add a teacher name or ID region that is being collected from the form so that your folder names include teacher identifiers. Each student's data from the data set would be stored in a separate folder based on teacher name or ID number.

10. If using a database format that requires a table name, go to the **Table Name** area of the window. The name you chose for Table Name when initially setting up the file in Step 6 is listed as the Table Name. You may modify it by typing in the box. You may also use the drop-down list to add a region from the processed data to the file base name. Choose the region from the drop-down list and then click the **Insert Data Into Table Name** button. Continuing with our example, if
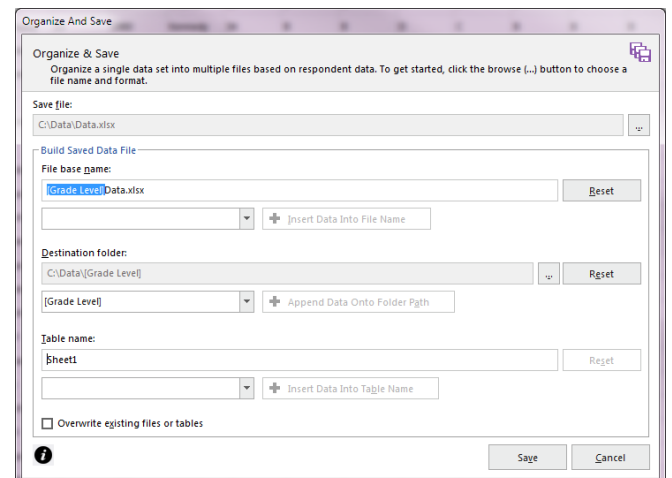
processing student test forms, you could add a teacher name region that is being collected from the form so that your data file table name includes the name of the teacher administering the test. Remember to place your cursor in the appropriate spot for where you want the region information to be inserted.

11. If desired, mark the checkbox for **Overwrite existing files or tables**, in which case anything that exists in the same location, with the same name and format, is overwritten.

12. Click the **Save** button to save the data. The data file(s) is saved based on your specifications. If you named files or folders based on data from your data set, you may see separate folders and files. For folders, there is a separate folder for each unique entry in your data set. Within each folder you find the appropriate data file. For data files, the data file names begin with the region data you chose during the set up process.

Custom Format for Saving Data

The Custom format allows you to create a customized text file. This format is useful for exporting data into a database or other program that has very specific requirements. The format can also be used to break apart rows of data into multiple records. For example, if you are processing an attendance sheet containing records for multiple students in a single row, you can use the Custom format to separate the data into one record for each student.

To use the Custom format

1. Select the **file** menu and then click **Save Data As**. The Save Data window opens, allowing you to choose a file name, a file type, the folder in which you would like the file saved and advanced saving options.

2. Select the desired folder location using the **Look in** drop down box.

3. Enter a name in the box titled **file name**.

4. Select the **Custom (*.ASC, *.TXT)** format in the box titled **Save as type**.

5. Click the **OK** button.

6. If you have used the Custom format previously and have a saved configuration file that applies to this data set, click the ellipsis (...) button to locate the configuration file. Otherwise, continue to the next step

7. Select the options you wish to use to customize your data set. Each option is described here:

Option	Description
Start export at row	Enter the row number that you want to use as the first record in the exported data file. All rows from this point forward are included in the data file. Enter 0 to include region (field) names as the first record.
file Type	Delimited: Fields are separated by a delimiter, such as a comma or tab. Fixed-Width: Fields are aligned at fixed character spaces.
Record Delimiter	Sets the delimiter to be used to separate records: Carriage Return/Line Feed, Carriage Return, Line Feed or any other string.
Column Delimiter	Select the character to use to separate the columns in the data file: Comma, Tab, Semi-colon, Space or any other string.
Text Qualifier	Select the character to use to qualify text. Textual responses are encapsulated within these characters. Options include: None, double quote ("), single quote (').
Multiple Response Qualifier	Select the character to use qualify multiple responses. Reponses are encapsulated within these characters. Options include: Parenthesis (( )), Curly Braces ({ }), Square Braces ([ ]), Angle Brackets (< >) or any other single character.
Multiple Response Delimiter	Select the character to use to separate multiple responses. Options include Comma (,), Hyphen ("), Colon (:), Semi-colon (;), Space or any other single character.
Fixed Width files Only:	
Automatically format questions that allow multiple responses	Mark the Automatically format questions that allow multiple responses checkbox to automatically set formatting for questions that allow more than one answer choice (e.g., (1,2,3) becomes 123). Note that Remark looks at the longest answer choice and any answer choices that are shorter have padding added to them to make them the same length. For example, if the answers are 5, 10 and 3, it would look like 5 103. One space of padding is added after the 5 because 10 is the longest answer choice with two characters. This setting only applies to Fixed Width files.
Field Size	The maximum number of characters allowed in the field.
Start Position	The position, in characters, where the field begins. For example, if your field sizes are 25, the first field starts at position 1 and the second field starts at position 26 (25 characters later). This field is for reference only and cannot be changed.
Pad Character	Enter the character to use to pad the field (typically a space character).
Pad On	Select whether to pad the field on the left or right of the text that resides in the field.

8. Click the **Next** button to go to the next step.

9. Use this step if you need to break your data apart into multiple records. This option is useful for things like attendance forms, session evaluations and any other forms that evaluate more than one person on a single form. If you do not need to break apart data, simply click the **Finish** button (step 14).

10. Choose how many records you want in your data set. For example, if you are processing an attendance sheet and there are 20 students per form (row of data), you would enter 20. Click the **Update** button. The number of desired records are created on the right side of the window.

11. You have three options for formatting the file:

- **Add to Every Record:** Choose this option to add a question (or questions) to every record in the data set. In our attendance example, this might be a class name or teacher name (something that is static for everyone).
- **Add to Selected Records:** Use this option to add questions to only the records you have selected on the right side of the window. This option lets you fine tune what goes into each record.
- **Split Among Records:** Use this option to select questions and then have them equally split across all records. In our attendance example, this would be the questions that are used to track attendance (e.g., days of the week). For example, suppose you have students listed down the left side of the form and options for Monday-Friday for each student. If a student is in attendance, the corresponding bubble is filled. If the student is absent, the bubble is left blank (this is a Boolean region). You can split the students among all the records. Then split each day among all the records. See screen shot at right. If your data was not split, you might have something like this:

Notice how the students and attendance are listed in one long row.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Student1	Student2	Student3	Student4	Student5	M1	M2	M3	M4	M5	T1	T2	T3	T4	T5	W1	W2	W3	W4	W5
12345	57748	43637	56832	34577	0	0	1	1	1	0	0	1	0	0	1	1	1	1	1

However, if you split your data, you have this:

A	B	C	D	E	F
12345	0	0	1	1	1
57748	0	0	1	0	1
43637	1	1	1	0	1
56832	1	0	1	1	1
34577	1	0	1	1	1

Notice how each student is now occupying one record of data, along with his/her attendance.

12. Using the above descriptions, parse your data as needed.

13. Use the **Preview** button to preview how your data will look once exported.

14. When finished, click the **Finish** button.

15. When the **Save Configuration** window appears, click the **Yes** button to save your settings to a file that you can use later when saving data. If you do not wish to save this configuration file, click the **No** button. If you are not saving the *configuration* file for later use, the *data* file is saved when you click the No button. Continue with the next steps if you are saving the configuration file. Otherwise you are finished saving your data.

   - [Optional] If saving the configuration file, in the **Save Text Export Configuration As** box, select a location in which to save the configuration file in the **Save in** box.

   - Enter a name for the file in the **file name** box.

   - Leave the **Save as type** box set to **Text Export Configuration files (*.tec)**.

   - Click the **Save** button to save the TEC file and create the data file.

The data is saved according to your specifications and you can reuse the TEC file in the future. The resulting text file can be taken to the application of your choice.

Creating a Data Transform

If you want to use Remark Quick Stats to analyze a subset or customized configuration of your data, you can use the Data Transform option. This option allows you to set up the same custom parameters and pass them into Remark Quick Stats so that your data can be analyzed. Normally the newly formatted file would require a new template to match, but the transform option does that for you. Note that if you want to analyze your data on multiple occasions, you will need to perform the transform option each time. You can use a saved custom text configuration file (.tec) when using the data transform option (you do not have to start from scratch). Note that the data transform option does not output a data file. If you want a saved data file you should use the Custom Format first (file|Save Data|Custom... see section above).

To create a custom transform

1. Scan forms or open a data file.
2. If analyzing a survey, click the drop-down arrow on **Advanced Survey** and choose **Create Data Transform**. If grading a test, click the drop-down arrow on **Advanced Grade** and choose **Create Data Transform**.
3. [Optional] If you previously created a transform file or saved data using the Custom Text option, you may use the ellipsis (...) to open the existing .tec file. The remainder of these instructions will focus on creating a new data transform.
4. Click the **Next** button.
5. Use this step if you need to break your data apart into multiple records. This option is useful for things like attendance forms, session evaluations and any other forms that evaluate more than one person on a single form. If you do not need to break apart data, simply click the **Finish** button (step 11).
6. Choose how many records you want in your data set. For example, if you are processing an attendance sheet and there are 20 students per form, you would enter 20. Click the **Update** button. The number of desired records are created on the right side of the window.
7. You have three options for formatting the file:

- **Add to Every Record:** Choose this option to add a region (or regions) to every record in the data set. In our attendance example, this might be a class name or teacher name (something that is static for everyone).
- **Add to Selected Records:** Use this option to add regions to only the records you have selected on the right side of the window. This option lets you fine tune what goes into each record.
- **Split Among Records:** Use this option to select regions and then have them equally split across all records. In our attendance example, this would be the regions that are used to track attendance (e.g., days of the week). For example, suppose you have students listed down the left side of the form and options for Monday-Friday for each student. If a student is in attendance, the corresponding bubble is filled. If the student is absent, the bubble is left blank (this is a Boolean region). You can split the students among all the records. Then split each day among all the records. See screen shot at right. If your data wasn't split, you might have something like this:

Notice how the students and attendance are listed in one long row.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Student1	Student2	Student3	Student4	Student5	M1	M2	M3	M4	M5	T1	T2	T3	T4	T5	W1	W2	W3	W4	W5
12345	57748	43637	56832	34577	0	0	1	1	1	0	0	1	0	0	1	1	1	1	1

However, if you split your data, you have this:

A	B	C	D	E	F
12345	0	0	1	1	1
57748	0	0	1	0	1
43637	1	1	1	0	1
56832	1	0	1	1	1
34577	1	0	1	1	1

Notice how each student is now occupying one record of data, along with his/her attendance.

8. Using the above descriptions, parse your data as needed.
9. Use the **Preview** button to preview how your data will look once exported.
10. When finished, click the **Analyze** or **Grade** button.
11. When the **Save Configuration** window appears, click the **Yes** button to save your settings to a file that you can use later when saving data or creating a data transform. If you do not wish to save this configuration file, click the **No** button. Continue with the next steps if you are saving the configuration file. Otherwise you are finished creating your data transform.
    - **Note:** No data is saved. You are only saving the configuration settings to be used at another time.
        - [Optional] If saving the configuration file, in the **Save Text Export Configuration As** box, select a location in which to save the configuration file in the **Save in** box.
        - Enter a name for the file in the **file name** box.
        - Leave the **Save as type** box set to **Text Export Configuration files (*.tec)**.

71

- Click the **Save** button to save the TEC file.

13. Depending on your operation, **Advanced Survey** or **Advanced Grade** opens. Make the desired selections to analyze your data and run Remark Quick Stats. Please see the Remark Quick Stats User's Guide PDF to learn more about these options (Start|All Programs|Remark Classic OMR 5|Documentation).

Database Update Format for Saving Data

The database update format allows you to update an existing database based on the data in the Remark Classic OMR data grid (Access or Excel). The data are matched to the existing database by the region names and a mapping process. When saving to this format, you map the regions in the Remark Classic OMR data to the fields in the existing database. You also choose a question to be the record identifier. If data corresponding to the unique record identifier exists in the database it is updated with what is in Remark Classic OMR when the identifiers are matched. For example, if you are conducting a survey that collects demographic information, and include for a respondent identifier on your form, you could use the identifier as the record ID to update an external database using the Database Update format. During the save process, Remark Classic OMR attempts to find the ID in the database and then updates the data fields associated with that respondent. If the ID is not found, you have the option of adding the record to the external database.

- **Note:** The ODBC Database Update format works just as described here, but you can save to a database using an ODBC connection.

To use the Database Update format

1. Select the **file** menu and then click **Save Data As**. The Save Data window opens, allowing you to choose a file name, a file type, the folder in which you would like the file saved and advanced saving options.

2. Select the desired folder location using the **Look in** drop down box.

3. Select a file to update, which fills the file name box.

4. Select the **Database Update (*.ACCDB, *.MDB, *. XLSX, *.XLS)** format in the box titled **Save as type**.

5. Click the **OK** button. A window opens to walk you through the next few steps.

6. If you have used the Database Update format previously and have a saved configuration file that applies to this data set, click the **Load...** button to locate the configuration file. Otherwise, go on to step 7.

   - **Note:** You are prompted to save a configuration file with your settings after saving the data.

7. In the **Update Options** area, select the number of records contained in each row of the data set (e.g., if multiple respondents' answers are on a single form, you would have more than one record per data row). If each record in the data set corresponds to one respondent's submission, use 1 for the value.

8. In the **Update Options** area, mark the **Add database records for missing record identifiers** checkbox if you would like to create new records in the database when an identifier is not found.

9. In the **Field Mapping** area, map the regions from Remark Classic OMR to the fields in the external database. The target database fields are listed in the first column, called **Database Field**, and the Remark Classic OMR regions (questions) are listed in the second column, called **Grid Column**. Use the down arrow in the Grid Column section to choose the appropriate field to map to the corresponding database field.

- **Note:** Remark Classic OMR attempts to automatically map the fields based on the field/region names. Review the field mapping first and then make changes if necessary.

10. Choose a field or fields to use as an identifier by marking the appropriate checkbox next to the field name. The identifier fields are used to match data from Remark Classic OMR to the external database. If a match is not found, the data is not added to the database (unless you selected this feature in step 8) and you receive a message. You may select more than one field to use as the identifier, in which case the data from all identifier fields must be a match for the record to be updated in the external database.

11. Click the **OK** button to save the data.

12. If any problems are encountered when updating the selected file, a message appears detailing the problems. If the database is updated successfully you receive a message telling you how many records were updated and asking you if you want to save the configuration file for later use (if you use this same template and external database again, you can save a configuration file and skip the mapping process). If you do wish to save the file, click the **Yes** button. Enter a file name and choose a location for the .ini file in the **Save** window that appears.

Opening Data files

The Remark Classic OMR Data Center can open data saved in dozens of different file formats. We specifically designed the Remark file format to optimize the data storage process in the Remark Classic OMR software. The software is designed to work with data that is collected using a form template in Remark Classic OMR. Therefore, you must first open a form template and then open the corresponding data file. Once the data file is opened, you can save it to another format or location, or use Remark Quick Stats to analyze it.

- **Tip:** When working with data in Remark Classic OMR, use the Remark file format (RMK or RMX). This format saves exception case colors and links to scanned images* (*image enabled scanners only). Only save data to other formats when exporting.

The following table lists the different file formats the Data Center can open, their extensions and a brief description:

file Format	Extension	Description
Remark Extended	RMX	Remark format; stores grid exception colors; includes information about changed responses for associated reports in Remark Quick Stats
Remark	RMK	Remark format; saves grid exception colors
SQL Server 2000-2005	MDF	Microsoft SQL Server format
Oracle 7.4 & later	*.*	Oracle format
Access 2007-2016	ACCDB	Microsoft Access 2007-2013 format (only available if the 32-bit Microsoft Office 2007 or greater database engine is installed) *Note: If you are running a 64-bit version of Microsoft Office, you may install the 32-bit Office engine alongside of it.
Access 2000-2003	MDB	Microsoft Access 2000-2003 format
Access 95-97	MDB	Microsoft Access 95-97 format
Access 2.0	MDB	Microsoft Access 2.0 format
Access 1.0	MDB	Microsoft Access 1.0 format
Excel 2016	XLSX	Microsoft Excel 2016 format
Excel 2013	XLSX	Microsoft Excel 2013 format
Excel 2010	XLSX	Microsoft Excel 2010 format
Excel 2007	XLSX	Microsoft Excel 2007 format
Excel 97-2003	XLS	Microsoft Excel 97-2003 format
Excel 95	XLS	Microsoft Excel 95 format
Excel 4.0	XLS	Microsoft Excel 4.0 format
Excel 3.0	XLS	Microsoft Excel 3.0 format
SPSS	SAV	SPSS 16 format
SPSS Legacy	SAV	SPSS 6 format
Survey Pro	SRV	Survey Pro standard format (Apian Software)

file Format	Extension	Description
CSV	CSV	Comma separated values
Text	TXT	Tab delimited text with quotes around textual data
Opinionmeter	ASC	Comma delimited text format for Opinionmeter application
StatPac	DAT	StatPac format for StatPac Survey Software
dBase 5.0	DBF	dBase 5.0 format
dBase IV	DBF	dBase IV format
dBase III	DBF	dBase III format
Paradox 5.X	DB	Paradox 5.X format
Paradox 4.X	DB	Paradox 4.X format
Paradox 3.X	DB	Paradox 3.X format
Lotus WK4	WK4	Lotus Works 4 format (open only)
Lotus WK3	WK3	Lotus Works 3 format
Lotus WK1	WK1	Lotus Works 1 format
Lotus WJ3	WJ3	Lotus 1-2-3 version 3 format
Lotus WJ2	WJ2	Lotus 1-2-3 version 2 format
Lotus 1-2-3	WKS	Lotus 1-2-3 format
LXR Test	MRG	LXR Test format
Report	RPT	Fixed format ASCII, cell text padded or truncated to specified record length
Data Interchange Format	DIF	Standard format using file header and data section
XML	XML	Extensible Markup Language format
HTML	HTM	Hypertext Markup Language
ODBC	*.*	Open Database Connectivity

To open grid data

1. Open the correct form template.

2. Select the **file** menu and then click **Open Data** to display the **Open Data** window. Alternatively, use the **Open data file** link from the task pane or **Open Data** button from the toolbar.

3. Select a file from the list. Use the **Look in** box to locate saved data files. You may need to adjust the **files of type** list to find the desired file.

   - **Note:** The data contained in the file must correspond to the currently active form template or an error may occur.

4. If opening a database file, select the appropriate table from the **Table name** drop-down list.

5. Click the **OK** button to open the data file.

   - **Caution:** When opening a database file type, the Data Center attempts to match grid column headers (region names) to the database's field names. If any column headers cannot be matched, an error occurs. Grid column headers do not need to appear in the same order as the database fields.
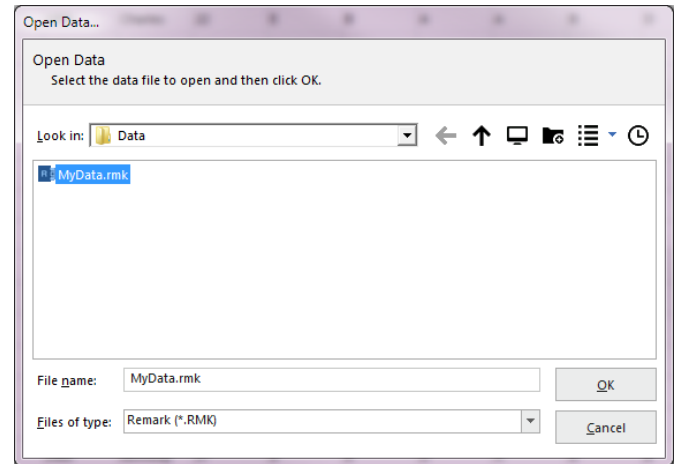
You may now read more forms, save the data to a new format or location or run Remark Quick Stats for analysis.

File Formats

The following sections contain detailed information about each file format supported in Remark Classic OMR.

Remark Format (RMK, RMX)

There are two Remark formats: Remark (RMK) and Remark Extended (RMX). The Remark formats are proprietary to the Remark software and, therefore, can only be used in Remark applications. We recommend that you use the Remark file format as your default file format and only save to other file formats when exporting data to other applications. These formats save data grid exception colors to make reviewing data easier (if using an image enabled scanner). In addition, the Remark extended format saves information about changed responses so that you can run reports in Remark Quick Stats to view how many times a response was changed or respondents who change responses frequently, which could be useful when grading tests.

- **Tip:** The Remark formats are the only formats that preserve the exception case colors. We recommend exporting data to other formats only after you have fully cleaned your data.

Extension	• RMK, RMX
Options (automatic)	• Saving Grid Colors: The RMK and RMX formats automatically save the exception colors in the data, which are used in conjunction with Review Exceptions to clean your data. • Storing Changed Responses: The RMX format stores information about how many times a response was changed and how many times a respondents changed responses, which can be reported on Remark Quick Stats.
Limitations	• Proprietary to Remark software and cannot be used in other products.

Access Formats (ACCDB, MDB)

The Access file formats are proprietary to the Access database program by Microsoft Corporation. Remark Classic OMR supports the Access version 1.0 through 2016 file formats. Column (region) names in Remark Classic OMR are used as field names when saving to an Access database. Remark Classic OMR can save data to a new Access database, add new tables to existing Access databases and append data to existing Access tables.

Extension	• ACCDB, MDB
Options	• Table Name: When saving to an Access database, you must select a table name to which to save the data.
Limitations	• Field (region) and table names can contain a maximum of 60 characters (including spaces). Field (region) and table names cannot include: leading spaces, periods (.), exclamation points (!), accent graves (`) and brackets ([]). • An Access table can hold a maximum of 255 fields. • All region (field) names must be unique. • An Access table record can hold a maximum of 2000 characters (excluding Memo and OLE object regions). • If saving data to an existing table, grid column headers (region names) in Remark Classic OMR must match table field names. • When Remark Classic OMR creates an Access table, textual fields can contain a maximum of 255 characters. If you would like a field to support more than 255 characters, Edit the database in Microsoft Access and change the field type from a Text field to a Memo field. Alternatively, click the Advanced button in the Remark Classic OMR Save Data window and change the field type to Memo. • In order to see the latest formats, you must have the 32-bit Microsoft Office database engine installed, which you can find on the Microsoft website. If you are

	running a 64-bit version of Microsoft Office, you may install the 32-bit Office engine alongside of it.

Comma Separated Values (CSV) Format

The CSV file format is a generic textual format and can therefore be used by many different applications. Grid cells are delimited by commas. Grid rows are delimited by a carriage return line feed sequence. CSV is a good choice for importing data into other applications.

Extension	• CSV
Options	• Save Headers: The Save Headers option in the Save Data window saves the grid column headers (region names) as the first record in the file. • Encoding: The Encoding lists allows you to choose the type of character encoding you want to use. You should find out the requirements of your data analysis package before choosing an encoding type. Choices include: o System Default: Use the Windows default encoding type (if you are uncertain about encoding, we recommend you use this setting). o ASCII: Standard encoding scheme that encodes 128 specified characters into 7-bit binary integers. o Big Endian Unicode: UTF-16 variable-length encoding capable of encoding 1,112,064 possible characters into Unicode. o Unicode: Consistent encoding option that encodes 110,000+ plus characters. It is especially good for international characters, such as those found in the Arabic and Hebrew languages. o UTF32: Fixed length encoding that uses exactly 32 bits per Unicode code point. o UTF7: Variable length encoding for representing Unicode text in a stream of ACSII characters. It was often used in email, but has lost popularity. o UTF8: Variable length encoding capable of encoding all possible characters in Unicode. Designed for backward compatibility with ASCII.
Limitations	• When saving a CSV file, which is comma delimited, other applications may have difficulty opening the file if the data contain multiple responses. Multiple responses typically contain commas, which are also used as cell delimiters. Consider using the Custom format if you have questions that allow more than one response in the same data cell.

Data Interchange Format (DIF)

The Data Interchange file format is a "standard" method of exchanging data between non-compatible programs. By its nature DIF cannot support program-specific information, such as cell formats.

Extension	• DIF
Options	• None
Limitations	• None

dBase Format (DBF)

The dBase file formats are commonly used database file formats used to transfer information between applications. Remark Classic OMR supports dBase version III, IV, and V file formats. Column (region) names in Remark Classic OMR are used as field names when saving to a dBase table. A dBase database is represented by a directory. A dBase table is represented by a DBF file within a dBase database. Remark Classic OMR can save data to a new dBase table and append data to existing dBase tables.

Extension	• DBF
Options	• None
Limitations	• Region (field) names can contain a maximum of 10 characters (including underscores). • Spaces in region (field) names will be automatically converted to underscores. • All region (field) names must be unique. • Region (field) names cannot include punctuation. • A dBase table can hold a maximum of 255 fields. • If saving data to an existing table, grid column headers (region names) in Remark Classic OMR must match table region names. • When Remark Classic OMR creates a dBase table, textual fields can contain a maximum of 255 characters. If you would like a field to support more than 255 characters, Edit the database table in the dBase software program and change the region type from a Text region to a Memo region. Alternatively, click the Advanced button in the Remark Classic OMR Save Data window and change the field type to Memo.

Excel Format (XLS, XLSX)

The Excel file formats are proprietary to the Excel spreadsheet program by Microsoft Corporation. When saving data, Remark Classic OMR supports the Excel version 97-2016 file formats. When opening data, however, you can go back as far as Excel 3.0. Column (region) names in Remark Classic OMR are used as field names when saving to an Excel spreadsheet. Remark Classic OMR can save data to a new Excel spreadsheet, add new sheets to existing Excel spreadsheet and overwrite existing Excel files.

- **Note:** Older versions of the Excel formats have limitations, such as character limits and a 255 field limit. Use the 2013 format to avoid these limitations.

Extension	• XLSX, XLS
Options	• Sheet Name: When saving to an Excel spreadsheet, you must select a sheet name to which to save the data.
Limitations	• If saving data to an existing sheet, grid column headers in Remark Classic OMR must match spreadsheet field names. • In order to see the latest formats, you must have the 32-bit Microsoft Office database engine installed, which you can find on the Microsoft website.

HTML Format (HTM, HTML)

HTML stands for Hyper Text Markup Language. Use HTML to publish data and results from Remark Classic OMR to the Internet or an intranet. Remark Classic OMR saves data as well as graphs (from analysis reports) for inclusion in web based documents.

Extension	• HTM, HTML
Options	• None
Limitations	• None

Lotus Format (WKS, WK1, WK3, WK4, WJ2, WJ3)

The Lotus file formats are proprietary to the Lotus 1-2-3 program by Lotus Development Corporation. Remark Classic OMR supports the Lotus 1-2-3, WK1, WK3 and WK4 formats.

Extension	• WKS, WK1, WK3, WK4, WJ2, WJ3
Options	• None
Limitations	• Data saved to a Lotus 1-2-3 version 2.0 format can have a maximum of 240 characters per cell. Remark Classic OMR displays an error message (listing the cell location) if any cell exceeds 240 characters when saving to a Lotus 1-2-3 file format. • If a cell contains any textual data, the entire column is saved as a string (text) rather than numeric data. • Data in the WK4 format can only be opened (not saved).

LXR Format (MRG)

The LXR Test format by Logic Extension Resources is a tab delimited ASCII file made for exporting data to LXR Test. The file contains a custom header followed by the data. Grid rows are delimited by a carriage return line feed sequence.

Extension	• MRG
Options	• None
Limitations	• None

Open Database Connectivity (ODBC)

Open Database Connectivity, or ODBC, is a standard format independent of database and operating systems. ODBC works using an ODBC driver, which must be installed and configured correctly. Consult your database documentation for configuration and installation instructions. Once the ODBC driver is configured, you can select it in the Remark Classic OMR Save Data window during a regular save operation. For example, you can save to MySQL and MariaDB using the ODBC driver.

Extension	• *.*
Options	• None
Limitations	• Consult your database documentation for specific format limitations.

Opinionmeter Format (ASC)

The Opinionmeter file format creates a text file for importing into the Opinionmeter application. Grid cells are delimited by commas. Multiple responses are encapsulated in parentheses. Grid rows are delimited by a carriage return line feed sequence.

Extension	• .ASC
Options	• Save Headers: The Save Headers option in the Save Data window saves the grid column headers (region names) as the first record in the file.
Limitations	• None

SQL Server

The SQL Server driver is proprietary to the SQL Server database program by Microsoft. Remark Classic OMR can add new tables to existing SQL Server databases and append data to existing SQL Server tables.

Extension	• NA
Options	• Server: The SQL Server driver saves data to the server you specify. • Table Name: The SQL Server driver saves data to the table within the database you specify. You may create new tables or save to existing tables. • Login: You may log in to the database for security purposes.
Limitations	• Consult the SQL Server database documentation for specific format limitations.

Oracle

The Oracle driver is proprietary to the Oracle database program by Oracle. Remark Classic OMR can add new tables to existing Oracle databases and append data to existing Oracle tables.

Extension	• NA
Options	• Server: The Oracle driver saves data to the server you specify.
	• Table Name: The Oracle driver saves data to the table within the database you specify. You may create new tables or save to existing tables.
	• Login: You may log in to the database for security purposes.
Limitations	• Consult the Oracle database documentation for specific format limitations.

Paradox Format (DB)

The Paradox file formats are proprietary to the Paradox database program by Borland International, Inc. Remark Classic OMR supports Paradox version 3.X, 4.X, and 5.X, 7 and 8 file formats. Column (region) names in Remark Classic OMR are used as field names when saving to a Paradox database. Remark Classic OMR can save data to a new Paradox database or overwrite existing tables.

Extension	• DB
Options	• Primary Index: When saving to a Paradox database, you must select a field to use as the primary index.
Limitations	• Primary Index: You must select a field to use as a primary index. A primary index must contain a unique value for every record.
	• For Remark Classic OMR to save data to a Paradox table, the ParadoxNetStyle must be set to the selected Paradox save format. (See your Paradox database documentation for more information on the ParadoxNetStyle property.)
	• All region (field) names must be unique.
	• A Paradox table can hold a maximum of 255 fields (columns).
	• A Paradox record can hold a maximum of 10,800 bytes.
	• If saving data to an existing table, grid column headers (region names) in Remark Classic OMR must match table field names.
	• When Remark Classic OMR creates a Paradox table, textual fields can contain a maximum of 255 characters. If you would like a field to support more than 255 characters, Edit the database in Paradox and change the field type from a Text region to a Memo field. Alternatively, click the Advanced button in the Remark Classic OMR Save Data window and change the field type to Memo.

Questionmark Format (QSF)

The Questionmark format is proprietary to the Questionmark Perception assessment software program. This format has specific parameters that must be defined, including a Snapshot ID (the value that uniquely identifies the assessment) and the Participant (the region that identifies each respondent). Additionally, there are optional parameters you may specify, including the Group, Details, Date and Monitor. This information should closely match what was originally defined in Perception. For example, the Snapshot ID used should already be defined in Perception as the ID for this particular form, the Participant IDs should already be defined in Perception as the student identifiers, Group should already be defined, Questions should already be defined in the same order as they appear in this form, Special fields should already be defined in the appropriate order and Details should already be defined (as to what type of information the field should contain). Please see the table below for further details.

Extension	• QSF
Required Parameters	• Snapshot ID: A value that uniquely identifies the assessment. Each record in the data file must contain the same Snapshot ID. The Snapshot ID must be a numeric value from 1 to 99999999. Choose a field containing the Snapshot ID or enter one manually. • Participant: Participant, student or respondent identifier. This field uniquely identifies each respondent. Every record in the data file must contain a unique Participant identifier. Choose the field containing this information.
Optional Parameters	• Group: Group, category, course or department. This entry should match the groups defined in your Questionmark application. Choose the field containing the group or enter a group name manually. • Details: Optional demographic data. Choose the field containing the details or enter a value manually. • Date: Date the assessment took place. Choose a field containing the date or enter one manually. • Monitor: Monitor, teacher or instructor name. Choose the field containing the monitor name or enter one manually.
Limitations	• The Questionmark format is only available when saving data. You may create new files or overwrite existing files, but you cannot open the files in Remark Classic OMR. • Region names cannot contain double quotes ("). • Spaces entered before or after a region name or data label will be ignored. However, spaces in the middle of a region name or data label will be counted. " • Graded questions MUST use region names of "Q1, Q2, Q3..." or "Question1, Question2, Question3..."

	• You may optionally define questions called "Special1 - Special10" that can contain more optional demographic data. • The following fields can contain a max of 50 characters (any more will be truncated): Participant, Group, Details, Monitor, Special1 - Special10. • All exceptions should be corrected before exporting to this format. Any exception found in the graded questions when exporting is treated as an unanswered question.

Report Format (RPT)

The Report file format is a fixed width ASCII file. Each cell is padded, if necessary, to the specified length. Grid rows are delimited by a carriage return line feed sequence. The specified record length is written to the beginning of the file followed by the actual data.

Extension	• RPT
Options	• Save Headers: The Save Headers option in the Save Data window saves the grid column headers (region names) as the first record in the Report data file. • Record Length: The Record Length option in the Save Data window allows you to choose the fixed length of each piece of data written to the file.
Limitations	• If any cells contain data longer than the specified record length, Remark Classic OMR displays an error message that lists the cell location.

SPSS Format (SAV)

The SPSS file format is proprietary to the SPSS statistical software program by SPSS, Inc. The column headers (region names) in Remark Classic OMR are saved as SPSS variable names. The question text, if entered, is saved as SPSS variable labels. Remark Classic OMR uses the Labels and Values defined when creating the form template as SPSS value labels and value numbers, respectively. Missing, invalid or unrecognized responses in Remark Classic OMR are assigned an SPSS missing value of -1 by default.

• **Note:** The SPSS file format outputs numeric data for each of your Labels. By default, Remark Classic OMR uses a sequential numbering scheme, called Values, which begins with 1 for the first Label. You may change these values in the form template by selecting a question's properties.

Extension	• SAV
Options	• Save Headers: The Save Headers option in the Save Data window saves the grid column headers (region names) as the header names in the SPSS data file. If Save Headers is not selected, default variable names are used (e.g., v1, v2, etc.).
Limitations	• Data saved to an SPSS format can have a maximum of 255 characters per cell. Remark Classic OMR automatically truncates any cell text that is greater than 255 characters when saving to an SPSS file. • Labels (Value Labels in SPSS) can have a maximum of 60 characters. • Values: If custom Values are not defined during form template creation, Remark Classic OMR assigns Values in sequential order to use as SPSS Values. • Region names (Variable Names in SPSS) can have a maximum of 60 characters. If a region name has more than 60 characters, it is truncated. • Region names cannot begin with a number. • Region names (Variable Names in SPSS) must be unique. If a region name is used more than once, SPSS converts the name to a standard naming convention (e.g., v1). • Question text (Variable Labels in SPSS) can have a maximum of 120 characters. • Questions that allow more than one response are broken into separate Boolean questions for each answer option and the answers are saved as a dichotomy of 1 representing selected and 0 representing not selected. The question is then defined as an SPSS multiple response set that can then be analyzed. (You do not have to set the question up as Boolean in the Template Editor; it is handled behind the scenes).

SPSS Legacy Format (SAV)

The SPSS file format is proprietary to the SPSS statistical software program by SPSS, Inc. We strongly recommend using the SPSS format (non-legacy) but if you require an older version of the format, you may use the legacy format. The older version does have more limitations. The column headers (region names) in Remark Classic OMR are saved as SPSS variable names. The question text, if entered, is saved as SPSS variable labels. Remark Classic OMR uses the Labels and Values defined when creating the form template as SPSS value labels and value numbers, respectively. Missing, invalid or unrecognized responses in Remark Classic OMR are assigned an SPSS missing value of -1 by default.

• **Note:** The SPSS file format outputs numeric data for each of your Labels. By default, Remark Classic OMR uses a sequential numbering scheme, called Values, which begins with 1 for the first Label. You may change these values in the form template by selecting a question's properties.

Extension	• SAV
Options	• Save Headers: The Save Headers option in the Save Data window saves the grid column headers (region names) as the header names in the SPSS data file. If Save Headers is not selected, default variable names will be used (e.g., v1, v2, etc.).
Limitations	• Data saved to an SPSS format can have a maximum of 255 characters per cell. Remark Classic OMR will automatically truncate any cell text that is greater than 255 characters when saving to an SPSS file. • Labels (Value Labels in SPSS) can have a maximum of 60 characters. • Values: If custom Values are not defined during form template creation, Remark Classic OMR assigns Values in sequential order to use as SPSS Values. • Region names (Variable Names in SPSS) can have a maximum of eight characters. If a field name has more than eight characters, it will be truncated. • Region names cannot begin with a number. • Region names (Variable Names in SPSS) must be unique. If a region name is used more than once, SPSS will convert the name to a standard naming convention (e.g., v1). • Question text (Variable Labels in SPSS) can have a maximum of 120 characters. • Remark Classic OMR can open and save to an uncompressed SPSS format only. Remark Classic OMR cannot open compressed SPSS files. If you need to uncompress your SPSS file, first open the file in SPSS. Select the file menu and click Save As. Enter a file name and then click the Paste button. In the Syntax Editor window, change the word "COMPRESSED" to "UNCOMPRESSED". Press Ctrl+A to select the text, then select the Run menu and click Current. • SPSS cannot import multiple responses (e.g., (A,B,C)) as numeric data. Questions that allow multiple responses in Remark Classic OMR will be formatted as a string when exported to the SPSS file format, which will not import properly. To import questions that allow multiple responses into SPSS as numeric data, set the questions up as Boolean OMR regions in the form template. As a result, Remark Classic OMR will output the responses to separate cells (each answer choice will be treated as a individual question in the data grid). Once the data have been opened in SPSS, you can combine the data for each answer in the question back into one question. Refer to the SPSS User's Guide for more information.

StatPac Format

StatPac data files are fixed format sequential ASCII files with a carriage return and line feed at the end of each line. When saving to the StatPac format two files are created: .dat and .cod. You import the .dat file into StatPac but the .cod file is also required. Both files should have the same name up to the period before the extension. StatPac imports both Question Names and Question Text.

Extension	• DAT
Options	• None
Limitations	• You need both the .dat and .cod files when importing into StatPac. Ensure that the names up to the period are the same (Remark Classic OMR does this automatically for you when saving). • The StatPac format imports both Question Names and Question Text (optional).

Text Format (TXT)

The Text file format is generic and can therefore be used by many different applications. The text format similar to the CSV format with two differences:

- The text format places quotes around textual data.
- All text files are tab delimited

Extension	• TXT
Options	• Save Headers: The Save Headers option in the Save Data window saves the grid column headers (region names) as the first record in the Spreadsheet data file.
Limitations	• All text files are tab delimited with quotes around textual data.

The Survey System (DAT, CRS)

The Survey System file format is proprietary to The Survey System survey design and analysis software program by Creative Research Systems. When saving to the Survey System file format, Remark Classic OMR creates two files: a data file and a questionnaire definition file. To import the data into The Survey System, first import the questionnaire definition file (CRS extension) and then open the data file (DAT extension) within that questionnaire. Consult The Survey System user's guide for additional information. Data may only be saved to The Survey System format (not opened in Remark Classic OMR).

Extensions	• DAT, CRS
Options	• None
Limitations	• You may create new data files or overwrite existing files only (not open data files in Remark Classic OMR).

XML Format (XML)

The XML format is used to save data to an XML file, which stands for Extensible Markup Language and is widely used for the exchange of data on the Internet.

Extension	• XML
Options	• None
Limitations	• Region (field) names can contain a maximum of 60 characters (including spaces). • Region (field) names cannot include: leading spaces, periods (.), exclamation points (!), accent graves (`) and brackets ([]). • An XML file can hold a maximum of 255 fields. • All region (field) names must be unique. • An XML record can hold a maximum of 2000 characters (excluding Memo and OLE object regions). • If saving data to an existing file, grid column headers (region names) in Remark Classic OMR must match field names. • When Remark Classic OMR creates an XML file, textual fields can contain a maximum of 255 characters. If you would like a field to support more than 255 characters, Edit the file and change the field type from a Text field to a Memo field. Alternatively, click the Advanced button in the Remark Classic OMR Save Data window and change the field type to Memo.

Emailing Data Overview

You can email data files in their native formats or in ZIP format from the Remark Classic OMR Data Center. You have a choice of using Microsoft Outlook 2007 or greater or your own SMTP server (Custom) to send the emails.

• **Note:** When emailing data, a local copy of the data is not saved. If you need to save a data file, make sure you take that step in addition to using the email function.

Microsoft Outlook:

If you plan to use Microsoft Outlook 2007 or greater, you do not need to set up anything outside of telling the software to use Outlook. When you email a data file, Outlook opens a new email with the data attached.

Your SMTP Server:

If you use your own SMTP server, you must have a valid SMTP server set up independently of Remark Classic OMR. SMTP stands for Simple Mail Transfer Protocol and is the Internet standard for transmitting email across networks. It is likely your organization has a running SMTP server already set up. You just need to find out general information about the server. You will need to consult with your network/email administrator to obtain information about your SMTP server.
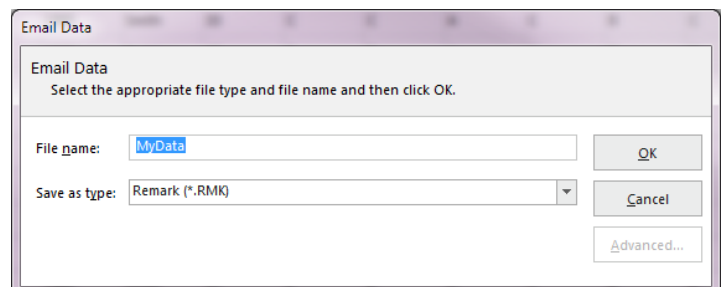
Click here to see how to choose your default email program.

Using Outlook to Email Data

Once you have set up your email preferences in Tools|Preferences, you are ready to start emailing data files.

To email data files using Microsoft Outlook

1. After processing forms, saving data or opening a data file, select the **file** menu and click **Email**.

   - **Note:** If you choose the toolbar option or task pane option to send email, the file is always in zipped format.

2. Choose **Data as Attachment** to attach the native file to an outgoing email message. Choose **Data as ZIP Attachment** to first zip the native data file (compress it into a .zip file) and then attach it to an outgoing email. The **Email Data** window appears.

   - **Note:** Your organization, or the recipient's organization, may have restrictions on the types of files that can be sent via email. If the file is restricted and you do not zip it, the email may never reach the intended recipient. If you are unsure whether the selected file type is restricted, use the ZIP option. The recipient must have a Zip program to unzip the file and view it.

3. Choose the **file name**, file format using **Save as type** and if using a database format, the **Table or Sheet name**. You do not need to specify a location for the file, as it is automatically attached to an email message.

4. Click the **OK** button.

5. Outlook automatically opens a new email message with your file attached. You may now enter recipients and a message and send your file.

   - **Note:** if you chose to zip the file, it appears with a .zip extension.

Using SMTP to Email Data

Once you have set up your email preferences in Tools|Preferences, you are ready to start emailing data files.

To email data files using your SMTP server (Custom)

1. After processing forms, saving data or opening a data file, select the **file** menu and click **Email**.

- **Note:** If you choose the toolbar option or task pane option to send email, the file is always in zipped format.

2. Choose **Data as Attachment** to attach the native file to an outgoing email message. Choose **Data as ZIP Attachment** to first zip the native data file (compress it into a .zip file) and then attach it to an outgoing email. The Email Data window appears.

- **Note:** Your organization, or the recipient's organization, may have restrictions on the types of files that can be sent via email. If the file is restricted and you do not zip it, the email may never reach the intended recipient. If you are unsure whether the selected file type is restricted, use the ZIP option. The recipient must have a Zip program to unzip the file and view it.

3. Choose the **file name**, file format using **Save as type** and if using a database format, the **Table** or **Sheet name**. You do not need to specify a location for the file, as it is automatically attached to an email message.

4. Click the **OK** button.

5. The **Email Message** window appears.

6. Enter the recipient(s)' email address in the **To** box. Separate multiple recipients with a semi colon (;).

7. Enter your return email address in the **From** box.

8. Accept the default subject, which is the file name, or enter a new one in the **Subject** box.

9. In the rich text box, type your message to the recipient(s). You may use the toolbar to format your message as desired.

10. If you have already configured your SMTP settings in Remark Classic OMR you do not need to click the **SMTP Settings** tab. However, if you have not entered your SMTP settings or need to modify
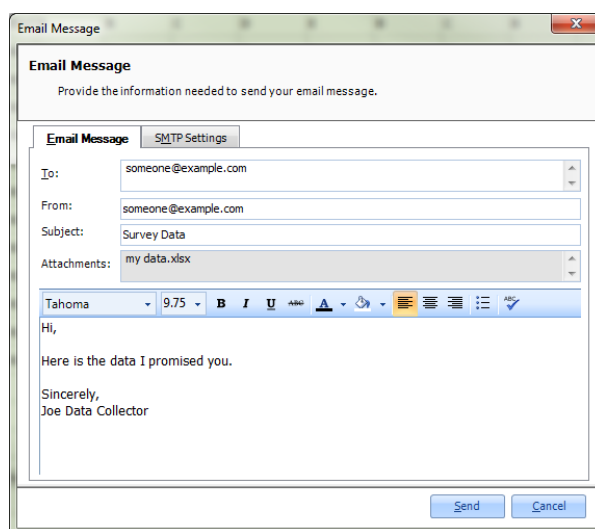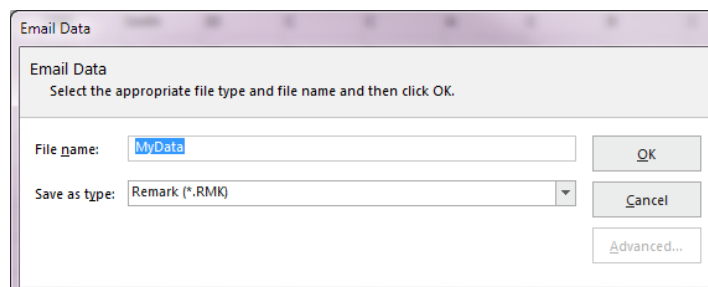
them, click the **SMTP Settings** tab to enter the SMTP server information. You will need to obtain this information from your network/email administrator.

11. Click **Send** when you are ready to send your message.

Your email message is automatically sent. The file is only saved as an email attachment; there is no permanent copy of the file saved on your computer when using the email functionality. If delivery problems occur, delivery reports are routed to the address listed in the From box of the email message (this may depend on how your SMTP server is configured to handle message failures).

Chapter 6: Remark Classic OMR Preferences

Preferences Overview

This section details how to customize the Remark Classic OMR software by setting up preferences. Preferences allow you to set the way the software functions by default, which can facilitate your use of the software. Please note that there are also preferences for Remark Quick Stats.

- **Important Note:** The Preferences are global software settings. When you make a change to the Preferences, it affects all actions from that point forward. It does not affect anything you have already completed.

To access the Preferences

1. In the **Remark Classic OMR Data Center**, select the **Tools** menu and then click **Preferences**.

2. Use the links in the left task pane to access all of the available preferences. Each item is described below and using the links to the left.

3. Once you make a change, click the **Apply** button.

4. When you are finished working with the **Preferences**, click the **OK** button to close the window.

From this point forward, any changes you made take effect. Note that you may click the **Defaults** button at any time to return the settings back to their originally installed state.

Remark Classic OMR Preferences - General

General preferences allow you to setup defaults for basic software functions. The following options are available:

Preference Option	Description
Review Exceptions: Attempt to match typed response to the list	Mark this checkbox so that you can type the first letter(s) of a response into the Response box of Review Exceptions and the software automatically selects the response that begins with those characters. This option applies to questions that employ list box style cells only (Multiple, List, and Boolean OMR regions and Input regions that utilize Database Lookup.
Review Exceptions: Play a sound when the Review process begins	Mark this checkbox to play a sound when Review Exceptions first starts. This feature is useful as an alert if you are processing forms in an unattended manner.
Review Exceptions: Play this sound when an exception is located	Mark this checkbox to play a sound every time an exception case is located in Review Exceptions. Click the ... button to select a .wav sound file. You may also click the ... button to preview the sound.

Preference Option	Description
Review Exceptions: Clear exceptions after they have been reviewed	Mark this checkbox to remove the color coding for an exception after it has been reviewed. This setting applies when you Review grid cells but do not make changes that would automatically remove the exception color (e.g., if a question is legitimately blank, you might leave it as BLANK with the yellow colored cell). By clearing the exceptions, Review Exceptions does not stop on them the next time it is run.
Maximum length for a value in a data grid cell	Enter the maximum number of characters allowed in a data grid cell. You are not able to enter more characters than allowed (e.g., when entering text using an Input region). Note that performance may be affected by data grid cells that contain very large amounts of text.
Numeric data value used to represent invalid responses	Enter the value to be used when invalid data are encountered during a data file export. Invalid data is anything that does not match the labels you defined in the template, such as error codes. If you typed a response in a list cell in the grid but it did not match the labels defined, this data would also be considered missing (e.g., "A" is defined in the form template, but you type "a"). The Missing Value is also used when running reports in Remark Quick Stats. The default value is -1.
Numeric data value used to represent blank responses	Enter the value to be used when blank data cells are encountered during a data file export. The Missing Value is also used when running reports in Remark Quick Stats. The default value is -2.
Numeric data value used to represent multiple responses	Enter the value to be used when multiple responses in data cells are encountered during a data file export (and are not allowed). The Missing Value is also used when running reports in Remark Quick Stats. The default value is -3.
Database lookup & replace record limit	The limit on the number of records loaded into the data grid's list when using Database Lookup. If the limit is lower than the number of records in the database no data is loaded. The larger the limit the longer it takes to load the list.

Remark Classic OMR Preferences - Folders

Folder preferences allow you to setup the default folders that are used to store image files if you are using and OMR/Image or Prisma scanner. If you prefer to store files on a network drive, you can enter that location here (ensure that you have permission to fully access that drive). Note that Remark Classic OMR uses a 'follow me' folder structure, meaning that it uses the last location you selected when saving and opening files in general (e.g. templates, data). The following options are available:

Preference Option	Description
Image Search Folders	Sets the locations(s) in which images are stored for processed forms. When a cell in the data grid is clicked, the stored image file is displayed in the Image Viewer. The Image Viewer can be used for Review Exceptions and in-cell Editing. Use the **Add Folder...** button to add any folders in which you plan to store image files for processed forms. Remark Classic OMR searches for these images in the order in which the folders are specified. Use the **Move Up** or **Move Down** buttons to change the search order, and the **Remove Folder** button to remove a folder from the search list. Note that you can store images in any folder when processing forms. However, providing frequently used folders in the Image Search Folders List aids the Remark software in finding images to display whenever a data set is opened.
Active Dictionary	Sets the active dictionary to be used for Spell Checker. Click the down arrow to view any dictionaries that are currently installed on your computer.

Remark Classic OMR Preferences - Display

Display preferences allow you to set up aspects of how Remark Classic OMR looks. The following options are available:

Preference Option	Description
Shade alternating grid rows	Mark this checkbox and choose a color to shade every other Data Center grid row.
Default row height	Sets the height of the row based on font and screen resolution. 18 is the default but you may set the number larger or smaller according to your preference.
Update the Image Viewer after each image is processed	Mark this checkbox to have the Image Viewer update with a new form image each time a form is processed. The Image Viewer is located beneath the data grid window. Using this option could alert you to issues such as skewed forms and is highly recommended. This option applies to OMR/Image and Prisma scanners only.
Update the Graph Viewer after each image is processed	Mark this checkbox to have the Graph Viewer update with a new graph per question each time a form is processed. The Graph Viewer is located beneath the data grid window. It provides a quick glimpse into your data by graphing the active question.
Use a Custom Font	Custom Font preferences allow you to set up the default fonts to use throughout the application. Mark the Use a Custom Font checkbox to choose a font to use throughout the application, allowing you to customize the software's look. You may choose a character set, font name and font size. You should choose a font that is supported by your operating system. Please note that not all fonts look optimal in the software. You should restart the application after making any font changes.

Remark Classic OMR Preferences - Email

Email preferences allow you to set your internal SMTP server or Outlook as your default email program when emailing data and report files out of Remark Classic OMR (FILE|Email). When using Outlook, Outlook opens with your file(s) as an attachment. When using Custom (SMTP), a Remark Classic OMR email window opens that utilizes your SMTP server.

SMTP stands for Simple Mail Transfer Protocol and is the Internet standard for transmitting email across networks. It is likely your organization has a running SMTP server already set up. You just need to find out general information about the server. You will need to consult with your network/email administrator to obtain information about your SMTP server.
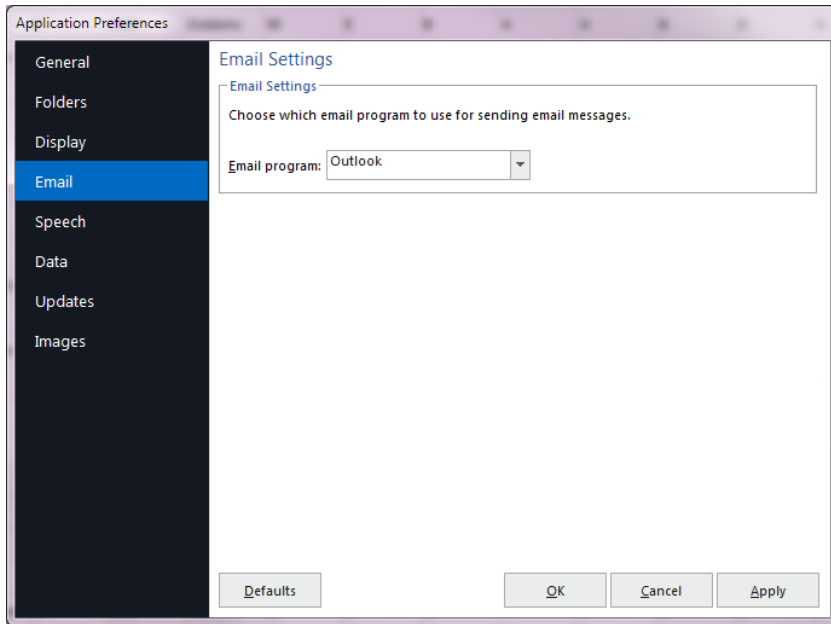
To choose your default email program

1. Select the **Tools** menu, then click **Preferences**, then **Email.**

2. In the **Email** drop-down list, choose **Custom** to use your SMTP server or **Outlook** to use Microsoft Outlook 2007 or greater.

3. If using your SMTP server, click the **SMTP Server** button and put in the settings as described in the table below for your SMTP server.

4. Click the **OK** button to close the **Preferences**.

To set up an SMTP server, please use the following table as a guide to have your administrator provide the proper settings:

Option	Description
SMTP server	This is the name, address or IP address of the mail server.
SMTP port	The SMTP port is usually 25 but may vary with your email server.
Enable a secured (SSL) connection	If desired, use a secure connection by marking the checkbox for Enable a secured (SSL) connection. SSL encrypts data as it is transmitted. Your SMTP server must be configured to use SSL in order for this feature to work.
Use the default credentials of the currently logged in user	If you need to use authentication for your SMTP server, you can enter credentials or use those of the user logged in to the computer. Mark the Use the default credentials of the currently logged in user checkbox to utilize the user's credentials (e.g., the person logged in when sending the emails from Remark Classic OMR). Otherwise, continue to the next step to enter specific credentials.
Username and Password	If authentication is required, and you are not using the credentials of the currently logged in user, enter the Username and Password, as supplied by your network/email administrator.
Throttle rate	The throttle rate adds a delay while sending emails. The default setting is 500ms, meaning that one email is sent every 500 ms (in other words, two emails are sent per second). Throttling emails keeps the SMTP server from being overloaded when sending large numbers of emails. Unless you plan on sending hundreds of emails at one time, the default setting of 500 is likely fine.

Remark Classic OMR Preferences - Speech

Remark Classic OMR includes the ability to use speech recognition when running Review Exceptions. This feature is particularly helpful if you have Input regions on your form that have long comments. Instead of typing the comments, you can read the comments into the data grid. You can also use speech recognition to Review other data types during Review Exceptions (e.g., actual answer choices from an OMR region).

Speech recognition relies on the Microsoft Windows built-in speech technology. Gravic has no control over the effectiveness of speech recognition. We strongly suggest you train your computer to recognize your voice using the Microsoft speech training options in the Windows Control Panel. If you encounter difficulties with speech recognition, ensure you have a good quality microphone and that you have conducted the speech recognition training. For speech recognition troubleshooting, consult the Microsoft website.
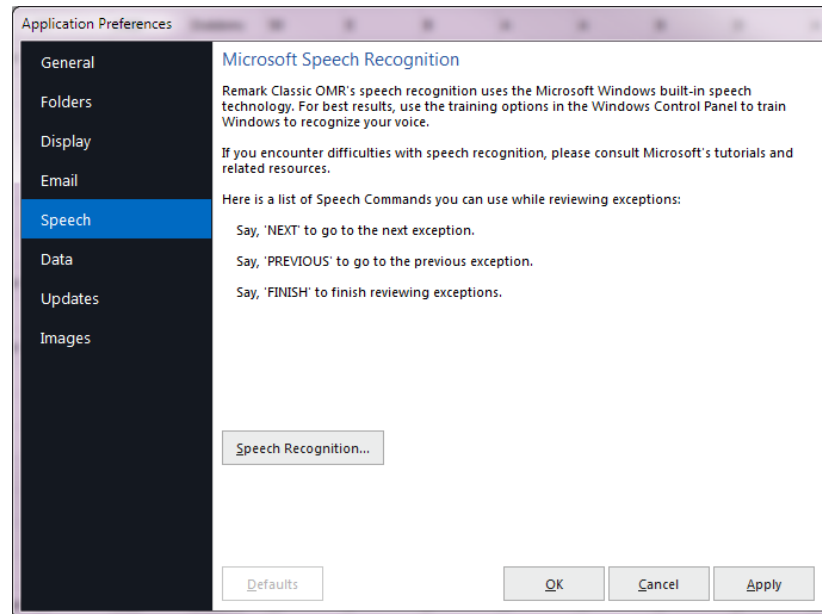
The Speech preference in Remark Classic OMR allows tells you the commands you can use when using speech recognition in Review Exceptions:

Next: Moves to the next exception

Previous: Moves to the previous exception

Finish: Ends the Review process

You can also click the **Speech Recognition** button to run through Microsoft's training process.

Remark Classic OMR Preferences - Data

As changes are made to data in the Remark Classic OMR Data Center, they can optionally be logged, allowing you to see what changes were made and who made them. Logging is turned on and off in the Remark Classic OMR Preferences. It can only be turned off if you know the password used when turning on the feature. Changes made to the data grid (Edits, Review exceptions, Review duplicates, clipboard, open, save, etc.) are logged in a password protected Access database in the following location:

C:\ProgramData\Gravic\Remark Classic OMR\Change logs (note you must have the option to show hidden folders and files on to see this location).

When the database is initially created, it uses the date of creation as the Filename. From that point forward, all changes to all data files are stored in that Access file as long as the feature is turned on. Data file types, exception flags and actions are all listed with a numeric equivalent in the database. The additional tables in the database explain each of the numeric values. Once a database reaches 10MB in size, a new database is created the next time Remark Classic OMR is opened.

To turn on logging

1. From the Remark Classic OMR Data Center, select the **Tools** menu, then click **Preferences**, then **Logging**.

2. Mark the checkbox for **Maintain Data Modification Log**.

3. Enter a password in the **Password** box.

4. Click the **OK** button to close the **Preferences**.

From this point forward, all changes to the data grid are logged.
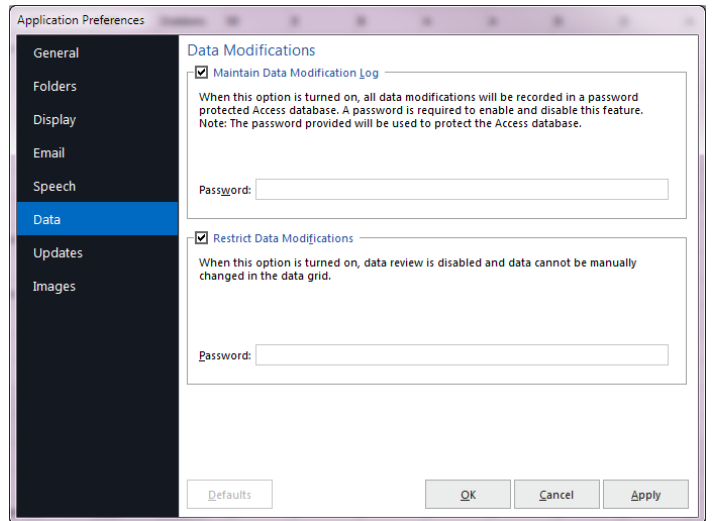
To turn off logging

1. From the Remark Classic OMR Data Center, select the **Tools** menu, then click **Preferences**, then **Logging**.

2. Enter the password that was set when turning on logging in the **Password** box.

3. Click the **Disable** button.

4. Click the **OK** button to close the Preferences.

From this point forward, all changes to the data grid are not logged. If changes have been logged previously, the Access database still exists.

You can also restrict changes that are made to the data grid. Similar to the "Maintain Data Modification Log" feature, you turn on the data restriction feature by setting a password and turn off the feature by re-entering the same password. If this option is turned on, users will not be able to Review data or Edit data in the grid.

To restrict data modifications

1. From the Remark Classic OMR Data Center, select the **Tools** menu, then click **Preferences**, then **Data**.

2. Mark the checkbox for **Restrict Data Modifications**.

3. Enter a password in the **Password** box.

4. Click the **OK** button to close the **Preferences**.

From this point forward, no changes to the data grid are allowed.
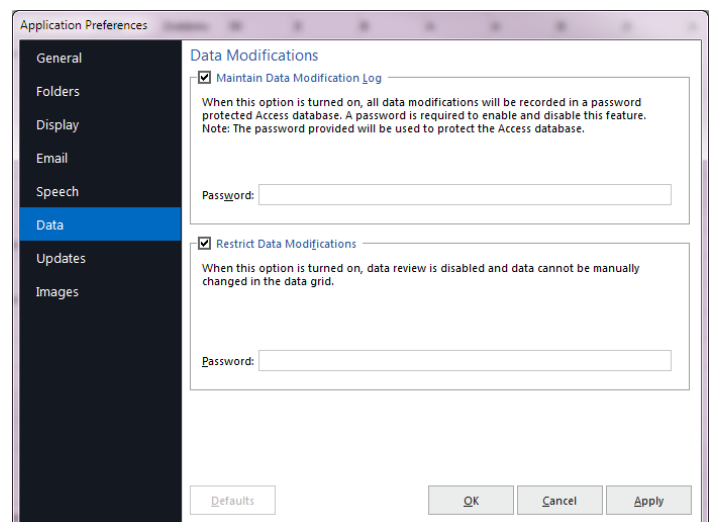
To turn off data modification restrictions

1. From the Remark Classic OMR Data Center, select the **Tools** menu, then click **Preferences**, then **Data**.

2. Enter the password that was set when turning on logging in the **Password** box.

3. Click the **Disable** button.

4. Click the **OK** button to close the Preferences.

From this point forward, changes are allowed in the data grid.

Remark Classic OMR Preferences - Updates

Remark Classic OMR has the ability to automatically check for software updates. You can check at any time by clicking the Help menu and then choosing Check for Updates. You can also have the software check for an update every time it starts up. When this option is turned on, every time you start the software, it sends information about your current version to the update website and lets you know if there is a newer version of the software available. If an update is available, you are prompted to install it. The Check for Updates window also has the ability to do an immediate check for updates.
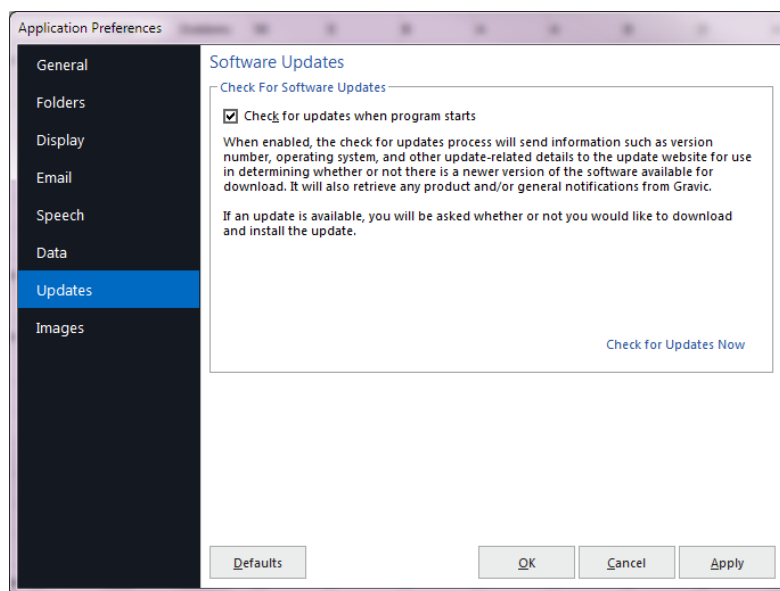
To automatically check for updates

1. Select the **Tools** menu, then click **Preferences**, then **Updates**.

2. Mark the checkbox for **Check for updates when program starts** to turn on the automatic check for updates.

3. [Optional] If you would like to see if an update is available immediately, click the **Check for Updates Now** link.

4. Click the **OK** button to close the **Preferences**.

The next time the software is started, it automatically checks for an update. If an update is found, and you would like to install it, follow the on-screen prompts. You must have an Internet connection to download the update. If no updates are available you receive a message indicating that your software is up to date. Please note that in order for the update to install, you need to close Remark Classic OMR. You can either install the update as soon as it is downloaded, or continue working and when you close the software, the update will install itself. If the Remark Classic OMR Data Center or Template Editor are open, you are prompted to close them. Please save all work before allowing the install to continue.

The Remark Classic OMR Automatic Update collects some system configuration data in order to provide you with updates that apply to your installation. This information includes:

- Product Name

- License Key

- Remark Serial Number

- Remark Authentication Code

- Software Version and Build Number

- System Finger Print (same as activation)

Gravic, Inc. is committed to helping protect your privacy. Using the automatic update feature does not collect your name, address, email address, or any other form of personally identifiable information. Your Internet Protocol (IP) address is logged when you connect to the Gravic website, but this address is only used to generate aggregate statistics.

Remark Classic OMR Preferences - Images

PDF files are not native image files. However, they can be converted to an image format in order to read scanned forms. The Images settings are used to determine how best to convert these files to the most usable image format so that they both read well and display well (e.g. in Response reports). This setting only applies when using a scanner that has imaging capabilities.

To set Image Handling

1. Choose the **Bit Depth**: Bit Depth is the color information stored in an image. The higher the bit depth, the more colors stored. For example, a 1 bit image only shows black and white. Choose whether your image is **Color** or **Grayscale** bit depth.
2. Choose the **Compression**: Compression is used to minimize the size of an image without degrading its quality. Choose from the following options: **None**, **CCITT Group 3**, **CCITT Group 4**, **Run-length encoding**, **JPG**, **LZW** and **Packed bits**. Group 4 creates the most compressed image (smallest file size that take up less space on your computer).
3. Choose the **Resolution**: Resolution is the detail an image holds and is measured in dots per inch (DPI). Higher resolution means more detail (and a larger file size). Choose from the following options: **150 DPI**, **200 DPI** or **300 DPI**.
4. Click the **OK** button to close the **Preferences**.

Chapter 7: Automation Control Center

Automation Control Center Overview

Remark Classic OMR includes an Automation Control Center that allows you to automate some of the functionality of the software. The Automation Control Center allows you to setup automation files that can be run by another user by simply double clicking a file. You can automate functions such as opening the software, opening a form template, processing forms, saving data, running reports and closing the software. This feature is useful for simplifying tasks for your users.

The Automation Control Center is accessed from the Tools menu in the Remark Classic OMR Data Center. It walks you through the steps to set up a RCEZ file. Once that file is created, it can be double clicked to launch the associated actions on a computer running Remark Classic OMR. You can also call this file from other applications (this is outside the scope of Remark Classic OMR). Ensure that the folders and files you set up in the RCEZ file are universally accessible to your Remark users.

- **Tip:** The Automation Control Center allows you to automate basic features of the software. These features are described in the main Remark Classic OMR user's guide and elsewhere in this document. Therefore, each feature will not be presented in detail here. You can learn about specific software features by locating them in the table of contents of this document.
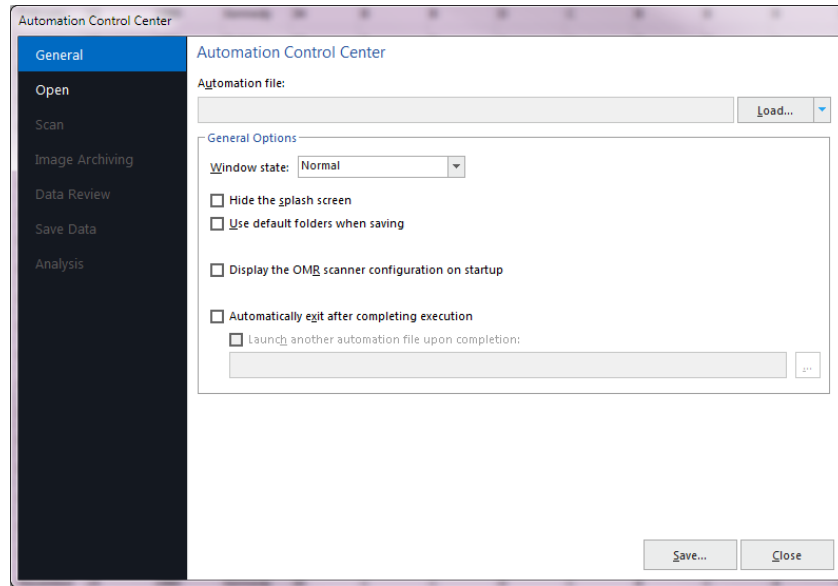
To create/modify a RCEZ file

1. Select the **Tools** menu and then click **Automation Control Center**.

2. Use the sections below to set up your RCEZ file.

3. Once everything is set up, save the file. You have the following options:

   - Click the **Save** button to save the RCEZ file, but the Automation Control Center remains open for further modifications.

   - Click the drop-down arrow on the **Save** button and choose **Execute**. The RCEZ operation executes in a new instance of Remark Classic OMR. The Automation Control Center remains open for you to make further modifications or save your RCEZ file. Nothing is saved.

   - Click the drop-down arrow on the **Save** button and choose **Save and Execute**. You are prompted to save the RCEZ file first, and then the operation executes in a new instance of Remark Classic OMR.

Once the RCEZ file is created, provide it to Remark users by placing it on the computer or embedding it into your own application.

Automation Control Center - General

The first step in the Automation Control Center allows you to setup general software options. Once you make your selections, click the **Open** link in the left task pane to continue.
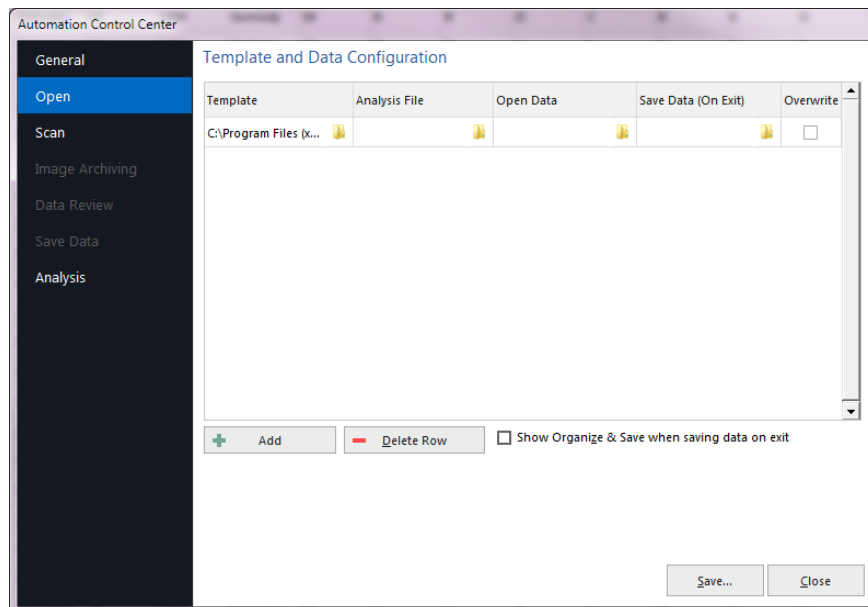

Option	Description
Load	The Load button provides two options: **Load:** Loads a previously saved Automation file so that you can make changes or execute it. **New:** Allows you to begin building a new Automation file (resets the Automation Control Center and all changes made previously are lost).
Window State	Configures how the main Remark Classic OMR window appears when the software is launched: *Normal:* Displays the software in its default state. *Minimized:* Leaves the software minimized on the desktop so that the user can easily continue doing other things while processes are being executed. *Maximized:* Displays the software full screen. *Hidden:* Runs the software in a hidden state so that the user does not see the software running. Most prompts are suppressed.
Hide the splash screen	Mark this checkbox to hide the splash screen that displays when the software is first launched.

Option	Description
Automatically exit after completing execution	Mark this checkbox to have Remark Classic OMR automatically close once it has executed all of the parameters in the automation file.
Use default folders when saving	Mark this checkbox to have stored images saved to the folders specified in the software preferences. Images are only available if using an OMR/Image or Prisma scanner.
Display the OMR scanner configuration on startup	Mark this checkbox to show the scanner properties window when the software is launched so that the user can configure the scanner.
Launch another automation file upon completion	Mark this checkbox to launch another automation (RCEZ) file after this one completes. Use the ellipse (...) to choose that file. This feature allows you to chain automation files together to run multiple operations automatically.

Automation Control Center - Open

The Open window allows you to select which templates, data files and analysis definition files to open automatically. In addition, you can set up data saving options here. Once you make your selections, click the **Scan** in the left task pane to continue.
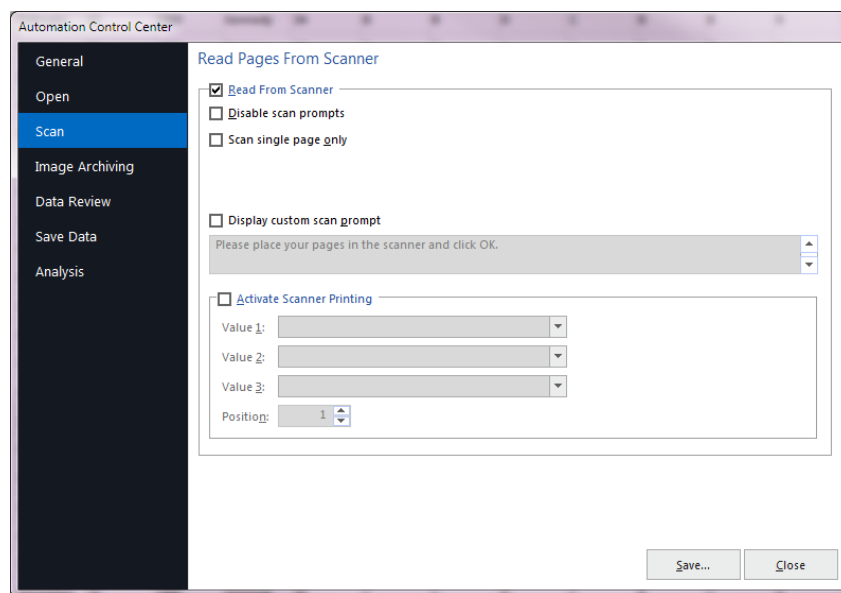
Option	Description
Template	Click the folder to select a form template to open automatically. You may open form templates (RCO), batch files (RBF/RBFX), Remark (RMK/RMX) data files.
Analysis file	Optionally, click the folder to open an existing answer key or survey definition file. This file is executed after forms are processed. Grading and Tabulation parameters are specified in the last step of the Automation Control Center. You have several options for the use of this file: 1) If using Quick Grade or Quick Survey, the file selected in this step is used to produce the results. 2) If using Advanced Grade, do not specify grading options in the last step of the Automation Control Center. Instead, if an answer key file is specified here in the automation file, you can run Advanced Grade manually (e.g., click the toolbar button, task pane option or menu option) and the specified answer key file is opened automatically. You may click Grade to grade the data or further configure the selected answer key file. 3) If using Advanced Survey you need to run it manually (e.g., click the toolbar button, task pane option or menu option) and then the file specified here is automatically loaded into Advanced Survey. You may click Analyze to tabulate the data or further configure the selected survey definition file.
Open Data	Click the folder to select a data file to open automatically. You may open any one of the supported file formats. When opening and RMK/RMX files, the associated form template file opens with the data file automatically (note that the files must be in the same location as specified when saving the data in order for this to work). When opening data prior to processing forms, the newly processed data is added onto the end of the data file. You most likely want to overwrite the entire data file once you process additional forms in this case.
Save Data (on Exit)	Click the folder to select a data file for saving the data after forms are processed. You may choose an existing file or enter a new file name and format. Data from any open form templates is saved when the software is closed. This is the most common way to save data using an automation file.
Overwrite	Mark this checkbox to overwrite the data file(s) specified each time the automation file is run.

Option	Description
Add	Click the **Add** button to add another row where you may make further selections (e.g. open another form template, save to another data file, etc.).
Delete Row	Click the **Delete Row** button to remove the currently selected line of parameters.
Show Organize & Save when saving data on exit	Mark this checkbox to show the Organize & Save window if saving data when exiting the software. This feature allows you to customize the names used for data files and storage folders by utilizing data values from the active data set.

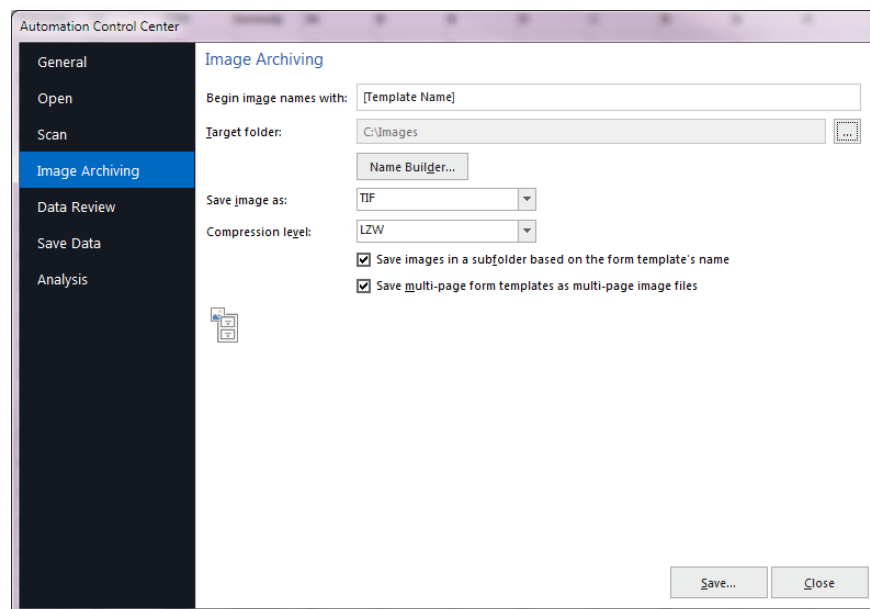# Automation Control Center - Scan

The Scan window allows you to select the parameters to use for scanning forms. Once you make your selections, click the **Data Review** or **Image Archiving** (only if using an OMR/Image or Prisma scanner) link in the left task pane to continue.

Option	Description
Read from Scanner	Mark this checkbox to use the scanner to scan forms once a form template is opened.
Disable scan prompts	Mark this checkbox to disable any scanning prompts. Scanning begins without any interaction from the user. When the ADF is empty, scanning simply stops with no additional prompts.
Scan single page only	Mark this checkbox to only scan a single page placed in the scanner.
Display custom scan prompt	Mark this checkbox to enter your own customized scanning prompt. Enter the text you wish to display when scanning begins in the box below the checkbox.
Activate Scanner Printing	Mark this checkbox to print on the forms, then choose the item(s) you wish to print. Note that if printing grade information, you must scan the answer key first.

Automation Control Center - Image Archiving

The Image Archiving window appears if you are using scanner with imaging capabilities and allows you to select the parameters to use when saving images during scanning. Once you make your selections, click the **Data Review** link in the left task pane to continue.
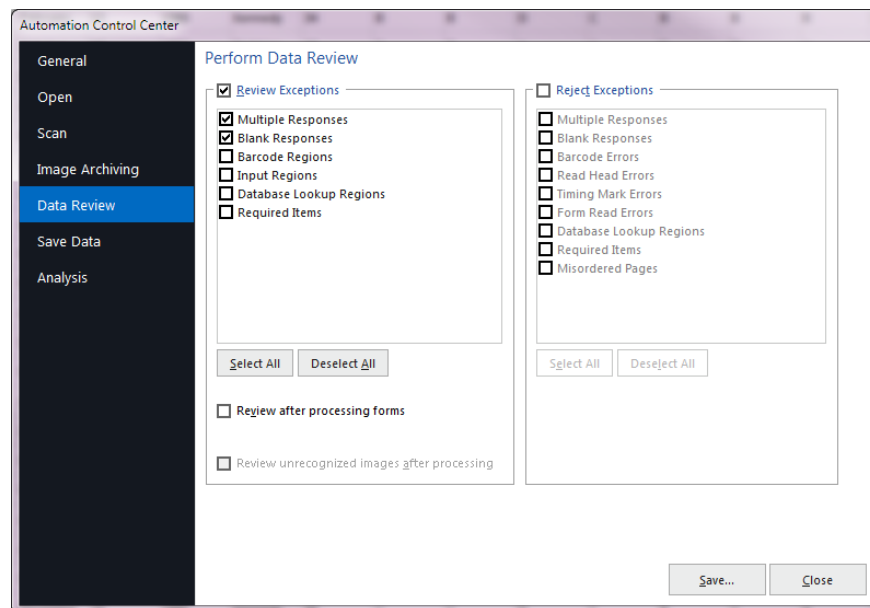
Option	Description
Begin image names with	Enter a file base name that the software can use to name the images stored for this form template as forms are scanned. You may use any name you like. We suggest using something that identifies to you that the images belong to a certain form (e.g. form template name). The images that are stored all begin with this base name and then have the page number (if larger than a one page form template), date and time appended to them to keep track of the various images. If you leave the Begin image names with option blank, your images only have the page number (if applicable), date and time as the name of each image.
Target folder	Click the ellipsis (...) to select a location in which to store the images for this form. You may use the default folder for images (stored in the software's preferences) or select a different folder.
Name Builder	The Name Builder button allows you to customize the image base names and storage folders for the scanned image files by pulling in data values from the active data set. In the **Image Base Name** area, you may choose to add a region from the processed data to the image base name. Choose the region from the drop-down list and then click the **Insert Data into Base Name** button. If you already added a region on the previous screen, the Name Builder allows you to add additional regions. For example, if processing tests, you could add a Student ID that is being collected from the form so that your processed images all have the Student ID number in them.
	In the **Destination Folder** area, you may choose to add a region from the processed data to the folder structure that holds the processed images. Choose the region from the drop-down list and then click the **Append Data Onto Folder Path** button. For example, if processing tests, you could add a Test ID that is being collected from the form so that each student's form images are stored in a folder containing the Test ID.
	In the Name Builder box, click the **OK** button to return to the Automation Control Center.
Save image as	Select an image type to use for storing images. The choices are: PCX/DCX, PDF, TIF or JPG.
Compression level	When saving to the PDF or TIF formats, you can choose the compression rate: Uncompressed, Group 3, Group 3 2d, Group 4 and LZW. Group 4 creates the most compressed (smallest file size) image.

Option	Description
Save images in a subfolder based on the form template's name	Mark this checkbox to have Remark Classic OMR automatically create a folder in which to store these images. The folder name will be the name of the form template and the folder will be created in the folder you have selected in the Image target folder box.
Save multi-page form templates as multi-page images files	Mark this checkbox if you are scanning with a multi-page form template and would like all of the images for one complete form saved as one image file.

# Automation Control Center - Data Review

The Data Review window allows you to specify whether to Review exception cases during form processing and which cases to review. If your scanner has a select stacker, you can also choose options on which to send the form to the select stacker. Once you make your selections, click the **Save Data** or **Analysis** links in the left task pane to continue.

Option	Description
Review Exceptions	Mark this checkbox to activate the [Review Exceptions](#) feature during scanning. When selected exception cases are found, processing stops and you are required to take action (either correct the exception or continue the processing without correction). It is not common to stop the process to Review exceptions. The Review Exceptions process can also be launched after forms are processed. The following exceptions are available: • Multiple Responses • Blank Responses • Barcode Regions • Input Regions • Database Lookup Regions • Required items
Reject Exceptions	Mark this checkbox to use your scanner's select stacker and reject forms with certain exception during scanning. When selected exception cases are found, the forms are sent to the select stacker. The following exceptions are available: • Multiple Responses • Blank Responses • Barcode Errors • Read Head Errors • Timing Mark Errors • Form Read Errors • Database Lookup Regions • Required items • Misordered Pages
Review after processing forms	Mark this checkbox to have Review Exceptions start after all of the forms are processed. Using Review Exceptions after processing forms means that the processing does not stop for any exceptions. Instead you use Review Exceptions post-processing to clean the data.

Automation Control Center - Save Data

The Save Data Options window allows you to specify saving options while forms are being processed. As each page is processed, the data is written directly to the file specified (as opposed to saving after all forms are processed). This feature allows you to send data to an external file right as the forms are processed so that some other action can be taken on the data. Any changes made after processing the forms are not written to this file. Use of this saving option is not common. You typically want to use the Save Data options in the Open window of the Automation Control Center. Once you make your selections, click the **Analysis** link in the left task pane to continue.
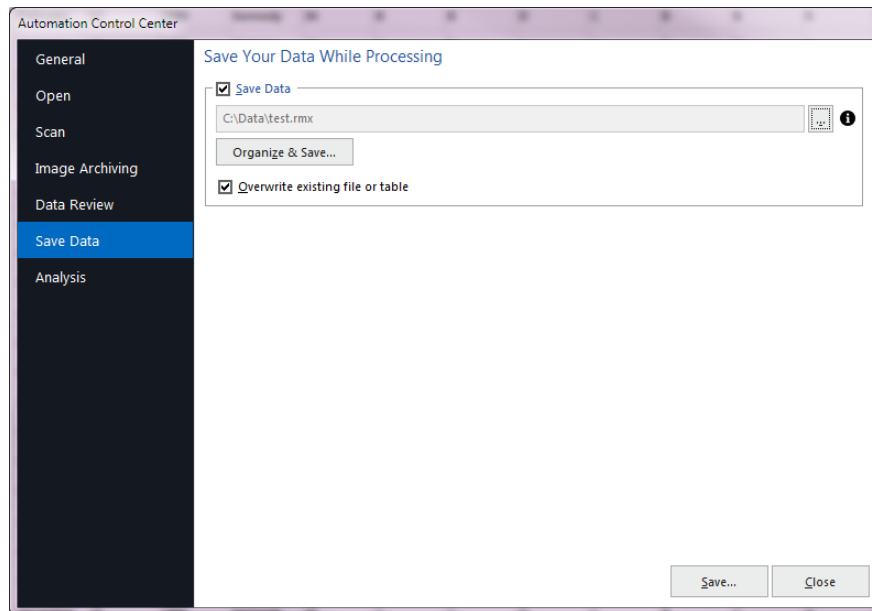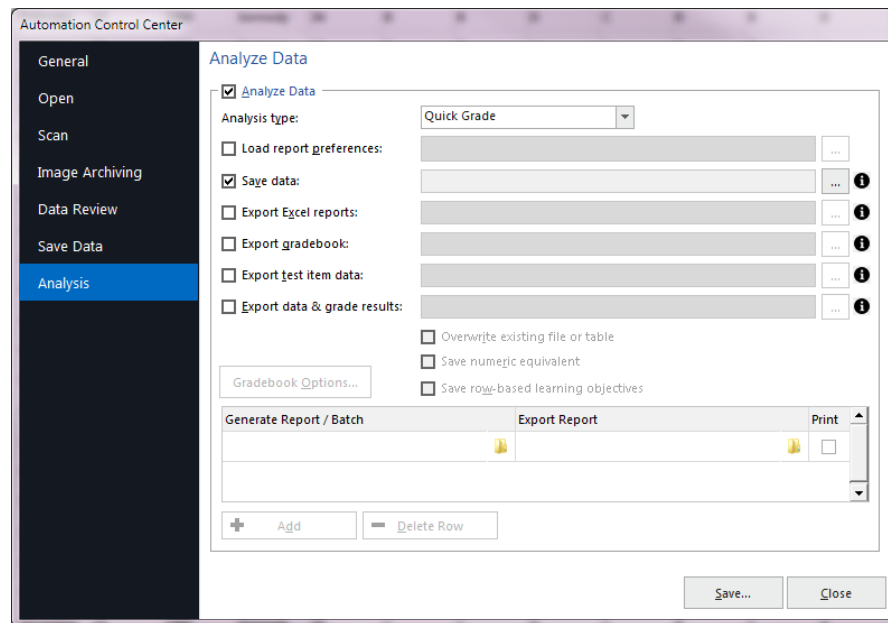

Option	Description
Save Data	Mark this checkbox to save all data collected to one data file. Click the ellipsis (...) to select an existing data file or enter a new file name. If you choose an existing file, you are prompted to overwrite or append to the file each time.

Option	Description
Organize & Save	The Organize & Save button allows you to further customize how data files are named and stored. In the **file base name** area, you may choose to add a region from the processed data to the file base name. Choose the region from the drop-down list and then click the **Insert Data into file Name** button. For example, if processing tests, you could add a Student Name field that is being collected from the form so that data file names all begin with the students' names.
	In the **Destination folder** area, you may choose to add a region from the processed data to the folder structure that will hold the data files. Choose the region from the drop-down list and then click the **Append Data Onto Folder Path** button. For example, if processing tests, you could add teacher name and student name fields that are being collected from the form so that each student's data is stored in a folder containing the teacher's name and then a subfolder containing the student's name.
	In the Table name area, you may choose to add a region from the processed data to the table base name if using a database or spreadsheet format. Choose the region from the drop-down list and then click the **Insert Data into Table Name** button. For example, if processing tests, you could add a Test Name field that is being collected from the form so that the table name contains the test name.
Overwrite existing file or table	Mark this checkbox to overwrite the selected data file each time the Automation Control Center file is executed.

Automation Control Center - Analysis

The Automation Control Center can produce reports using Remark Quick Stats. You may run grade or survey operations, as well as save and export reports. Once you have configured your analysis options, you can save the RCEZ file. Please note that due to the changes made to saved answer keys and survey definitions in this version, you may need to recreate RCEZ files with updated versions of your files.

- **Note:** To learn more about Remark Quick Stats in general, please see the Remark Quick Stats user's guide installed with your software.

Option	Description
Analyze Data	Mark this checkbox to run analysis on your data.
Analysis type	Choose Quick Grade, Quick Survey, Advanced Grade or Advanced Survey from the list to automatically launch this type of analysis.
Load Report Preferences	Allows you to select a set of Remark Quick Stats preferences that you want to use for this operation. These preferences may be exported from a copy of Remark Quick Stats so that they may be used here. If your copy of Remark Quick Stats is already using the preferences you desire for this report, you may skip this option.

Option	Description
Save data	Mark this checkbox to save the Remark Quick Stats data as an RQS file for reuse within Remark Quick Stats. Then click the ellipsis (...) to choose a location in which to save the file.
Export Excel reports	Mark this checkbox to export the entire set of reports to the Excel format.
Export gradebook	Mark this checkbox to export the grade results to a gradebook file. Then click the ellipsis (...) to choose the gradebook type and a location in which to save the file.
Export test item data	Mark this checkbox to export the grade results to a test item data file. Then click the ellipsis (...) to choose the file type and a location in which to save the file.
Export data & grade results	Mark this checkbox to export the data and grade results to a file. Then click the ellipsis (...) to choose a file type and a location in which to save the file. If you wish to overwrite an existing file, mark the checkbox for **Overwrite existing file or table**. If you wish to save the numeric equivalents for the data set, mark the checkbox for **Save numeric equivalent**. If you wish to save the learning objectives in a row based file (each learning objective per student is a data record), mark the checkbox for **Save row-based learning objectives**.
Gradebook Options	Click the **Gradebook Options** button to set parameters specific to the gradebook export you have chosen.
Generate Report / Batch	Click the ellipsis (...) to choose the individual report (.rpx) or report batch file (.rbwx) you wish to generate. Report batches are created in Remark Quick Stats using the Report Batch feature. This feature allows you to generate, print and/or export multiple reports without having to select each one individually. Note: If you select a report batch, the exporting and printing options are disabled, as these options are setup in the batch file.
Export Report	Click the ellipsis (...) to choose a file type and location to which to export the report for individual reports.
Print	Mark this checkbox to print the report once it is generated.
Add/Delete Row	Click the **Add** button to add another row where you may make further selections (e.g., run another report). Click the **Delete Row** button to remove the currently selected line of parameters.