Remark Office OMR Tutorials

1.0 Tutorial Overview

We want you to be immediately successful with your new software. To that end, we highly recommend that you walk through the tutorials provided here before you do anything else with your new software. The following sections contain the tutorials, which are designed to give you an overview of the Remark Office OMR software and allow you to quickly learn the basic functions of the software. Two of the most common uses for Remark Office OMR are surveys and tests; therefore we have covered both form types in these tutorials. Completing these lessons will help position you for mastering the software. Please keep in mind that even though you may only currently do one or the other (surveys or tests), completing both tutorials will still help you understand basic software premises. We recommend starting with Tutorial I and then continuing with Tutorial II to get the broadest knowledgebase (the first tutorial provides more detailed instructions and explanations than the second tutorial).

- **Tutorial I Test (Generic Test Answer Sheet):** The first tutorial outlines how to create a form template for a test and includes coverage of both basic and advanced options. The first tutorial also covers reading tests and grading the test data.
- Tutorial II Survey (Hospital Stay Evaluation): The second tutorial outlines how to create a form template for a basic survey as well as read forms, correct the output and run reports.

Important Note: The tutorials provided with the software work with image files that are included when you install Remark Office OMR. In reality, the software can read pages directly from a scanner, or read pre-scanned image files. Even though you are reading pre-scanned image files, the steps you are taking are very similar to scanning directly in the software. If you process your own forms directly with a scanner, you choose the options to scan instead of read from images within the software. The tutorials still give you a good overview of how the software works in order to prepare you for using your own forms and scanner.

Please note that we have included copies of the tutorial forms in Microsoft Word format for your reference. Each document installs to its corresponding tutorial folder (C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 1\Remark Office OMR 8 Tutorial 1 Form - Test Answer Key.doc and C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 2\Remark Office OMR 8 Tutorial 2 Form - Hospital Survey.doc). These forms are not meant to be scanned in order to perform the tutorials; images of pre-scanned forms are supplied for this purpose. However, you may find it useful to view or print the forms before you do the tutorials as reference. The following information details what will be accomplished in each tutorial:

Tutorial 1 – Test

- Creating the test answer sheet form template
 - Creating a barcode region
 - Creating an OCR region
 - Creating OMR regions
- Processing completed tests
- Reviewing and correcting data output with Review Exceptions
- Saving the test data
- Grading tests, including the use of bonus and subjective points
- Saving a grade report

Tutorial II – Survey

- Creating the hospital stay evaluation form template
 - Creating an OCR region
 - Creating OMR regions
 - Creating linked OMR regions
- Processing completed course evaluation forms
- Reviewing and correcting data output with Review Exceptions
- Saving the hospital stay evaluation data
- Analyzing the hospital stay evaluation data
 - Using the Report Batch Wizard

There are some basic concepts to review before you get started with the tutorials. Please note that there are several ways to access basic software functions. Three of the most common methods include:

- **Getting Started Task Pane:** The task pane on the left side of each Remark Office OMR window can be used to access the most common functions in the software. The task pane will automatically update based on the functions you perform. You can show or hide the task pane by selecting the **View** menu and then clicking **Task Pane**.
- **Toolbar:** The toolbar is the series of icons across the top of each Remark Office OMR window. These icons represent shortcuts for common functions within the software. Hold your mouse over any button to see tool tip text explaining the functionality of the button.
- **Menus:** The pull-down menus have all of the functions available within the software. Many of these functions can also be found in the toolbar and task pane.

It is up to you to decide how you wish to access software functions. We will work with all three methods to allow you an understanding of each method.

Before we begin, we need to touch briefly on some important concepts that may be new to you. Just take in the big picture for now; details will be built as these concepts are used in the lessons.

1.1 Form Template Overview

The following concepts are explained in greater detail in the Remark Office OMR user's guide, but are important to understand in performing these tutorials. Here is a quick overview to help you get started:

1.1.1 What is a Form Template File?

The first thing you do in Remark Office OMR (after you have a form created outside the software) is create form templates for the forms you wish to process in the software. A form template file contains the information needed to instruct Remark Office OMR about each form. The form template conveys the location of the information on the pages (e.g., the bubbles the respondents darken) and the specifics of the data you require. The form template defines the backend database you use for storage of the processed data. You create a form template for each form that you wish to process using the software.

1.1.2 How are Form Templates Created?

Form templates are created by scanning an unmarked copy of the form (or importing a scanned image of the blank form) to create an equivalent image in the Remark Office OMR Template Editor. You then 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.

You are now ready to get started with the tutorials.

2.0 Tutorial I – The Test Answer Sheet

The Test Answer Sheet tutorial is designed to provide you with experience in the basic and a few advanced functions of creating a form template and processing forms. The following procedures describe how to set up a form template for the sample Test Answer Sheet form included with the software. Subsequent sections of this tutorial detail how to process forms and export or analyze the data.

The form template creation process consists of:

- Scanning an unmarked copy of the form (or importing an image of a previously scanned copy of the form)
- Dragging boxes around the areas to be recognized
- Providing Remark Office OMR with information about the data you need to collect

Important Note: As stated previously in the tutorial overview, the tutorials provided with the software work with image files that are included when you install Remark Office OMR. Even though you will be reading pre-scanned image files, the steps you are taking are very similar to scanning directly in the software. The tutorials still give you a good overview of how the software works in order to prepare you for using your own forms and scanner.

2.0.1 Creating the Form Template

The first step in this process is to create a form template outlining the areas on the form that you want the software to recognize.

To begin the Test Answer Sheet form template

- 1 If not already running, start **Remark Office OMR** (Start|Programs|Remark Office OMR 8|Remark Office OMR Data Center).
- 2 Begin a new form template. Select the **File** menu and then click **New form template** or

click . Alternatively, in the left-hand panel, known as the **Task Pane**, select **New form template**. Any of these actions will open a second window containing the **Remark Office OMR Template Editor**.

Tip: If you use **File|New Form Template** or the **New form template** link in the Task Pane, the Template Editor will open with the new form template window already opened for you.

3 [Optional] If the Template Editor opens but you do not see the **New form Template Properties** window, select the **File** menu and then click **New Form Template** or click. Alternatively, select the **New form template** link in the task pane.

The **New Form Template Properties** window opens. The New Form Template Properties window is where you describe your form to Remark Office OMR. You do this by entering basic

information about your form, including the form template description, page size and page orientation.

- 4 Enter **Test Answer Sheet** in the **Form template description** box.
- 5 Locate the Page Size area where you can tell the software the size paper your form uses. Select US Letter in the Size drop-down list.
- 6 Locate the **Orientation** area and select **Portrait**.
- 7 Click the **Next>>** button to continue.

Enter a rom description and the page scale and orientation to b	e used as the basis for all pages.
orm Template Properties	
form template description: Test Answer Sheet	Units: Inches
Page Size	Orientation
Size: US Letter	Eortrait
You have specified a page size of Letter which has dimensions of 8 $1/2\times11$ inches. All pages in the form template must be of this size.	O Landscape
Reset Page Images (Existing Pages Only)	Form Template Details
Click reset in order to acquire new images for all existing form	Total number of pages: 0
template pages.	Total number of regions: 0 Total number of items: 0

The **Create Page Elements** window appears. The Create Page Elements window allows you to either acquire an

image of your form from your scanner, or acquire an image of your form from an existing image file. Each page in a form template is created using an image of the appropriate page in your form. The image allows you to see the form so that you can easily teach Remark Office OMR how to read it.

To obtain a form template image

As previously mentioned, there are two ways to acquire an image for a form template page. Images can be acquired by scanning to create a new image file or by opening an existing image file. We will be acquiring our image from a pre-scanned image file stored on your computer.

- 1 Click the radio button for **Read from image files** in the **Select Method to Use for Image Acquisition** area.
- 2 Click the **Acquire Images from File** button. The **Select Image File** window opens.
- 3 Select the Tutorial 1 Test Answer Sheet.tif file from the Tutorial 1 folder of your Remark Office OMR installation directory (e.g., C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 1) and then click the Open button.



Once an image is acquired by opening an existing image file, the Template Editor displays a thumbnail of the image for your approval.

4 When a thumbnail image of your form appears, click the **OK** button to accept the image.

Once the thumbnail image is accepted, the Template Editor opens the new form template where you can begin to define the regions. You see a tree view (item list) on the left and an image representation of your form on the right.

To define form template regions

The purpose behind making a form template is to tell the software where to locate the information on your specific form and how to understand your specific data requirements. The following table lists the six regions on the Test Answer Sheet form and their corresponding region types:

Area on Form	Corresponding Region Type
Student Name	OCR
Teacher Name	Barcode
Questions 1-50 (2 regions)	OMR (Multiple)
Bonus Question	OMR (Multiple)
Official Use Only (used as subjective region)	OMR (Grid)

To define the Student Name as an OCR region

The first area of the form to define is the Student Name, which is defined as an OCR (optical character recognition) region. OCR involves reading computer-generated text (not handwriting). In this case, the test answer sheets were printed with each student's name on them before they were distributed. Using OCR allows you to quickly collect each student's name and then use this information on subsequent grade reports.

- 1 Highlight the **Page 1** node on the left side of your screen, if it is not already highlighted.
- 2 Select the **Page** menu, click **Insert** and then click **OCR Region After Selected Page**, or

click the purple toolbar button to insert an OCR region. Alternatively, select the **Define regions** link in the task pane and then select **Insert OCR region**.

The mouse changes to a crosshair.

3 To create the OCR region, place the cursor just beyond the top left of the text, then press and hold the left mouse button while dragging the rectangle beyond the bottom right corner of the text, making sure you have selected the entire allotted space. For OCR areas, capture a little extra space at the end of the text to accommodate the largest amount of text you might process (student names will vary in length).



4 After positioning the box, release the mouse button and the **Properties - OCR Region** window appears to allow you to define the region's properties. This window allows you to provide pertinent information about the text.

Tip: You can use your cursor to drag/slide the **Properties** box on your screen if you need to see anything on your form. Do not worry if the region is not drawn perfectly at this point because you can easily adjust it by dragging the borders as needed after the region's properties are defined and the **Properties - OCR Region** window closes.

- **5** Type **Student Name** in the **Region name** box. The Region name provides a brief description of the region and becomes the name for this column in your data set.
- 6 Set the **OCR type** to **Standard**. Standard OCR works well in most cases and is the default setting. (Microsoft Office Document Imaging is a second OCR option available if you have Microsoft Office 2007 installed on your computer.)
- 7 The following options should be set to their default settings:
 - **Data Type** is **Textual**. We are collecting student names, which are textual. If we were to export our data once it is collected, the data type would be flagged as textual in the output file. When creating your own form templates, the data type you select can be textual or numeric, depending on the type of data you require.
 - **Language** is **None**. The system's default language is used.
 - **Orientation** to **Left to Right**. The text on our form is oriented from left to right
 - OCR Image Pre-Process Options are all unchecked.
- 8 Mark the checkbox for **Region contains more than one word**. This region contains both a first and last name for each student.
- 9 Click the **Region item properties** link in the Task Pane to the left.
- 10 In the area called **Analysis Respondent ID**, mark the checkbox for **Designate as a respondent ID**. When you run reports in Remark Quick Stats, any regions marked as Analysis Respondent IDs appear on select reports to identify each respondent. This way you can run student grade reports with the students' names on them to

hand back to the students or parents.

11 Click the **OK** button to return to the main Template Editor window.

You now see a purple box around the text in the image area, identifying it as an OCR region, and a new node in the tree view titled **Student Name**.



Properties	-Region Definition -			OCR Image Pre-Process Options
OCR region properties	Region name:	Student Name		Invert region image
Set overall properties for the region.	OCR type:	Standard	~	Deskew region image
Region item properties	Data type:	Textual	~	Despeciele Region Image
Set properties for items within a region.		Nano		Magimum speckle size: 1 🚔
Question text and names	Language:	none	~	
Set question text and question names for the region's items.	$\underline{T}e{\times}t$ orientation:	Left to Right	Image: 1	Region contains more than one word
Tracking	Define format:		•	Region contains multiple lines of text
identifier.	Limit OCR Char	acter Set		

To define the Teacher Name as a Barcode region

The Teacher Name is defined as a barcode region. Using a barcode allows you to quickly collect each teacher's name and then use this information on subsequent grade reports. In our case, we will filter our data by teacher to evaluate teacher performance.

- 1 Highlight the **Student Name** node on the left side of your screen if it is not already highlighted.
- 2 Select the Region menu, click Insert and then click Barcode Region After Selected

Page, or click the orange toolbar button to insert a Barcode region. Alternatively, select the **Define regions** link in the task pane and then select **Insert Barcode region**.

The mouse changes to a crosshair.

3 To create the Barcode region, place the cursor just beyond the top left of the barcode, then press and hold the left mouse button while dragging the rectangle beyond the bottom right corner of the barcode, making sure you have selected the entire allotted space. For barcodes, capture a little extra space at the end of the barcode to accommodate the largest possible barcode you might process. It is okay to encapsulate the text beneath the barcode since it is small.



- 4 After positioning the box, release the mouse button and the **Properties - Barcode Region** window appears, allowing you to define the region's properties. This window allows you to provide pertinent information about the barcode.
- 5 Type **Teacher Name** in the **Region name** box. The Region name provides a brief description of the region and becomes the name for this column in your data set.
- 6 Set the **Barcode type** to **Code 39** and the **Barcode orientation** to **Horizontal**. These settings allow you to specify the barcode type to recognized and/or positioning of the barcode on your form.
- 7 Set the **Data Type** to **Textual**. We are collecting teacher names, which are textual. If we were to export our data once it is collected, the data type would be flagged as textual in the output file.
- 8 Click the **OK** button to return to the main Template Editor window.

You now see an orange box around the barcode in the image area, identifying it as a Barcode region, and a new node in the tree view titled **Teacher Name**.





To define the test questions as OMR regions

The 50 test questions are broken into two sections, each containing 25 questions. You create an OMR region for the first 25 questions and then copy and paste that region to the other set of 25 questions.

Tip: When creating similar regions, using copy and paste can save time. Once you paste a region, you can access its properties to make any changes. However, by copying similar regions, you save time in entering all of the region information.

- 1 Highlight the **Teacher Name** node in the left side of your screen if it is not already highlighted.
- 2 Click the green toolbar button to insert an OMR region, and use the crosshair to draw a box around the first set of 25 questions, beginning at the top left with the first "A" bubble (question 1) and ending at the bottom right for the last "E" bubble (question 25).

Tip: When defining an OMR region, include only the actual marks; never include the nearby labels, text, etc. Also, create approximately a 1/8 inch buffer space between the marks and the edge of the defined region. This buffer allows Remark Office OMR to accommodate minor shifting or skewing during form processing and decrease the number of data exceptions you need to clean in the resulting data.



- 3 After positioning the box, release the mouse button. The **Properties OMR Region** window appears, allowing you to enter information that will define the OMR region and the data it produces, including:
 - **Region Definition** (the area containing **Region name**, the type of OMR region or **OMR type** and the **Data type**).
 - **Region Layout** of the region (the area detailing how many **Rows** and **Columns** of marks are contained in the region and their orientation).
 - Possible Responses (the Labels you want to see as your data).
- 4 Enter **Question** in the **Region name** box. We call the two regions containing the 50 questions "Question." Your region names then become Question1 through Question50.
- 5 Select **Multiple** as the **OMR type**. The Multiple region designation is used for typical multiple choice style questions.

Note: There are other types of OMR regions that can be seen if you click the down arrow to the right of **Multiple**. These additional region types offer differing types of data output. The additional OMR region types are explained in your Remark Office OMR user's guide.

- 6 Select **Textual** for the **Data type**. This region contains the answer choices A-E, so textual data is appropriate.
- 7 In the **Region Layout** area, select **Row** for the **Region orientation** because each question occupies one row.
- 8 Enter 5 in the Columns in the region box and 25 in the Rows in the region box. The 5 columns represent our answer choices (A-E) and the 25 rows represent our 25 different questions.

roperties	Region Definit	ion		Region Layout		
BMR region properties	Region name:	Question		Region orientation:	Row	~
Set overall properties for the region.	OMR type:	Multiple	v 🔷	Columns in the region:	5	~
Region item properties Set properties for items within a region.	Data type:	Textual	~	Bows in the region:	25	~>
Question text and names	Possible Respo	onses scales:				
Set question text and question names for the region's items.	A to E	×	Labels	Yalu	ies	
Tracking	Saye Currer	nt Scale Edit	A	1		-
Set region as page, form, or respondent identifier.			c	3		
Database lookup			E	4		-
Verify region's value in a database and optionally return additional fields.	NA label:					
	None	*				-
	Define Eor	mat (Grid Type Only)				
					Reset	
	🗹 Include regio	on in read operation				
				ОК	Carr	cel

9 Use the **Possible label scales** drop-down list to select **A-E**. These labels automatically fill the **Labels** grid. Your choice of Labels in the form template determines what you see in the data set when your filled in forms are processed. The Labels represent the response choices for each bubble, moving from top to bottom. You notice that each Label automatically has a value in the **Values** column to the right. While the Labels represent the data you see

returned from the processed forms, the Values represent the information Remark Office OMR uses to perform any statistical analysis (these values are not grading point assignments).

10 Click the **OK** button to return to the main Template Editor window.

You now see a green box around questions 1-25 in the image area, identifying them as an OMR region, and a new node in the tree view titled **Question**.

To copy and paste the Question OMR region

Next, copy the region you just created and paste it over the remaining 25 questions. Copying similar questions saves time in the template creation process.



1 With the **Question** node highlighted in the tree view, select the **Edit** menu and then click

Copy, or click 🔚

2 Select the **Edit** menu and then click **Paste**, or click

Tip: You can use the keyboard shortcut keys for **Copy (Ctrl + C)** and **Paste (Ctrl + V)** for quick copying and pasting.

A red region is drawn near questions 1-25.

- 3 Place the mouse directly over the red region until it becomes two double arrows and then drag the new region to questions 26-50, positioning it directly over the 25 questions.
- 4 Release the mouse. Check your positioning; if the solid red color disappears, this is an indication that you have moved the box successfully. If the region is still red, hover your mouse over it to see text describing where the problem lies.

You should now have two OMR regions, one covering each of the groups of 25 questions, and two nodes in the tree view titled **Question (1-25)**, **Question (26-50)**.





To create the bonus question OMR region

The question at the bottom of the exam answer sheet that reads Bonus is used to add extra credit points to the overall test score. Questions are designated as extra credit in the Grade Wizard, which is covered later in this tutorial. For now, we need to create a region to capture the information.

- 1 Highlight the **Question (26-50)** node in the tree view, if it is not already highlighted.
- 2 Click the green toolbar button to insert an OMR region, and use the crosshair to draw a box around the bonus question's bubbles (A-E).
- 3 When the **Properties OMR Region** box opens, enter **Bonus** in the **Region name** box.
- 4 Select **Multiple** as the **OMR type**. This is a multiple-choice question.
- 5 Select **Textual** for the **Data type**. This region contains the answer choices A-E, so textual data is appropriate.
- 6 In the **Region Layout** area, select **Row** for the **Region orientation** because the question is oriented in one row.
- 7 Enter 5 in the Columns in the region box and
 1 in the Rows in the region box. The 5 columns represent our answer choices (A-E) and the 1 row represents our single bonus questions.
- 8 Use the **Possible label scales** drop-down list to select **A-E**. These labels automatically fill the **Labels** grid. The Labels represent the data output you see when you process forms. Corresponding values are automatically entered in the **Values** grid. These Values are used for statistical analysis (these values are not grading point assignments).
- 9 Click the **Region item properties** link in the Task Pane to the left.
- 10 In the area called Testing Point System, change the number set for Correct points to 5. When the tests are graded, if the student gets the bonus question right, they will be rewarded 5 extra credit points.
- 11 Mark the checkbox for All points awarded should be treated as extra credit. When grading, whether using Easy Grade or the Grade Wizard, this question is considered extra credit.



roperties	Test Settings	Survey Settings	
CMR region properties	O Do not grade this item	O Do not tabylate this	tem
Set overall execution for the region	 Grade this item 	 Tabulate this item 	
Secoveral propercies for the region.	O Designate as key identifier		
Region item properties			
Set properties for items within a region.	Testing Point System		
Ouestion text and names	Item test type: Objective item	Correct points:	5.000
Set question text and question names for	Objective items are typically multiple choice	Incorrect points:	0.000
the region's items.	short answer, essay, or other non-scannable		
	items.	No response points:	0.000
n Tracking		All points awards	d should be treated a
Set region as page, form, or respondent identifier		extra credit	
_	Analysis Respondent ID	Recognition Threshold (a	applies to region) —
📁 Database lookup	Designate as a respondent ID	Threshold value: 3	
Verify region's value in a database and			
optionally return additional fields.	Blank Exception Handling	Multiple Exception Hand	ing
	Replace with: BLANK [BLANK]	Multiple responses: Not	alowed
	Flag blanks: Always	Replace with: All F	esponses [ALL]
	Disable mark discrimination		
	Required item		

12 Click the **OK** button to return to the main Template Editor window.

You now see a green box around the **Bonus** question in the image area, identifying it as an OMR region, and a new node in the tree view titled **Bonus**.

To create the Official Use Only OMR region

The Official Use Only area allows a teacher to bubble in points awarded for a subjective question on the test. Subjective questions could be essays, short answer questions, etc. This type of question has to be graded by a person, but you can add the points earned to the total test score by designating it as a subjective question.

- 1 Highlight the **Bonus** node in the tree view, if it is not already highlighted.
- Click the green toolbar button to insert an OMR region, and use the crosshair to draw a box around the entire set of bubbles in the Official Use Only area question's bubbles (0-9).
- 3 When the **Properties OMR Region** box opens, enter **Subjective** in the **Region name** box. We title it Subjective in order to remember that this question is for designating our subjective points for the human-graded part of the test.
- 4 Select **Grid** as the **OMR type**. Grid regions capture information that spans across multiple rows and columns, but consists of a single piece of data (e.g., zip codes, names, social security numbers, phone numbers, etc.). In our case, the teacher bubbles in a two-digit number representing the points earned on the subjective portion of the test.
- 5 Select **Numeric** for the **Data type**. This region contains a two-digit number, so numeric data is appropriate.
- 6 In the **Region Layout** area, select **Row** for the **Region orientation** because the question is oriented by row (each row is one digit in the two-digit number).
- 7 Enter 10 in the Columns in the region box and 2 in the Rows in the region box. The 10 columns represent our answer choices (0-9) and the 2 rows represent the digits in the subjective score.
- 8 Use the **Possible label scales** drop-down list to select **0-9**. These labels automatically fill the **Labels** grid. The Labels represent the data output you see when you process forms.
- 9 Click the **Region item properties** link in the Task Pane to the left.
- 10 Under Test Settings, mark the option for Grade this item.
- 11 In the **Testing Point System** area, under **Item Test Type**, select **Subjective item**. Note that you will tell Remark the maximum number of subjective points that can be earned later in the process when you scan or enter an answer key.
- 12 Click the **OK** button to return to the main Template Editor window.

You see a green box around the **Official Use Only**

question in the image area, identifying it as an OMR region, and a new node in the tree view titled **Subjective**.



To save the Tutorial 1 form template

We are finished creating all of the regions in our form template and need to save the form template as a file we can use to process completed forms.

1 Select the **File** menu and then click **Save** or **click**

Alternatively, select the **Save template** link in the Task Pane. Make note of where you save the form template file (we suggest C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 1).



2 In the **File name** box, type **Tutorial1** and then click the **Save** button.

Note: If someone has already completed the tutorial with this file name, you may modify the file name.

You have now created the Tutorial 1 form template. Close the Template Editor by selecting the **File** menu and then clicking **Exit**. Alternatively, you may also simply click the X in the upper right hand corner of the **Template Editor** window.

2.0.2 Processing the Completed Answer Sheets

Now that you have created the form template for the **Test Answer Sheet** you are ready to begin processing the completed forms using the supplied image files.

To open the Test Answer Sheet form template

- 1 If not already running, start the **Remark Office OMR Data Center** (Start|Programs|Remark Office OMR 8|Remark Office OMR Data Center). When the Data Center opens, it displays a blank spreadsheet-style data grid.
- 2 Select the File menu and then click Open Form Template or click . Alternatively, select the Open form template link in the Task Pane. You must open a form template in order to process forms.

Tip: When you are in the Remark Office OMR Template Editor with a form template open, you can select **File|Launch Remark Office OMR** and the Data Center opens with the selected form template also open.

3 Select the **Tutorial1.omr** file from the Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 1 folder (the file you created in the previous section of this tutorial) and then click the **Open** button. Alternatively, we have provided a sample file in Program Files\Gravic\Remark Office OMR 8\Tutorials\Samples\Tutorial1.omr.

When the Tutorial1 form template opens, its name appears on the title bar at the top of the screen and you see the region names you specified as your column headers in the data grid. Each column in the grid corresponds with one variable or question in the form template, as the column headers indicate. The data grid fills row by row as your completed forms are processed. Each grid row contains information from one processed form regardless of the number of pages the form contains.

To read from image files

The Read Wizard is used to process completed forms and produce data. The Read Wizard has several steps to help customize the reading process. This tutorial focuses on the basic functions. As stated previously, we are reading pre-scanned image files.

1 Select the **Tools** menu and then click **Read Wizard**, or **click** . Alternatively, select the **Read Wizard** link in the Task Pane.

The **Read Method** window appears.

- 2 In the **Select Method to Use for Data Collection** area, mark the radio button for **Read from image files**.
- 3 Click the **Next>>** button to continue.

The **Image Selection** window appears to enable you to view and select the images you want to process.

- 4 Navigate to the **Tutorial 1** folder of your Remark Office OMR installation (e.g., C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 1)
- 5 Navigate to the **Images for Processing** folder.
- 6 Select the files called Tutorial 1 Answer Key.tif and Tutorial 1 – Completed Test Forms.tif by either double clicking them or selecting them and clicking the top green button for Add Selected Images, which moves them into the Images in Read Order window on the right. You may also click the bottom green button for Add All Images to move any images in the directory to the Images in Read Order window. Note that the first file in the list is the answer key for the test. The second file



is a multi-page TIF image file that contains 20 student tests.

Tip: You can use the **Ctrl** or **Shift** keys to select multiple image files and then use the **Add Selected Images** button to move the images to the **Images in Read Order** window.

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

The **Review Exceptions** window appears. This window allows you to configure options for reviewing exception cases such as blank and multiple responses. We will not be using this feature in this tutorial.

- 8 If the **Activate Review Exceptions** checkbox is marked, click in the checkbox to deselect this option. We do not want to review exceptions at this time.
- 9 Click the **Read** button to begin reading the image files.

As each image is processed, you see a row added to the data grid.

2.0.2 Reviewing and Correcting the Data

After the forms are processed, 21 rows of data are displayed in the data grid. Each row represents the responses collected from one of the forms. The first row is the answer key for the test, and the following rows are student tests. You are now ready to inspect the data for missing or unrecognized responses in order to prepare for analysis and/or data export.

How does the software handle data exceptions?

Remark Office OMR informs you of unrecognized or questionable responses by placing a visible marker in each appropriate data grid cell. Each one of the types of problematic or potentially inaccurate data is represented by a specific color and explanatory text (e.g., yellow color and the word BLANK). The **Exceptions Legend** in the **Task Pane** provides an easy reference key to the nine possible exception cases and their meanings.

The software then assists you to correct exception cases or problems by allowing you to see what was entered on the actual form. The stored images for each processed form are available to display your respondents' answer choices. You can click inside any cell in the data grid to view the corresponding image of that form. (If you click in a cell and do not see an image beneath the data grid, select the **View** menu and then click **Image Viewer** to open the Image Viewer.)

To run Review Exceptions

We use an automated tool called Review Exceptions to locate and correct any exceptions in our data.

1 Select the **Tools** menu and then click **Review Exceptions**, or click —. Alternatively, select the **Review exceptions** link in the Task Pane.

The **Review Exceptions** window appears in the Task Pane.

- 2 The top half of the pane allows you to select the search cases (e.g., multiple responses, blank responses, etc.). Make sure **Multiple responses** and **Blank responses** are checked.
- 3 The bottom half of the window allows you to configure and begin the search. You may search by Row/Respondent (across rows) or by Column/Item (down the columns). For this tutorial, select Row/Respondent.
- 4 Click the **Begin Review** button to start the automated review. The software searches through the data set to locate the flagged cells.

The first piece of flagged data is a multiple response in the eighth grid row for the item called **Question8**. In the **Review Exceptions** window, you see a green exclamation point and

Response for [Question8]. The green tells you that a multiple response was encountered. The text in the brackets ([Question8]) tells you the question or item where the multiple response was encountered.

5 In the box beneath **Response for** [Question8] use the drop-down list to select the appropriate response. Use the Image Viewer beneath the data grid to review the student's exam. In this case, you see the student accidentally marked A and then put an X through it. The intended



response was B. Select **B** from the drop-down list.

- 6 Click the first green arrow, titled Search Forward to move to the next exception. Or, simply press Enter.
- 7 The next exception is a multiple response in row 16 for question 12. Look at the Image Viewer to see the intended response. In this case, the student marked both D and E, but crossed out E. Use the drop-down list in the Review Exceptions pane to select **D** from the list.
- 8 Click the first green arrow, titled Search
 Forward to move to the next exception.
 Or, simply press Enter.
- 9 The next exception is a blank response in row 17 for question 6. Look at the Image Viewer to see the intended responses. In this case, the student truly left the question blank. You may simply press **Enter** to ignore it. The question will be marked as incorrect when the data are scored.
- **10** Press **Enter** to move to the next exception case.
- 11 When prompted, click Yes to the message Are you sure you are finished reviewing exceptions? (there are no more exceptions in this data set).



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12 Click the **Back** button in the **Review Exceptions** pane to return to the regular Task Pane.

Your data set is now ready to be saved and analyzed.

2.0.3 Saving the Test Data

Remark Office OMR provides many file formats for exporting data to other applications. For this tutorial, the data set is saved to the Remark (RMK) format, which is a proprietary format within the software. This format saves the exception colors (if any are present) as well as the link from the data to the stored images so that you can open your data and still view the image that corresponds with any piece of data.

To save the exam data

1 Select the **File** menu and then click **Save Data**, or click



- 2 Data can be saved anywhere on your system. By default, a Data folder is installed in the Remark Office OMR directory; we recommend using this folder for storage of data files. In the Look in box, navigate to this Data folder on your system (e.g., C:\Program Files\Gravic\Remark Office OMR 8\Data).
- 3 Click the **Save as type** down arrow to display a list of file types.

Look in: C	ata	<u> </u>	2 🗹	🏷 📅
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- 4 If not already selected, click the **Remark (.RMK)** format.
- 5 Type **Tutorial1** in the box titled **File name**.
- 6 Click the **OK** button to save the file.

2.0.4 Grading the Test Data

Remark Office OMR provides statistical analysis functionality for grading data from your tests. There are two ways to grade an exam:

Easy Grade: Uses the first grid row as the answer key by default as well as all settings defined in the form template (e.g., whether a question is graded, assigned point values and respondent identifiers).

Grade Wizard: Allows you to customize the grading process, including adding benchmark values, customized grade scales and learning objectives (subtests).

For this tutorial, we will demonstrate the Grade Wizard.

Tip: The **Remark Quick Stats** module of the software includes various ways to tabulate/grade data and display reports. Review the Remark Quick Stats User's Guide PDF file by clicking **Start|Programs|Remark Office OMR 8|Documentation** to see all available analysis features.

To grade the exam data



1 Select the **Tools** menu, click **Analysis** and then click **Grade Wizard**, or click **Grade Wizard**. Alternatively, select the **Analysis** tab in the Task Pane and then click the **Grade Wizard** link.

The Grade Wizard Getting Started window appears.

- 2 In the **Designate Learning Objectives** area, mark the checkbox for **This test contains one or more learning objectives**. We will define two learning objectives from the test. A learning objective is a subset of questions that pertains to a particular topic (e.g., Spelling or Grammar on a Language Arts exam). Questions are mapped to each learning objective, producing a separate score for the objectives in addition to an overall score for the test.
- 3 Mark the checkbox for Define Benchmark Value for Overall Test. In the box titled Benchmark percent below, enter the number 75. A Benchmark is a target score you want

🚨 Grade Wizard		
Grade Wizard	^	Getting Started 🤞
Getting started Welcome to the Grade Wizard!		The Grade Wizard is designed to facilitate the process of designing an answer key that will be used to grade a test. Select any appropriate options below and then dick Next.
Answer key Import or define a new answer key.		Select an Existing Answer Key File (Optional) Brogse
 Question properties (optional) Specify advanced question properties. 		Learning Objectives (Optional) Test contains one or more learning
👠 Learning objectives (optional)		Dijectives
Define the learning objectives associated with this test.		Construct Multiple Answer Keys for a Single Test (Optional)
Grade scales (optional) Select the grade scales used when scoring the best.		 Standard: Specify a different answer key for each version of the the test. Standard answer keys do not re-order the questions. As a result, several reports will not be available.
Scaled scores (optional) Optionally lookup a scaled score for the test.		Advanced: Specify the order of questions for each answer key. Advanced answer keys specify the order of questions in relation to the original key.
Multiple keys (optional) Define multiple answer keys for a test.		Define Benchmark Value for Overall Test. A test benchmark value corresponds to a standard percentage score by which the student scores can be measured or sudace.
Custom headers (optional) Create and apply custom report headers.		Benchmark percent: 75.00
🔍 Review selections (optional)		
Review the answer key and related		Cancel << Back Next >> Einish

your students to achieve. Reports that include benchmarks show you which students achieved the benchmark percent, which did not and the difference between the student's score and the benchmark. Using Benchmarks is useful for seeing how well your students are mastering topics.

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

The **Answer Key** window appears. This window is where you specify an answer key. You may scan a key, import a key from an image file, use a grid row as the key or type an answer key. In our case, we processed the answer key as the first row of our data grid.

- 5 In the **Answer key source** box, use the drop-down arrow to select **Grid Row**. By default, the Grid Row box will be filled with the number **1**.
- 6 Click the **Get Key** button to obtain the answer key responses from the data grid.
- 7 Click the **Next>>** button to continue.

The **Question Properties** window appears. This window allows you to change properties you defined in the form template for this grading session. You may change

things such as respondent identifiers, point values, correct answers, data type and question text. You may also add a benchmark value for individual questions. Changes made here do not change the form template. You may hold down the **Shift** or **Ctrl** keys and select multiple questions to make the same change to each question. For the purposes of this tutorial, we set up everything correctly in the form template, so we do not need to make any adjustments to this window.

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

The **Learning Objectives** window appears. This window is where you define learning objectives (sometimes called subtests). You may assign questions to each learning objective you define so that the software provides a separate grade for that subset of questions. This feature allows you to track progress on specific objectives that you are teaching your students. For this tutorial, we are defining two learning objectives.

- 9 In the Create New Learning Objectives area, enter Spelling in the Name box.
- 10 Click the **Add** button.
- 11 Enter **Grammar** in the **Name** box.
- 12 Click the Add button.

You should now have two learning objectives defined: **Spelling** and **Grammar**. The next step is to pick the questions that belong to each Learning Objective.

- 13 Highlight **Spelling** in the **Learning objectives** column.
- 14 In the Available questions column, click Question1. Hold down the Shift key and then click Question10. Question1 through Question10 are selected.
- 15 Click the Add questions to the selected learning objectives button (>≥). The questions appear under Spelling in the Learning objectives column.



- 16 Mark the **Define Benchmark Value** box and enter a **Benchmark percent** of **75**. Using a benchmark score indicates that your students need to score at least 75% on this learning objective (Spelling Questions 1-10) to be considered proficient at spelling.
- 17 Highlight Grammar in the Learning objectives column.
- 18 In the Available questions column, click Question11, hold down Shift and then click Question20. Question11 through Question20 are selected.
- **19** Click the **Add questions to the selected learning objectives button** (>>). The questions appear under **Grammar** in the **Learning objectives** column.



- 20 Mark the **Define Benchmark Value** box and enter a **Benchmark percent** of **80**. Using a benchmark score indicates that your students need to score at least 80% on this learning objective (Grammar Questions 11-20) to be considered proficient at grammar.
- 21 Click the **Next>>** button to continue.

The **Grade scales** window appears. This window allows you to select or create grade scales used to determine final grades.

- 22 For this tutorial, we are using the default Grade Scale. If it does not appear automatically, click the **Scales** drop-down list and select **Default**.
- 23 Click the **Next>>** button to continue.

The **Custom Report Header** window appears. This window allows you to create a customized report header with text, images or information from fields in the form template. It is a useful feature for making reports more meaningful to

reviewers. However, for this tutorial, we are skipping this step.

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

The **Review selections** window appears. This window allows you to check all of the parameters you have just specified.

25 Once you are satisfied with the review, click the **Finish** button.

You are prompted to save the answer key. Saving answer keys is useful if you administer the same test on multiple occasions.

- 26 Click the **Yes** button to save the answer key.
- 27 In the Save Answer Key window, type Tutorial1 in the File name box.
- **28** Click the **Save** button to save the file. You receive a confirmation notice that the file was saved and then Remark Quick Stats opens.

2.0.5 Reviewing Grade Results and Reports

Once Remark Quick Stats opens, you have access to a variety of grade reports. You can report on the test itself, the class or individual students. For this tutorial, we will look at the Student Statistics, Student Response and Student Grade Reports.

To run the Student Statistics Report

1 In the **Task Pane**, select the **Display Reports** link to view the selection of available reports.

Tip: If there is a report you always want to see, select Tools|Preferences|Default Reports and make a selection for a default report.

2 Select the **Student Statistics Report** link in the list; the report displays on the right.

The Student Statistics Report displays the grades for the entire class. Each student can optionally be identified by an Analysis Respondent ID region (chosen in the form

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125-State Augusta Augusta	Thomas Jones	C	54.00 7 70.00	77.14	41.00 / 50.00	13.00 / 20.00
epres.	Rachel Marks	C	49.00 / 70.00	70.00	39.00 / 50.00	10.00 / 20.00
136 - Condensed Text Report	Bob Lee	C	50.00 / 70.00	71.43	45.00 / 50.00	5.00 / 20.00
takes a condensed statistical analysis of each perifier on the test.	Jonathan Finkel	A	63.00 / 70.00	90.00	48.00 / 50.00	15.00 / 20.00
117 - tressonatic trade facor	Mark Smith	B	58.00 / 70.00	82.86	41.00 / 50.00	17.00 / 20.00
mate down shallow performance lists by the	Lauren Brown	A	64.00 / 70.00	91.43	48.00 / 50.00	16.00 / 20.00
and the second sec	Jay Atkins	D	42.00 / 70.00	60.00	37.00 / 50.00	5.00 / 20.00
211 - Define Bills Heldy in Report	Bill Brooks	A	63.00 / 70.00	90.00	45.00 / 50.00	18.00 / 20.00
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	 Emily Dodds 	B	62.00 / 70.00	88.57	44.00 / 50.00	18.00 / 20.00
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st gastar.	James Yeager	B	59.00 / 70.00	84.29	43.00 / 50.00	16.00 / 20.00
200 - Cost shuld in: Report	Catherine Campbell	8	57.00 / 70.00	81.43	41.00 / 50.00	16.00 / 20.00
nan and an annual quantity parties of	Meg Hunt	B	56.00 / 70.00	80.00	48.00 / 50.00	10.00 / 20.00
311 - Statiet Grade Report	Anthony Wales	C	54.00 / 70.00	77.14	42.00 / 50.00	12.00 / 20.00
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import of define differentiations repr	Question2	8		Spelling			1.000	0.000	0
Question properties (optional)	Ouestion3	C		Spelling			1.000	0.000	0
Specify advanced question properties.	Question4	D		Spelling			1.000	0.000	0
sheer) as a set of the	Question5	E		Spelling			1.000	0.000	0
🌜 Learning objectives (optional)	Question6	D		Spelling			1.000	0.000	0
Define the learning objectives associated	Question7	C		Spelling			1.000	0.000	0
with this test.	Question8	В		Spelling			1.000	0.000	0
	Question9	A	\checkmark	Spelling			1.000	0.000	0
urade scales (optional)	Question10	8		Spelling			1.000	0.000	0
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scoring the test.	Question12	D		Name			1.000	0.000	0
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Optionally lookup a scaled score for the	Question15	C		Name			1.000	0.000	0
	Question16	В		Name			1.000	0.000	0
Multiple keys (optional)	Question17	A	\checkmark	Name			1.000	0.000	0
Define multiple answer keys for a test	Question18	В	\checkmark	Name			1.000	0.000	0
	Question19	С	\checkmark	Name			1.000	0.000	0
Custom headers (optional)	Question20	D		Name			1.000	0.000	0
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Review the answer key and related properties.	⊊ancel		<<	: Back	Nex			Einis	h

template or Grade Wizard) if desired. In this tutorial, we designated the Student ID barcode as an Analysis Respondent ID. You can also view the benchmark information and learning objectives. This report provides a nice overview of how your class is performing. Use the Page Navigation tools at the top of the window to review the various pages of your report.

3 To gain some comfort with the **Remark Quick Stats** window, go to the toolbar and use the **Full Screen** button to expand the report. Then toggle back to the default view by selecting

the button again. If you need to, use the **Zoom In** increase or decrease the size of the report image.



Next, we will look at the Comparative Grade Report.

To run the Student Response Report

The Student Response Report allows you to view class and question performance, along with score data in a graphical format.

1 In the **Task Pane** under Reports, select the **Student Response Report** link.

The report displays each question across the top and each student down the left. Green indicates the question was answered correctly, red indicates the question was answered incorrectly and white indicates the question was left blank. Means are included at the bottom of each column. Use the Navigation tools at the top of the window to scroll to the second page, where you find summary score information. Report colors are customizable in the report's options (Tools|Report Properties).



Finally, we will look at the Student Grade Report.

To run the Student Grade Report

- 1 In the **Task Pane** under Reports, select the **Student Grade Report** link.
- 2 Select one or more students from the **Group** list and click the arrow to move them to the **Selected groups** list.
- 3 Click the **OK** button; the report displays on the right.

The **Student Grade Report** shows an individual report of each student's grades. You can show the correct and incorrect responses, as well as an image of the actual test as it was scanned. You can also add customized headings such as high, low and mean scores for the class. Learning objectives are tracked, as well as subjective and extra credit points.



2.0.6 Exporting the Student Grade Reports

Once you have tabulated your data, you can save a report and/or export the report to one or more formats for either storing or sharing with others. For this tutorial, we will export the Student Grade Reports to PDF files. Saving to this format allows you to email test grades to parents, for example.

To export the Student Grade Reports

1 Select the **File** menu, click **Export** and then click

Report, or click **Export** . Alternatively, click the **Export report** link in the Task Pane.

- 2 In the Export format box, select Portable Document Format (PDF).
- 3 In the **Page Range** area, select **All**.
- 4 Set the **Image quality** to its default value of **High**.
- 5 Click the **Export** button to choose a location and file name for the PDF file.
- 6 In the **Save As** window, use the **Look in** drop-down list to locate a folder on your computer for the file. For this tutorial, use **My Documents** or another folder where you can easily access the exported report.
- 7 Click the **Save** button to export the report.

You may now go to the My Documents folder on your computer and view the resulting PDF files.

You have completed the first tutorial. Look below for a summary, and then continue on to Tutorial 2 for more practice.

2.0.7 Tutorial 1 Summary

The first tutorial illustrated basic and some advanced features of the software, including:

- Creating a form template
 - Setting advanced region options
- Processing forms
- Using Review Exceptions to clean data
- Saving data
- Grading tests with the Grade Wizard
- Exporting reports

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3.0 Tutorial II – The Hospital Stay Survey

The second tutorial quickly teaches you how to use the basic software functions and how to easily navigate the software's user interface. You will create a form template for a hospital stay evaluation. This evaluation is a typical survey form containing several types of areas that Remark Office OMR recognizes, including text, OMR bubbles and an area for gathering comments. The survey asks previous hospital patients to provide details about when and where they stayed and then answer some basic questions to evaluate their stay. A survey such as this one can be scanned to produce data and subsequently, reports to show how the hospital is performing.

You will perform the following steps in this tutorial:

- Create the Hospital Stay Evaluation form template
- Process completed Hospital Stay Evaluation forms
- Review and correct the data output
- Save the Hospital Stay Evaluation data
- Analyze the Hospital Stay Evaluation data with Remark Quick Stats

3.0.1 Creating the Hospital Stay Evaluation Form Template

The first step in this process is to create a form template outlining the areas on the form that you want the software to recognize.

To begin setting up the Hospital Stay Evaluation form template

- 1 If not already running, start **Remark Office OMR** (Start|Programs|Remark Office OMR 7|Remark Office OMR Data Center).
- 2 Begin a new form template. Select the **File** menu and then click **New form template** or

click . Alternatively, in the left-hand panel, known as the **Task Pane**, select **New form template**. Any of these actions will open a second window containing the **Remark Office OMR Template Editor**.

Tip: If you use **File|New Form Template** or the **New form template** link in the Task Pane, the Template Editor will open with the new form template window already opened for you.

3 [Optional] If the Template Editor opens but you do not see the **New form Template Properties** window, select the **File** menu and then click **New Form Template** or click. Alternatively, select the **New form template** link in the task pane.

The **New Form Template Properties** window opens. The New Form Template Properties window is where you describe your form to Remark

Office OMR. You will do this by entering basic information about your form, including the form template description, page size and page orientation.

- 4 Enter Hospital Stay Evaluation in the Form template description box.
- 5 Locate the Page Size area where you can tell the software the size paper your form uses. Select US Letter in the Size drop-down list.
- 6 Locate the **Orientation** area and select **Portrait**.



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

The **Create Page Elements** window appears. The Create Page Elements window allows you to either acquire an image of your form from your scanner, or acquire an image of your form from an existing image file. Each page in a form template is created using an image of the appropriate page in your form. The image allows you to see the form so that you can easily teach Remark Office OMR how to read it.

To obtain a form template image

As previously mentioned, there are two ways to acquire an image for a form template page. Images can be acquired by scanning to create a new image file or by opening an existing image file. We will be acquiring our image from a pre-scanned image file stored on your computer.

- 1 Click the radio button for **Read from image files** in the **Select Method to Use for Image Acquisition** area.
- 2 Click the Acquire Images from File button. The Select Image File window opens.
- 3 Select the Tutorial 2 Hospital Stay Survey.tif file from the Tutorial 2 folder of your Remark Office OMR installation directory (e.g., C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 2) and then click the **Open** button.

Once an image is acquired by opening an existing image file, the Template Editor displays a thumbnail of the image for your approval.

utorial 2 - Hospital Sta	y Survey.tif		Select Method to Use for Image Acquisition O Read from scanner (Scanner Properties) Development Float
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Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call Image: Call <			Warning, Always use forms that have not been marked. Page Trop-out Cales Bad give Drop-out threshold: 20

4 When a thumbnail image of your form appears, click the **OK** button to accept the image.

Once the thumbnail image is accepted, the Template Editor opens the new form template where you can begin to define the regions. You see a tree view (item list) on the left and an image representation of your form on the right.

To define form template regions

The purpose behind making a form template is to tell the software where to locate the information on your specific form and how to understand your specific data requirements. The following table lists the six regions on the Hospital Stay Evaluation form and their corresponding region types:

Area on Form	Corresponding Region Type
Hospital Name	OCR
Hospital Unit	OMR (Multiple)
Length of Stay	OMR (Multiple)
Room Number	OMR (Grid)
Evaluation Questions	OMR (Multiple)
Comments	Image

To define the hospital name as an OCR region

The hospital name text is located in the upper left hand corner of the form and is defined as an OCR region. Remark Office OMR reads the pre-printed text automatically so that the responses can be tied back to specific hospitals.

- 1 Highlight the **Page 1** node on the left side of your screen, if it is not already highlighted.
- 2 Select the Page menu, click Insert and then click OCR Region After Selected Page, or

click the purple toolbar button . Alternatively, select the **Define regions** link in the Task Pane and then select **Insert OCR region**.

The mouse changes to a crosshair.

3 To create the OCR region, place the cursor just beyond the top left of the text, then press and hold the left mouse button while dragging the rectangle beyond the bottom right corner of the text, making sure you have selected the entire allotted space. Because text length may vary depending on the name of each hospital, capture a little extra space at the end of the text to accommodate the largest possible hospital name you might process.



- 4 After positioning the box, release the mouse button and the **Properties OCR Region** window appears, allowing you to define the region's properties. This window allows you to provide pertinent information about the OCR region.
- 5 Type **Hospital** in the **Region name** box. The Region name provides a brief description of the region and will become the name for this column in your data set.
- 6 Set the OCR type to Standard. Standard OCR works well in most cases and is the default setting. (Microsoft Office Document Imaging is a second OCR option available if you have Microsoft Office 2007 installed on your computer.)
- **7** The following options should be set to their default settings:
 - **Data Type** is **Textual**. We are collecting hospital names, which are textual. If we were to export



- Language is None. The system's default language is used.
- Orientation to Left to Right. The text on our form is oriented from left to right
- OCR Image Pre-Process Options are all unchecked.
- 8 Mark the checkbox for **Region contains more than one word**. Each hospital name contains more than one word.
- 9 Click the **OK** button to return to the main Template Editor window.



You now see a purple box around the text in the image area, identifying it as an OCR region, and a new node in the tree view titled **Hospital**.

To define the Hospital Unit as an OMR region

The Hospital Unit question contains two columns of bubbles separated by text. Therefore, we have to use the software's Append Linked Region feature to link the second set of bubbles to the first set of bubbles. When linking regions that

REMARK MEDICAL

0 Cardiac 0 Neurology 0 Ganeral Surgery 0 Pathology 0 Maternity 0 Pediatria

have text in the middle of them, you create a region around the first set of bubbles, then link the second set to the first set. (You cannot create one OMR region around bubbles that have text between them.)

- 1 Highlight the **Hospital** node by clicking it in the tree view, if it is not already highlighted.
- Select the **Region** menu, click **Insert** and then click **OMR Region After Selected Region**, 2

OMR or click the green toolbar button Alternatively, select the **Insert OMR region** link in the Task Pane.

The mouse changes to a crosshair.

Tip: When defining an OMR region, include only the actual marks; never include the nearby labels, text, etc. Also, create approximately a 1/8 inch buffer space between the marks and the edge of the defined region. This buffer allows Remark Office OMR to accommodate minor shifting or skewing during form processing and decrease the number of data exceptions you need to clean in the resulting data.

- Place the cursor just to the left of the top bubble for "Cardiac", then press and hold the left 3 mouse button while dragging the rectangle to the bottom right corner of the region, the bubble for "Maternity", capturing all three bubbles in the region.
- After positioning the box, release the mouse button. The **Properties OMR Region** 4 window appears. The Properties - OMR Region window allows you to enter information that will define the OMR region and the data it produces, including:
 - **Region Definition** (the area containing **Region name**, the type of OMR region or **OMR** type and the **Data type**).
 - Region Layout of the region (the area detailing how many Rows and Columns of marks are contained in the region and their orientation).
 - **Possible Responses** (the Labels you want to see as your data).
- In the **Region Definition** area, enter **Hospital Unit** in the box titled **Region name**. 5
- For the **OMR Type**, select **Multiple**. The Multiple 6 region designation is used for typical multiple choice style questions.
- 7 For the **Data type**, select **Textual**. This region contains Hospital Unit names, so textual data is appropriate.
- In the **Region Layout** area to the right, select 8 **Column** for **Region orientation**. Region orientation lets Remark Office OMR know how the region is structured on the form. For this question, the question's first set of answer choices is listed in one column.



- 9 Enter **1** in the **Columns in the region** box and **3** in the **Rows in the region** box. The region size lets Remark Office OMR know how many rows and columns of marks are in the region.
- 10 Locate the **Labels** area, and then type in the text for each unit: **Cardiac**, **General Surgery**, **Maternity**, one per line. Your choice of Labels in the form template determines what you see in the data set when your filled in forms are processed. The Labels represent the response choices for each bubble, moving from top to bottom. Notice that as you type the Labels, numbers automatically fill the **Values** column to the right. While the Labels represent the data you will see returned from the processed forms, the Values represent the information Remark Quick Stats uses to perform any

statistical analysis.

Tip: When entering Labels into Possible Reponses, you may use the Enter Key to move to the next row.

11 Click the **OK** button to return to the main Template Editor window.

You see a green box around the first column of bubbles in the **Hospital Unit** area of the form, identifying it as an OMR region. You also see that **Hospital Unit** is added to the tree view on the left side of the Template Editor.



To append the second set of Hospital Unit bubbles to the first set

We can now add the second set of options (bubbles) in the Hospital Unit question to the first, using the Append Linked Region feature.

1 With the **Hospital Unit** node highlighted in the tree view, select the **Region** menu and then

click Append Linked Region, or click

- 2 Place the cursor just to the left of the top bubble for "Neurology", then press and hold the left mouse button while dragging the rectangle to the bottom right corner of the region, the bubble for "Pediatrics", capturing all three bubbles in the region.
- 3 After positioning the box, release the mouse button. The **Properties OMR Region** window appears. You will notice that everything is filled in for you based on the previous OMR region, with the exception of the **Labels**.
- 4 Locate the Labels area, and then type in the text for each unit: Neurology, Pathology, Pediatrics, one per line. Your choice of Labels in the form template determines what you will see in the data set when your filled in forms are processed.
- 5 Click the **OK** button to return to the main Template Editor window.

You see a green box around the second column of bubbles in the **Hospital Unit** area of the form, identifying it as an OMR region. You also see that the two linked regions are outlined with a dashed line to show their linked status.



To define Length of Stay as an OMR region

The **Length of Stay in Days** region is a third OMR region designed to output the number of days the respondent stayed in the hospital. The steps involved in creating this OMR region are similar to those performed for the Hospital Unit. However, notice that many of the region's properties change to reflect that the area on the form has a single row with five columns instead of two columns with three rows.

- 1 Highlight **Hospital Unit** by clicking its node in the tree view, if it is not already highlighted.
- 2 Select the Region menu, click Insert and then click OMR Region After Selected Region,

or click the green toolbar button . Alternatively, select the **Insert OMR region** link in the Task Pane.

The cursor changes to a crosshair.

- **3** Place the cursor just to the top left of the row of marks representing the **Length of Stay**, then press and hold the left mouse button while dragging the rectangle to the bottom right corner capturing all of the bubbles in the region.
- 4 In the **Region Definition** area, enter **Length of Stay** in the box titled **Region name**.
- 5 For the **OMR type**, select **Multiple**.
- 6 For the **Data type**, select **Textual**. This region contains numbers of days but because one of the choices (5+) is not numeric, textual is the correct data type.
- 7 In the **Region Layout** area to the right, select **Row** for **Region orientation**. Region orientation lets Remark Office OMR know how the region is structured on the form. For this question, the question's answer choices are listed in a row.
- 8 For Columns in the region, enter **5** and for **Rows in the region** enter **1**.
- 9 For the Labels area, type the number for each length of stay on each of the rows: 1, 2, 3, 4, 5+, one per line. This label range represents the response choices for each bubble, moving from left to right. Again notice that as you type the Labels, numbers automatically fill the Values column in the grid.



10 Click the **OK** button to return to the main Template Editor window.

You now see a green box around the **Length of Stay** region in the form area, identifying it as an OMR region. You also see that **Length of Stay** is added to the tree view.

To define Room Number as an OMR region

The Room Number region needs to capture all five digits as one piece of information. We use a Grid OMR region to define the bubbles on the form. A Grid OMR region outputs a single piece of data regardless of the number of rows and columns included in the region. This type of region is used for items such as dates, ID numbers, social security numbers, etc.

The steps involved to create a Grid region are the same as you used to create the OMR regions we already created. However, the specific properties of the region change to reflect the way the region is formatted on the form and the way we want the software to report the data.

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- 1 Highlight the **Length of Stay** node in the tree view, if not already highlighted.
- 2 Click the green toolbar button to insert an OMR region, and then draw the OMR region box around the entire group of bubbles.
- 3 After positioning the box, release the mouse button, and the **Properties OMR Region** window appears.
- 4 In **Region Definition** area, enter **Room Number** in the **Region name** box.
- 5 Select **Grid** for the **OMR type**.
- 6 Select **Numeric** for the **Data type**. We are capturing a five-digit number.
- 7 In Region Layout area, select Column for the Region orientation. Each column in this region represents one digit of the room number.
- 8 In the **Columns in region** box, enter **5** and in the **Rows in region** box, enter **10**.
- 9 Enter the appropriate Labels in Possible Responses. For the Labels area, click the down arrow for Possible label scales and choose the scale 0 to 9 from the list of choices. This range represents the response choices for bubbles in all five columns, moving from top to bottom. The numbers fill the Labels grid automatically. The Labels represent the data that is returned from the processed forms when filled in by the respondent, and the Grid region returns all selections to make a five-digit number.
- **10** Click the **OK** button to return to the main Template Editor window.

You see a green box around the **Room Number** region in the form area, identifying it as an OMR region. You also see that **Room Number** is added to the tree view.

To define the Hospital Stay Evaluation questions as an OMR region

There are five questions on the form that ask the patient to evaluate his or her hospital stay. All five questions share the same evaluation scale of Strongly Agree to Strongly Disagree, which allows them to share one set of labels on the form. This compact and logical question area can be captured with a single OMR region even though it contains five separate questions. Defining similar questions in one region saves time and effort, and is preferable.

- 1 Highlight the **Room Number** node in the tree view, if not already highlighted.
- 2 Click the green toolbar button to insert an OMR region, and use the crosshair to draw a box around the entire group of 20 bubbles (all four columns and five rows). This region contains five individual questions and each question has four possible answer choices.
- 3 When the **Properties OMR Region** box opens, enter **Evaluation** in the **Region name** box.





Room Number:

- 4 Select **Multiple** as the **OMR type**.
- 5 Select **Textual** for the **Data type**. This region contains a scale from Strongly Agree to Strongly Disagree, so textual data is appropriate.
- 6 In the **Region Layout** area, select **Row** for the **Region orientation** because each individual question occupies one row of the region.
- 7 Enter **4** in the **Columns in the region** box and **5** in the **Rows in the region** box.
- 8 In the Possible label scales drop-down list, select the Strongly Agree to Strongly Disagree (4) scale. The Labels and Values grids are filled automatically with the appropriate labels and values.
- 9 In the left Task Pane, select Question Text and names. The next step is to enter the Question Text and Question Names for each of the five questions.

Tip: Question Text appears on the reports generated in Remark Quick Stats and is useful when exporting to some data formats. **Question Names** can be used to enter individual names for every question within one OMR region. If the Question Names grid is left blank, the software uses the Region Name defined on the previous screen and appends sequential numbers to the end of the name to differentiate the questions. Individual Question Names are useful if you are exporting data to an existing file that requires specific field names (e.g., an Access table).

10 Enter the **Question Text** and **Question Names** for each of the five questions as shown here:

Question Text:

The staff was responsive to my needs.ResponsiveThe staff treated me with respect.ResponsiveMedical procedures were explained in terms I understood.ExplainedMy doctor was available to answer questions.QuestMy overall rating of this hospital is favorable.Overall

11 Click the **OK** button to return to the main Template Editor window.

You see a green box around the **Hospital Stay Evaluation** region in the form area, identifying it as an OMR region. You also see that **Evaluation** is added to the tree view.

Region name: Evaluation BMR region properties Set overall properties for the region OMR type: Multiple V 🚯 Columns in the region: 4 Data type: Textual Region item properties ~ Rows in the region: 5 properties for items within a Possible label scales on text and question Strongly Agree to Stro Saye Current Scale Edit.. /erify region's value in a databas optionally return additional f -**m** c Include region in read operatio QK Cancel

-	Please note that if the question name is blank, the default will be t	ne region name.	
CMR region properties	Question Text	Question Names	-
Set overall properties for the region.	 The staff was responsive to my needs. 	Responsive	
Region item properties	The staff treated me with respect.	Respect	
Set properties for items within a ration	3 Medical procedures were explained in terms I understood.	Explanations	
Set propercies non terms mean a region.	4 My doctor was available to answer questions.	Questions	
🖳 Question text and names	5 My overall rating of this hospital is favorable.	Overall	
Tracking Set region as page, form, or respondent dentifier. Orabase bole.co Verfy regions value in a database and optionally return additional fields.			

Question Names:

Responsive Respect Explanations Questions Overall



To define the Comment area as an Image region

Areas in which you expect your respondent to use handwriting can be captured by Remark Office OMR as Image regions, Image regions offer you three different ways to capture handwriting: 1) the software takes a snapshot of the handwriting and stores it on your computer as an image file, 2) the software allows you to hand enter the written information into your data set using image assisted data entry, 3) you apply qualitative codes that characterize the comments as you read them on-screen. For image clips and data entry regions, you can run a Respondent Report in Remark Quick Stats to view the information from the Image region. For qualitative codes, you can run an Item Analysis report. We are capturing a snapshot of the handwriting (image clip).

Highlight the **Evaluation** node in the tree view, if not already highlighted, and then click the 1 to insert an **Image** region.

blue toolbar button

2 Once the cursor becomes a crosshair, place the cursor at the top left of the area where you would expect the respondent to enter their comments. Press and hold the left mouse button while dragging the rectangle to the bottom right corner of the area, making sure you have selected the entire allotted space.

Comments:



- 3 After positioning the box, release the mouse button and the **Properties – Image Region** window appears, allowing you to define the region's properties.
- Enter **Comments** in the **Region name** box. 4
- Set the **Region type** to **Image clip**. This type 5 captures each respondent's response as a small image file for storage on your computer. You can then run a report in Remark Quick Stats to review the comments.
- At the bottom of the **Region Definition** area, 6 mark the setting for **Attempt to detect the** presence of handwriting in the region. By using this feature, Remark Office OMR searches for handwriting in the Image region area during form processing. If writing is found, the image clip is captured, and the path to the clipped image file is displayed in the data grid.



7 In the **Target directory** box, click the ellipsis to choose the **Images** folder of your Remark Office OMR installation (e.g., C:\Program Files\Gravic\Remark Office OMR 8\Images). Whenever a comment is found, a small image file is captured and stored in this folder.

- 8 In the **Begin names with** box, type **Tutorial Comments**. When the images are captured, the image names begin with the text "Tutorial Comments" so that you know they belong to this form.
- 9 Set the **Clip file type** and **Compression** to the default settings of **TIF** and **Group 4**.
- **10** Click the **OK** button to return to the main Template Editor window.

You see the new Image region visible as a blue field on your form and that **Comments** is added to the tree view of your form template.

To save the Tutorial 2 form template

We are finished creating all of the regions in our form template and need to save the form template as a file we can use to process completed forms.

- Select the File menu and then click Save or click Alternatively, select the Save template link in the Task Pane. Make note of where you save the form template file (we suggest C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 2).
- 2 In the **File name** box, type **Tutorial2** and then click the **Save** button.

Note: If someone has already completed the tutorial with this file name, you may modify the file name.

You have now created the Tutorial 2 form template. Close the Template Editor by selecting the **File** menu and then clicking **Exit**. Alternatively, you may also simply click the X in the upper right hand corner of the **Template Editor** window.

3.0.2 Processing the Completed Hospital Stay Evaluations

Now that you have created the form template for the **Hospital Stay Evaluation** survey, you are ready to begin processing the completed forms using the supplied image files.

To open the Hospital Stay Evaluation form template

- 1 If not already running, start the Remark Office OMR Data Center (Start|Programs|Remark Office OMR 8|Remark Office OMR Data Center). When the Data Center opens, it displays a blank spreadsheet-style data grid. The Data Center offers a Task Pane on the left containing the most commonly requested actions.
- 2 Select the **File** menu and then click **Open Form Template** or click **Select** the **Open form template** link in the Task Pane. You must open a form template in order to process forms.



Save As		? 🔀
Save in:	🔁 Tutorial 2 💌 🖛 🏝 📸 📰 -	
My Recent Documents Desktop	Thages for Processing	
) My Documents		
My Computer		
My Network Places	File name: Tutorial2 Save as type: Form Template Files (*.om/)	Save Cancel



Tip: When you are in the Remark Office OMR Template Editor with a form template open, you can select **File|Launch Remark Office OMR** and the Data Center opens with the selected form template also open.

3 Select the **Tutorial2.omr** file (the file you created in the previous section of this tutorial) and then click the **Open** button. Alternatively, we have provided a sample file in Program Files\Gravic\Remark Office OMR 8\Tutorials\Samples\Tutorial2.omr.

When the Tutorial2 form template opens, its name appears on the title bar at the top of the screen and you see the region names you specified as your column headers in the data grid. Each column in the grid corresponds with one variable or question in the form template, as the column headers indicate. The data grid fills row by row as your completed forms are processed. Each grid row contains information from one processed form regardless of the number of pages the form contains.

To read forms from image files

The Read Wizard is used to process completed forms and produce data. The Read Wizard has several steps to help customize the reading process. This tutorial focuses on the basic functions. As mentioned previously, we are reading pre-scanned image files.

1 Select the **Tools** menu and then click **Read Wizard**, or **click** . Alternatively, select the **Read wizard** link in the Task Pane.

The **Read Method** window appears.

- 2 In the **Select Method to Use for Data Collection** area, mark the radio button for **Read from image files**.
- 3 Click the **Next>>** button to continue.

The **Image Selection** window appears to enable you to view and select the images you want to process.

- A Navigate to the **Tutorial 2** folder of your Remark Office OMR installation (e.g., C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 2).
- 5 Navigate to the **Images for Processing** folder.
- 6 Select the file called Tutorial 2 Completed Hospital Surveys.tif by either double clicking it or selecting it and clicking the top green button for Add Selected Images, which moves the file into the Images in Read Order window on the right.



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

The **Review Exceptions** window appears. This window allows you to configure options for reviewing exception cases such as blank and multiple responses. We are using this feature in this tutorial.

- 8 If the **Activate Review Exceptions** checkbox is marked, click in the checkbox to deselect this option. We are not reviewing exceptions at this time.
- 9 Click the **Read** button to begin reading image files.

As each image is processed, a row of data is added to the data grid.

3.0.3 Reviewing and Correcting the Data

After the forms are processed, 20 rows of data are displayed in the data grid. Each row represents the responses collected from one of the forms. You are now ready to inspect the data for missing or unrecognized responses in order to prepare for analysis and/or data export.

Remark Office OMR informs you of unrecognized or questionable responses by color-coding each appropriate data grid cell and including a short descriptive word describing the exception (e.g., BLANK for a blank response). The software then assists you to correct exception cases or problems by allowing you to see what was entered on the actual form. The stored images for each processed form are available to show you respondents' answer choices.

For this tutorial, we will run **Review Exceptions**, which provides an automated way to search through the data for exceptions and then correct them.

To run Review Exceptions

1 Select the **Tools** menu and then click **Review Exceptions**, or click . Alternatively, select the **Review exceptions** link in the Task Pane.

The **Review Exceptions** window appears in the Task Pane.

- 2 The top half of the pane allows you to select the search cases (e.g., multiple responses, blank responses, etc.). Make sure **Multiple responses** and **Blank responses** are checked.
- 3 The bottom half of the window allows you to configure and begin the search. You may search by Row/Respondent (across rows) or by Column/Item (down the columns). For this tutorial, select Row/Respondent.
- 4 Click the **Begin Review** button to start the automated review. The software searches through the data set to locate the flagged cells.

The first piece of flagged data is a multiple response in the first grid row for the item called **Length of Stay**. In the **Review Exceptions** window, you will see a green exclamation point and **Response for [Length of Stay]**. The green tells you that a multiple response was encountered. The text in the brackets ([Length of Stay]) tells you the question or item where the multiple response was encountered.

- 5 In the box beneath Response for [Length of Stay] use the drop-down list to select the appropriate response. Use the Image Viewer beneath the data grid to review the respondent's form. It appears that the respondent changed his response from 3 to 4 by crossing out the original mark and filling in a second bubble. We will assume that 4 is the correct response. Select 4 from the drop-down list.
- 6 Click the first green arrow, titled Search Forward to move to the next exception. Or, simply press Enter.
- The next exception is a multiple response in row two for the item called Respect. Look at the Image Viewer to see the intended response. In this case, it looks like the respondent changed his response from
 Strongly Agree to Agree. Select Agree from



the drop-down list (or type "A" and watch Remark Office OMR auto-fill the response).

- 8 Press the **Enter** key. There are no more exception cases in the data.
- 9 When prompted, click **Yes** to the message **Are you sure you are finished reviewing exceptions?**. There are no more exceptions to review in this data set.
- 10 Click the **Back** button in the **Review Exceptions** pane to return to the regular Task Pane.

Your data is now ready to be saved and analyzed.

3.0.4 Saving the Hospital Stay Evaluation Data

After reviewing the data, you may save it one of many file formats available for exporting data to other applications. For this tutorial, we will save the data to the Remark (RMK) format, which is a proprietary format within the software. This format saves the exception colors (if any are present) as well as the link from the data to the stored images so that you can open your data and still view the image that corresponds with any piece of data.

To save the Hospital Stay Evaluation data

1 Select the **File** menu and then click **Save**, or click



- 2 Data can be saved anywhere on your system. By default, a Data folder is installed in the Remark Office OMR directory; we recommend using this folder for storage of data files. In the **Look in** box, navigate to this **Data** folder on your system (e.g., C:\Program Files\Gravic\Remark Office OMR 7\Data).
- 3 Click the **Save as type** down arrow to display a list of file types.
- 4 If not already selected, click the **Remark (.RMK)** format.
- 5 Type **Tutorial2** in the box titled **File name**.
- 6 Click the **OK** button to save the file.

3.0.5 Analyzing the Hospital Stay Evaluation Data

Remark Office OMR provides statistical analysis functionality for tabulating data from your forms. The **Easy Survey** feature is one such facility and provides you with a choice of standard reports based on your data.

To tabulate the Hospital Stay Evaluation data

1 Select the **Tools** menu, then click **Analysis** and then click **Easy Survey**, or click **Easy Survey**, or click **Analysis** tab and then select the **Easy Survey** link in the Task Pane.

The Remark Quick Stats window appears.

2 In the **Task Pane**, select the **Display Reports** link to view the selection of available reports.

Save Data Save Data	propriate file type and file par	e and then click OK.	
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Save as type:	Remark (*.RMK)	~	Cancel

report, which shows us the answers to the "Comments"

To run a Response Report by Item report

question.

- In the Task Pane, select the Response Report by Item link. 1
- 2 A selection window appears, allowing you to choose questions on which to base the report. Choose the **Comments** guestion so that we can see the responses to our open ended comments question.
- Click the **OK** button to run the report. 3

Notice that the comments are displayed on screen for all handwritten comments. You can read through them and/or export them to another format. If the comments are difficult to read, select Tools | Report Properties, locate the item called **Image Quality** and change it to **1 - High**. The Report Properties also allows you to choose whether to show or hide the respondent identifier. Our survey is anonymous; therefore you may wish to hide the respondent identifier by changing **Respondent ID** to **Hide**. Then click the **OK** button and run the report again. Note that the comments are clearer when printed.

3.0.6 The Report Batch Wizard

The previous tutorial on test grading explored Remark Quick Stats. In this tutorial, we demonstrate use of the Report Batch Wizard. This wizard allows you to display, print or export multiple reports at one time. In addition, it allows you to auto filter data based on one or more questions on your form. We are going to auto filter the data based on the Hospital OCR region. Remark Quick Stats provides us with a report for each hospital based on the filter that we set up.

				Cond	ensed Item	Analysis	Report		
3	Select the Condensed Item Analysis Report link in the	Hospital Un	R.			Length of Sta	,		
	list: the report displays on the right	Cardiac	Frequer 4	20.00	Mean: 3.45	Response 1	2	10.00	Mean: 3.20
	ise, the report displays on the right.	Surgery Maternity	2	10.00		3	7	35.00	
Th	e Condensed Item Analysis Report shows several	Neurology Pathology Pediatrics	3 3 4	15.00 15.00 20.00		4 5+	2 5	10.00 25.00	
sta	tistics for each question, such as Label. Total and Percent.	The staff w Response	is responsiv Frequer	e to my needs. cy Percent	Mean: 3.30	The staff treat Response	ed me with re Frequency	espect. Percent	Mean: 3.3
Ea	ch table displays statistics for a separate question in the	Strongly Age Agree Disagree Strongly Disagree	6 10 6 4 0	50.00 30.00 20.00 0.00		Strongly Agree Agree Disagree Strongly Disagree	10 6 4 0	50.00 30.00 20.00 0.00	
sui	vey. This simple, straightforward report may be all that	Medical pro	cedures wer	e explained in t	ermsl	My doctor wa	s available to	answerque	stions.
vo	I need to communicate your survey's results. Although we	Response Strongly Age	Frequer	cy Percent	Mean: 2.90	Response Strongly Agree	Frequency	Percent 30.00	Mean: 2.90
	I not view event evented ble report in this tutorial we	Agree Disagree	7	35.00		Agree Disegree	8	40.00 20.00	
WII	i not view every available report in this tutorial, we	Strongly Disagree	1	5.00		Strongly Disagree	2	10.00	
su	ggest that you explore the other available reports and	My overall Response	ating of this Frequen	hospital stay is cy Percent	favorable. Mean: 3,10				
evi	periment with the report options by clicking Tools Report	Strongly Age Agree	ee 6 10	30.00 50.00					
D		Disagree Strongly Disagree	4 0	20.00					
Pr	operties and Tools Preferences.								
Let	's take a look at one more report: The Response by Item								

01	- Response Report by Ite	m	~
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	Display Filter	Show	
	Report Format Option	s	
	Sort Items	Unsorted	
	Sort Order	Ascending	
	Display All Questions	No	
	Respondent ID	Hide	
	Page Break	No	
	Row Shading	Yes	
	Image Quality	1 - High	~
	Question Identifier Label	Question:	
	Data Font Size	10	
	Font	Arial	~
[n Ch De	nage Quality oose the image quality for fault = 2 - Medium	loading graphics.	

To run the Report Batch Wizard

- 1 Select the **Tools** menu and then click **Report Batch Wizard**.
- 2 Mark the checkbox for **Auto Filter Reports**.
- 3 In the **Filter by** drop-down list, select **Hospital**. The reports will be created based on the hospital names in our data. Remark Quick Stats will sort the data behind the scenes and then report by hospital.
- 4 Click the **Next>>** button to continue.
- 5 The next window allows you to choose which reports to run. Select the **Detailed Item Analysis Report** and the **Response Report by Item**. These reports will provide us with an item analysis for each question and a listing of the open-ended comments.
- 6 Click the **Next>>** button to continue.
- 7 The next window allows you to print the reports. We will not print for this tutorial.
- 8 Click the **Next>>** button to continue.
- 9 The next window allows you to display and export reports. Mark the checkbox for **Display Reports**.
- 10 Mark the checkbox for **Export Reports**.
- 11 Under Export Format, choose **Portable Document Format** (PDF).
- 12 Click the ellipsis next to Base file name to choose a location and name for your file. Note where you save the file so that you can view it later (you may wish to save it to the tutorial folder in C:\Program Files\Gravic\Remark Office OMR 8\Tutorials\Tutorial 2). Do not mark the checkbox for Merge all selected reports or Place all reports in a single folder. The result will be individual reports for each hospital.
- 13 Click the **Finish** button to generate the reports. You are asked if you want to save the report batch file for later use. Click **No** for this tutorial (saving report batches is useful if you plan to run the same reports repeatedly).

The reports begin to generate and you see a progress bar on the screen.

- 14 The Response Report by Item requires user input. You are prompted to choose the question on which to base this report. When prompted, choose the **Comments** question from the **Questions** window. Use the arrow to move it to the **Selected questions** window. This report displays all of the handwritten comments from the forms.
- 15 You are notified when the Report Batch Wizard is finished creating your reports. Navigate on your computer to the folder in which you saved the PDF files. You will see folders for each hospital, and two

leport Batch Wizard	
Report Batch Wizard Generate, print, or export multiple reports in a single batch.	
-Load an Existing Report Batch (Optional))
Auto Fiter Reports - Optionally generate a new batch of reports based on a subset of the data each time the field value changes in the specified fields.	
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vailable reports:		Selected reports:	
202 - Detailed Item Analysis Report	2	Selected Reports	;
203 - Item Analysis Graph Report		202 - Detailed Item Analysis	Report
204 - Condensed Item Analysis Report	>>	401 - Response Report by Ite	em.
205 - Basic Item Analysis Report	_		
206 - Item Statistics Report			
208 - Crosstabulation Report			
209 - Comparative Item Report			
210 - Question Mean Report			
401 - Response Report by Item			
402 - Response Report by Respondent			
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reports in each folder: one for the Detailed Item Analysis and one for the Response Report by Item. If you have the Adobe Acrobat Reader, open the reports to gain a better understanding of how the auto filter feature worked.



3.7 Tutorial II Summary

The second tutorial illustrated the basics of using the software, including:

- Creating a form template
 - Linking OMR regions
- Processing forms
- Using Review Exceptions to clean data
- Saving data
- Tabulating surveys with Easy Survey
 - Using the Report Batch Wizard

You have completed the Remark Office OMR tutorials. We encourage you to read the Designing Scannable Forms chapter of your Remark Office OMR user's guide before you get started with your own forms.

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