



Scanning with OMR Scanners

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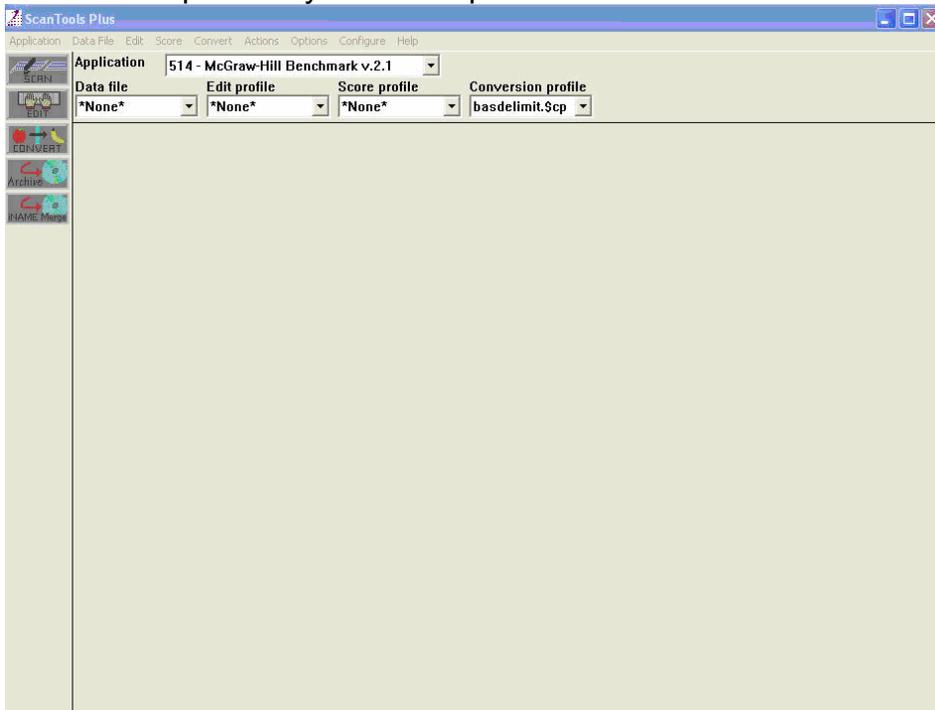
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Acuity permits scanning with Scantron OMR scanners. This guide walks you through using these scanners and their ScanTools software with Acuity.

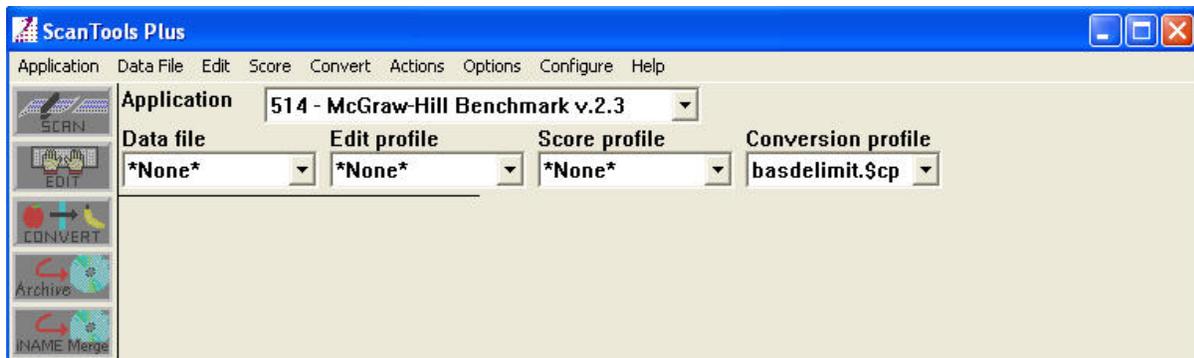
First, you need to set up ScanTools to run the scanner. Next, you will scan answer sheets, and you must handle any scanning exceptions or scanning errors. Then you upload the resulting scanned data into Acuity. Finally, you verify the upload into Acuity and if necessary, correct any validation errors in the uploaded data.

Section 1: Working with ScanTools

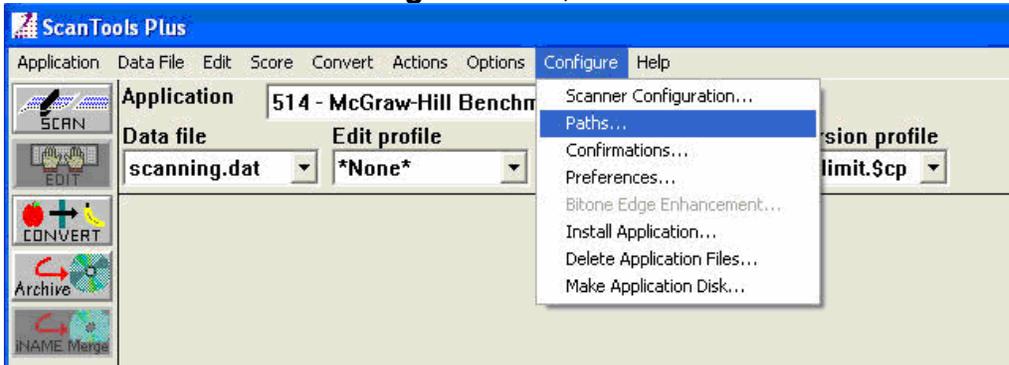
1. Launch ScanTools from the shortcut on your Start menu by selecting Start>Programs>PearsonNCS>ScanTools Plus.
2. ScanTools opens on your desktop.



3. Select **514 – McGraw-Hill Benchmark** from the Application list, and **basdelimit.\$cp** under **Conversion profile**.



4. Select **Paths** from the **Configure** menu, as shown below.



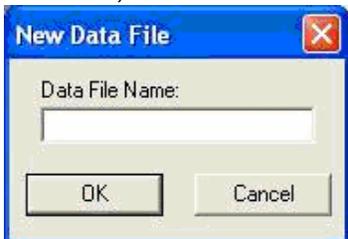
5. In the **Paths** window, click the **Browse** button next to the **Data** box and navigate to the location on your system where you want the scan data file to be placed. We recommend placing the data in an easy-to-find location such as the Desktop.

6. Click **OK** to close the **Paths** window and save your location choice.

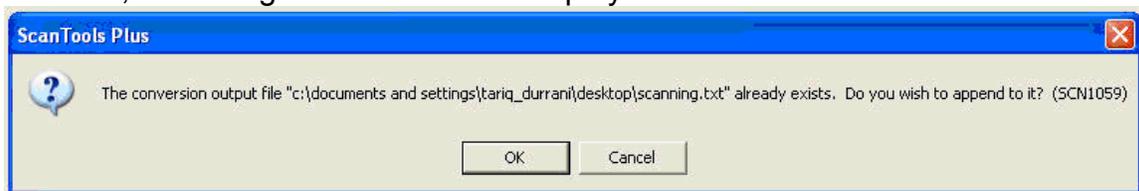
7. Next you must specify a name for the file. Select **New** from the **Data File** menu.



8. In the **New Data File** window that opens, enter an alphanumeric name for the scanned data file, and click **OK**.



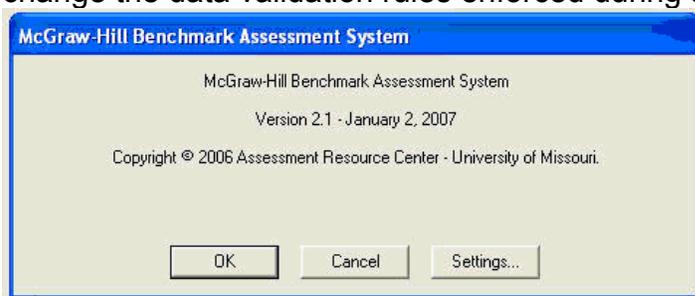
Note: You should create a new data file every time you scan, to avoid having your new data appended to an old scan file. If you click the **Scan** button without creating a new scan file, a warning such as this one displays:



Should this occur, click **Cancel** and perform steps 7 and 8 above. If you click **OK** instead, the new scan data will be put into the old scan file, which is not advisable.



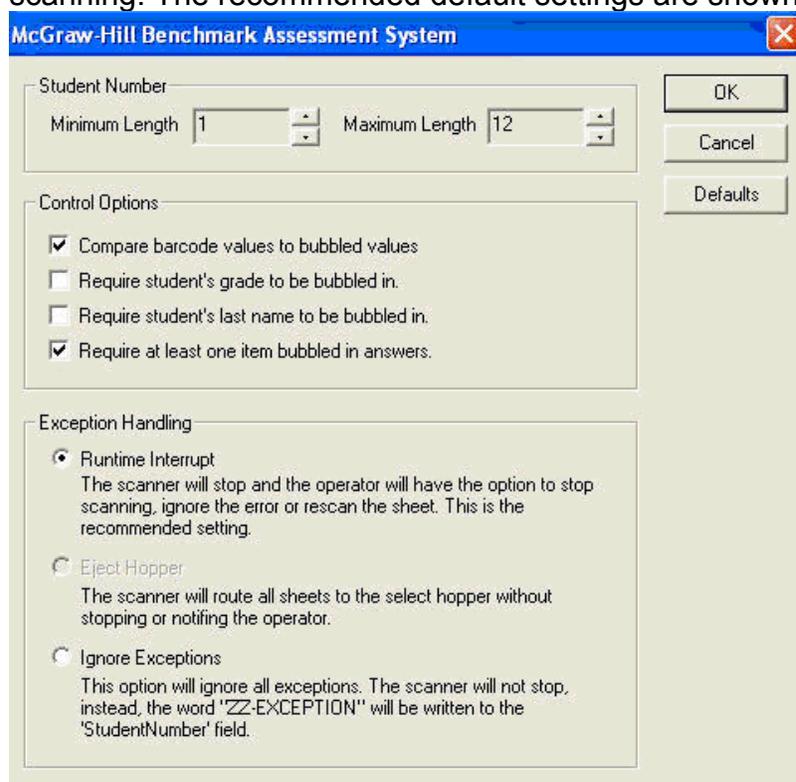
9. Click the **Scan** button to start the Benchmark Assessment System application. In the window that opens, you can begin scanning immediately or adjust settings to change the data validation rules enforced during scanning.



-If you choose to scan immediately, make sure answer sheets are placed on the scanner's input hopper and click **OK**.

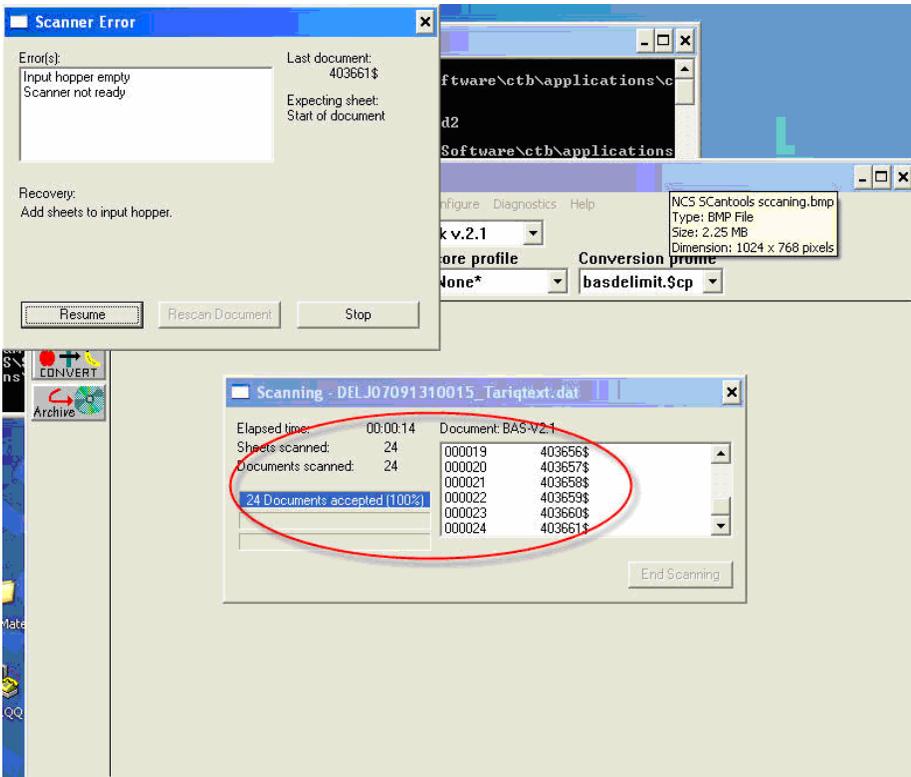
-If you choose to adjust validation rules, click **Settings**. In the window that opens make the appropriate changes, click **OK** to exit the window. Make sure you have answer sheets in the input hopper, and click **OK** to start scanning.

Please keep in mind that changing the default settings may cause exception errors during scanning. The recommended default settings are shown below.



Section 2: Scanning

After you take the preceding steps, answer sheets should be running through the scanner. A scanning window (circled in red below) informs you how much time has passed since scanning started, how many answer sheets have been scanned and how many of those were accepted.



When the input hopper is empty, a Scanner Error window opens. If you have more sheets to scan, load them in the hopper and click **Resume**. If you have finished scanning and are ready to upload the scan data into Acuity, click **Stop**.

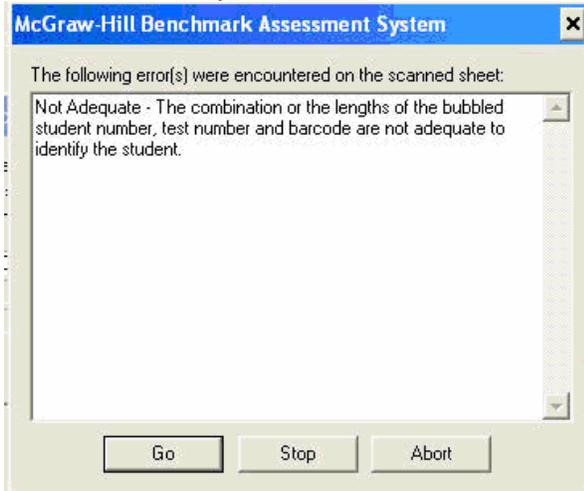
Scanning Exceptions

Scanning exceptions are errors that occur when an answer sheet cannot be read properly, or when the data in the answer sheet does not meet the validation rules.

Here are some of the scanning exceptions that can occur when validation rules are not met:

Inadequate

If the TEST NUMBER or STUDENT NUMBER is missing or of incorrect length, and no bar-coded value is present:

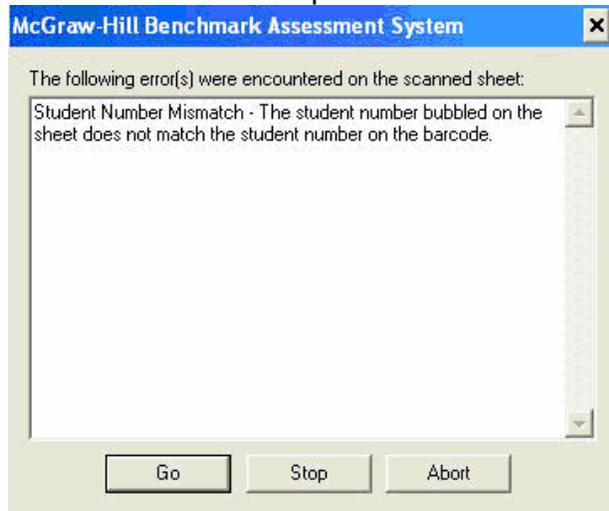


Note: If a barcode is present on the answer sheets, then the STUDENT NUMBER and TEST NUMBER fields should remain blank, as the barcode contains both of these values. When a barcode is present, set the slider to 6.5.



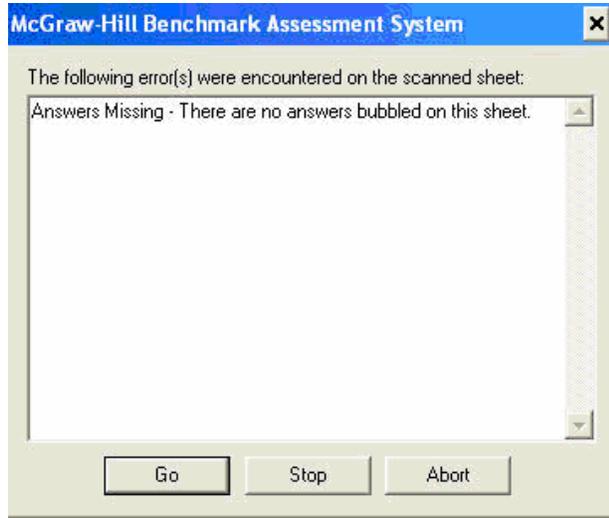
Mismatch

If the TEST NUMBER or STUDENT NUMBER was bubbled on the answer sheet and it does not match the values present in the barcode:



Blank

If at least one ANSWER field is not bubbled (at least one response should be present):



With these exceptions, you can choose **Stop** to examine the answer sheet and fix it, **Abort** to stop the application and close the program, or **Go** to ignore the exception and write it to the output file, which is not recommended.

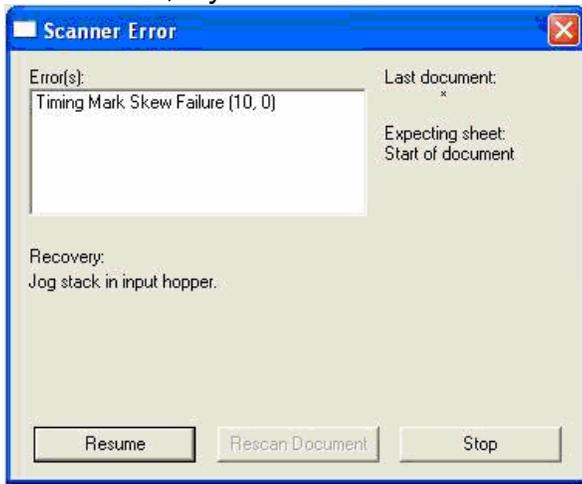
Scanner Errors

Scanner errors can occur when the scanner is unable to read the answer sheets correctly. If this occurs, remove the sheets, attempt to resolve the error, and click **Resume**.

These are some of the more common scanner errors and their resolutions:



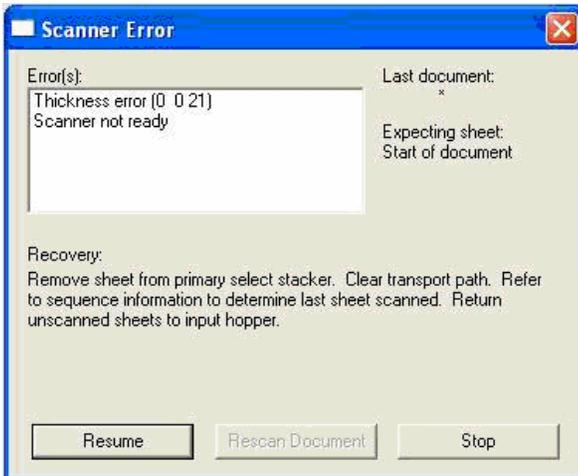
There are no documents in the input hopper. You also get this message at the end of a scan run when there are no documents left in the tray. Add more documents to the hopper and click **Resume** or, if you are finished with scanning, click **Stop**.



There was something wrong with the way the sheet fed through the scanner. The stack of answer sheets should be put back into alignment, and any bent edges should be straightened. Then place the neat stack back on the tray with the rejected sheet(s) on top of the stack in the correct order. Click **Resume**.



An answer sheet is stuck mid-scan. Stuck sheet(s) should be pulled carefully from the scanner, Click **Resume** to continue.

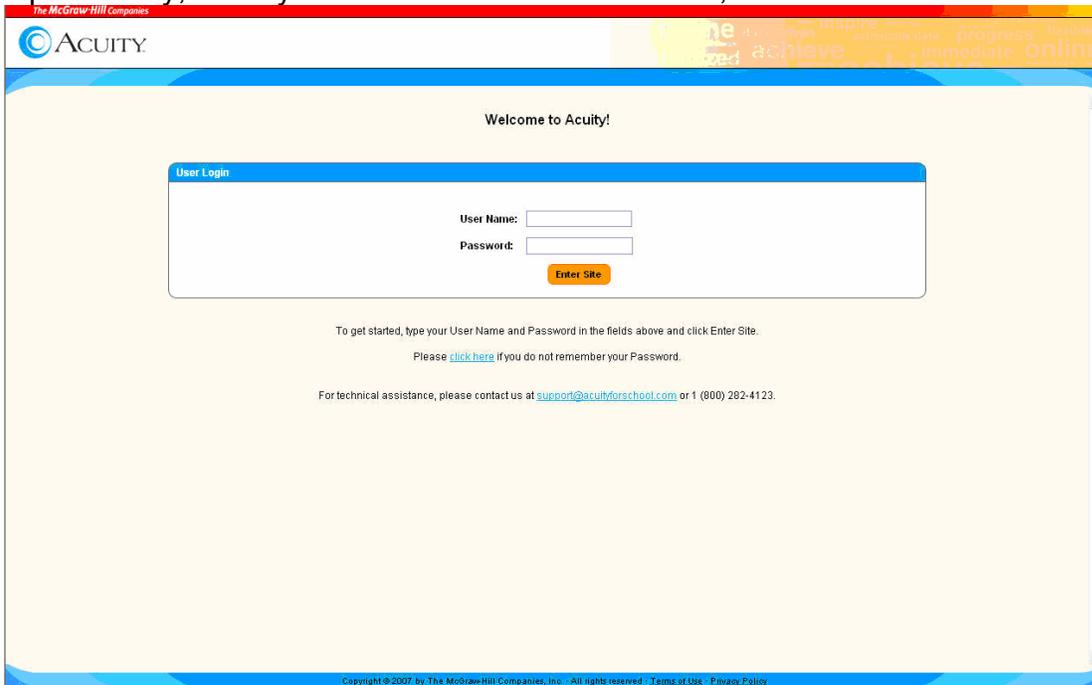


This error can happen when two sheets are fed at the same time, or if the edges of a sheet are folded over and the scanner perceives more than one sheet's thickness. Remove any sheets that may be stuck in the scanner, unfold and straighten as needed, place sheets back on the tray and click **Resume**.
Once scanning is complete and the scanned data is saved to a file, you can load the contents of that file into Acuity.

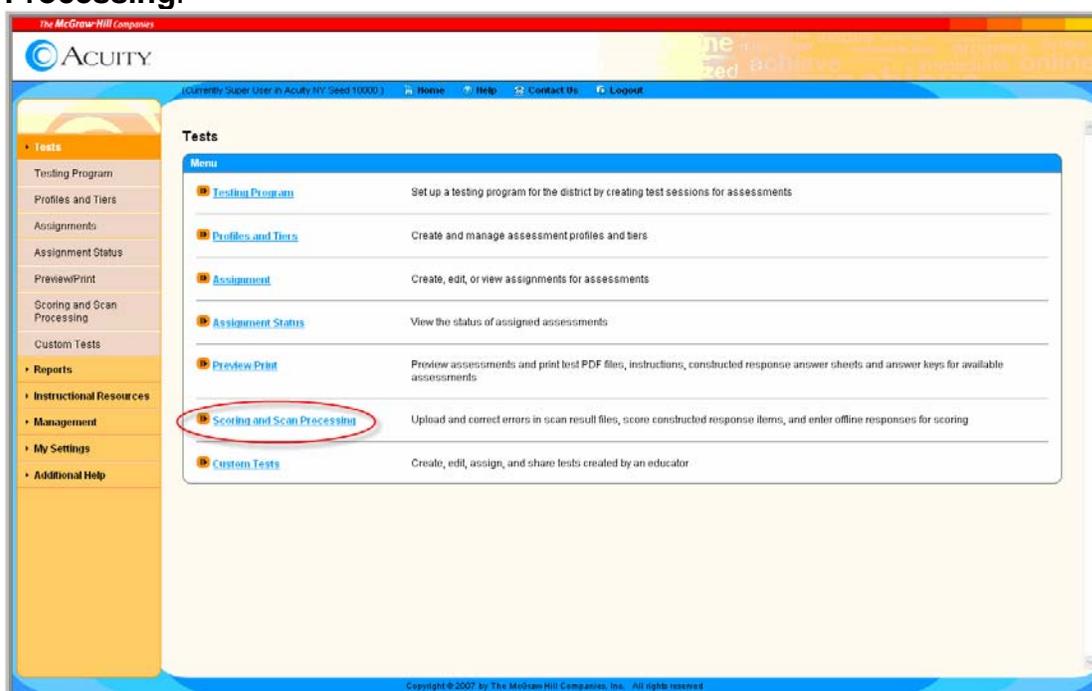
Section 3: Uploading Scanned Data into Acuity

When scanning is complete, the scan data is stored with the name you specified, in the location you specified. When you look in that location, you will see that two files were created, one with a .DAT extension and one with a .TXT extension. We will work with the .TXT file for upload; you can ignore or delete the .DAT file.

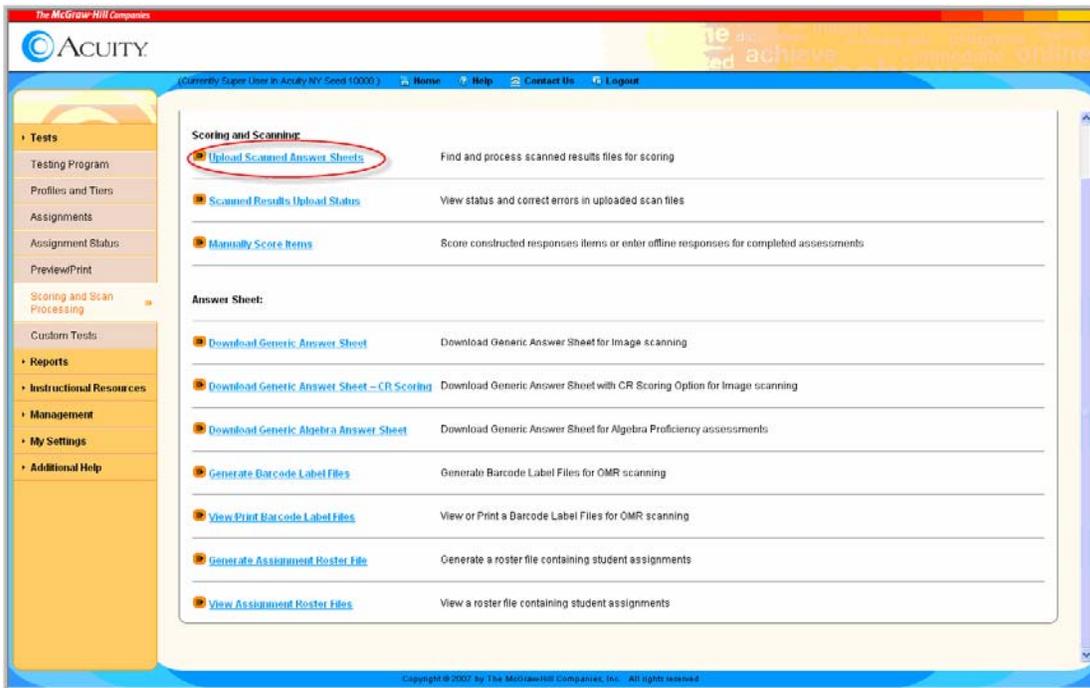
1. Open Acuity, enter your User Name and Password, and click **Enter Site**.



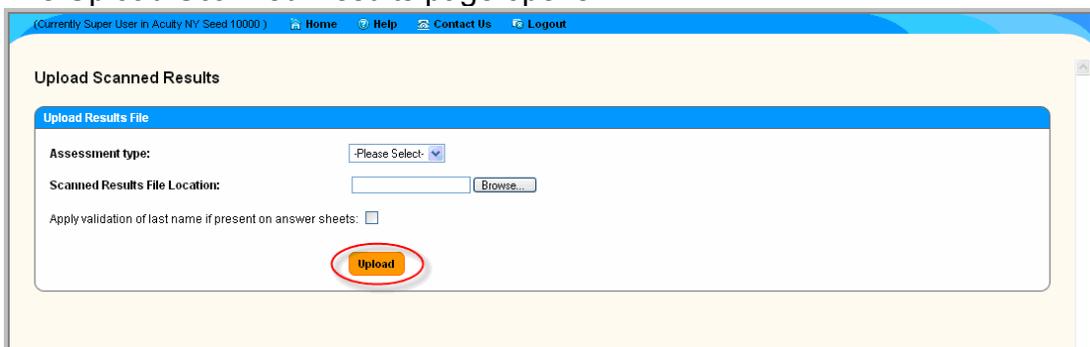
2. Click **Tests** in the left menu to open the Tests menu, and click **Scoring and Scan Processing**.



3. The Scoring and Scanning menu opens. Click **Upload Scanned Answer Sheets** to access the upload function.



4. The Upload Scanned Results page opens.



5. For **Assessment type**; select **Custom** if you already created the test in Acuity under Custom Tests, select **Non-custom** if it was a shelf test.

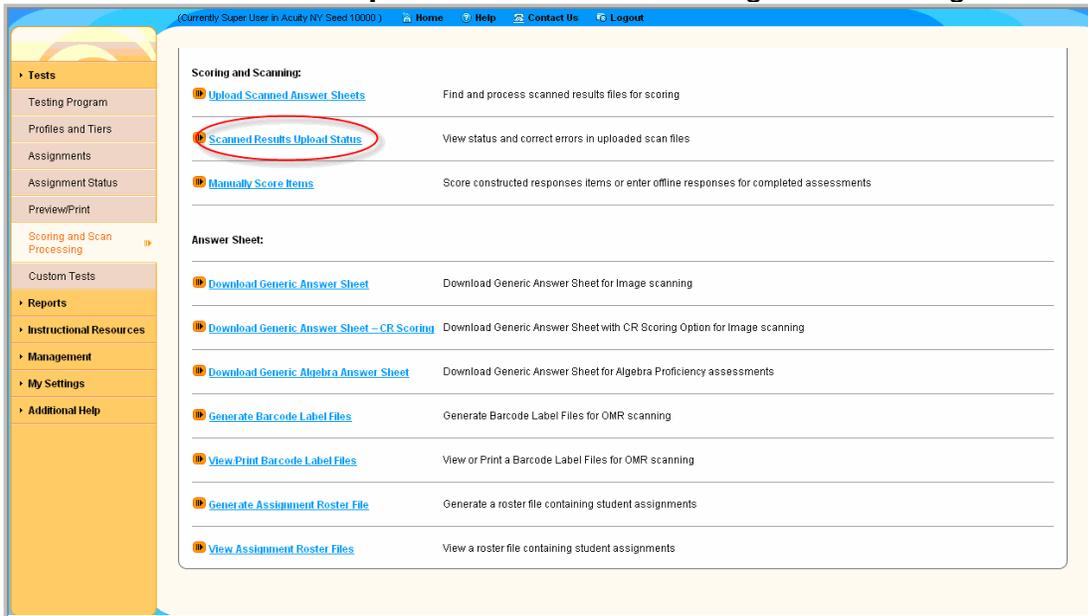
Click **Browse**, navigate to the location where you saved the scan file, and select it. Remember to select the .TXT file, not the .DAT file.

Click **Upload** to start the upload to Acuity. Note that large files may take several minutes to upload.

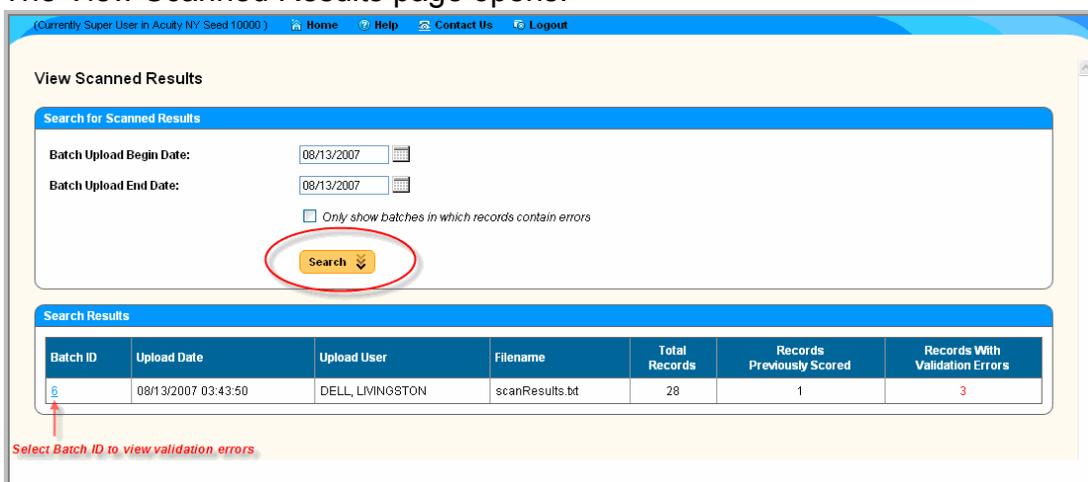
Section 4: Viewing Upload Results

When uploading is complete, you should view the results of the upload to verify the number of records uploaded and check for any system validation errors. A system validation error occurs when a record does not match the records currently in Acuity. For example, if test responses were uploaded for a student who was not assigned to the test or for a student who did not exist in Acuity, a system validation error would occur.

1. Click **Scanned Results Upload Status** in the Scoring and Scanning menu.



2. The View Scanned Results page opens.



Enter the date range for the upload you want to view in the **Batch Upload Begin Date** and **Batch Upload End Date** fields, and click **Search**. Your upload displays in the Search Results window.

The Search Results window identifies information about the file and the user who uploaded it, provides the total number of records in the file, notes any records which had been previously scored, and identifies the number of records with validation errors, if any.

3. If there were any records with validation errors, click the blue batch ID link in the Batch ID field to edit the upload file. The Scanned Batch Results page opens.

The screenshot displays the 'Scanned Batch Results' page in the Acuity system. The page is divided into two main sections: 'Search for Errors' and 'Search Results'.

Search for Errors: This section provides summary information for the batch:

- Batch ID:** 26
- Batch Upload Date:** 10/27/2006 01:07:53
- Uploaded By:** Hope, Tim
- Filename:** ScanTest.bt
- Total Records:** 5
- Records Previously Scored:** 0
- Records Uploaded With Errors:** 3

There are also checkboxes for 'Only show unreviewed records' and a dropdown menu for 'Only show records containing the following validation error' set to 'Any Validation Error'. An 'Apply Filters' button is present.

Search Results: This section contains a table of records with validation errors. A message above the table states: 'The following batch contains student answer records with validation errors. You may edit the answer record or perform a reconciliation action for the record. You may rerun the validation checks by selecting the answer records below and clicking the Resubmit button.'

The table has the following data:

Resubmit	Student ID	First Name	System Last Name	Answer Last Name	Test ID	Review Status	Upload Status	Edit/Review Record	Reconcile Record
<input type="checkbox"/>	-----253	DAVID	LEWIS		-55780	N	Invalid Test Id	Edit/Review	
<input type="checkbox"/>	-----256	CLARICE	MOORE		-55780	N	Invalid Test Id	Edit/Review	
<input type="checkbox"/>	-----257				-55783	N	Invalid Student Id	Edit/Review	Add Student

A red arrow points to the 'Edit/Review' link for the first record. A 'Resubmit' button is located at the bottom of the table.

4. Use the controls in the Search for Errors window to manage the display in the Search Results window if you have many records to view.

In the Search Results window, you can page through the errors using the arrows. When you are ready to fix an error record, click the blue **Edit/Review** link for that record.

If Acuity has determined the method of reconciling the error (for example, adding a student to Acuity when test responses were uploaded for a student who didn't exist in the system), a link displays in the Reconcile Record Column.

5. When you click the **Edit/Review** link, the record is displayed. The Test Upload Status field identifies the nature of the error, and the Uploaded Answer Record displays below so you can review the data and correct the error.

Review Scanned Record << Back to Scanned Batch Results

System Information

Student ID:	10005468	Test ID:	
First Name:	RICHARD	Test Name:	
Last Name:	CARTER	Test Upload Status:	Invalid Test Id

Uploaded Answer Record

Student ID:	<input type="text" value="--10005468"/> Edit	←
Test ID:	<input type="text" value="-562500"/> Edit	←
Last Name:	<input type="text"/>	
Bubbles Student Number:	----10005468	
Bubbles Test Number:	-56253	
Bar Code:	93	
Answers:	ABCD-ABCD-ABCD-ABCD-ABCD-ABCD-ABCD-ABCD-ABCD-ABCD-ABCD-	
Error Cannot Be Resolved Systematically:	<input type="checkbox"/>	
Review Comment:	<input type="text"/>	

[Save Record](#)

Click

the blue **Edit** link next to the field(s) with errors, make the appropriate corrections, and click **Save Record**.

- To correct some fields, such as Test ID, you may have to search for the correct information. If this is the case, when you click the **Edit** link, a Find window will open, like the Find Assessment window shown here. Enter the appropriate search criteria and click **Search**.

Select Test ID << Close Window

Student Answer Record

Test ID:	-562500	Bubbles Student Number:	----
Student ID:	10005468	Bubbles Test Number:	-56253
First Name:	RICHARD	Bar Code:	93
Last Name:			
Grade Level:	3		

Classes: CONNELLY LIZA Language Arts CONNELLY LIZA Acuity Algebra CONNELLY LIZA Mathematics

Find Assessment

Subject:	<input type="text" value="Mathematics"/>
Assessment Type:	<input type="text" value="Predictive"/>
Grade Level:	<input type="text" value="3rd Grade"/>

[Search](#)

- Choose the correct data (in this case, the correct test) from the selections presented, and click the **Select** button (in this case, **Select Test**).

Select Test ID Close Window

Student Answer Record

Test ID: -55780
 Student ID: 256
 First Name: CLARICE
 Last Name:
 Grade Level: 4
 Bubbles Student Number: 256
 Bubbles Test Number: -55780

Classes: LONAELMERLa Language Arts FLORES MR. Mathematics

Find Student

Subject: Mathematics
 Assessment Type: Predictive
 Grade Level: 5th Grade

Search

Search Results

Select	Assessment Name	Test ID
<input type="radio"/>	NY Math Grade 5 Form A - Op and Anchors	55788
<input checked="" type="radio"/>	NY Math Grade 5 Form A - SR Only	55783

Select Test

- When you make your selection, the correct data you selected populates the field. Click **Save Record** to update the data for this record.

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ACUITY

(Currently Signed User in Acuity (1/1/2008)) Home Help Logout

• Tests

- Testing Program
- Assessment Profiles
- Assignments
- Assignments
- Assignment Status
- Preview/Print
- Scoring and Scan Processing
- Custom Tests

• Reports

- Instructional Resources
- Management
- My Settings

Student ID: 256 Edit

Test ID: 55783 Edit

Last Name:

Bubbles Student Number: 256

Bubbles Test Number: -55780

Answers: AACBD-DDACCBDCCBDCACBCCB-CBBSA-ABCBDACDACBCADDBAACACBCA-

Error Cannot Be Resolved Systematically:

Review Comment:

Save Record

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- This returns you to the Scanned Batch Results page, so you can continue to use the Search for Errors window to locate records needing corrections. When your data is successfully corrected, you can generate reports.

Note: You can generate reports without correcting validation errors, however any records

with validation errors would be left out of the report. They would not be included in any reports until their validation errors were resolved.

This concludes the overview of information necessary to use Acuity with Scantron OMR Scanners. Should you have any further questions not addressed by this guide, please contact your trainer or Acuity Customer Support. Thank you for using Acuity.

APPENDIX B



Acuity Barcode Labels for OMR Scanning

Do you have blank answer sheets (grids) that you would like to pre-code?

Creating barcode labels will allow you to apply labels onto the answer sheet. All that is needed is for the student to bubble in their answers!!

Acuity provides the ability to print barcodes with student demographic information onto labels. These labels are placed in a designated area on the answer sheet and then scanned with a scanner that is barcode-reader equipped. The CTB scanners support this barcode, and these sheets can be sent back to CTB for scanning or scanned locally. The barcodes provide a higher level of accuracy as required fields (Student ID and Test ID) do not have to be bubbled in because this information resides in the barcode. The barcode labels also provide student demographic data such as student first and last name, teacher, school, and grade that allows for student identification with their answer sheet. The following will walk you through the process of generating barcode labels from within Acuity and readying the answer sheets for scanning.

Note*

*Before we get started, it is important to remember that for predictive, diagnostic, or custom tests, test assignments need to be made for the students prior to generating barcode labels. If the test has not been assigned then you **will not** be able to generate barcode labels. Please refer to the “How to make a Test Assignment” quicktip for detailed directions.*

There are some common errors to avoid. These errors have caused student answer sheets to be unscannable:

- **Use of incorrect label stock. Avery 5263 labels (2” by 4”) must be used.**
- **Quality of printing on the labels. A printer that can create clear type must be used. A visual check of all printed labels should be done to ensure that margins are set correctly and all of the information (including the barcode) is printed on the label.**
- **Use of the Acuity label printing tool MUST be used. Labels that do not have the barcode on them will not be readable.**

- ✓ Please log-in to Acuity and under the **Tests**, please select **Scoring and Scan Processing**.
- ✓ Select **Generate Barcode Label Files**.

Scoring and Scan Processing

Scoring Options

Scoring and Scanning:

- [Upload Scanned Answer Sheets](#) Find and process scanned results files for scoring
- [Scanned Results Upload Status](#) View status and correct errors in uploaded scan files
- [Manually Score Items](#) Score constructed responses items or enter offline respon

Answer Sheet:

- [Download Generic Answer Sheet](#) Download Generic Answer Sheet for Image scanning
- [Download Generic Answer Sheet – CR Scoring](#) Download Generic Answer Sheet with CR Scoring Option f
- [Generate Barcode Label Files](#) Generate Barcode Label Files for OMR scanning
- [View/Print Barcode Label Files](#) View or Print a Barcode Label Files for OMR scanning
- [Generate Assignment Roster File](#) Generate a roster file containing student assignments
- [View Assignment Roster Files](#) View a roster file containing student assignments

- ✓ Please select the appropriate information and choose the “Start and End” date range and select **Search**.
- ✓ Please select the appropriate assessment/assignment by placing a check in the check box.
- ✓ Select **Print Barcodes**.

Generate Barcode Label Files

Search For Assignments

Subject: Language Arts
 Assessment Type: Custom
 Grade Level of Assessment: Please Select
 Assessment: READING LEVEL 2
 Assignment Start Date Range: 11/05/2007 TO 11/30/2007

Search

Search Results

Please select the assignments you wish to associate to print barcodes. Click the "Print Barcode Labels" button when complete.

Assessment	Assignment	Start Date	End Date	Select
READING LEVEL 2	READING LEVEL 2 TEST	11/05/2007	11/30/2007	<input checked="" type="checkbox"/>

Print Barcode Labels

- ✓ Select the **File Create Begin and End date** using the same dates you selected in **“Print Barcode Labels”**(previous screen) and select **Search**.
- ✓ Select the Blue link under **Filename/Status** to download your barcode labels. (**Please use Avery 5263 labels, 2” by 4”**).

Note*

*Large files may take a few minutes to populate. If your labels do not appear immediately, try to select **Search** again. If nothing appears, continue other activities within Acuity, or log out and return in a few minutes to retrieve the barcode labels.*

View Barcode Label Files

Search for Barcode Label Files

File Create Begin Date: 11/30/2007
 File Create End Date: 11/30/2007

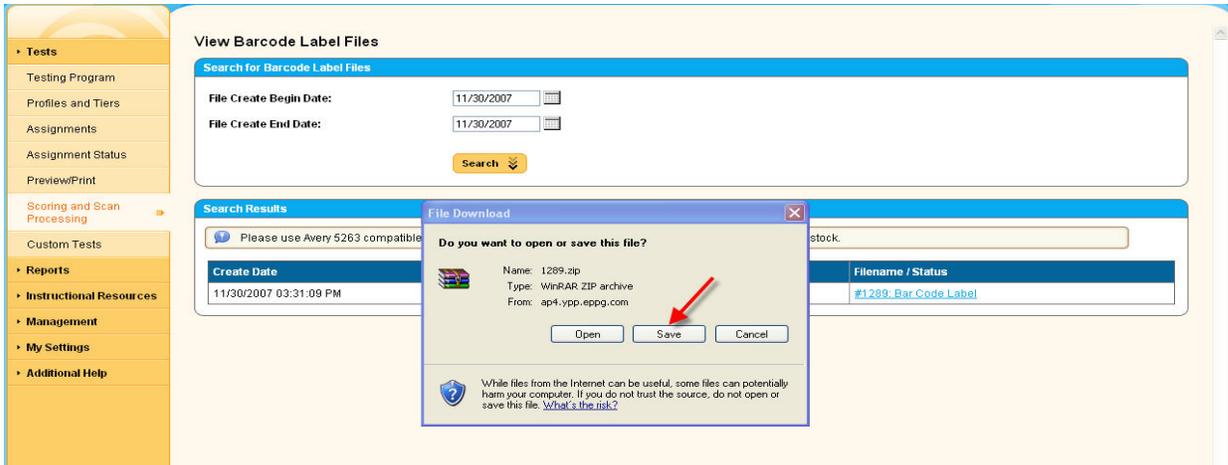
Search

Search Results

Please use Avery 5263 compatible labels for printing labels and check that printer is loaded with appropriate stock.

Create Date	User	Filename / Status
11/30/2007 03:31:09 PM	Super, FrancisHowell	#1289_Bar Code Label

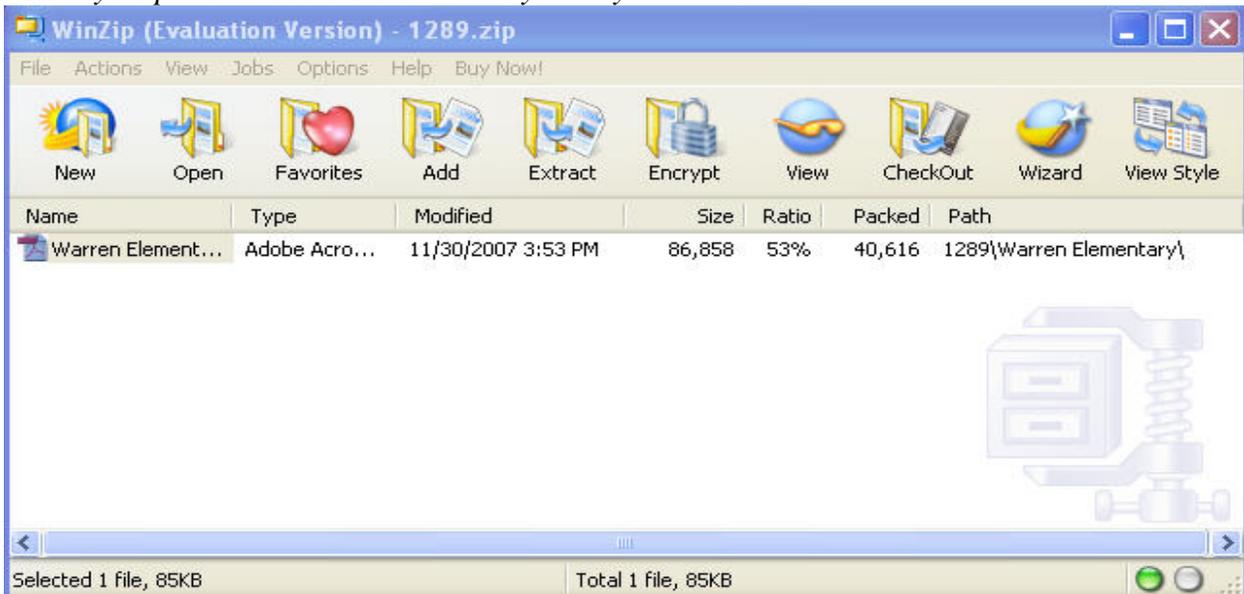
- ✓ Select **Save** and choose the appropriate location to save the file.



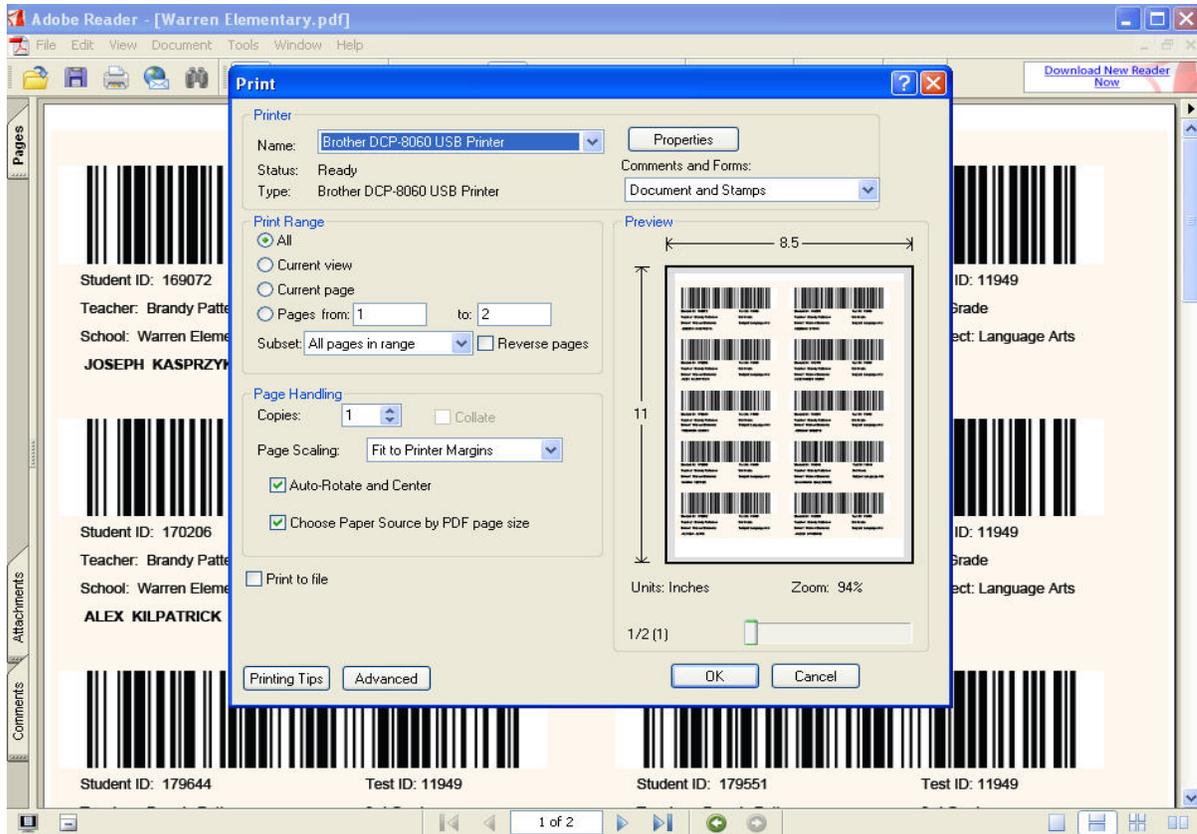
- ✓ Double click on the file that you just saved to open its contents.
- ✓ Select the PDF icon and drag to appropriate folder and/or double click on file to open.

Note*

The file is a compressed ZIP file and will need to be unzipped utilizing WINZIP or WINRAR to name a few. If you have difficulty opening this ZIP file, please contact the Acuity helpdesk at 866-NYC-6550 or nycacuity@ctb.com.



- ✓ You should now be able to view the .PDF file that contains the barcodes, Please select **File and Print**.
- ✓ Make sure you have the **Avery 5263 (2" by 4") labels** loaded in the printer.
- ✓ Select the appropriate printer from the drop down menu and select **OK**.



- ✓ Peel off each label and apply the label onto an answer sheet in the area marked by 4 corner brackets just under the Date line. These labels must be lined up with the bottom left bracket, as shown below. Since the label goes on sideways, make sure the **left corner of the label is placed on this bracket just barely covering over the lines. Note: This means the other end of the label may cover the Date line.**
- ✓ When correctly applied, the barcode label should **face to the left, toward the Grade field, as shown below.**
- ✓ **Important: Please see below for directions and for an example of proper barcode placement. The scanner will not read this barcode if it is placed incorrectly on the answer sheet.**

Note*

Make sure the label does not cover any of the bubbled areas and that it is completely flat, with no folds in either the label or the answer sheet.

Before Applying Label

New York City Periodic Assessment Program

NAME (Last)	TEST ID	Teacher Name _____	
		Class Name _____	
		School Name _____	
		DBN _____	Date _____
			
		Align corner of label to this bracket (just barely covering over the lines of the bracket).	
	STUDENT NUMBER	GRADE	

↖

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

After Applying Label

New York City Periodic Assessment Program

NAME (Last)	TEST ID	Teacher Name _____	
		Class Name _____	
		School Name _____	
		DBN _____	
			
			
		<small>Student ID: 10000006 Teacher: Tony Duran School: NYSchool001 OTM: GARCIA</small>	
		<small>Test ID: E7951 3rd Grade Subject: Language Arts</small>	
	STUDENT NUMBER	GRADE	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

For schools that are getting answer sheets picked up by a courier for CTB scanning:

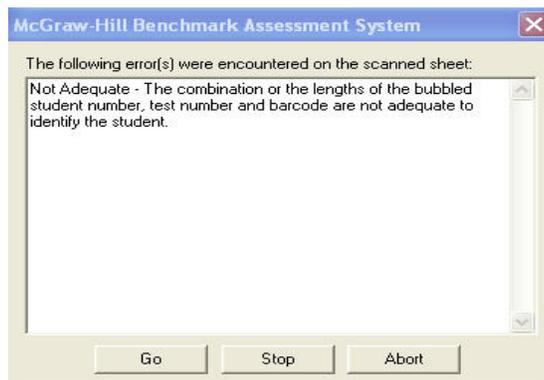
- ✓ Proceed as usual.

For schools that are scanning at the school level:

- ✓ Once all barcode labels have been placed on answer sheets, please place answer sheets on scanner.
- ✓ Adjusting of the barcode slider may be required to read the barcode area (see photo below).
- ✓ Proceed as usual with scanning and uploading process.



- ✓ If you receive the below error while scanning, the barcode slider shown above will need to be adjusted to read the correct barcode area.



vCapture Scan/Score for Acuity (Offline Testing)

The following step-by-step process is used for creating pre-coded answer sheets and scanning bubble sheets into the Acuity Assessment System. You will be using both a software program call vCapture and the Acuity Assessment System. Prior to beginning this process you need to make sure the test assignments have been created and the know the date range for which they were created, vCapture software installed on the PC, and a scanner connected to that PC.

Step 1: Generating Student Roster files for pre-coding/Pre-slugging

1. Log into Acuity with your username and password
2. Once the Predictive or Diagnostic test assignments have been created by your Test Coordinator, Go to **Tests>Scoring and Scan processing**.
3. Locate the **Generate Assignment Roster File** link and click on it.
4. Please select the appropriate filters pertaining to the test assignment(s), select the date range of the assignment(s), and select **Search**.
5. Create a roster file name. When naming roster file, try using a name that corresponds to the assignment (example: PredBMath3rdGrade). Click on the check box under **select** and click on **Generate Roster File**.
6. Please select the correct date range in which the test assignments were created and select **Search**.
7. Once the file has been processed a blue link will appear under *Filename/Status*, click on blue link and save the file to location so you can find it for Step 2.

Step 2: Printing Student Answer Sheets and Scanning

1. Launch the vCapture Application from *Start< Programs or an icon on your desktop*. If the vCapture application has not been installed yet, please contact your School Corp IT Director or technician.
2. To pre-code the answer sheets with student data, click on **Load Roster**. Find the .CSV file(Roster file) you created and saved to your PC from step 1 from the directory dialog box , and select **OK**.
3. Next, Click on **Print Answer Sheets**.



4. Choose the printer you would like to print from and choose the template(answer sheet) you would like to use (CR Scoring,Generic or Acuity Algebra) and select **Print**.
5. To begin scanning, select **Scan** on the top menu and select **Choose Scanner** to choose the appropriate scanner.
6. Select **Begin Scanning** and choose the appropriate template under *Form Template* that you are scanning (CR Scoring, Generic, and Acuity Algebra) and select **OK**. *Note** It is important to choose the correct template according to which answer sheet you are scanning. If the wrong template is chosen then all answer sheets scanned will be unrecognizable after processing.*
7. Once all images have been scanned, **select Process Images**. Choose to process images now or to process at a later time. You can also choose to validate against a roster file to help in the exception processing by selecting **Browse** under *Roster File* and choosing the corresponding roster file.
8. Select **OK** to process the images from the previous step
9. Correct any data that caused an exception(dialog box will appear allowing to correct invalid data or image) during the processing of images. Once all images have processed save the output file that is created by vCapture with a name corresponding to what was scanned and in a location that easy to remember.

Step 3: Uploading scanned data into Acuity

1. Log into Acuity.
2. Go to **Tests>Scoring and Scan Processing**.
3. Click on **Upload Scanned Answer Sheets**.
4. Choose the appropriate test (*Non-Custom* = Pre-built tests (Predictive/Diagnostic) and *Custom* = self created tests (Created under Custom Test option in Acuity)).
5. Select Browse to locate the output file from step 9 in the previous section under *Printing Answer Sheets and Scanning using vCapture* and select **Upload**.
6. Once uploaded, select **Scoring and Scan Processing** on the left side of the screen and then select **Scan Results Upload Status**.
7. Choose the corresponding dates of when the output file was uploaded(File name can also be entered if known) and select **Search**.



8. Please clear up any validation errors that occurred by clicking on the Batch ID link all the way to the left of your upload results row. Remember that a single validation error is linked to a scanned data record for a single student. If these errors are not corrected then no information pertaining to that student or students will be available in reports.

For additional help please refer to the help section of the vCapture software or contact CTB customer support at support@acuityforschool.com or dial 1(800) 282-4705