
File Transfers

Downloading Data from iSeries to PC

INTRODUCTION

*How can I get my favorite custom report from CU*BASE into my Excel worksheet? How do I get an address file ready for my insurance provider on a CD? Can I make my financial statements look any “prettier” for presentation to my Board?*

Independent PCs, LANs and WANs are a critical part of the online CU*BASE environment. More and more, day-to-day credit union activities require that one of your most important assets—*data*—be available for analysis and manipulation on a platform other than CU*BASE.

To that end, we are pleased to provide the **CU*BASE PC File Transfer** system for CU*BASE GOLD users. Data can be quickly and easily translated from CU*BASE iSeries files to your PC, for use in today’s most popular PC applications.

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For an updated copy of this booklet, check out the Reference Materials page of our website:
<http://www.cuanswers.com/resources/doc/cubase-reference>
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OVERVIEW

PREPARING DATA FOR DOWNLOAD

Data can be prepared for a file download from three different sources:

Using the Dashboard Export Feature

CU*BASE has a variety of analytical dashboards and reports for diving into your data without having to go through the process of creating a complicated Query.

Many dashboards also include the ability to export your results for use with Query. Using the export feature, you can create a file and then use the file download tools available so you can manipulate and modify results even further.

■ *See Page 5 for instructions.*

Using CU*BASE Report Builder (Query) Results

The CU*BASE Report Builder feature has always been an excellent resource for reviewing data from the CU*BASE database, allowing you to sort, group and summarize data such as account statistics or membership records in a report format. However, there may be times when you wish to manipulate the data even further, using various calculations and trying “what if” scenarios using your credit union’s CU*BASE files. For this, a PC-based spreadsheet software is often the best tool.

In addition, you may need to create a series of personalized form letters using member data merged into a word processing document. The problem lies with how to get the data from CU*BASE onto your PC’s word processing or spreadsheet program, without having to laboriously re-key the figures from a printed report.

The solution is the File Download procedure, where data from a custom report can be transferred to your PC, then imported into any spreadsheet or other application for further manipulation. Data is copied from the CU*BASE iSeries system, so you can manipulate and modify figures without affecting the on-line stored data.

■ *See Page 6 for instructions.*

Using a Spooled Report File

Although the Report Builder system is powerful and very flexible, you may want to simply manipulate data that has already been formatted into a CU*BASE report, such as a financial statement or other standard statistical report.

With the “Copy Report to Disk File” feature, a spooled report can be formatted and copied to a library, then downloaded to the PC using the File Download command.

See Page 7 for instructions.

DOWNLOADING DATA TO YOUR PC

Once files are ready for transit, they can be downloaded to your PC with three methods:

Using the Client Access Tool

The Client Access tool allows you to download files from the iSeries to your PC using a data transfer tool from IBM.

See Page 10 for instructions.

Downloading from Data On The Move Server with a Web Browser

Data On The Move offers a user friendly means of moving your files from the iSeries to your PC through a simple drag and drop function, and can be done securely via your web browser.

See Page 15 for instructions.

Downloading from Data On The Move Server with a Secure FTP Client

For files too big to be transferred via a web browser, you can also use a secure FTP client to move files easily from the Data On The Move server to your PC.

See Page 15 for instructions.

CU*BASE FILE TRANSFER TOOLS

This booklet covers:

- **Tool #373 File Download (System i to PC)**
- **Tool #349 Download Files to DOTM Server**
- **Tool #422 Launch "Data On The Move" (DOTM)**
- **Tool #282 Copy Report to Disk File**
- **Tool #100 CU*BASE Report Builder (Query)**

At this time, **Tool #374 File Upload (PC to System i)** is *only* for use by CU*BASE self-processing credit unions and for online credit unions using either the FinCEN, G/L Import features, and Direct Mail Post features. (Refer to these booklets for directions with these specialized programs.) For all other uses, contact a CU*BASE representative for instructions.

SPECIAL NOTE: SECURITY REQUIREMENTS

Special authority is required to download files from the CU*BASE system onto your PC. Start by completing the **iShield Security Access Request for CU*BASE Downloads** form to request access privileges:

https://www.cuanswers.com/wp-content/uploads/iShieldRequestForm_Download.pdf

Authorization by your credit union's designated Security Officer is required to grant these permissions. On a monthly basis, your Security Officer will be required to confirm the staff that have been given clearance to download files.

DO YOU KNOW WHERE YOUR MEMBER DATA IS? Data that is downloaded to an employee's workstation or a credit union file server is no longer under the protection of normal CU*BASE security features. That means it is vulnerable to unauthorized access if not properly secured. Make sure that proper security precautions have been put in place to protect your sensitive member data!

PREPARING FILES FOR DOWNLOAD

CREATING THE FILE IN A CU*BASE DASHBOARD

1. Start by using a CU*BASE dashboard or report that includes the option to Export the sub-file. In the example below, we used the Net Relationships Dashboard to gather the desired data.
2. Use *Export* to display the following window:

The screenshot shows the 'Member Balance Detail' dashboard for 'Session 0 CU*BASE GOLD - ABC CREDIT UNION'. The dashboard includes search filters for Year (2015), Account #, and Name. A table displays account details with columns for Account, Type, Seq, Name, Date Opened, Date Closed, Current Bal, Avg Daily Bal, and EOM Bal Avg. An 'Export' dialog box is overlaid on the table, showing 'Export selection' options: 'Accounts for Member Connect' and 'Account detail for query' (which is selected). The dialog also features navigation icons and a 'FR (1121)' label.

Account	Type	Seq	Type	DIV/CD/CAT	Name	Date Opened	Date Closed	Current Bal	Avg Daily Bal	EOM Bal Avg
000	SH	SH			-----ER WILLIS	12/12/1964		361	340	346
900	OC	91			-----ER WILLIS	09/01/1983		353	61	105
000	SH	SH			-----WILLIAM J	12/12/1964		1,480	1,226	874
110	SD	CK			-----WILLIAM J	02/20/1980		99	183	30
000	SH	SH			-----WARD E	12/14/1964		10,603	9,899	10,603
002	1 SH	LS						307	1,698	
000	SH	SH							4,575	5,307
002	1 SH	LS							1,700	
055	SH	SP						170	227,806	227,852
900	OC	91						784	438	511
000	SH	SH						292	2,271	2,261
019	SD	MM						64	64	64
300	CD	05						500	1,500	1,500
301	CD	06						359	54,272	54,308
000	SH	SH						358	4,902	4,907
045	CD	90						759	3,077	3,132
111	SD	IP						908	8,120	7,953

3. Choose export selection for *Account detail for query* and Enter to access the next screen:

The screenshot shows the 'EXPORT WINDOW' dialog box. It has a 'File name' field containing 'TESTDATA'. A message box states: 'File will be stored in your credit union's QUERYxx library (where xx is your 2-character CUID)'. The dialog includes navigation icons and a 'FR (1122)' label.

*Some dashboards in CU*BASE do not have the option of exporting data for Query and will go directly to the above screen. This will export only the account bases and will not include the detail in the file.*

4. In the *File name* field, enter a file name to be used for the file. This name will be used when downloading the data to the PC. Use any name you like, as long as it begins with a letter (max. 10 characters). The file will automatically be stored in your credit union's QUERYxx library (where xx is your 2-character CUID).
5. Press Enter to create the file.

If the file name used already exists, you will be prompted to press Enter to overwrite the existing file or enter another name.

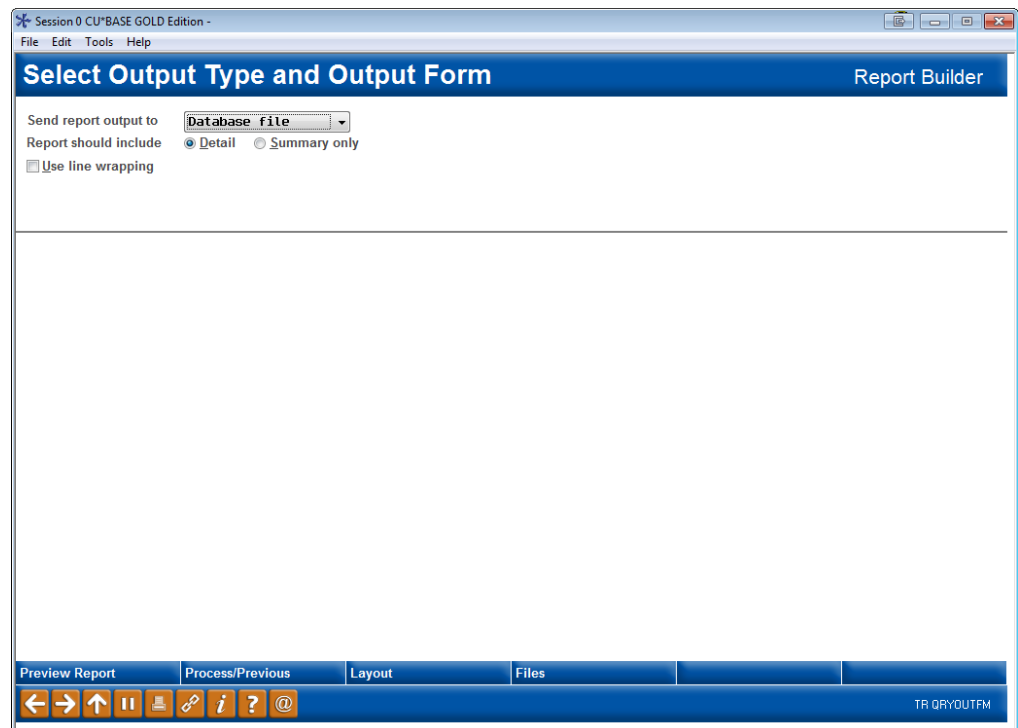
The next step is to take the database file created in CU*BASE Report Builder, and transfer it to a file stored on your PC.

CREATING THE FILE IN REPORT BUILDER (QUERY)

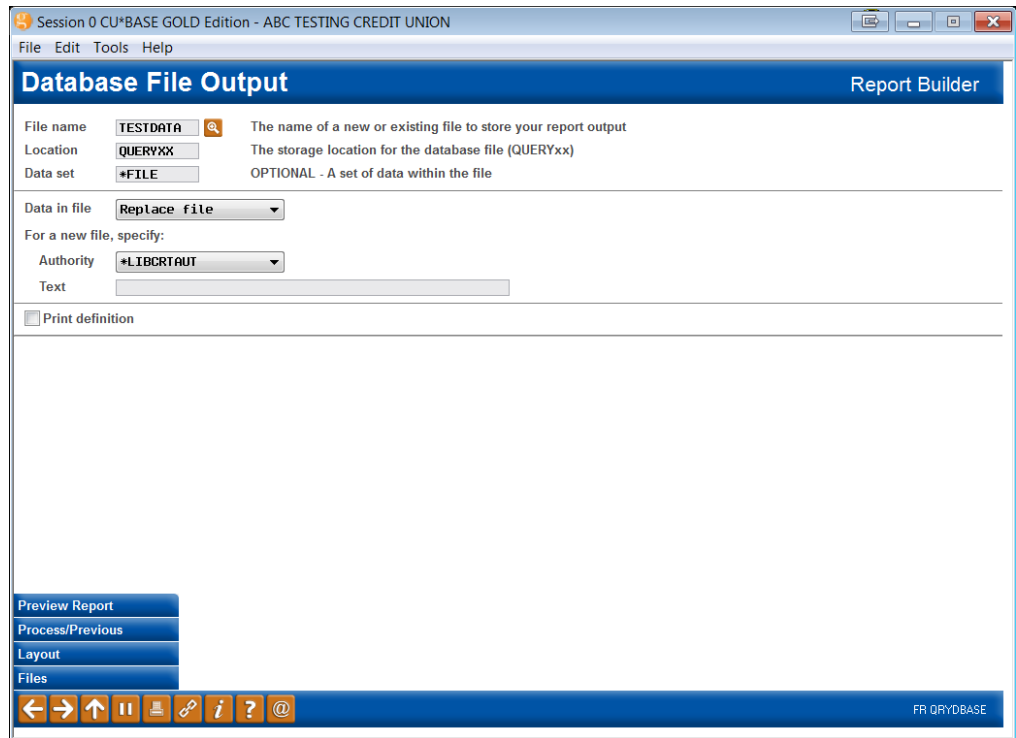
1. Start by creating a custom report which gathers all of the desired data from CU*BASE files. Set up selection parameters, field formats, and other options as usual.

For complete information about using CU*BASE Report Builder to pull information from CU*BASE member and account files, refer to the Report Builder / IBM Query (MNQUERY) chapter in CU*BASE GOLD Online Help.

2. Use *Choose Output (Print, display, or file)* to display the following screen:



3. In the first field, choose **Database file** (3). Use Enter to proceed to the next screen.



4. In the *File name* field, enter a file name to be used for the file. This name will be used when downloading the data to the PC. Use any name you like, as long as it begins with a letter (max. 10 characters).
5. In the *Location* field, enter: **QUERYxx** (where *xx* is your credit union's 2-character ID).
6. In the *Data in file* field, Choose **Replace file** (2). (This will ensure that you can run this same report again or another report using this same file name in the future, without conflict).

NOTE TO CU*BASE CLIENT SERVICE REPRESENTATIVES: In order for your files to be usable by credit union staff, you must use *ALL in the *Authority* field. Credit union staff should use the default *LIBCRTAUT setting to allow access to others at the CU as well as client service staff.

7. Use Enter to record the changes.
8. Save and run the report to generate the database file.

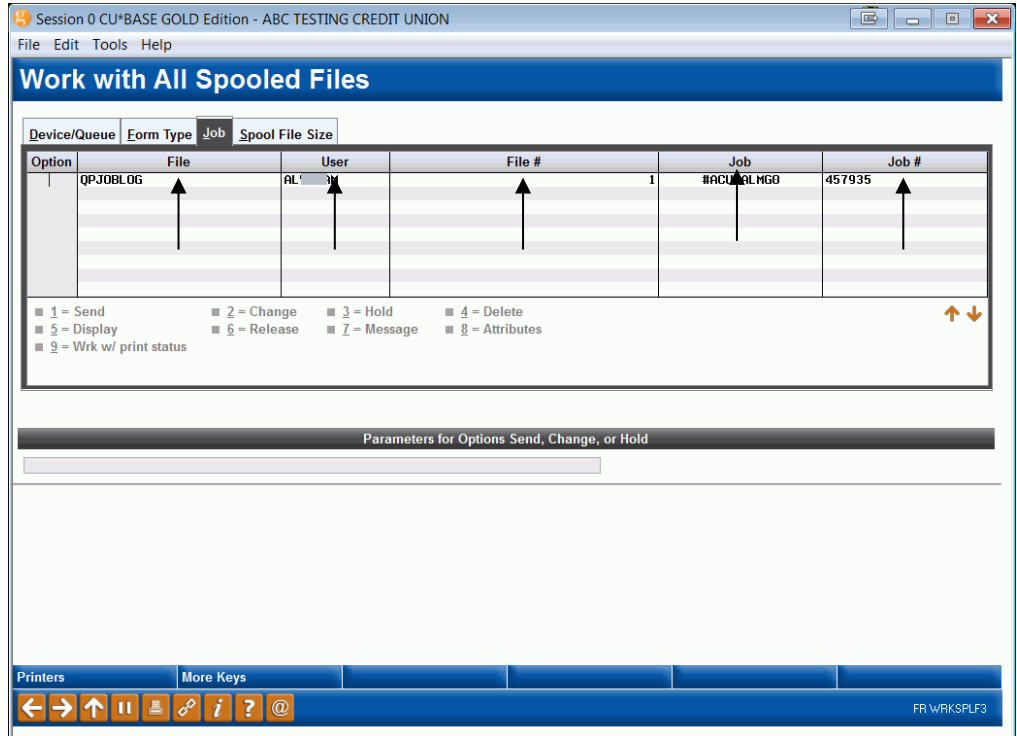
***HINT:** Before running the report, it is helpful to use **Preview Report** (F5) to see a sample of the records the report will produce, and to make a note of the total number of records that will be selected. Also make sure your PC application can handle that number of records!*

The next step is to take the database file created in CU*BASE Report Builder, and transfer it to a file stored on your PC.

CONVERTING A SPOOLED REPORT

STEP 1 - The first step is to gather information from the spool file that will be used when converting the report for download.

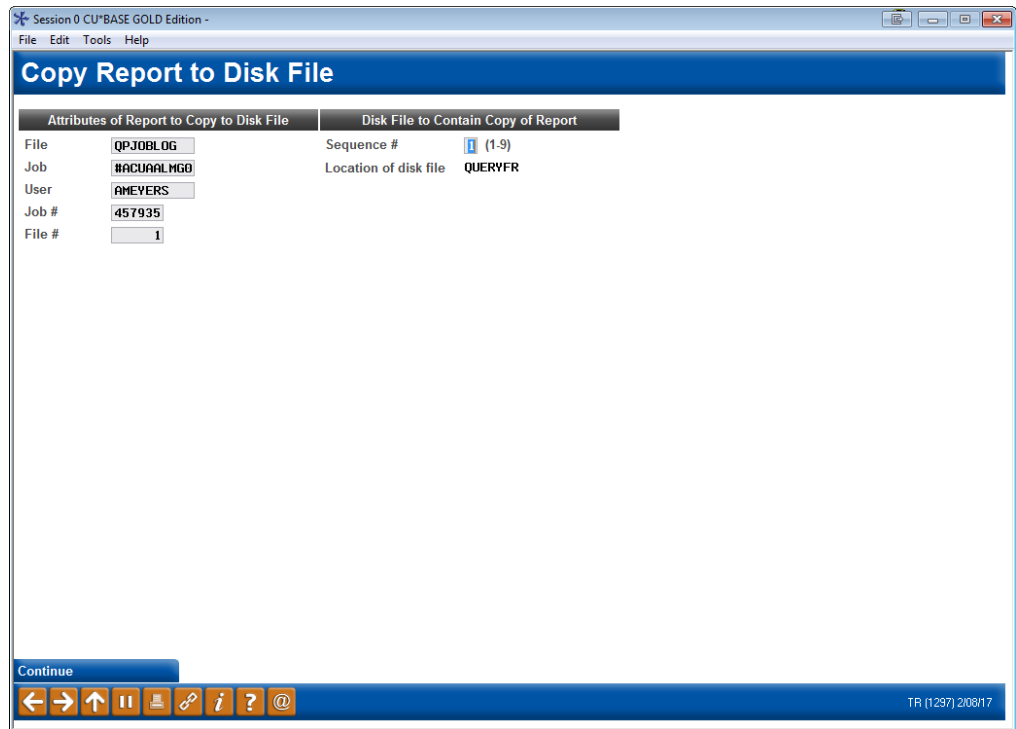
1. Display your spool file and click the **Job** tab to show the following display:



2. This screen contains all of the details necessary to identify this spool file so that it can be copied to a disk file format that can be downloaded. Print a copy of this screen to record the information marked in the above sample. Then use the back arrow (F3) to exit.

STEP 2 - The next step converts the spooled data to a file that can then be downloaded to the PC.

3. Choose **Tool #282 Copy Report to Disk File** to display the following screen:



4. On the top half of the screen, enter the spool file details obtained in the previous step. The remaining fields are used to specify the name and location of the converted file:
 - *Sequence number* - This number is used to identify the converted file. If you are converting several different reports at this time, use this to sequentially number each item (1-9). (If converting only one file, enter 1 in this field). This number will be used as part of the file name on the file transfer screen shown below.
 - *Location of disk file* - This will default to your credit union's Query library name and cannot be changed.
5. When done, press Enter. The system will convert the file and copy it to your QUERYxx library in a format that can be downloaded.
6. No confirmation message will appear upon completion of the process. Use the up arrow to exit.

If the information is entered incorrectly, a message will indicate that program is "Unable to locate selected report".

TRANSFERRING FILES WITH CLIENT ACCESS

ACCESS

This section covers how to take the file created and download the data via the Client Access tool for use on a PC.

DOWNLOADING QUERY/REPORT TO PC

1. Choose **Tool #373 File Download (System i to PC)**. The following dialog box will appear:

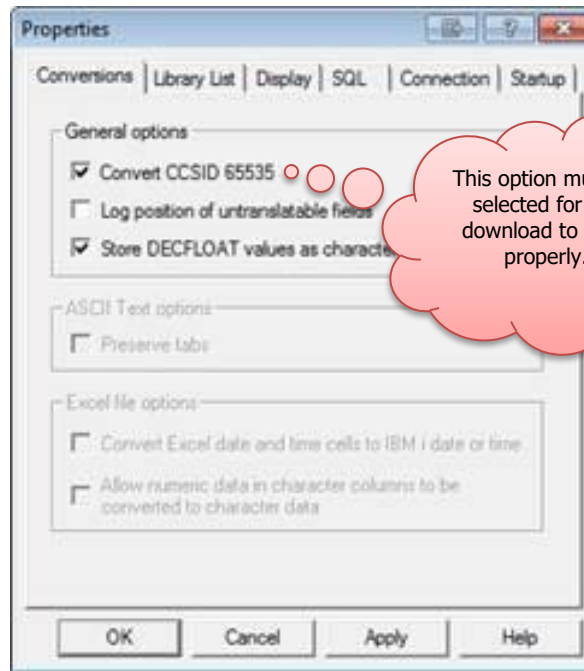
2. Complete all of the following fields (none are case-sensitive):

Field Descriptions

Field Name	Description
iSeries	These settings refer to where the data is coming from.
System name	This designates the iSeries system from which the files will be downloaded. For online credit unions, this will read PROD.CUANSWERS.COM and should not be changed. <i>(If this defaults to something else, leave it as the default.)</i>
File name	FOR A QUERY FILE: Enter your credit union's Query library name, a forward slash, then the name of the database file to be downloaded, as in the following sample: QUERYxx/FILENAME <i>(For the xx, fill in your credit union's two-character credit union ID)</i> FOR A CONVERTED REPORT:

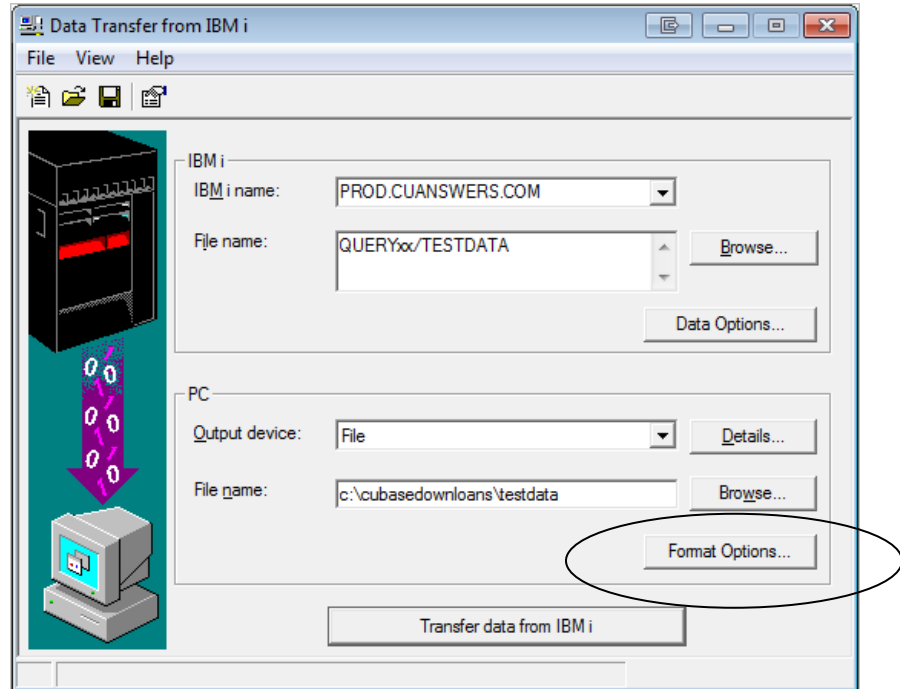
Field Name	Description
	Enter your credit union's Query library name, a forward slash, then the word "spool" and the sequence number used when the file was converted, as in the follow sample: <p style="text-align: center;">QUERYxx/SPOOL1</p> <p><i>For the xx, fill in your credit union's two-character credit union ID.</i></p>
PC	These settings refer to where the data is going.
Output device	This setting controls the format in which the data will be downloaded. Click [▼] and choose File.
File name	Enter the path (the storage location, both drive and folder) and file name where the downloaded file should be stored on your PC. Use backslashes between the folder name and the file name, as in the follow sample: <p style="text-align: center;">C:\CUBASEDOWNLOADS\FILENAME</p> <p>HINT: Locating downloaded files and keeping your computer storage clean will be much easier if you designate a special folder on your PC to receive all downloaded files, such as c:\cubase, c:\downloads, or something similar.</p>

- From the screen shown below, select the **File** menu and choose **Properties**

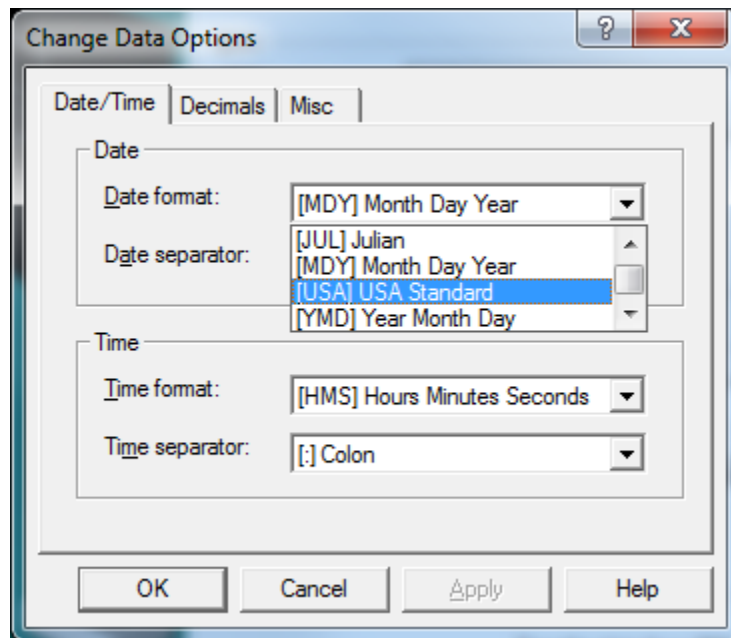


- Check **Convert CCSID 65535** as shown above.
- Click **OK**

6. Select Format Options to set the format of the downloaded data.

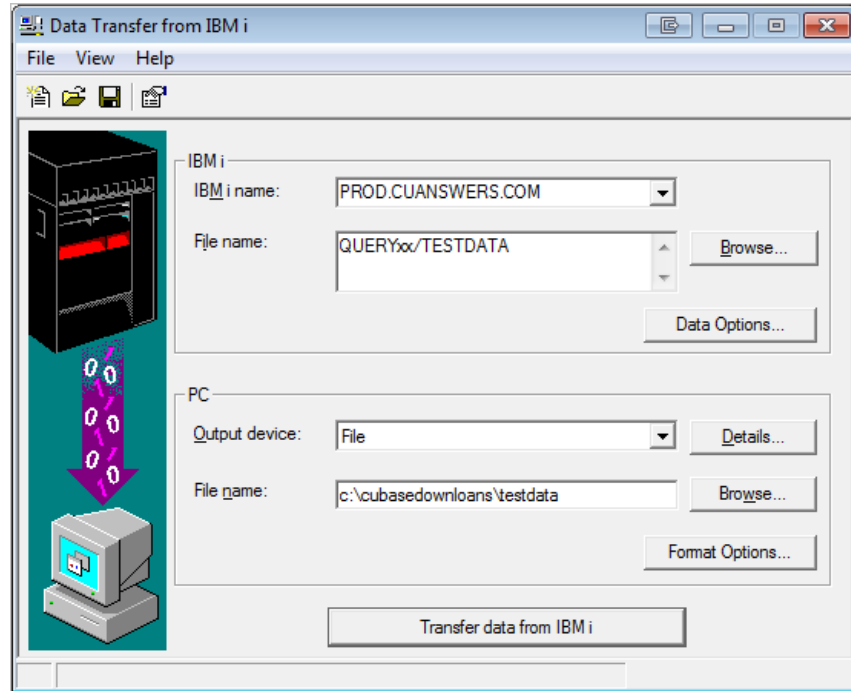


7. Use the drop-down menu to select the USA format.



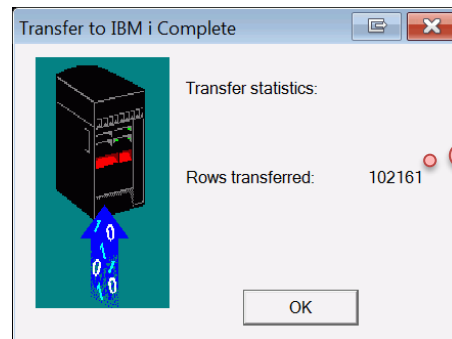
8. Click OK.

9. To begin the transfer process, click the **Transfer data to IBM i** button. A series of messages will appear to report on the progress of the transfer.



If you experience problems uploading, it may be because you have not been authorized to download data. If you receive the error: "Data in this field is incorrect or does not match the PC data type," make sure to set the properties as shown in #4 above.

When the transfer is complete, the following message will appear: Click **OK** and the Data Transfer dialog box will reappear. Click **Close [X]** exit.



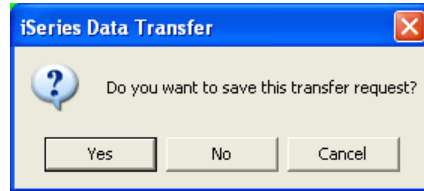
This number should match the number of individual figures in your original source file.

The text file is now saved in the designated folder, and can be opened in any spreadsheet or other PC application.

SAVING TRANSFER SETTINGS

If you perform file transfers often, one way to speed things up and make sure that all settings are set correctly (especially the conversion format you selected using the File, Properties command), the transfer request can be saved. This feature simply stores all of the file names and other settings from the Data Transfer window so that they can be quickly filled in for you the next time a transfer is performed.

1. When closing the Data Transfer window after a transfer has been set up or performed, the following message may appear:

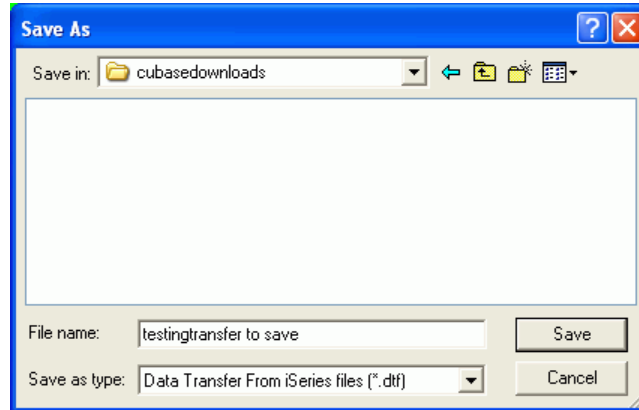


If this is a transfer you perform often, click **Yes**.

OR

1. At any time in the Data Transfer window, choose the **File** menu, then choose **Save**. If the transfer has not been saved before, the following dialog box will appear:

*HINT: If you have already saved the transfer once but wish to use a different name this time, use **File, Save As** instead.*



2. Enter a name for the transfer request, then click **Save**. The request will be saved.

USING A SAVED TRANSFER REQUEST

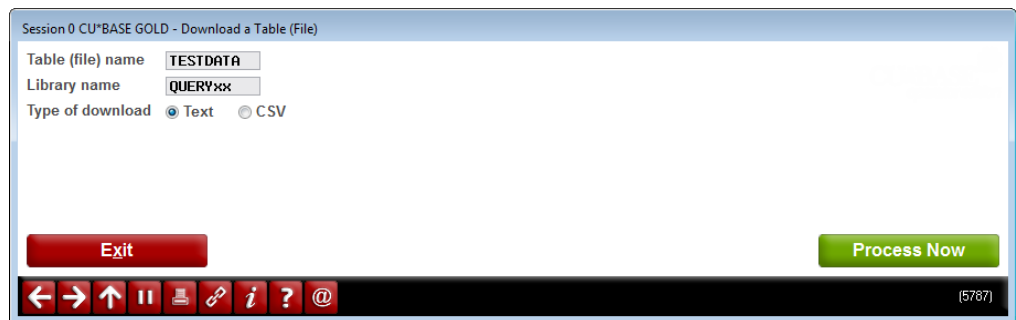
1. After creating the database file as usual, display the Data Transfer window (**Tool #373 File Download (System i to PC)**)
2. From the **File** menu, choose **Open**, select the desired transfer request from the list and click **Open**.
3. Make changes to the request specifics as needed (such as the PC file name, etc.), then click **Transfer data from iSeries** to begin the transfer as usual.

TRANSFERRING FILES WITH DATA ON THE MOVE

This section covers how to take the file created and download the data via Data On the Move. Unlike Client Access, Data On The Move is a two-step process requiring that you first download the files from the iSeries to the Data On The Move server, then you can use either a web browser interface or secure FTP client on your PC to complete the transfer to your local device.

MOVING FILES TO THE DATA ON THE MOVE SERVER

1. Choose **Tool #349 Download Files to DOTM Server**. The following window will appear:



2. Complete all the following fields (none are case-sensitive):

Field Name	Description
Table (file) name	<p>FOR A QUERY FILE: Enter the file name created with your Query or after exporting data from a dashboard.</p> <p>FOR A CONVERTED REPORT: Enter “spool” and the sequence number used when the file was converted, as in the follow sample: SPOOL1</p>
Library name	<p>Enter the credit union library name in which the file resides. In most cases, this will be the QUERYxx library (special permissions can also be granted to download select files from the FILExx library.</p> <p><i>(For the xx, fill in your credit union’s two-character credit union ID)</i></p>
Type of download	Select between having the download as a text file or as a comma separated values file format.

3. Select the *Process Now* button to proceed with the download.

DOWNLOADING WITH A WEB BROWSER

Once the file has been downloaded to the DOTM server, you can transfer it to your PC through an HTTPS connection on your web browser.

1. Choose **Tool #422 Launch Data On The Move**. This will open your default web browser and navigate to <https://dotm.cubase.org>.



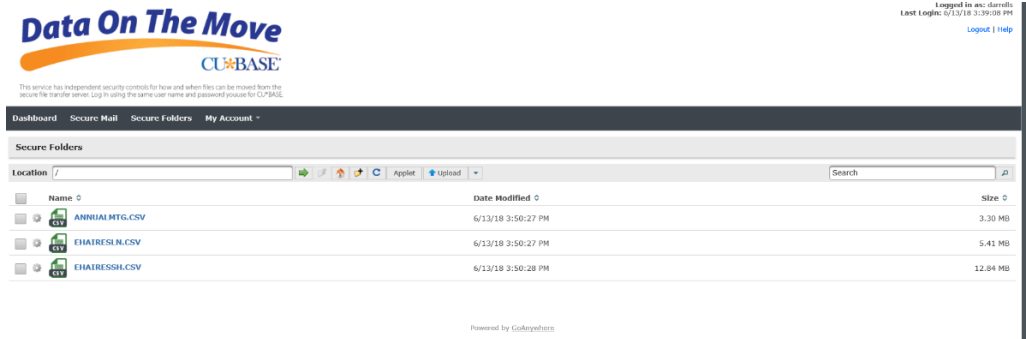
This service has independent security controls for how and when files can be moved from the secure file transfer server. Log in using the same user name and password you use for CU*BASE.

User Name
Password

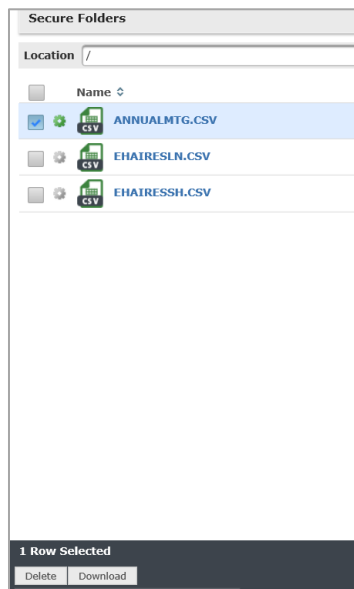
SYSTEM: CUAPROD

File transfers facilitated by CU*BASE Web Download Client; all rights reserved. For instructions, visit cuanswers.com and search for keyword: download.

2. After entering your CU*BASE GOLD user ID and password, you will get the following screen:



3. Once you select a file, a Download button will appear.



4. Click the Download button and use the browser features to download the file.

4. Once you are done moving files, click “Logout” at the upper right corner of the window.

NOTE: The web browser interface has a file size limit of 10MB. Files exceeding 10MB must be downloaded either with the Client Access tool or using a secure FTP client on your PC.

DOWNLOADING WITH A SECURE FTP CLIENT

Files can also be downloaded from the Data On The Move server using a secure FTP client that you have downloaded and installed locally on your PC. This is ideal for files larger than 10MB that cannot be downloaded via the web browser.

CU*Answers recommends using either WinSCP or FileZilla for this process, and makes no guarantees that other SFTP clients will work.

Download Info:

In order to complete the download process, you will be required to enter the following information:

- File Protocol .. : SFTP
- Host Name : dotm.cubase.org
- Port Number.. : 22
- User Name : {User’s CU*BASE GOLD login user name}
- Password..... : {User’s CU*BASE GOLD login password}

For additional instructions, please refer to the SFTP client provider’s website.

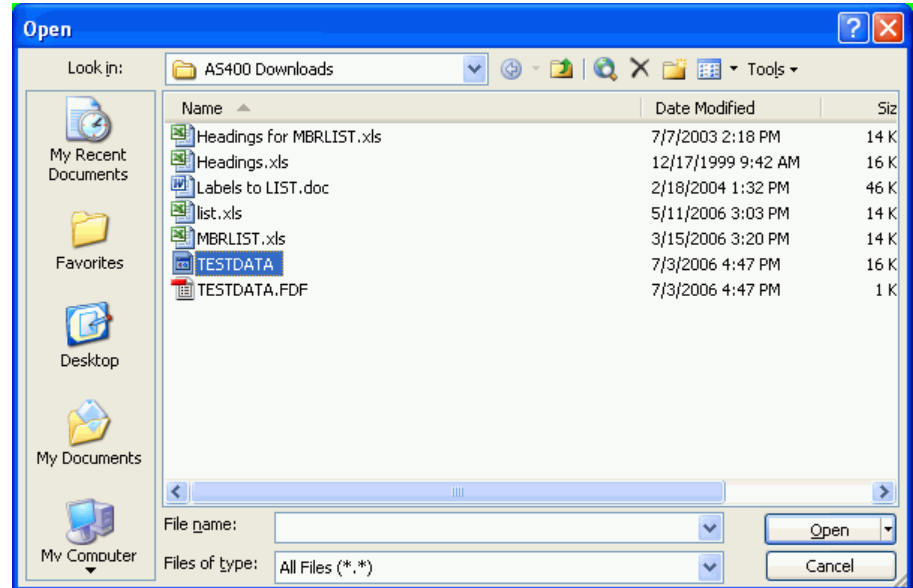
ACCESSING DOWNLOADED DATA

The following section provides tips for accessing your downloaded files.

OPENING A DOWNLOADED FILE USING MICROSOFT EXCEL

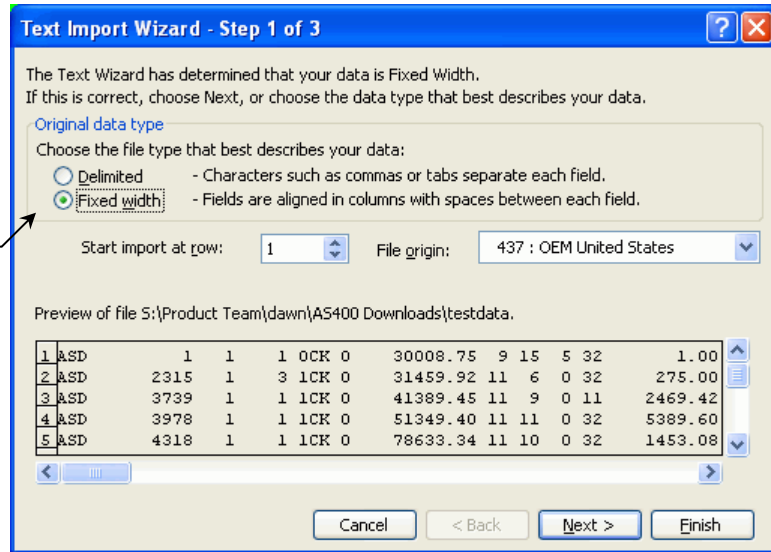
NOTE: The following is shown as an example only. For complete information on using Microsoft Excel or any of the many popular PC spreadsheet applications currently available, refer to your software reference manual.

1. In Excel, from the **File** menu, choose **Open**.

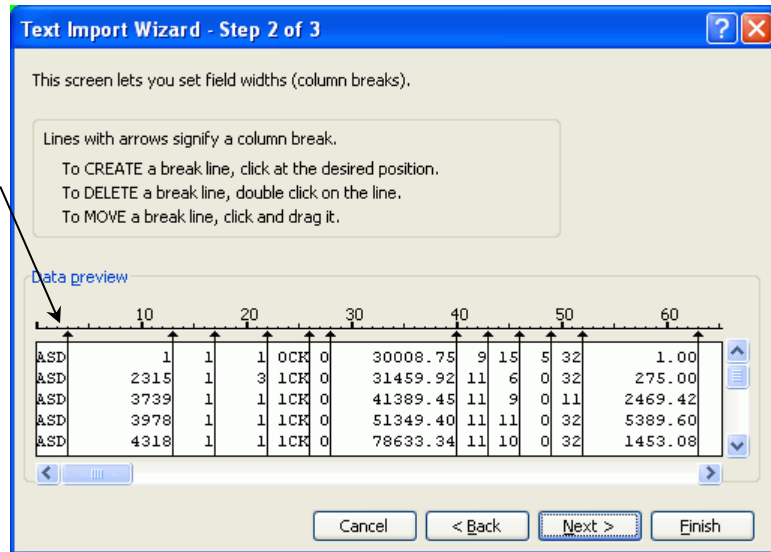


2. In the **Files of Type** list, choose **All Files (*.*)**. Use the **Look in** list to open the folder where the file was downloaded.
3. Select the file name to be opened, choosing the file without the *.FDF extension, then click **Open**. A series of windows will appear to help you separate the text in the file into separate columns. Follow the instructions on each window, clicking **Next** to proceed.

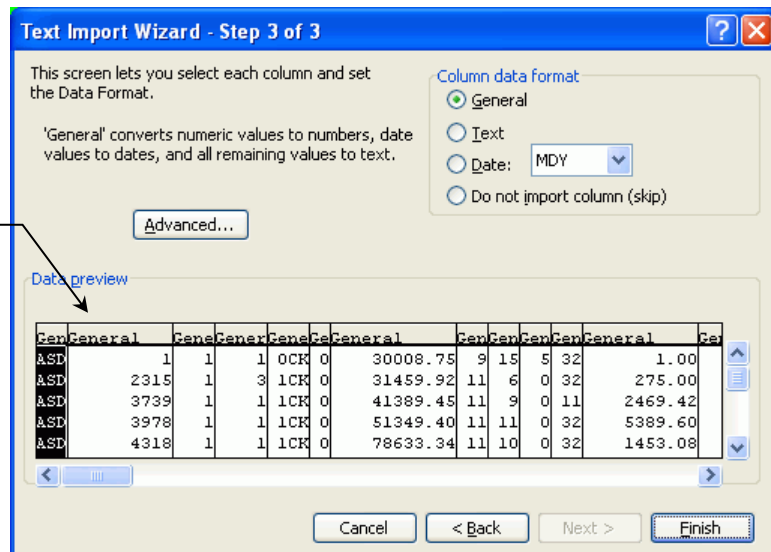
For files downloaded from CU*BASE, choose **Fixed Width**.



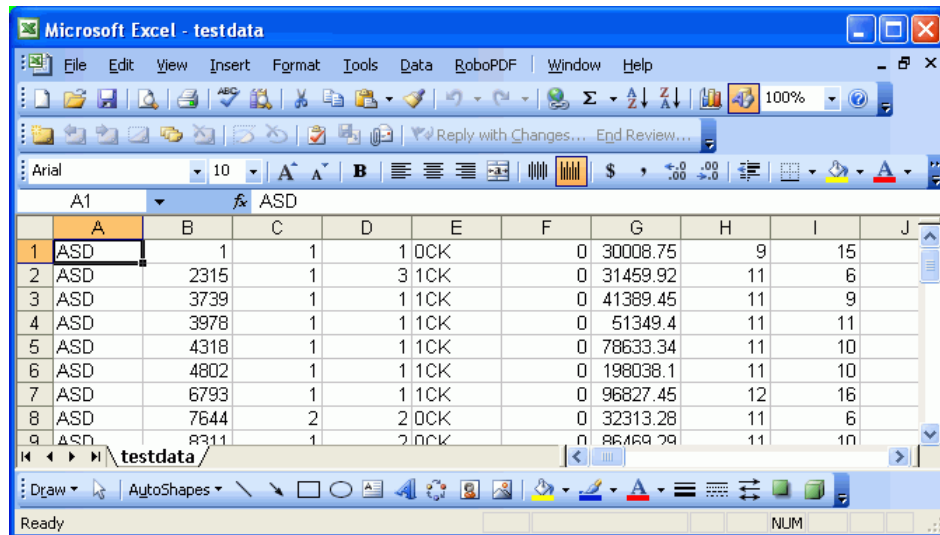
Excel will automatically guess where the data should be separated into separate columns. These markers can be adjusted, deleted, or new breaks added as needed.



Although columns can be formatted here, it is usually easier to wait until the spreadsheet has been created, then use the normal formatting features in Excel to format the data.

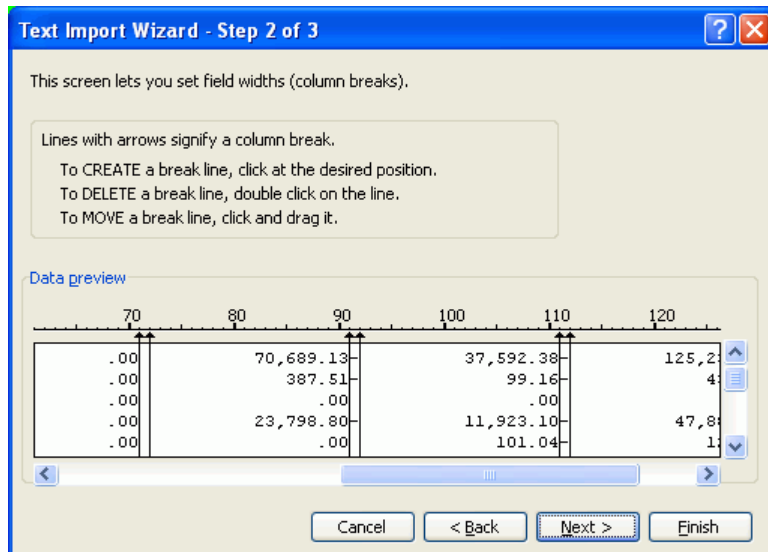


Once the data has been pulled into the spreadsheet, you may format it, add headings, set up calculations, and perform any other spreadsheet function you wish. Be sure to save the file as an Excel document.

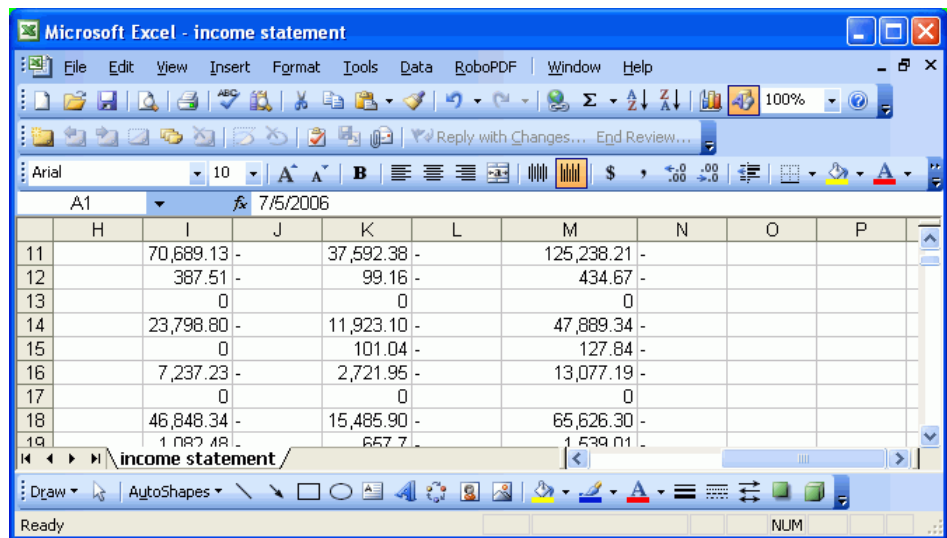


MISCELLANEOUS HINTS AND TIPS

- Although downloaded data can be opened using a word processing application, such as Microsoft Word, it is generally not recommended. Remember that the file is a simple text file, with spaces to separate the fields and no formatting. Choosing a proportionally spaced font, for example, may make the data difficult to read. Other text editors, such as Microsoft Notepad, default with a fixed-width font and may be easier to use for cleaning up extraneous data.
- If you wish to use the data as part of a mail merge (for personalized form letters or mailing labels), open the data in a spreadsheet program and add one row at the top for the field labels. Then use your word processing program to create the form letter, using the spreadsheet as the database from which the variable information will be pulled.
- Data such as amounts, dates, ZIP codes, etc., can be formatted either when the custom report is created, or after the data has been pulled into your spreadsheet program, according to your preference.
- If upon opening the file you see a series of numbers and letters that appear to be “garbage,” it is usually because the “Convert CCSID 65535” flag was not checked when the download transfer was performed via Client Access. Repeat the download procedure, using File, Properties to select the conversion option.
- When downloading a financial statement or other report into a spreadsheet program where you plan to perform calculations on the figures, be careful: if any of the figures display with the negative sign (-) after the number, Excel may read it as text, not a number, and will not allow it to be used in a calculation. To work around this problem, try separating the negative signs into a separate column. The following example shows how this could be done in Excel:



The results would be as follows:



- In order to enter a negative number in Excel (and many other spreadsheet packages), the negative sign must be typed in front of the number. Therefore, you could also choose to open the file first in Notepad or WordPad and manually move all of the negative (-) signs to the front of the number, before attempting to pull the file into Excel or another spreadsheet program.