



## Populating your Inventory using Load Data and CS1504 Scanners

The Load Data module in Anthology is used to load your inventory into the computer system by way of a small hand held scanner. You can walk around your store and scan in the ISBN's from your books, doing about 250 at a time. You then draw the data from the scanner into your computer. Each Batch can be verified for ISBN's that will be retrieved. Every batch created can have a Section assigned to it so you can track what physical section the titles came from. As each batch is posted the inventory items found in each batch will have the Section assigned to them.

### Preparation Tasks

There are some things you should do a few days in advance to get ready for the Load Data.

1. Setup CD Fetch using an external Database of Books. The Load Data utility does require you have already setup your CD Fetch using the Database of Books (DBoB) of your choosing. As of April 2007 these options are Ingram Companion, Baker & Taylor Titlesource, or Bower Books in Print. Load Data requires a specific setup and it requires you have already setup and tested your CD Fetch setup. Consult the Anthology Manual or your Implementation technician for details on setting up CD Fetch.
2. Decide on Section names and populate the Section listing. Do this by going to Master Files | Sections and pressing F4 New to add a new section. The Load Data utility looks to the Master Files listing for its Section names.
3. Buy extra batteries. Each scanner with a fresh set of batteries should be able to do roughly 5,000 scans. Remember that a scanner can only hold about 250 scans at any given time. Symbol recommends using 4 Energizer EPX76 batteries in each scanner for optimal performance. These are also sold under the models 357/303, A76, AG13, LR1154, LR44, or SR44SW/W. You will need a small crosshead/Phillips screwdriver to change the batteries. We recommend using an eyeglass repair kit screwdriver. There is a single screw near the bottom end of the scanner. Be VERY careful putting in the batteries. The two batteries on the left should be printed side up, and the two batteries on the right should be printed side down. Putting in the batteries incorrectly could seriously damage the scanner.
4. Familiarize yourself with the various barcodes being used on your inventory. Know the difference between an EAN barcode and a UPC barcode. Information provided at the end of this document.
5. Connect the CS1504 scanners, install the driver, enter in the Authorization code and test a few rounds of scanning items, downloading scanner contents, verifying and posting the batches. The next few sections of this document cover these specific items.

## Connecting the CS1504 Scanners

Decide which machine will be the 'central command' station during the LD. This may be the main cash register or any other machine that is in a convenient location for all the runners to reach. This machine will have the one and only scanner cable connected to it. There should only be one person using the LD module at the central station, no others may use the LD at the same time.

The CS1504 scanner comes with a standard Serial connection cable that connects between the computer and the scanner (mini connector). Additionally a USB to Serial adaptor is available. Anthology has decided to support the USB to Serial (with adaptor) combination only.

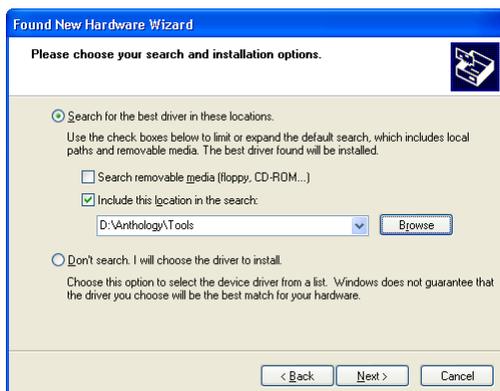
1. If you have a Palm device docking unit, a Pole Display, or any other serial based device that is connected to COM1 already, shut down the machine, disconnect the device, then power the station back on. This should allow the computer to recognize the device is no longer connected.
2. Verify the USB adaptor is firmly attached to the Serial connector. The male and female serial connectors can be screwed together for stability.
3. Plug the USB end into the computer and allow a few moments for the computer to recognize new hardware. You may receive a message saying that "New Hardware" or "New USB Controller" was found. Shortly after a new window should appear. Follow the images below to set the correct options and install the necessary driver.



#1- Select "No, Not this time", click Next



#2- Select "Install from a list or specific location"



#3- Select "Include this Location in the Search"  
Click Browse button and browse to the location of your Anthology folder on the server. Browse down to the "Tools" folder contained in the Anthology folder. (C:\Program Files\Anthology\Tools)  
This folder contains the drivers necessary. Click Next.



#4- Completion message upon successful driver installation.  
Click Finish.

## Activating the LD Scanning License with the Authorization code

By now you should have received an email from Tech Support containing an "Authorization code". Use the steps in the email or the steps below to enable the scanner download function.

- 1) Open Visual Anthology, on any machine
- 2) Go to Tools | Load Data
- 3) Click on the Actions menu | Specify Scanner.
- 4) Select the CS1504 scanner and Save
- 5) Go back to the Actions menu | Enter/Review License for Scanning.
- 6) Paste in this authorization code, exactly as noted from the email. This is usually an 18 character string of numbers and letters that is case sensitive.
- 7) Save settings. This authorization code will allow you to use the rental scanners for a set number of days. A message will display indicating how long the scanners can be used.
- 8) Repeat these same steps with your Test Copy, if you've created one to practice with before the real LD.

## Testing CD Fetch:

- To ensure that CD Fetch has been properly setup and is functioning correctly, go the Anthology, Master Files, Inventory, and click F4 to add a new record.
- Type in an ISBN that is not currently in the Anthology system. If Fetch is working appropriately and the title is in the external database, the title information should appear. Sometimes a title is not found via Fetch, so the program will display the "Inventory Assistant" window so the user can add the item manually.
- If you wish to change the Default information that is imported from the CD; such as default department, media, publisher, etc., please go to Tools | Options | External Data to change the settings.

## Setting up Visual Anthology for Load Data

Once you have the CD Fetch working you'll need to make a few small changes so the Load Data will automatically fetch titles when the Section batch is being posted.

The screenshot shows the 'Options' dialog box with the 'External Data' tab selected. The 'Fetch!' section includes 'External inventory source' (TitleSource (Baker & Taylor)), 'External inventory path' (D:\), and 'Add automatically' (checked). The 'Default values' section includes 'Default Distributor' (Baker & Taylor (X12)- EO FTP), 'Default Department' (Book), 'Default Section' (None), and 'Default Media' (None). The 'Internet StockCheck' section includes fields for Ingram acct id, Ingram password, Ingram ship id, Bowker acct id, Bowker password, Baker acct id, Baker password, and Baker ship id. At the bottom, the 'Add as needed' section has checkboxes for Publishers (checked), Sections (unchecked), Departments (unchecked), and Media (checked). Buttons for 'F1 Help' and 'F10 Save' are at the bottom.

- Go to Tools | Options | External Data
- Check the option for “Add Automatically”. Having this option checked means Anthology will fetch each title in a Load Data batch being posted instead of querying you for every single title. If you’re working with Used Books you may want to have the opportunity to edit every single title as it’s being fetched, but most often during Load Data you’ll find it easiest to have this option checked.
- We recommend you select a “Default Distributor” such as Ingram or Baker. While you’re fetching title information and entering in Sections on each title, you’ll also be populating other fields with how you want the inventory items to be stored. Distributor is who you’d normally get the title from, this is besides who publishes the title.
- We also recommend you select a “Default Department” as well. This is typically Books but if you could be working on scanning in sideline items such as CD’s, journals, or toys. Note that DBoB’s typically only contain book items for CD Fetch to bring in.
- We do not recommend having a Default Section or Media selected for the purposes of Load Data.
- For the “As Needed” checkboxes it’s best during Load Data to have a check on Publishers and Media. Since the purpose of Load Data is to fetch items and store the Sections you selected you do not want the External Data setup screen overriding your Section choices with the Subject/Section codes that can be fetched by the DBoB. Make sure the Section is unchecked in this area.
- When you’ve completed the LD we recommend turning the “Add Automatically” off and turn back on the “Add As Needed: Section” back on in the Tools | Options | External Data area.

### Quick Steps for Load Data

Below is a brief list of steps to get you started on a Load Data (LD). The recommended setup information listed above is CRITICAL to doing a proper and correct LD.

1. Open Anthology, go to Tools, Load Data
2. Press F4 New to create a new Batch record. Enter a Description for your batch such as ‘Shelving Unit #3’. Select the Section that the scanned titles came from. You should have already started to build a list of Sections by going to Master Files | Sections and doing F4 to add new records.
3. Scan a series of items, each scanner will hold roughly 250 scans. Meaning if you scan 6 separate copies of the same title the scanner will only hold 244 more scans. Be sure to scan the EAN barcode for book items and not the UPC barcode.
4. Connect scanner to mini USB cable. The other end of the cable should already be connected to your computer. We recommend leaving the cable connected on the computer side the entire time you are doing the LD. Unplugging the cable from the computer could require a complete reinstall of the scanner drivers each time.
5. Go to the Actions menu and choose “Get Data from Scanner”.
6. Wait until scanner is finished beeping and flashing before removing now empty scanner from the cable.
7. You may wish to perform a Clear Scanner on the scanner once you’ve removed them from the base, put them into an “Empty” pile for staff to pick up. Hold the (-) button down for 20 seconds until it emits a long beep. NOTE: This should really only be done if you had problems downloading the batch. Doing this after every batch will deplete the batteries very quickly.
8. The newly downloaded batch will be shown on the Details tab of the LD screen.

9. At this time you should begin reviewing the contents of the batch for any miss-scanned items. Use the option of “Alt+F3 Verify” to have the program pre-fetch the titles. This will help you locate any non-fetchable items that need special attention. We recommend removing these special items from the batch and locating the physical title on the shelf just scanned and creating a pile in the store to be dealt with at the end of the Load Data. This method is the most efficient one for most stores. You can delete a line item from a batch by highlighting it and pressing “F7 Delete”.
10. You can print this batch or review to locate any titles that were miss-scanned or are problematic. Once the review is complete, you should immediately click “Consolidate Quantities” and F10 Save before editing the batch.
11. When you are satisfied with the contents of the Batch and have the Section picked then use “F12 Post Update” to Post the items to Inventory. This will fetch the title information, add the record to inventory, add the qty counted to any already existing OH for that ISBN, and populate the Department, Section, Media, Distributor, Publisher with the appropriate values based on your Batch settings and the CD Fetch settings found in Tools, Options. Any ISBN that had been previously fetched with a different Section assigned to it will still have the counted qty added to it's OH but the Section will not be changed. The status of the posted batch will change from Draft to Posted.
12. Every few hours save your work, and close out of the LD. Go to the Tools menu and run a quickbackup, then Reindex. This will give you restore points in case of a serious problem with your network or hardware. We highly recommend you ensure you have backup method in place that will backup your data to something other than the hard drive of your machine, backing up to a CD or USB key every night is strongly recommended.

### **DOs and DONTs. Tips for Troubleshooting**

- You should be using version 5.16.033 or higher for the Load Data.
- Don't try to scan all the books in the store in one batch—it's best to create relatively smaller batches of, at most a couple hundred books at a time. If something goes wrong, you won't lose too much work.
- If you utilize 'fetch', verify it is working properly before uploading the data collector.
- When connecting the scanner to the cable, make sure you have the cable firmly seated. For proper download, always connect the collector to the cable first before selecting “Get Download”.
- DO NOT leave any scanner connected to the cable after the download is completed because it drains the batteries. If you have problem downloading a batch from any scanner, disconnect the scanner, close out of anthology, wait one minute and try again.
- To scan a barcode with the scanner, just press the large button marked with a (+) sign. A green light should appear along with the red laser light. An audible beep will be heard with a successful scan.
- If you make a mistake, like doing a double scan, you can delete the last scanned item. Press the small button marked with a (-) and rescan the item. A beep will sound and the scanner will flash yellow.
- Be sure to scan the correct barcode. Many books have two different barcodes printed on them. The correct one to scan for books is called an EAN13 barcode which starts with 978 or 979. Please read the help system section entitled Special Topics | Understanding Barcodes. To avoid heartburn, all staff assisting with the LD must the correct barcode to scan, make sure they know the difference between EAN and UPC barcodes.
- Once you have gotten the scanner and base working in the training, DO NOT install any new software, printers, hardware, etc. until the entire LD has completed. In some cases installing a new printer disables the serial port the scanner bases use.

- DO NOT pull scanner from base too fast when it is downloading the cable as soon as titles are downloaded to the LD screen. Wait till it stops flashing and beeping. If the scanner is pulled too soon, the scanner is not emptied and you may lose data collected as well as corrupt the scanner programming.
- If you have hit the limit of the # of scans the scanner will hold, it will emit to higher pitched beeps along with red flashes, but no laser light will appear. You can hit the (-) to scan the last item to remove it from the scanner. Continue to scan past the warning beep can cause serious problems such as the inability to download that batch and subsequent batches. This is one of the most common mistake stores make and will lead to lost time!
- If you attempt to “Get Data From Scanner” and get a message of “Cannot connect CS1504 to serial port” or “No Data to Download” the cable may have gotten dislodged from the scanner or the computer. Double check the cable connections before attempting again. It is important to connect to the exact same USB port as before or the driver will have to be reinstalled.
- If you attempt to “Get Data From Scanner” and get a message of “No Serial Ports found” or “No Data to download” after checking all connections. Don’t force another upload and don’t panic.
  - 1. You should shut down the entire system and wait for 5 minutes before turning it back on. Start Anthology and do a Rebuild Keywords, Reindex and a Quickbackup.
  - 2. If it has been more than 3-5 hours since the last battery change, change them now on the problem scanner (the last attempted upload).
  - 3. Clear that scanner (hold – button for 20 seconds).
  - 4. Try a small test scan first with 3-4 items to ensure the scanner/PC is in working order before uploading a full load.
- If the scanner does not respond after changing the batteries then try the manual clear.

### Frequently Asked Questions:

Q: What kind of batteries does the CS1504 use?

- Symbol recommends using 4 Energizer EPX76 batteries in each scanner for optimal performance. These are also sold under the models 357/303, A76, AG13, LR1154, LR44, or SR44SW/W. You will need a small crosshead/Phillips screwdriver to change the batteries. We recommend using an eyeglass repair kit screwdriver. There is a single screw near the bottom end of the scanner. Be VERY careful putting in the batteries. The two batteries on the left should be printed side up, and the two batteries on the right should be printed side down. Putting in the batteries incorrectly could seriously damage the scanner.

Q: How long do the batteries last?

- Symbol estimates up to 5,000 scans on a fresh set of batteries.

Q: How do I know the collector is full or the batteries are low?

- The scanner will emit a beep when it is getting full and another when it is full. A different signal will emit when the batteries are getting low.

Q: My store must be open during this LD, what should we know about this?

- Again, Anthology does not support or recommend doing LD during open hours. Know that most stores that attempt a LD during open hours, usually find that doing this while open is too complex and time consuming to be cost effective or accurate. If you absolutely must be open, you will

need to take great care in the counts, it will be difficult to know if a title was moved before or after a section was counted.

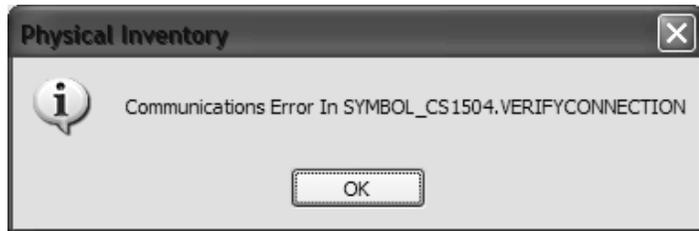
Q: I plugged in the scanner and choose the “Get Data From Scanner” option from the action menu and am getting this error message.

- This error means the computer has not recognized the scanner and/or cable. You may need to shut down the computer again, leaving the cable connected. Bring the computer back up and try again.



Q: I plugged in the scanner, and chose the “Get Data From Scanner” option from the Action menu and am getting this error message. How can I get my scanner to download again?

- Unplug the scanner, click ok, close out of the LD and Anthology. Open Anthology and the LD back up. It's critical that you do the Get command then plug in the scanner, not the other way around. There is only a small window of time where the software and the hardware will attempt to communicate so have the scanner and the cable end in hand ready to plug together quickly. Too long of a delay or connecting then doing the Get command will cause this error.



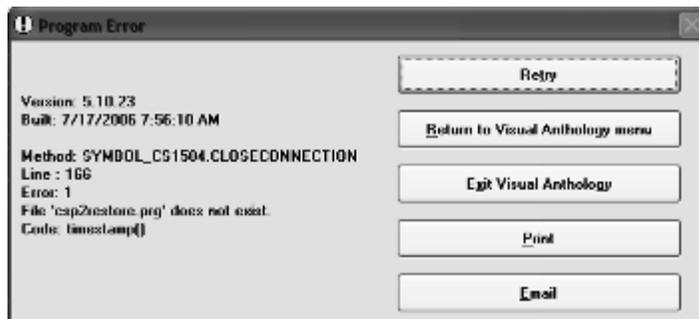
Q: I get the following error when trying to download from the scanner:

- Click OK, disconnect the scanner. Close out of LD and Anthology for 1 minute. If you try to get the data again and get the same message, try connecting the scanner and doing another Get Data command. Occasionally the scanner needs to be left sitting on the cable long enough for the green light to stop flashing and then have the Get data command to run again.



Q: I get the following error when trying to download the scanner:

- You may notice the scanner starts blinking immediately when connected to the cable. If this happens it's likely that doing the “Get Data” command will result in the above error. The quickest fix for this issue is to choose Exit Anthology, disconnect the



scanner for 30 seconds, then get back into the LD and reconnect the scanner to try another Get command.

Q: My scanner doesn't want to read/accept barcodes.

- First clear the scanner by holding the (-) for 20 seconds. You should hear it beep twice when cleared. Locate a book with the EAN barcode (978...) on the back and attempt to scan that item first. If successful then the other item being scanned may have a damaged barcode, or one that is too small to read. Try different angles and distances away from the barcode being scanned. Further, if even a book item fails to be scanned, you may wish to change the batteries in the scanner. Further you may need to switch the audio mode on the scanner. Hold down the (+) button for 15 seconds, during this time the scanner may blink green, amber, and then a steady amber light. This will toggle the sound off. Now toggle the sound back on by holding down the (+) again for 15 seconds until the scanner beeps. Attempt to scan the book item again.

Q: I've done a Get Data command and gets messages saying "No Data to Download".

- The scanner may not be completely connected, or the scanner was manually cleared. First attempt to check the connections, close the program and reopen, and then try another get command.

Q: I have several items that only have UPC barcodes or some do not have barcodes on them at all, mostly these are sideline items. How should I handle these?

- For these items you can still count them and include the counts on a LD Batch. For items that have a UPC barcode you can still scan and download them, you just won't be able to fetch the information. When you post the batch you will be able to manually add the details for the title. For the non-barcode items, simply use the F5 New Line option on a new Batch record. You will have to add the details of these items manually but you can at least establish the counts.

Q: What if I left the scanner connected for a long time after upload?

- Close the LD, and Anthology. You may also need to shut down the computer for 1 minute and change the batteries as well if left for an extended period of time.

Q: After shutting down the program, checking the cable connections, I still get an error saying I cannot download the data from the scanner. I have tried repeatedly with different scanners and am unable to download any scanners.

- First, stop all scanning. Close out of Anthology, disconnect the scanner from the cable, and shut down the PI machine for 5 full minutes. Bring the system back up and do a Quickbackup, and a Reindex from the tools menu. Pick one scanner and empty it by holding the (-) for 20 seconds until it beeps. Scan only 2-3 items as a test. Do not attempt to download other scanners at this time, concentrate only on this one scanner and getting the communications functioning again. Create a new LD Batch for this test. Go to the Action menu and choose "Get Data From Scanner" and see if the problem is resolved. Remember, that these scanners want to send the data as soon as they are connected. Think of the connection process as opening the door (Get Data) and walking through the door (connecting the cable). If you still experience problems you may need to replace the batteries on the scanner, or shut down the PI machine, disconnect the cables, and try to connect the PI scanner cable to a different machine. Know that the USB driver

will need to be reinstalled if the scanner cable is moved to a different USB port or different computer.

Q: What if I followed all the troubleshooting tips and I still can not upload?

- Shut down computers and move the cable connection to another computer.
- As an absolute last resort, if after following the above directions you still have problems downloading batches, stores on support may page. Please be aware that techs are instructed to offer only 5-10 minutes assistance, but we cannot guaranty the issue can be resolved on an emergency page basis. Some problems may only be resolved by a login M-F, 9-5pm eastern.
- Please be aware that if you page, the tech on call will ask you to go through the same troubleshooting procedures listed here. When the scanner malfunctions, there is very little a tech can do **remotely**.

Q: What if I have problems posting a batch after hours?

- Note the problem batch number, do not post it. Continue with other scanning but do not complete the LD. Email [Support@anthology.com](mailto:Support@anthology.com) with the information and a tech will contact you the next business day to assist with the problem batch.

Please be aware that if you page, the tech on call will ask you to go through the same troubleshooting procedures listed here.

## SPECIAL NOTE

### Introduction to Bar Codes

Anthology allows you to use a bar code reader to enter data. Within the publishing industry there are two types of bar codes commonly used EAN-13, and UPC codes. A third type exists called CODE 39. Visual Anthology uses the CODE 39 bar code when labels are generated from within the Visual Anthology system.

### EAN-13 Bar Code

EAN-13 codes can be found on most books being published today, either on the back cover or on the inside front cover. You can recognize EAN-13 codes by the 978 which will appear at the beginning of the number printed beneath the bar code. EAN-13 codes encode (that is, contain within them) the ISBN numbers for the books on which they appear. Visual Anthology translates these codes into ISBNs automatically. You can use the bar code reader to enter ISBNs into inventory by scanning the code into the ISBN/SKU field. Because Visual Anthology automatically converts these numbers you may simply scan the EAN-13 code on the book to locate the item in inventory during sales.

Sample Code



## UPC Bar Code

Some mass-market books are not printed with UPC codes on their back covers. These codes do not encode an ISBN and therefore cannot be converted to ISBNs by Visual Anthology, Load Data, or Physical inventory tools. Generally these books will have the EAN-13 codes inside the front cover. You can still use UPC codes with Anthology if you so choose. But you must scan the code into the ISBN/SKU field in the Inventory file record for that book before Visual Anthology will be able to recognize a scanned UPC code.

This is good candidate for the Alternate SKU field in inventory. This way either code scanned will be located. It is important to note here that publishers will not accept orders by UPC code. They require ISBN.

For those books which do not come with any EAN-13 code, with no bar code at all, or even with no ISBN, you may want to print out bar codes through Visual Anthology. These labels will encode whatever number has been entered into the ISBN number field in the Inventory file record for the books received (See [CODE 39](#) for limitations). You can paste these labels on your books so that they can be scanned at the register.

### Sample Code



## Understanding CODE 39

Code 39 is commonly used for bar coding labels in inventory and industrial applications. The symbology of the Code 39 character set consists of bar code symbols representing characters 0-9, A-Z, the space character and the following symbols: -, ., \$, /, +, %. All other symbols will be ignored by the code. Visual Anthology uses this type of code when generating labels.

### Sample Code

