



# AutoCharge

Automated credit card processing add-on for Club Office Accounting

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## Overview

AutoCharge is a single-user Club Office component that performs automatic credit card billing of member account balances for members who use Club Office's auto debit feature and have active and valid credit card account numbers and expiration dates on file in the LockBox secure storage system. AutoCharge includes the option to print individual receipts and multiple copies to a receipt printer.

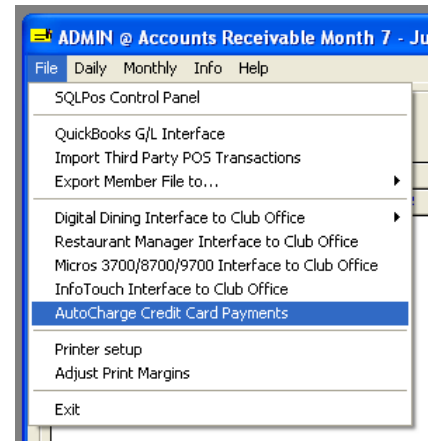
## Prerequisites for using AutoCharge

1. A working, always-on broadband or DSL connection to the Internet. AutoCharge does not have telephone dial out functionality unless the user has Mercury DialBridge installed. More information on DialBridge is in Appendix 3.
2. Working access to Club Office accounting from the computer on which AutoCharge will be installed. AutoCharge runs locally on a single computer; it is not a networked application that resides inside the main CDCO folder; instead, it resides in the c:\cdconode folder on a single workstation.
3. LockBox secure storage must be physically installed on the computer on which AutoCharge is installed. AutoCharge will not run unless it locates a valid LockBox installation in the c:\lockbox directory on the local computer. (Note: LockBox software is included with the purchase of AutoCharge. LockBox requires its own, separate installation.)
4. Member accounts in Club Office must be set for "Auto Debit" on the member financial screen for AutoCharge to be aware of them. Accounts that are not marked properly will not be used by the module.
5. Appropriate credit card information must be stored in the LockBox system and the LockBox member number must match the corresponding member account in Club Office for which the Auto Debit option has been enabled. The card number must be correct and the card's expiration date must not yet have been reached. The credit card must be of one of the following types: Visa, MasterCard, Discover, American Express (AMEX), Carte Blanche, or Diner's Club.
6. The merchant must have an active card processing account with one of Club Office's embedded credit card processing partners. Club Data's software currently supports Mercury Payment Systems, Merchant Partners or Moneris Solutions card processing.
7. The merchant must have access to the selected card processor's Internet merchant portal to verify, modify, cancel or change automatically generated transactions should the need arise.
8. Mercury Payment Systems only: MPS provides AVS checking for the Zip Code for the address to which the credit card has been issued. When zip code checking is used, the merchant will realize a lower processing rate on the card transaction, resulting in potentially hundreds or thousands of dollars of savings per year. During processing, AutoCharge looks up the member's bill-to address and uses the zip code listed for the billing address as the zip code for the AVS/Zip code verification. When the billing address zip code for the member's account is the exact address for the member's credit card billing, you should receive the lowest processing rate available for a card-not-present transaction.

## General Operation - How AutoCharge Works

**Start AutoCharge** by selecting the option located on the FILE menu of the Accounts Receivable module. **Note: the option to run AutoCharge only appears on the A/R File menu of the computer on which AutoCharge and LockBox are physically installed:**

Upon startup, the module checks for any payment transactions that have not yet been accepted for member accounts. If any exist, they are displayed in the transaction audit log window along with a message that they can be accepted or more can be added and all accepted together.



The GO button starts the automatic charge process. As card transactions are completed they become visible in the transaction log window. The system has only two balance options: the full "balance forward" value or the balance forward plus all current month charges. As there is no assumption that the account holder wishes to make a partial payment, there are no other options to adjust the amount to be charged to the credit card. The system evaluates each account individually based on the balance forward and any previously entered payment/credit transactions for the current month; if the result is either a zero or credit balance, a credit card transaction is not generated.

Click the Print Report button to print an audit report of the resulting transactions. NOTE: It is HIGHLY SUGGESTED that the audit report be printed as this is the ONLY time you will be allowed to print it in its original state. Restarting the module or accepting payments will result in clearing the audit window though the historical data will remain in the system database. Following the printing of the report, the Accept Payments button becomes available.

Click the Accept Payments button to move the card transactions from the AutoCharge workspace to the completed A/R monthly database where they are immediately applied to member balances as PAYMENT-CC transactions. Afterward, the normal A/R reports already in the A/R system's monthly report menu can be used for further analysis. Following the transfer of the transactions to the A/R system, the original workspace items are marked so they cannot be accepted twice.

Click Exit to quit the module.

AutoCharge's configuration screen must be completed before it can operate. For the convenience of SQLPos users, an option to import SQLPos's configuration directly can be used since SQLPos and AutoCharge share credit card processing components. The module uses its own internal transaction database to create and temporarily store payment transactions. Like A/R, such transactions must be "accepted" as being correct so that they can appear on their respective member account balances.

## Cautions

It is extremely important that AutoCharge transactions not be left in the workspace and that they are "accepted" at the earliest opportunity so that they can apply toward member balances. If they are subsequently NOT accepted, running AutoCharge again opens the door to double-charge the members for the balance that would have been settled had the original payment transactions been accepted.

For a variety of reasons, there is no auto-credit function for an erroneously doubled-up set of charges. The essential problem is that while the user has control over the local computer system and which transactions remain in the workspace and which have been accepted to member accounts, that level of control is not possible in the worldwide credit card bank interchange network. Sometimes a transaction may be posted to an account within minutes while other times, it may take two or more days for it to filter through the banking system and finally land at its

destination. Therefore, AutoCharge must be managed and used very carefully so as to eliminate double or over charging the customer's card.

It is highly likely that some transactions will be declined by the card processor; in such cases, the transaction audit log will include helpful information that can be used to create a manual charge transaction on a separate SQLPos or "shazam" terminal. Some examples:

1. **Card expired.** The system will display this problem in the audit report but for obvious reasons will not generate a transaction. To fix the problem, the card owner must be contacted and the card information stored in LockBox updated; afterward, AutoCharge can be run again and the transaction will be made.
2. **Invalid card number.** AutoCharge will attempt to use whatever card number is on file but for obvious reasons, the system cannot generate a transaction when the credit card processor has rejected the card altogether.
3. **Declined.** This can happen for various reasons, the most common of which is that the available credit for the card is less than the amount being charged. But there can be other reasons too, such as a poor network connection, an Internet gateway is too busy or down, or the amount attempting to be charged to the card is greater than the merchant's floor limit. The important thing to know is that only approved card transactions are stored in the AutoCharge workspace; a decline for any reason does not create a transaction that can later be redone which could conceivably double-charge the credit card.
4. **Member requests a refund.** Since there is no "auto credit" feature in this module, issuing a refund credit is a manual procedure that must be done via the merchant's Internet portal to his/her credit card processor or issued via check. The problem is that a refund often is requested many days after the original card transaction went through and the original transaction can't be easily recalled and cancelled.
5. The merchant wants to use the special CVV code on the card to get a lower exchange rate. AutoCharge does not provide for this, and LockBox is not designed to store this number. It is also likely a violation of your merchant agreement with the card processor to even store this number. Therefore, if you need to use the CVV value, you should use the "Payment on Account" feature built into SQLPos while the customer is present with his/her card; you can swipe the card using the POS software and as such, a "card present" transaction is created that affords you the lower rates.

## When is the best time to run AutoCharge?

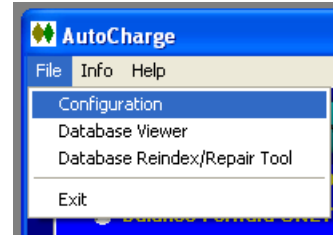
The short answer is immediately after or very soon after the close of an A/R month, after the month has been "finished" via normal the A/R "Finish Monthly" procedure.

Using AutoCharge during the midst of month-end processing may create unforeseen issues and is not advised. This is because at this time of the monthly billing cycle, member balances are very much in flux and are not "locked-in" until after the month has been completed.

AutoCharge may be rerun at any time during the month without worry of double-charging a member for his/her balance forward. The module always calculates the "net total" of the balance forward plus any credits or payments in the current month before creating a credit card transaction. When the option to use the balance forward plus all current month charges is chosen, the calculation includes the credits, payments and current month charges as well. For example, one could run AutoCharge every Monday morning and pick up the prior week's charges as well. Understand however that most credit card processors charge a per-transaction fee, so by running the module multiple times per month, you will likely encounter higher transaction fee expense than if you ran it only once a month.

## Configuring AutoCharge

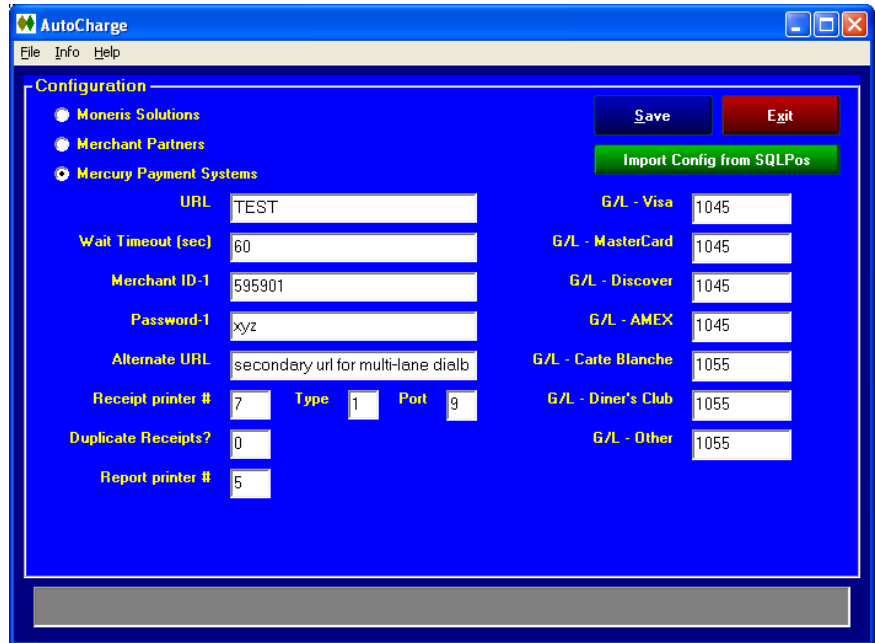
Once AutoCharge is running, open the configuration screen by clicking **File – Configuration**:



**Card Processor Selection:** select the radio button opposite the support card processor you will use. Depending on the choice, other boxes will appear or disappear. Complete information about these settings is in Appendix 2 of this guide.

**Receipt printer #:** A list will appear of printers installed on the computer. Select the printer to use for printing transaction receipts. If no receipt printer is installed, select the "No Receipt Printer" option.

**Type:** This applies only if a receipt printer is installed. AutoCharge supports several types of Star and Epson receipt printers; the dark gray helpwindow at the bottom of the screen will display the available option settings when the "type" box is selected.



**Port:** this is a future configuration feature; leave the default setting.

**Report printer #:** A list will appear of printers installed on the computer. Select the printer to use for printing the transaction audit log report. **A report printer is required**, even though the "no report printer" is displayed as an option. Without the ability to print a transaction log report, the usefulness of the module is severely compromised. The transaction log report is formatted for normal 8/12 x 11 paper.

**G/L - card type:** these boxes contain the G/L posting account numbers where receipts via the listed credit card types are to be recorded. These are normally level one asset G/L posting accounts. You should not post credit card receipts to either your cash or checking G/L accounts. Instead, you should use at least one separate G/L account for credit card receipts and consider assigning a separate G/L account for each credit card type for this can make reconciliation easier when you accept multiple cards and have many transactions on each every month. How your bank and merchant account provider reports the transactions to you can help you decide how many G/L accounts you'll want to have.

**G/L - Other:** if a credit card is used that cannot be recognized by the system, the posted value will be assigned to this "catch all" G/L account.

## Interaction with the LockBox Secure Storage System

AutoCharge decodes LockBox's securely stored data using the same 3DES encryption mechanism that LockBox uses. However, for AutoCharge to operate correctly, the LockBox data must be correctly entered into the LockBox system, such as:

- a) The member # in LockBox must be the same as the member number in the Club Office membership database. The member number is what AutoCharge uses to gather all of a specific member's information prior to processing a transaction.
- b) LockBox records must be set to "Use Credit Card information." Records that are set to "Use Bank information" will not be available to AutoCharge.
- c) The card name must be exactly typed the way it is spelled on the member's credit card.
- d) The card number must be typed in numeric form only -- without special characters or spaces. AutoCharge will strip dashes and extra spaces from the card number but it's better if these characters were never entered in the first place.
- e) The expiration date must be typed in MM/YY or MMY format. AutoCharge will strip out any / characters from the date. Examples: July 2009 would be entered as 07/09 or 0709. Do not use text abbreviations for the month or year such as May09 as they will not be evaluated properly by AutoCharge.
- f) The expiration date must indicate the card has not expired. AutoCharge will not process a transaction for a card that has expired.
- g) Because storing the CVV value or a card's magnetic track data is not allowed by the credit card companies, there is no facility in either LockBox or AutoCharge to either store or use them. Using these special fields of data is only available via SQLPos Point of Sale in a normal card present mode during a "payment on account" transaction.
- h) LockBox credit card types must be spelled or abbreviated correctly. AutoCharge uses the following credit cards and/or abbreviations:

<u>Card Type</u>	<u>Acceptable Abbreviation</u>
Visa	VISA
MasterCard	MASTER
Discover	DISC
American Express	AMEX
Carte Blanche	CARTE
Diner's Club	DINERS

If AutoCharge cannot identify the card type, it will attempt to process it as a VISA type using the "G/L Other" general ledger posting account number.

## Printing Receipts

AutoCharge can automatically print one or more copies (maximum = 9) of each receipt as card transactions are processed. The options to temporarily toggle receipt printing off or disable it altogether are also available. Only successful card transactions are printed; declined card transactions are listed in the audit log file but no receipt is printed.

The receipt is in three sections: the header section for club information, the details section for the card transaction data and a footer section for other information to print. The header and footer are both user defined by using any text editor such as Windows Notepad to edit the respective text file. The generic default files provided should be edited if receipts will be printed.

- The header file is named: **autoheader.txt**
- The footer file is named: **autofooter.txt**

When editing the file, remember that a receipt printer is usually limited to printing 39 or 40 characters per line, so edit your text accordingly. To add blank spaces, simply insert blank lines. To eliminate either the header or footer, simply delete the respective text file, or at the least, delete all the text in it so that the file is blank.

A sample of the generic receipt is displayed to the right:

```
AUTOHEADER.TXT file
Define this with as many lines of
text that you want printed as the
header on each AutoCharge receipt.
Be conscious of the normal 39 or 40
character per line limitation of a
receipt printer. If the AUTOHEADER.TXT
file does not exist, no header
information is printed at all and
only the basic receipt information
is displayed.

Date: 7/21/2009   Time: 10:33 AM
Ticket 265      Member# 207

-----
AutoCharge amount: $3.07
-----
--- AutoCharge Credit Card On File ---
Card #: *****8781   Exp:08/09
Name: ROBERT W. ANDERSON
Auth: 000011 AP
I agree to pay the above amount as
per the card issuer agreement.
-----

AUTOFOOTER.TXT file
Define this with as many lines of
text that you want printed as the
footer on each AutoCharge receipt.
Be conscious of the normal 39 or 40
character per line limitation of a
receipt printer. If the AUTOFOOTER.TXT
file does not exist, the basic
receipt is printed without a footer.
```

## Handling Declined Card Transactions

A credit card transaction can be declined for many reasons, only one of which is that the available credit isn't adequate to cover the charge value. A decline could happen because of an expired card date, an Internet connection problem, or something as simple as a typo error in the card number or name, or the card processor may decline the transaction but also request that the card information be verified by telephone. AutoCharge is designed to allow running the module multiple times without double-charging a member account.

The status of every attempted card transaction is displayed in the screen audit log; click the Print Report button to print the audit at the completion of a session.

- **Expired cards:** contact the card owner to verify the card number and new expiration date. Edit the information in LockBox and rerun AutoCharge to pick up the new information and charge the card.
- **Invalid date, card number or name:** contact the card owner to verify the card number and new expiration date. Edit the information in LockBox and rerun AutoCharge to pick up the new information and charge the card.
- **Invalid card type for the card number:** For example, Visa and MasterCard numbers are 16 digits in length; American Express' are 15 and Discover may be 16 or 17. Be sure to confirm both the number and the card type with their respective owners as you create or edit your LockBox database.

If no transactions are successful at all even though you're certain that the LockBox data is okay, the problem is likely a connection one. Check your connection to the Internet to make sure it is functioning properly. Other connection problems can arise when firewall or antivirus software is updated; in this case, configure the firewall or antivirus software to allow AutoCharge to poke "through" it.

An unexpected problem can arise if the card information is valid yet the amount of the charge is greater than the "per-transaction floor limit" established for your merchant account when it was originally set up. This error can happen if you add AutoCharge to an existing retail or restaurant credit card processing account without contacting your card processor and raising your limit. Be sure to set your limit high enough to accommodate the size of the transactions you will likely process.



## Transaction Corrections/Issuing Credits

**IMPORTANT:** There is no functionality built into AutoCharge to automatically generate credits or correct for prior erroneous charges. All credits or cancellations must be done manually by the merchant via the merchant's Internet portal with the card processor. Every effort has been made to prevent double-charging a card, but unexpected events can occur that could result in one or more cards being double-charged. For example:

AutoCharge payments are "accepted" in much the same way as normal chit transactions are accepted in the A/R system. "Accepted" transactions move from the A/R workspace to the "finished" transaction database; therefore, "accepted" AutoCharge payments flow into the current month's "finished" transaction database just as if the payments had been entered manually via the A/R system.

However, recall that the EOMEDITOR can be used to reverse, cancel or modify transactions *after* they've been accepted. If an AutoCharge payment transaction is reversed or changed, those changes do NOT flow back to the credit card processor automatically; they must be made manually via the merchant's portal on the Internet. The next time AutoCharge is run, it will charge the member's credit card again because the original "payment" transaction has been reversed and therefore, no longer shows on the member's account.

In like fashion, remember that virtually NO transactions inside the Club Office A/R system flow back to the credit card processor automatically. The lone exception is the issuing of a return sale through SQLPos POS and using the original credit card as the return tender, and even then, the card processors usually place limitations related to the number of days between the original transaction and the return sale for the transaction to be successful.

## Appendix 1 - Printing

A “local” printer is generally considered to be the printer that is physically connected to the workstation. A “network” printer is a printer that is somewhere else on your network, either connected to another workstation or as a stand-alone unit, such as you might find in an office that is shared by several people and several computers.

AutoCharge uses printers configured by their respective Windows printer number because it uses the Windows printing system for both local and/or networked printing. This way, the software doesn’t care where the printer resides – it merely sends the information to the printer number and lets Windows take care of things from there. However, this approach requires that the user configure the software to use the desired printer – it doesn’t happen automatically.

### Windows Printer Concepts

On a Windows computer, printers are assigned a numbered position on the list of printers on that workstation so that, for example, if you had 5 printers installed, Windows would assign #0 to one of them; followed by printers # 1, 2, 3 and 4 for a total of 5 printers (Windows starts its numbering system at zero instead of one.) However, whether these printers are available or not can affect the numbering system. If a printer is not powered on or if it’s a network printer, whether the workstation can “see” it makes a difference. Unfortunately, the “plug-and-play” features embedded into Windows sometimes causes Windows to reorganize this list on its own depending on what printers it can “find” when the computer is started. Obviously this can create some surprises such as when one expects to send an order to a printer in the kitchen yet the printing appears somewhere else. The solution is actually rather simple and logical: *install the printers in the order of importance:*

1. Uninstall ALL the printers on the computer. You need to start with a clean printers folder.
2. Add the local receipt printer first. If it needs to be shared on the network, go ahead and share it.
3. Add remote printer #1 next (if remote printing is used from this workstation).
4. Add remote printer #2 next, if necessary.
5. Add remote printers #3, #4, #5 (in that order), if necessary.
6. Finally, if a report printer or other network printer is also used at the workstation, add them last. You can still set any of them to be the “default” Windows printer so that when you print reports, emails, etc. they will go to the default.
7. Restart the computer to let Windows settle-in with the new printers. (It’s possible that Windows may reorganize them again after a restart because some printer or software manufacturers design their Windows printer drivers to force “their” products to appear at the top of the list. Examples of this are ScanSoft’s PDF Create, Microsoft Office Document Image Writer and various PC-based fax systems.)

By following the above example, it’s probable that all the point-of-sales printers will be at the beginning of the list and the position of each in the Windows list shouldn’t change – after all, they’re “always on.”

### How Deleting a Printer Affects a Workstation

Deleting one or more printers causes Windows to reorganize the list and *which one* you delete can throw things out of sync. For example, if there are 6 printers installed on the computer (printers # 0 through 5) and #2 is deleted or uninstalled from the workstation, Windows will reorganize the

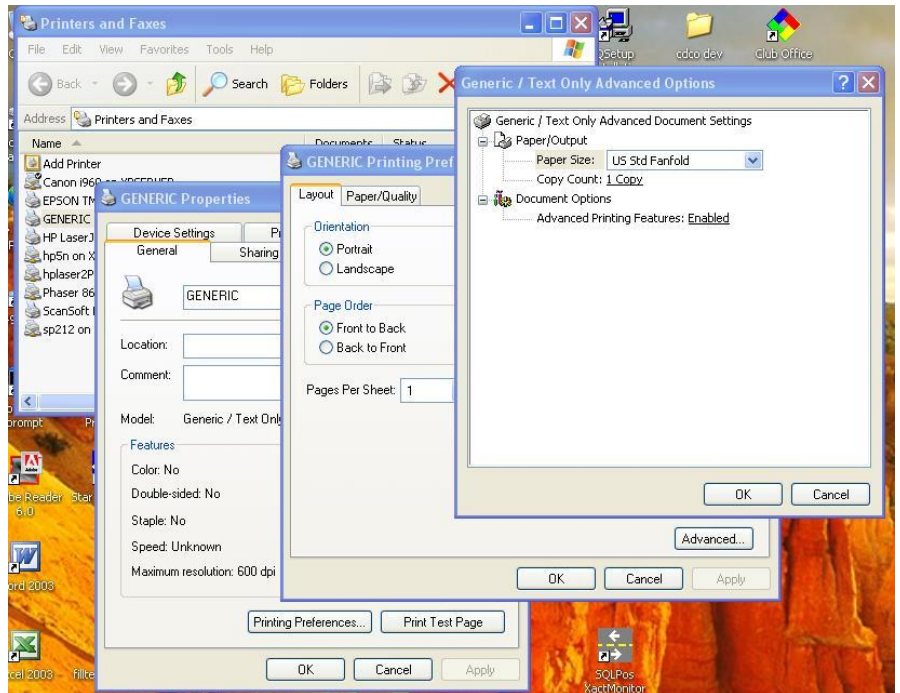
numbers for the remaining printers so that what was printer #3 is now #2, old #4 becomes printer #3 and old #5 becomes #4. This is why the report or other network printers must be added last – adding or deleting to the END of the list rarely has any bearing on the critical printer numbers at the beginning of the list and the receipt and remote printers should stay enumerated properly.

**IMPORTANT:** If you find you must delete a Windows printer, you should check the AutoCharge configuration panel on the workstation and possibly reset the printer numbers for the local and remote printers in use.

### Generic “Text Only” Printer Driver

AutoCharge prints through the Windows printing system using Windows printer drivers. If you can't find the Windows printer driver for your specific brand of printer, you can try the Generic Text Only printer driver that is supplied with Windows. The following information should also be helpful.

1. Install the “Generic Text Only” printer on the computer to which the printer is connected.
2. Right-click on the printer's properties, on the general tab, select the Printing Preferences button.
3. On the Printer Preferences Layout tab, select the Advanced button.
4. In the Advanced Options screen, set the paper size to US Std Fanfold.
5. Be sure to save the settings.
6. Start AutoCharge, go to the configuration screen.
7. Set the “receipt printer” to the Generic Text Only Printer.
8. Set the printer type to 0 (the Star setting).
9. Set the port to the port to which your receipt printer is connected (or 9-Windows)
10. When you close the configuration screen, the new configuration settings are reloaded automatically.



If the generic text printer is a remote printer, set the remote #1, remote #2, etc. options to direct printing to the appropriate printer. Set the remote printer types to 0 (the Star setting).

Note: It's possible that the generic driver may not work properly with your receipt printer; receipts may be too long, the receipt cutter may not function and the cash drawer may not open. However, if you are unable to locate a suitable Windows printer driver for your printer, trying the generic driver is worth the effort.

## Appendix 2 – Credit Card Configuration

Your merchant account guide contains critically important information about protecting your business and your credit card sales, as well as helpful procedural information about handling card transactions manually (voice authorizations) and more. As you integrate credit card processing into your business, use the guide to develop procedures to handle the “what if” situations that sometimes develop. Don’t leave your servers in the dark – develop solid procedures that enable them to accommodate your customers with a minimum of inconvenience.

AutoCharge includes three embedded Internet-based card processing networks: Merchant Partners, Moneris Solutions and Mercury Payment Systems. Moneris and Merchant Partners share configuration settings as Moneris uses the Merchant Partners card processing gateway. Credit card processing software is integrated into AutoCharge via custom DLLs (dynamic link libraries) named ATSSecurePost.DLL (Merchant Partners/Moneris) and DSIClientX.OCX (Mercury Payment Systems). These libraries are automatically installed on your computer during the AutoCharge installation. They provide certified 100% secure and PCI-compliant data transfer functions of your customers’ credit card information to/from the processing web sites and transactions are typically validated in a matter of seconds. AutoCharge is fully PABP/PCI-compliant and does not store full credit card numbers, track swipe data or CVV codes in any way.

To use AutoCharge’s built-in credit card processing capability you need the following:

- **A merchant account.** We selected Merchant Partners, Moneris and Mercury Payment Systems as our card processors because their systems are secure and quick and they stand behind their services. What’s more, they can work with any bank, even if your bank doesn’t currently offer merchant credit card processing on its own. **Important:** When you establish your merchant account, be sure to have your merchant account representative set it up as an “auto batch closing” account so that card sales that are made through AutoCharge are finalized by the card processor automatically and without further action. AutoCharge does not use nightly “batch” actions that are so common to external card swipe terminals.
- **An always-on, cable, DSL, satellite or other broadband connection to the Internet.** AutoCharge does not include native functionality for dial-up credit card processing.
  - If you are in an area where your only option is dial-up but you have a dedicated phone line to use, you can use a “proxy server” to perform the dial-up Internet connection. An excellent yet inexpensive proxy server software product is WinProxy ([www.winproxy.net](http://www.winproxy.net)) and it can serve as a local connection to the Internet for multiple computers either in an always-on or dial-up setting. WinProxy also includes automatic anti-virus and anti-spam capability and can help secure your own internal network from outside Internet hackers.

### If You Already use SQLPos Point of Sale

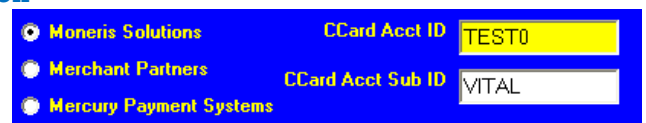
If SQLPos POS is also installed on the computer, a green button to “Import Config from SQLPos” appears on the AutoCharge configuration screen. Click it to quickly import the same settings that you’re already using for SQLPos.



**Important:** Remember that the floor limit (maximum dollar value per transaction) you set for POS use may be quite a bit lower than what you’ll need for AutoCharge. Contact your card processor for information on changing it.

### Merchant Partners/ Moneris Solutions Configuration

- The Account ID and Sub ID (when applicable) identify your business within the Merchant Partners and Moneris systems.
- Your Account ID will likely be 5-characters in

A screenshot of a configuration window with a blue background. On the left, there are three radio buttons: 'Moneris Solutions' (selected), 'Merchant Partners', and 'Mercury Payment Systems'. To the right, there are two input fields. The first is labeled 'CCard Acct ID' and contains the text 'TEST0'. The second is labeled 'CCard Acct Sub ID' and contains the text 'VITAL'.

length, and you may or may not be issued a Sub ID. Generally, over-the-counter retail operations will likely have only the Account ID while a facility that has both retail and restaurant sales may have both. In either case, once your system is configured with a valid Account ID, SQLPos' credit card processing is automatically activated.

- **TEST MODE:** The sample AcctID (**TEST0**) and SubID (**VITAL**) configuration displayed above can be used to test your Merchant Partners/Moneris card processing without affecting your bank. However, be advised that using actual credit cards even in test mode can affect the available credit on file for the credit cards used and could, in some cases, even create a sale transaction. Instead of using an actual credit card, use the following **Visa** test card number and expiration date:

5454-5454-5454-5454      Exp date: type the current month and year (ex: 1109)

### Mercury Payment Systems Configuration

- You need complete only two of the boxes: the **URL** and **Merchant ID-1**. The other configuration boxes are for using Mercury DialBridge (covered later in this appendix).
- **URL:** This setting determines which Internet MPS processing server to use. Mercury provides a test server that can be used for testing/training and a live server for actual card processing. Type **TEST** to use the MPS test mode server and turn on test auditing; type **LIVE** to use the real server for actual card processing.

<input type="radio"/> Moneris Solutions	
<input type="radio"/> Merchant Partners	
<input checked="" type="radio"/> Mercury Payment Systems	
URL	TEST
Wait Timeout (sec)	60
Merchant ID-1	595901
Password-1	xyz
Alternate URL	secondary url for multi-lane dialb

- **Merchant ID-1:** Your MPS representative will assign one or more Merchant IDs to your facility depending on a variety of factors. For example, if you are assigned an ID for retail and a different ID for the restaurant, it's important to configure the right registers with the proper IDs. Type your Merchant ID into the Merchant ID-1 box.
- **Wait Timeout, Password-1, Alternate URL and (unused):** Reserved for future use; leave the defaults that appear unless you have the DialBridge option.
- Click **SAVE** to save the MPS configuration settings. The system creates an encrypted data file named **mpsflag.dat** in the CDCONODE folder. This file is specific to the register itself, meaning that each register has its own mpsflag.dat configuration file, even if they contain the same configuration settings. AutoCharge loads this configuration file into memory when the credit card box appears on the register screen.
- **TEST MODE:** The sample configuration displayed above can be used to test your Mercury card processing without affecting your bank. However, be advised that using actual credit cards even in test mode can affect the available credit on file for the credit cards used and could, in some cases, even create a sale transaction. Instead of using an actual credit card, you can use the following test card numbers and expiration dates. You must also limit Mercury test sales to \$10.00 or less per transaction or you may receive an error.

Visa	4003-0001-2345-6781	Exp date: 0809
MasterCard	5499-9901-2345-6781	Exp date: 0809
Amex	3739-532443-61001	Exp date: 0811
Discover	6011-0009-9723-5373	Exp date: 0811

**CAUTION:** In test mode, be sure to use *both* the **TEST** URL and **595901** merchant ID instead of the live URL and your own merchant ID!

## Extremely Important Credit Card Testing Information

- Neither AutoCharge nor Club Office make a distinction between test transactions and actual transactions and that whatever you sell in a “TEST” mode will appear to the rest of the system as ACTUAL PAYMENTS inside the Club Office A/R system. Because AutoCharge places credit card payments into the monthly “accepted” transaction database, be sure to use the EOM Editor to reverse the TEST transactions before putting the system into a live, operation mode.
- Be advised that even though a test merchant account may be used, if you use a REAL credit card to test a sale, it will likely affect the card’s available credit by tagging a potential value on it, or worse yet, an actual sale may go through on it. *Be very careful!*
- **After testing is complete, remember to change the credit card configuration settings so they reflect your actual, real settings for your business. Failure to do this will likely result in lost deposits to your bank account.**

## Error Messages

Credit card processing is one of the most complex technological activities that one may do in the normal course of business. A great many technical things must happen behind the scenes so that the simple swipe of a credit card can transfer money from one bank account to another through dozens of computer systems and across potentially many thousands of miles yet do so in only a matter of seconds. Because of the vast complexity of the entire inter-bank system, errors periodically occur. After all, the Internet is a vast system of interconnected computers and other electronic devices and much is dependent on just being able to keep the whole system “talking” between the various physical pieces of equipment.

**IMPORTANT:** Merchant Partners, Moneris Solutions and Mercury Payment Systems use similar yet different messages and codes to inform the user that a problem exists. Complete information is provided in the merchant account materials provided by the processor you choose.

Normally, approved transactions appear in the transaction log screen like Tran# 309 and #310 in the example to the right: you’ll see the word **Approved** followed by the value and the approval code from the card processor. Every attempted card transaction is listed in the log screen along with some information as to what happened.

```
AutoCharge Transaction Log - 07-22-2009 - 09:46:24
-----
Tran# 308 - Mem# 109 - Card has expired or invalid date found
Tran# 309 - Mem# 207 - Approved: $3.07 - 000057 AP
Tran# 310 - Mem# 274 - Approved: $3.74 - 000097 AP
Tran# 311 - Mem# 312 - Account does not have a debit balance-no charge made
-----
Totals:   Records sent: 2   Amount: $6.81
```

In the case of a declined card, it can be a bit more challenging because there are multiple reasons why a card transaction may be declined. Note the difference in the two examples to the right:

```
Tran# 293 - Mem# 207 - Declined or a processing error occurred -
Tran# 294 - Mem# 274 - Declined or a processing error occurred -
Tran# 305 - Mem# 207 - Declined or a processing error occurred - Declined
Tran# 306 - Mem# 274 - Declined or a processing error occurred - Declined
```

In tran# 305 and 306, **Declined** appears at the end of the line. This space is reserved for messages from the card processor’s system, and in this case, it means the *processor* rejected the card for some reason. In tran# 293 and #294 there is no message at the end of the line. No message at all means that there was no connection to the card processor and indicates that the computer likely has a physical connection problem to the Internet – perhaps a network cable has become unplugged, the club’s router is off or needs to be rebooted or the club’s DSL/broadband connection is not working.

Therefore, if all cards are being declined yet there’s no **DECLINED** message at the end of the transaction log line, check to see if your Internet connection is working. If you can visit multiple web sites via your browser, then your connection is probably okay and the issue is most likely one of a firewall or antivirus software configuration nature. In any event, until this is solved AutoCharge cannot process credit card transactions.

If all cards are being declined and there's a **DECLINED** message at the end of the transaction log line, the problem is likely a configuration one – perhaps the merchant ID is typed wrong in AutoCharge's configuration, or your merchant account's floor limit is set too low – call your card processor and raise your floor limit.

Typical Mercury Payment Systems response codes are text messages such as Call ND, Call AE, Call Discover, Declined, etc. AutoCharge will always display "AP" for cards that are "Approved." Merchant Partners and Moneris return numerical codes – often very long ones – that indicate specific issues and almost always involve a call to the card processor for explanation and a solution.

### Technical Information

- **Connection type:** AutoCharge's credit card processing uses the TCP/IP protocol, port 80 for HTTP and port 443 for HTTPS (secure socket layer) connections. These are the standard settings for these two settings on most any Windows XP computer. When using Mercury Payment Systems, the system communicates through port 9000.
- **Firewall issues:** a firewall can easily prevent connection to the Internet. In some cases, your normal browser may work fine yet the firewall could filter out any attempts AutoCharge may make to send data over the Internet. You may have to set your firewall to allow AUTOCHARGE.EXE to communicate through the firewall on ports 80, 443 and 9000. Consult your firewall software's provider or built-in help for assistance.
- **Anti-virus, anti-spyware or ad-prevention software:** these software products can often function similarly to a firewall and can prevent successful card processing as well as software updates. Consult with the appropriate software product's provider or built-in help for assistance.

### Duplicate Credit Card Transactions

AutoCharge sends a ticket number along with the sale information and credit card data when processing a card transaction. Because the AutoCharge ticket number is unique, duplicate credit card transactions are extremely rare. However, it's possible that it could happen if, for example, the original sale went through but the approval code never reached the register because of traffic or other connection issue on the Internet.

**Mercury Payment Systems:** If you encounter an authorization code that reads **AP\*** instead of just the normal **AP** code, it means that the transaction just sent was apparently a duplicate of a previous transaction. Don't worry – Mercury's \* code is just informational and the card holder's card will not be charged twice.

**Merchant Partners/Moneris:** To prevent accidentally double-charging customers as well as to prevent possible fraudulent credit card use, credit card processors typically scan for certain situations such as the same credit card number being used multiple times, the same card number too soon since the last time it was used, two transactions with exactly the same date, card number and value that are too close together in time, and several other situations.

Sometimes, however, it may be desirable to allow virtually duplicate transactions to be approved. For example, assume that a member uses the same credit card to pay for multiple member accounts, such as could occur in the case of a company owning several club accounts. It's possible (but very doubtful) that the credit card processor might consider the second transaction as a duplicate and it could be declined.

When processing a credit card, SQLPos sends the ticket number along with the rest of the card information so that even if the sale information and credit card is the same, at least the ticket number is different which proves that it is not a duplicate transaction. However, Moneris requires that the **MerchantOrderNumber** setting be activated before the system will use the ticket number in its determination of whether the sale is a duplicate. Activating this feature is performed via the Moneris Online Merchant Center system.

Logging into the Online Merchant Center is described in the previous section entitled Handling “Return Sales” via Credit Card. After logging in, continue with the following to enable this feature:

- Go to the FRISK management menu
- Select Configure Options
- Select Prevent Duplicate Transactions
- Select to ENABLE the MerchantOrderNumber
- Be sure to save your settings before you log out.

### **Credit Card Processing Performance**

The typical response time for AutoCharge’s embedded credit card authorization functions is between 1-8 seconds, although it is of course dependent on (1) How fast your Internet connection is and (2) how busy the Internet is. If you experience authorization times greater than ten seconds, you should run some Internet speed tests on the computer that’s underperforming to first determine its general performance level before contacting either your chosen card processor or Club Data Technical Support.

Other factors that affect performance are the computer’s processor chip speed, the amount of RAM memory in the computer, the number of other applications that are running concurrently and the anti-virus and firewall software the computer uses. Here are some general guidelines:

- Processor chip speed: faster is better
- Amount of RAM memory: more is better
- Number of applications running concurrently: fewer is better
- Anti-virus/firewall software: you need only one of each; running multiple protection products almost always slows down any computer.



## Appendix 3 - Mercury Payment Systems – DialBridge Option

An additional option with Mercury is an automatic fall-back card processing connection called DialBridge. DialBridge is a hardware/software configuration that automatically senses whether the Internet is working and uses the fast Internet connection if it's available or a telephone dialup connection if the Internet connection is not working. It's automatic -- there's nothing the operator needs to do other than wait for a few more seconds because telephone connections aren't quite as fast. DialBridge uses a special external modem that connects to both the computer via a standard serial port and to the telephone line by a common telephone wire. For facilities that need automatic redundancy in their card processing operations, DialBridge is an excellent solution.

Mercury Payment Systems	
URL	TEST-DIALBRIDGE
Wait Timeout (sec)	60
Merchant ID-1	595901
Password-1	xyz
Alternate URL	secondary url for multi-lane dialb

To configure AutoCharge to use DialBridge as its backup connection, just include the word **DIALBRIDGE** in the URL line when configuring Mercury Payment Systems at the SQLPos configuration screen, such as in the above example. Type **TEST-DIALBRIDGE** if you're in test mode; type **LIVE-DIALBRIDGE** if you're in a live card processing mode. **If you are NOT using a DialBridge unit on the computer, DO NOT include this key word in the URL configuration line as it will prevent AutoCharge from connecting to the Internet through your normal connection.**

To configure AutoCharge to use DialBridge as its backup connection, just include the word **DIALBRIDGE** in the URL line when configuring Mercury Payment Systems at the SQLPos configuration screen, such as in the above example. Type **TEST-DIALBRIDGE** if you're in test mode; type **LIVE-DIALBRIDGE** if you're in a live card processing mode. **If you are NOT using a DialBridge unit on the computer, DO NOT include this key word in the URL configuration line as it will prevent AutoCharge from connecting to the Internet through your normal connection.**


**Multi-Lane mode:** DialBridge can be configured in your network on a single computer or as a "multi-lane" connection where one computer can process cards for up to three other units. The multi-lane configuration utilizes the **Alternate URL** configuration field for the IP network address of the computer that is *physically connected* to the DialBridge modem.

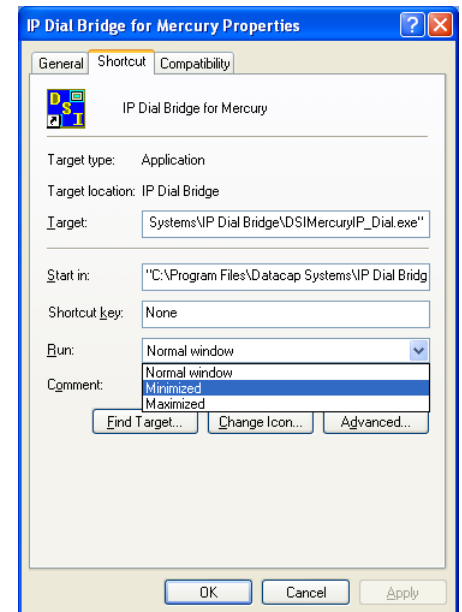
Multi-lane is an *advanced topic* that is beyond the scope of this manual. If you are not using multi-lane, leave the Alternate URL field blank or as shown in the example above. Contact your Mercury representative as well as Club Data technical support for more information *before* attempting to use multi-lane card processing for there are multiple other networking and firewall issues that can prevent multi-lane from working successfully.

### DialBridge requirements:

- An always-on Internet connection (DSL, broadband cable, etc.)
- A dedicated telephone line. Do not use a line that's shared with a telephone or fax or another computer.
- A COM port on the computer that the modem will be connected to.
- A Datacap DialLink modem. A regular modem will not work. Your Mercury Payment Systems representative can order one for you.
- An electrical power outlet for the modem's power supply.
- Windows XP, 512mb of RAM or more recommended.
- 1-gigabyte of available hard disk space.
- Microsoft Internet Explorer 5.5 or higher with 128-bit encryption.
- MPS Bridge software (provided with the modem, easily downloadable from [www.datacapipay.com](http://www.datacapipay.com) or available from Club Data.)

### DialBridge installation in a nutshell:

1. Connect the modem to a dedicated phone line.
2. Connect the modem to the computer's serial port.
3. Connect the modem's power supply and plug it into an A/C outlet.
4. Install the software; it usually requires that the computer be rebooted.
5. Click Start-Programs, and then double-click on the **Startup** program group to open it in its own window.
6. Click Start-Programs again, find the **Software from Datacap** group and the **IP Dial Bridge for Mercury** menu item: RIGHT-click on it and choose COPY.
7. RIGHT-click inside the Startup folder and choose Paste Shortcut.
8. RIGHT-click on the IP Dial Bridge shortcut that you just pasted into the Startup folder and choose **Properties**.
9. In the shortcut properties tab, choose the **RUN** option and set it to **Minimized**.
10. Click **Apply**, then click **OK**.
11. Close the startup folder and restart the computer one more time.
12. When the computer restarts, the DialBridge agent will start automatically and run in a minimized mode, out of sight on the taskbar, like this:  
  
DialBridge is sort of a miniature "proxy server" that runs in the background. It always chooses to connect via the Internet first and if it can't connect that way, it falls back to the dial-out method – *all automatically*.
13. Start AutoCharge and configure the Mercury Payment Systems screen by adding the key word **DIALBRIDGE** in the URL configuration box.
14. Save the settings and you're ready to go.



### DialBridge error 3051

If DialBridge isn't running when you try to process a credit card you will likely receive 100% declines along with error 3051 and possibly the message "No Connection to any Server!" Clicking GO again won't help. **The problem is that the DialBridge software is not running.** The solution is simple:

1. Print the transaction audit report just like normal, then close AutoCharge.
2. Click **Start – Programs – Startup – IP DialBridge from Mercury**.
3. Wait 5-10 seconds to give DialBridge time to initialize itself and start operating.
4. Try AutoCharge again.

Be sure to train your users in how easy and quick it is to solve this problem.

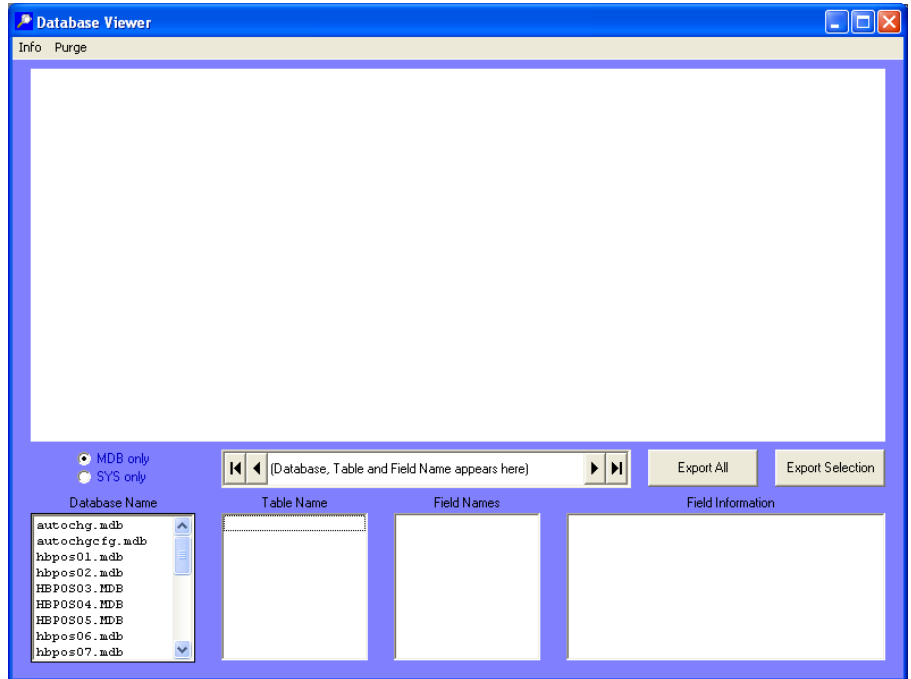
**Note:** If you do not use DialBridge *but configure AutoCharge to use DialBridge anyway*, you will also encounter this problem. Simply remove the key word **DIALBRIDGE** from the URL configuration option in AutoCharge configuration.

## Appendix 4 – Database Viewer

The FILE menu includes an option to open the database viewer. The viewer can be used to view configuration or raw transaction data inside the AutoCharge databases. Upon startup, AutoCharge minimizes itself to the Windows Taskbar and provides this message in front of the Database Viewer screen:

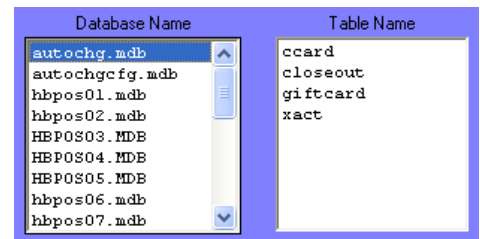


You may see several MDB database files in the first box (Database Name) on the lower left of the screen; AutoCharge uses only the two that appear at the top of the list.



- **autochg.mdb** contains transaction data from completed card transactions.
- **autochgcfg.mdb** contains configuration settings for the AutoCharge module.

Highlight the **autochg.mdb** transaction database in the database name box; the tables of data inside the database will appear in the “table name” box, the second box on the lower left of the screen. Selecting a table in the table name box populates the remainder of the boxes and displays the data residing in the chosen table. Examples:

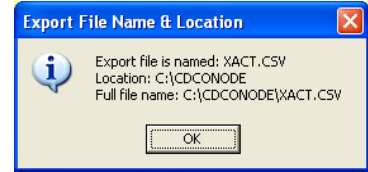


- **ccard** contains information about completed credit card transactions.
- **closeout** will be blank and void of any data.
- **giftcard** will be blank and void of any data.
- **xact** contains detailed payment transaction data that was transferred to the accounting system when payments were “accepted” (as well as any that have *not* been accepted).

Once the data is seen in the display, it can be sorted in ascending order by any of the columns of data simply by clicking on the column heading itself. The example below is from the ccard table:

ticket	CCName	CCNumber	ExpMonth	ExpYear	Amount	Swipedata	Accepted	ResultRefCode
289	ROBERT W. ANDERSON	0000000000006781	08	2009	307	207-AutoChg-20090721	1	KbMCC1641500721
290	CHARLES BARNETT	0000000000006781	08	2009	374	274-AutoChg-20090721	1	KaNcAV d5e00-000

The viewer includes button options to export the currently displayed data (or selected portions of it) in a CSV (comma-separated-values) format that can be imported into a spreadsheet for further analysis. To select a portion of the data, use the vertical scroll bar on the right side of the grid to locate the first record to export, and highlight the entire row by clicking on the small gray box immediately to the left of the first column. Then hold the SHIFT key down on your keyboard, use the scroll bar to locate the last record, and highlight the last row. All the items between the top and bottom rows will then highlight, and you may use the export selection button.



The export may take a few moments; the screen will display a message during the process and at the end, a message such as the one to the right will appear, stating the name of the file and its location; the system defaults to export into the CDCONODE folder on the computer's hard disk.

### Why the Database Viewer is Valuable

AutoCharge moves money from the cardholder's bank account to yours. Few pieces of software operate at this highly sensitive level and sometimes, credit card activities may cause difficulty in balancing your bank account. The **CCARD** table of the transaction database contains transaction code information that the card processor returned to you for successful transactions. It's proof of money that should be in your bank account, and it can help you balance your checkbook. Use the viewer's scrollbars to scroll right/left, up/down to view the columns of information.

ticket	CCName	CCNumber	ExpMonth	ExpYear	Amount	Swipedata	Accepted	ResultRefCode
289	ROBERT W. ANDERSON	0000000000006781	08	2009	307	207-AutoChg-20090721	1	KbMCC1641500721
290	CHARLES BARNETT	0000000000006781	08	2009	374	274-AutoChg-20090721	1	KaNcAV d5e00-000

In situations where a transaction doesn't appear on your bank statement, the "result" code fields (shown below) contain the actual codes the card processor sent back to you; they prove the validity of the transaction and can help solve disputes. AutoCharge stores other proprietary status codes in other fields that tell whether the successfully completed transaction was "accepted" and transferred to the A/R system; in the example below, the status column contains the number 4, which means they were successfully "accepted." If a 2 is displayed, it means it has not been "accepted" yet.

ResultRefCode	ResultOrderID	ResultTransID	ResultAuthCode	AltErrorFlag	LastError	status
KbMCC1641500721-000011	0002	KbMCC1641500721	000011	0	AP	4
KaNcAV d5e00-000051	0003	KaNcAV d5e00	000051	0	AP	4

Selecting the XACT table displays other transaction information that relates to the actual Club Office "payment" transaction that was created and transferred to the accounting system. This table has many fields but includes the date and time as well as fully-formatted information exactly as it appeared in the chits themselves:

joschitdate	osacctnum	eracctnum	itemployee	schitcovers	oschitbase	schitsrvchg	poschittax	joschittotal	posmemo	ostendtype	p
20090721	1045	207	0	0	(\$3.07)	\$0.00	\$0.00	(\$3.07)	AutoChg AP000011	4	4
20090721	1045	274	0	0	(\$3.74)	\$0.00	\$0.00	(\$3.74)	AutoChg AP000051	3	3

## Sample Authorization Form

You might use some of the ideas presented here to help you design a form that your customers can use to authorize the club to charge their credit cards. Before getting too deep however, you should most certainly consult with your club's legal representative to make sure you've covered all the necessary issues appropriately.

### (Club name) Automatic Payment Program Authorization Form

Please complete this form and return it to the office at the address below. Thank you!

Authorization Start date: \_\_\_\_\_ Stop date: \_\_\_\_\_

Credit card type: Visa \_\_\_\_\_ MasterCard \_\_\_\_\_ Amex \_\_\_\_\_ Discover \_\_\_\_\_ Other \_\_\_\_\_

Name as printed on card: \_\_\_\_\_

Card number: \_\_\_\_\_

Card expiration date as printed on card: \_\_\_\_\_

I agree to allow (club name) to apply monthly club charges in full to the above credit card beginning with the listed start date and ending with either the listed stop date or the card expiration date, whichever is sooner. I understand that the charge to my card will be made during the first week of each month.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Mail to: Club name  
Attn: Business Office  
Street Address  
City, ST ZIP

## Notes