
IC VERIFY

Reference Guide



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Getting Started

About This Document

This Quick Reference Guide is intended to provide you with basic information that will enable you to take advantage of IC*VERIFY*'s features and begin processing transactions right away. If you have not completed setup yet, refer to your Quick Setup Guide for information on how to set up IC*VERIFY* to process transactions.

Conventions Used in This Manual

Different processing networks use different labels for similar functions. In other words, a function may have a different name depending on the processing network used. The IC*VERIFY* Graphical User Interface (GUI) will use the terminology native to your processing network, but this manual must occasionally present information using a hybrid of these mixed terms. For example, the command "Settle/Close Batch" might be known as Settle, Settle Batch, Close, or Close Batch, depending on the processing network. An attempt will be made to display all of the common terminology for a particular function so that it may be readily recognized.

Tips for New Users

If you have never processed credit card, debit card or check guarantee transactions before, you may be wondering how to begin. This section is intended to provide you with some ideas to help get you up and running as quickly as possible. You may want to start out by reading the sections titled *Overview of Processing Networks* (starts on page 5) and *Processing Credit Card Transactions* (starts on page 9).

To get acquainted with IC*VERIFY*, try running it in Training Mode. When Training Mode is used, IC*VERIFY* will simulate a response from the processing network without actually dialing out and processing transactions. All transactions authorized or settled while in Training Mode are stored separately from live transactions. While in Training Mode, the software will always approve transactions done for an even amount. Transactions done for an odd amount are usually

rejected. Training Mode is a no-risk tool that can be used to learn how *ICVERIFY* operates without having to worry about the consequences of making mistakes while practicing. To place *ICVERIFY* in Training Mode, select **Options** from the **Edit** pull-down menu, then click the **Training Mode** check box.

When using Training Mode, there are some test card numbers embedded in the software that can be used for testing purposes. Pressing Ctrl-Alt-X simultaneously will fill in the appropriate fields with credit card information. Processors recognize these cards as test numbers and will not transfer any funds when transactions are done with them. These cards will be declined by most processors when used with a live merchant account, but even if they do not generate an approval they can still be used to test your modem's ability to connect with the processing network (or to practice in Training Mode).

ICVERIFY has a context-sensitive help feature that can be used while processing transactions. At the bottom of the graphical user interface there is a large field that normally contains a list of transactions. Clicking on the tab with the question mark will activate the context-sensitive help. The field that normally lists transactions will then provide you with information about menu items as the cursor is moved over them.

In addition to the context-sensitive help, there are some online help files available:

- A help file for the Graphical User Interface. This can be accessed by pressing F1 when *ICVERIFY* is running.
- A help file for multi-user and multi-merchant integration. This file can be accessed by pressing F1 when *ICVMLT32.EXE* is loaded (*ICVMLT32.EXE* is an integral part of a multiple user setup).
- A help file for the setup program. This can be accessed by pressing F1 in Advanced Setup.

About IC*VERIFY*

IC*VERIFY* is the leading electronic transaction processing software package on the market, providing credit card authorization /draft capture, check guarantee and debit/ATM card authorization functions. IC*VERIFY* operates on open-platform, Point-Of-Sale/business systems worldwide. In addition to transaction processing, IC*VERIFY* provides transaction storage, tracking and retrieval, reporting and integration capabilities.

IC*VERIFY* is available for Windows, DOS or UNIX systems and can be configured for single-user, multi-user and/or multi-merchant operation (additional licensing may be required).

IC*VERIFY* solutions are used in both traditional retail environments such as general retail, restaurant, hotel, car rental, travel, and in non-traditional retail environments such as internet, kiosk, catalogue, mail/phone order, CDPD and wireless communications. IC*VERIFY* supports transaction processing through more than 100 major processing networks.

IC*VERIFY* places many powerful features at your fingertips. With IC*VERIFY* you can:

- Process VISA, MasterCard, American Express, NOVUS, Diners Club, Carte Blanche, JCB and private label cards.
- Integrate easily with existing merchant software systems. Produce comprehensive transaction reports which can be printed or viewed on screen. Transaction data can be imported/exported into other applications such as order entry programs, point-of-sale systems, databases, Internet shopping carts, spreadsheets, etc.
- Store up to nine years of transaction information for financial tracking, reconciliation and marketing demographics.
- Use 2-track Magnetic Stripe Readers for credit cards, 3-track Magnetic Stripe Readers for credit cards and magnetic stripe

driver's licenses, keyboard MICR Readers for checks and Magnetic Stripe Readers with pinpads for Debit/ATM cards.

New for Version 2.X

Some new features have been added to version 2.X of our Windows product:

- A new, easier to use Graphical User Interface (GUI) that dynamically changes to reflect the terminology and transaction options of the merchant's processing network.
- Improved import/export functionality. *ICVERIFY* can easily import or export transaction data to and from external applications.
- Installment (recurring billing) support.
- All printer configuration options have been removed from the setup program. Report and receipt printers can be set up by selecting **Printer Setup** from the **File** pull-down menu.
- Improved access to historical data. *ICVERIFY* is able to store up to nine year's worth of transaction data, which can be accessed using a variety of reporting options. Version 2.0 allows the merchant to reprint receipts from historical transactions.

Overview of Processing Networks

As mentioned in the Quick Setup Guide, merchants are set up by their financial institution to process their transactions through a *Processing Network*. ICVERIFY uses your computer's modem to contact this processing network directly. The processor acts as an intermediary between the merchant and the credit card company - it checks the customer's account and then (if the funds are available) approves the transaction and routes the proceeds to the merchant's account. In addition to processing credit cards, many processing networks also handle debit card and check guarantee transactions.

Not All Processors Handle Transactions the Same Way

Credit card processing always involves at least two steps (the second step may or may not be apparent to the merchant):

The first step is generally referred to as *Authorization*. When a credit card transaction for a sale is processed, ICVERIFY connects with a credit card processing network and submits the transaction request. The processing network takes the request and matches it with a database maintained by the bank that issued the credit card. If there's enough credit available, the transaction will be approved and the necessary funds will be held in reserve. This reduces the card's "open to buy", reducing the available credit by the transaction amount. No money changes hands at this point. Approved transactions are stored by ICVERIFY in an open batch.

The next step is the *Settlement* (or "*Close Batch*") procedure. A merchant *must settle* before the funds from approved transactions will be deposited in the merchant's bank account. The authorization process is uniform, but the settlement procedure is not. For settlement, processors can be divided into two categories: *Terminal* and *Host*.

Terminal-based processors require that the merchant connect to the network and submit the open batch (which contains all of the transactions that were previously approved) for settlement before the funds from the approved transactions are deposited into the

merchant's account. This is done with one phone call; *ICVERIFY* submits the open batch for settlement, gets an approval for the batch, logs off and transfers the settled transactions from the open batch to the history files. The money (minus any interchange fees) then gets transferred to the merchant's account. Settlement can be done at any time with terminal-based processors.

A Host-based processor maintains the open batch. As *ICVERIFY* is authorizing transactions, the host based processor keeps track of the unsettled transactions for which the merchant has received approval. Some host-based processors will *auto-settle* the merchant's batch. This means that at a certain point each day, the processor will automatically close out the batch at its end. *ICVERIFY* uses the computer's internal clock to automatically transfer the open batch into the history file without contacting the processor. Some host-based processors do require that a settlement be performed, however only batch totals are sent unless an out of balance condition is encountered.

Most merchants that need to settle go through a settlement procedure at the end of each day. *ICVERIFY* automatically processes all credit cards authorized since the last settled batch. Once settlement has been completed (either by the merchant or the processor) the funds will be deposited the merchant's account at a time determined by the merchant's agreement with the bank or card company. To settle an open batch, choose **Settlement/End Day** from the **Function** pull-down menu.

Here's a summary of what has been covered so far:

- When processing transactions, merchants connect to a processing network. This is an entity which acts as an intermediary between the merchant and the credit card company.
- After authorizing transactions, it is necessary to settle them before the funds from the approved transactions are transferred to the merchant's account.
- Most processors require that you dial into their network to perform a settlement. Some *host-based* processors (not all) will auto-settle transactions for you.

What this means to you is that you may need to settle your transactions before any funds get deposited into your account. The merchant help desk at your financial institution will be able to provide you with information about this - contact them if you have any doubt about whether or not you need to settle transactions.

ICVERIFY Screen Orientation

Tool Bar

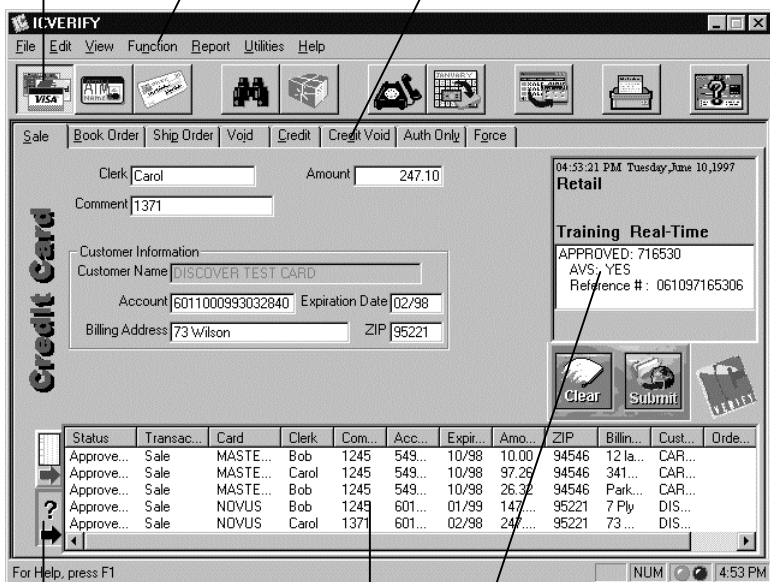
Contains shortcut buttons to the three transaction forms and other commonly used features

Transaction Tabs

Allows fast access to each transaction type. Terminology used for transactions is dependent on merchant's processing network

Menu Bar

With pull-down menus for all functions.



Tabs

One tab is used to display the transactions in the transaction list box. The tab with the question mark activates the context-sensitive help feature.

Status Box

Shows the merchant name, the operational mode of the software and the status of the transaction that is currently being processed.

Transaction List Box

Displays a list of transactions that are stored in the current batch.

Processing Credit Card Transactions

This section provides an overview of different features that are commonly used when processing credit card transactions.

Training Mode

When set to training mode, *ICVERIFY* will simulate a response from the processing network without actually dialing out and processing transactions. Any transactions authorized or settled while in training mode are stored separately from live transactions. While in training mode, the software will always approve transactions done for an even amount. Transactions done for an odd amount are usually rejected. Training Mode can be toggled on and off by selecting **Options** from the **Edit** pull-down menu, then checking/unchecking the **Training Mode** check box.

Real Time and Off-Line Group Processing

ICVERIFY defaults to processing transactions as soon as they are entered (Real Time mode) but can also be configured to store them in a batch for processing at a later time (Off-Line Group Mode). Both methods are described below.

- If set to Real Time mode, *ICVERIFY* will immediately submit transactions to the merchant's processing network as soon as they are entered. Each time that a transaction is entered and the submit button is pressed, *ICVERIFY* immediately uses the computer's modem to submit the transaction to the processing network.
- If set to Off-Line Group Mode, *ICVERIFY* will store transactions in an Off-Line group file for later processing. At some later point, all of the transactions stored in this file can be submitted to the processor by selecting **Transmit Off-Line Group** from the **Function** pull-down menu, or by clicking on the **Off-Line Group Mode** button. **Off-Line Group Mode** is more convenient for some merchants because it cuts down on transaction processing time (the modem connects to the processing network once and submits all of the stored transactions as a group without re-dialing

for each one). Also, the Off-Line Group can be transmitted to the processor at a time that is convenient to the merchant.

ICVERIFY can be placed in Off-Line Group Mode by selecting **Off-Line Group Mode** from the **Function** pull-down menu, or by clicking the **Off-Line Group Mode** button (which has a picture of a telephone on it).

As mentioned earlier, merchants normally need to perform a settlement/end of day procedure before the funds from approved transactions are deposited in the merchant's account. This is done by selecting **Settlement/End Day** from the **Function** pull-down menu.

The remainder of this section discusses the various transaction types that can be performed using the retail or mail order market formats. When loaded, ICVERIFY will display the terminology used by your processing network. For example, the tab for a "credit" transaction might be labeled as a "refund" or "return" depending on the processing network that is being used. For each transaction type explained in the following pages, the manual will attempt to present all of the terms normally used so that you can recognize the transaction or process being discussed.

Note: When manually entering account numbers for credit card transactions, it is not necessary to use dashes when entering the number into the account number field.

Processing Credit Cards (Retail Format)

Sale

A sale is the most commonly used transaction in a retail format. It is employed to charge a purchase to a customer's credit account. It places a "hold" on the customer's open-to-buy (or available credit) by the amount of the sale. Once a sale has been approved, the hold on the customer's credit will be valid for a limited time (three to thirty days depending on the cardholder's bank) before expiring and releasing the hold on the funds in the customer's credit account. Funds from an approved sale transaction will not be deposited into the merchant's account until they have been settled. This will occur automatically if the merchant is using a host-based processor that auto-settles transactions. Merchants who are using a terminal-based processor (or

a host-based processor that does not auto-settle) must perform a Settlement/End Day procedure in order for the funds from sales to be transferred to their merchant account. To perform a sale:

1. Swipe or manually enter the card information (the **Customer Name** field will only be filled out for swiped transactions).
2. Enter information into **Clerk** and **Comment** if desired (these fields are optional). The clerk's name can be typed directly into the field or selected from the drop-down list (Clerks can be added to this drop-down list by selecting **Options** from the **Edit** pull-down menu, then clicking on the **Clerks** tab). The **Comment** field can be used to enter a comment or invoice number that can be used to reference the transaction at some later point.
3. When all of the information has been entered, click on the **Submit** button to process the transaction. IC *VERIFY* will then use the computer's modem to submit the transaction to the processing network (unless the software has been placed in Training and/or Off-Line Group Mode).

Void

This transaction is used to remove a sale from the open batch *before it has been settled*. It does not cause any funds to be transferred. If a sale has not been settled, it can be voided. If a sale has been settled, a credit transaction must be performed (see below). To void a transaction:

1. Click on the **Void** tab. This pops up the **Find Transaction** box with the search criteria already entered. Click on the **Start Search** button to view a list of transactions in the open batch that can be voided.
2. Use your mouse to highlight the transaction that you wish to void.
3. Click on the **Convert To** button, then **Void**. This will fill in the **Void** tab on the Credit Card Form with the information for that transaction. Click on the **Submit** button. For terminal-based processors, IC *VERIFY* does not dial out for approval when a void transaction is submitted (for most host-based processors, the software will dial out to the processing network when the transaction is submitted).

Note: Transactions that have been voided will continue to hold funds from a customer's open to buy until they have expired.

Credit/Refund/Return

A credit transfers money from the merchant's account back to the customer. It is used to return funds to the customer's account after a transaction has been settled. A void does not work in this type of situation because it is designed to nullify an unsettled transaction (that is, a transaction that is still in the open batch waiting for settlement). For terminal-based processors, IC*VERIFY* does not dial out when a credit is submitted. Instead, the credit is stored in the open batch and transmitted at settlement. For most host-based processing networks, the software will dial out when a credit is submitted.

Credit Void/Cancel Return/Refund Void

Similar to a void transaction, a credit void is designed to remove an unsettled credit transaction from the open batch. A credit void cannot be performed if the credit has already been settled. To void a credit transaction:

1. Click on the appropriate tab (the terminology will vary by processing network). This pops up the **Find Transaction** box with the search criteria already entered. Click on the **Start Search** button for list of all credit transactions in the open batch that can be voided.
2. Select the credit transaction that you wish to void.
3. Click on the **Convert To** button, then **Void**. This will fill in the **Credit Void** tab on the Credit Card Form with the information for that transaction. Click on the **Submit** button. If a terminal-based processor is being used, IC*VERIFY* will not dial out to the processing network when the credit void is submitted. For most host-based networks, the software will dial out when a credit void is submitted.

Auth Only/Pre-Authorization

An auth only transaction is used to verify funds and return an approval code. This transaction can not be settled unless it is completed by using a force transaction (see below).

Note: Auth Only transactions are cleared out of the batch each time that a settlement is performed.

Force/Post-Authorization

A force transaction is primarily used to enter a voice approval into the open batch. For example, a merchant submits a card for approval, gets a “voice authorization” message and calls their merchant help desk for a voice authorization. The merchant help desk gives the merchant an approval code for the transaction over the phone. The merchant can then enter the transaction into the open batch using a force transaction and the approval code provided by the merchant help desk. A force can also be used to complete an auth only transaction (see above).

To complete an auth only transaction with a force transaction:

1. Click on the appropriate tab (the terminology will vary by processing network). This brings up the **Find Transaction** box with the search criteria already entered. Click on the **Start Search** button to view a list of all auth only transactions in the open batch that can be forced.
2. Select the transaction that you wish to force.
3. Click on the **Convert To** button, then **Force**. This will fill in the **Force** tab on the Credit Card Form with the information for that transaction. Click on the **Submit** button. For merchants using a terminal-based processing network, IC*VERIFY* will not dial out when a force transaction is submitted (it will be transmitted at settlement). For most host-based processing networks, the software will dial out to the processing network when a force transaction is submitted.

Processing Credit Cards (Mail Order Format)

The Mail Order format includes all of the transactions that are available when using the retail format, plus two additional transaction types (book and ship), which are often used in place of a sale transaction.

Since mail/telephone order transactions are generally not swiped (the cardholder is not present), address verification information (the customer's address and ZIP code) is usually required to get the best rate from the processing network. If the ZIP and address field are not showing up on the credit card form, you will need to load the Advanced Setup program, select the **Merchant Information** tab and set the **Address Verify?(Y/N)** field to **Y**. Please note that there may be processor-specific setup items that affect the ability to pass address verification information. For example, the FDMS - Cardnet processing network requires an **M.** or **W.** terminal type in order to process transactions with address verification information included. Other processing networks may have different requirements. These setup items are assigned by the processing network, and cannot be arbitrarily changed.

Book

Booking a transaction authorizes and places a hold on the transaction amount (similar to an auth only transaction). A book transaction is the first part of a two-part transaction; it cannot be settled until it is completed by a ship transaction (see below).

Ship

This transaction is used to complete a book transaction. Once a book has been shipped, it is eligible for settlement. To ship a transaction:

1. Click on the **Ship** tab or button (the **Ship** button has a picture of a package on it). This will pop up the **Find Transaction** box with the search criteria already entered. Click on the **Start Search** button to view a list of approved book transactions.
2. Find the book transaction that you wish to ship.
3. Click on the **Convert To** button, then select **Ship**. This will fill in the **Ship** tab on the Credit Card Form with the information for that transaction.
4. Adjust the transaction amount up or down as needed, then click on the **Submit** button to ship the transaction. For terminal-based processors, IC *VERIFY* will not dial out when a ship transaction is submitted.

Processing Debit Card Transactions

Processing debit cards is similar in many ways to credit card transactions, but there are fewer transaction types. A debit card transaction requires a card reader and an encrypted pinpad. ATM pinpads must be programmed by the bank before they can be used by ICVERIFY. Your pinpad must be Verifone 101 or Verifone 201 compatible.

The image shows a software interface for processing debit card transactions. On the left side, the text "Debit Card" is written vertically. At the top, there are two tabs: "Purchase" (which is selected) and "Return". Below the tabs, there are several input fields: "Clerk" with a dropdown arrow, "Amount" with a numeric field containing "0.00", "Comment" with a text field, "Cash Back" with a numeric field containing "0.00", and "Total" with an empty numeric field. Below these is a section titled "Customer Information" which contains four fields: "Customer Name", "Account", "Expiration Date", and "Billing Address" (with "ZIP" next to it).

Like credit cards, authorized debit card transaction must be settled before the funds will be transferred to your merchant account. The following transaction types are generally available:

Sale

This transaction transfers funds from an ATM/Debit account to a merchant account. Use it for all ATM/Debit purchases.

Credit/Return/Refund

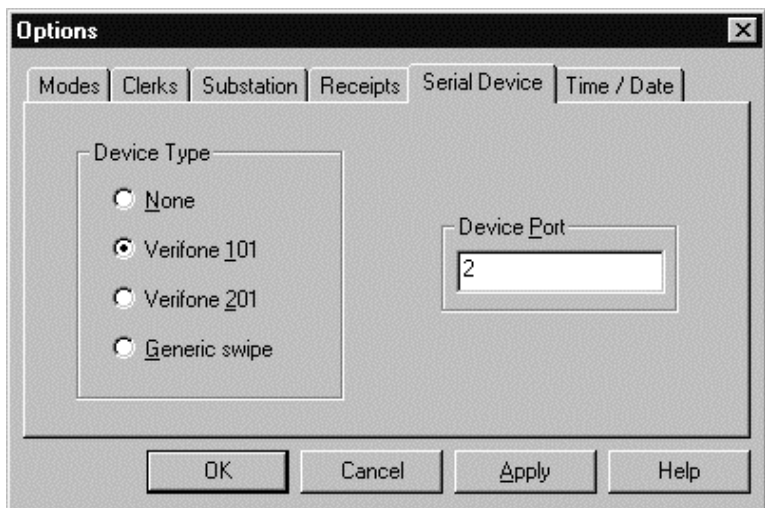
A return transaction transfers funds from a merchant account to an ATM/Debit account. Use this transaction to reverse a sale transaction that has been settled.

Void

A void transaction removes an unsettled sale transaction from the open batch. Use it to remove a debit transaction prior to settlement.

Setting Up a Pinpad

Debit card transactions require a pinpad. To set up your pinpad in ICVERIFY, select the **Edit** pull-down menu, then **Options**, then **Serial Device**. Click on the **Configure Serial Device** check box, then enter the type of device and the port that it will be using.



ICVERIFY for Windows relies on proper system-level setup of the com port in order to communicate properly with the pinpad. This is to say that the com port specified using the menu option shown above must also be properly configured via the Windows control panel. For virtually all pinpads, the proper values are 1200 baud, 7 data bits, even parity, one stop bit, and no flow control. All these parameters must be set correctly or you may experience errors ranging from "The serial device did not respond to initialization" errors to card swipes freezing the GUI up.

Here is the procedure for Windows 95:

1. From the **Start** menu, select **Settings**, then **Control Panel**.
2. Double-click the **System** icon.

-
3. Select the **Device Manager** tab.
 4. Expand the **Ports (COM & LPT)** item by clicking the plus symbol (+) to the left of it.
 5. Double click the com port which is being used by the pinpad.
 6. Select the **Port Settings** tab. Ensure the settings are:
 - Bits per second: 1200
 - Data bits: 7
 - Parity: Even
 - Stop bits: 1
 - Flow control: none
 7. Click on the **OK** button to save the settings and close the Communications Port Properties dialog.
 8. Click on the **OK** button to close the System Properties control panel dialog.

The procedure is very similar for Windows 3.x:

1. From the Program Manager, double click **Control Panels**.
 2. Double-click the **Ports** control.
 3. Double-click the com port that is being used by the pinpad.
 4. Ensure the settings are:
 - Baud rate: 1200
 - Data bits: 7
 - Parity: Even
 - Stop bits: 1
 - Flow control: none
 5. Click on the **OK** button to save the settings and close the settings dialog.
 6. Click on the **Close** button to close the Ports control panel dialog.
-

Processing Check Guarantee Transactions

A check guarantee transaction can be performed with either a Driver's license number, as shown above or by MICR verification as shown on the following pages. the driver's license can be read using a 3-track magnetic stripe reader attached to the system or entered manually. The information printed at the bottom of the check can be read by a Magnetic Ink Check Reader (MICR) attached to the system or entered manually (only keyboard check readers are supported).

Driver's License Verification

This function, to approve a check that you have been presented, is designed to protect you from possible fraud. Use this function to ensure that the customer's name does not appear on a list of people who have written bad checks.

If your system includes a 3-track magnetic stripe reader, and the customer has a magnetic stripe driver's license, the license may be swiped to fill in this information.

Note that this function does not guarantee available funds. A sample screen is displayed below (screen layout and terminology varies by processing network).

Driver's License Micr

Check Guarantee

Clerk Amount

Comment

Customer Information

Customer Name

Account

Billing Address ZIP

Drivers License #

State Code

Magnetic Ink Check Reader Verification

This is a hardware option for reading account information encoded at the bottom of the check. A sample screen is shown below (screen layout and terminology varies by processing network)

Driver's License Micr

Check Guarantee

Clerk Amount

Comment

Customer Information

Customer Name

Account

Billing Address ZIP

Aba#

The following fields are used when guaranteeing a transaction using a keyboard MICR check reader:

Account

This is the MICR number on the check. The reader will collect this data from the check automatically.

ABA

This is the ABA (bank) number on the check. The reader will collect this data from the check automatically.

State

This is the State that the customer lives in. It may be read from a magnetic stripe driver's license if a 3-track card reader is present.

Finding and Editing Transactions

ICVERIFY provides a fast and simple way to view or edit credit card transactions. The find transaction feature has been integrated with transaction types where finding transactions comes into play. For example, sales can be voided, so when the **Void** tab is clicked the **Find Current Transaction** dialog will pop up and allow you to search for all transactions that can be voided. The **Credit Void**, **Force** or **Ship** tabs will behave the same way.

You can also find a transaction by clicking on the **Find Transaction** button in the tool bar (**Ctrl-F**). This will display the Find Current Transaction window shown below. To search through all transactions, click on the **Start Search** button (**Alt+S**). A list of all transactions using the search criteria that you have selected will then be displayed:

Find Current Credit Card Transaction

Search Criteria

Matching Data

Clerk :

Customer Order #

Account # :

Expiration Date : Amount :

Customer Name :

Transaction Type

All

Clear Criteria

New Search

Credit Cards

VISA NOVUS

MC DBO

AMEX Other

Status

Approved

Declined

Deleted

Voided

Start Search

Show Results

Multiple One By One

Next Transaction

Search Results

Status	Transac...	Card	Clerk	Order #	Account	Exp Date	Amount	ZIP
--------	------------	------	-------	---------	---------	----------	--------	-----

Edit View Convert To... Delete Undelete Reprint Receipt Cancel Help

Note: This feature only searches for unsettled transactions. To locate a settled transaction, use the Find Settled Transaction menu option from the Utilities menu (See page 75 for more details).

You can narrow your search by using the following criteria:

- **Matching Data:** (clerk, comment, account number, transaction amount, or customer name).
 - **Transaction type:** (all, sale, void, credit, credit void, authorization only, book, ship, or force).
 - **Credit card type:** (VISA, MasterCard, American Express, Novus, DBO, or others).
 - **Status:** (approved, declined, deleted or voided)
1. Once you have selected any desired search criteria, click the **Start Search** button (**Alt+S**). A list of the transactions meeting the search criteria will be displayed.

*Note: To display one transaction at a time, select the **One by One** radio button. Click on the **Next Transaction** button (**Alt+X**) to move to the next transaction in the file.*

2. Select the transaction by clicking on it in the Status field (or use the arrows to scroll). You can reprint the receipt (**Alt+R**), or view the transaction (**Alt+T**). You can also convert the transaction to another transaction by clicking on the **Convert to** button. The transaction will appear on the screen, where it can be changed or submitted as a new transaction (the original transaction will remain in the file). Click “Clear Criteria” (**Alt+C**) or “New Search” (**Alt+N**) if you need to start over.

Important Note: *The Find Current Transaction feature is dependent on the operational mode of the software. If IC VERIFY is operating in Real Time Mode, the Find feature will search the current open batch. When the software is operating in Off-Line Group Mode, you will only be able to use the Find Current Transaction feature to find Off-Line Group transactions (see page 22 for more details about Off-Line Group Mode). If you are operating in Training Mode, the Find feature will only find those Real Time Mode or Off-Line Group Mode transactions done while in Training Mode (see page 66 for more details about Training Mode).*

Off-Line Group Mode

Off-Line Group Mode is used to store transactions for batch processing. When operating in Off-Line Group Mode, *ICVERIFY* will not dial out to the processing network when a transaction is submitted. Instead, each transaction is stored in an Off-Line Group Input file for future processing. These stored transactions can then be transmitted at some later point by selecting **Transmit Off-Line Group** from the **Function** pull-down menu.

If an immediate response from the processor is not necessary, Off-Line Group Mode is a very useful way of handling credit card transactions. It cuts down on transaction entry time because the operator does not need to wait for the software to dial out before entering the next transaction. It also cuts down on transaction processing time because the entire batch of Off-Line Group transactions can be submitted to the processing network with one phone call.

It is possible to use an application such as a database or a spreadsheet to create a file containing transaction data. This file can be imported into *ICVERIFY* by using the Import Transactions feature (see page 42 for more details).

When you enter a transaction in Off-Line Group Mode and then press the **Submit** button, you will get this message:

OK: TRANSACTION ADDED TO BATCH

This means that the transaction has been stored in the Off-Line Group File for future processing. When you are ready to submit the batch of Off-Line Group transactions to the processing network, select **Transmit Off-Line Group** from the **Function** pull-down menu and *ICVERIFY* will use the computer's modem to submit the Off-Line Group transactions to the processing network.

Finding Transactions While Using Off-Line Group Mode

ICVERIFY's Find Transactions feature is dependent on the operational mode of the software. If ICVERIFY is operating in Real Time Mode, the Find feature will search the transactions stored in the current open batch. When the software is operating in Off-Line Group Mode, you will only be able to use the Find Transactions feature to locate Off-Line Group transactions. These are transactions that have been "keyed in" while in Off-Line Group mode but have not yet been submitted to the processing network for approval. Keep the following points in mind when you are searching for Off-Line Group transactions:

- Make sure that the software has been set to Off-Line Group Mode when you are searching for Off-Line Group transactions, or you will not be able to find them.
- Once an Off-Line Group transaction has been transmitted to the processing network, it is no longer an Off-Line Group transaction. To find an Off-Line Group transaction once it has been transmitted, search for it in Real Time Mode instead of Off-Line Group Mode.
- Training Mode transactions entered in Off-Line Group Mode are stored separately from "live" Off-Line Group transactions. Search for these transactions by switching the software to both Off-Line Group Mode *and* Training Mode.

Editing Transactions While Using Off-Line Group mode

Because Off-Line Group transactions are stored transactions that have not yet been transmitted to the processing network, you have the option of editing them while they are stored in the Off-Line Group Input file. If you wish to do this, you must place the software in Off-Line Group Mode, then use the Find feature to locate the transaction you wish to edit.

1. While in Off-Line Group Mode, use **Find** to locate the transaction that you wish to edit, then highlight it (you must be in Off-Line Group Mode to find Off-Line Group transactions).

-
2. Click the **Edit** button (**Alt+E**). The transaction will be displayed. Some fields (for example, transaction type, card type) may be disabled (meaning that they cannot be changed).
 3. Change the transaction information as required.

You then have the following options:

- You can save the transaction (erasing the original transaction) by selecting **Save Transaction** from the **Edit** pull-down menu.
- You can delete the transaction by selecting **Delete Transaction** from the **Edit** pull-down menu. The display returns to the Find Transaction box. Select **Undelete Transaction** if you need to restore the transaction.
- You can select **Stop Transaction Editing** from the **Edit** pull-down menu if you wish to cancel the edit and return to the original transaction.

Setting up IC*VERIFY* for Multiple Users

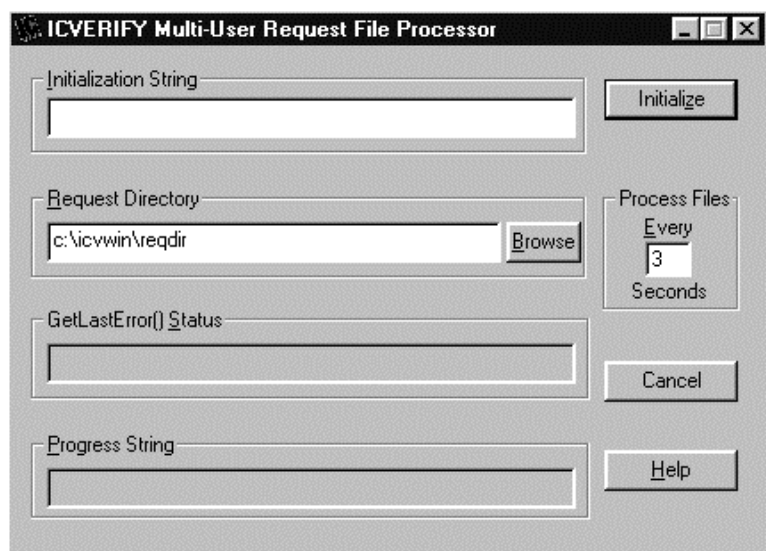
IC*VERIFY* can be set up for use by more than one computer, i.e., in a “networked” environment. When configuring IC*VERIFY* for multiple users, select one system on the network which will serve as a “master station”. The master station handles all communications with the processing network. It also handles all data file storage for the other network stations running IC*VERIFY*. The master station and the other network stations communicate by exchanging quote-comma delimited ASCII text files (called “request” and “answer” files) using a shared network directory. This directory can be at any location on the network that is accessible to all of the network stations that will be processing transactions. Because the master station processes transactions for all of the other network stations, it must contain the modem that will be used to submit transactions to the processing network.

Using standard computer network terminology, the master station would be referred to as an IC*VERIFY* “server,” since it serves the other computers that are connected to it. However, it is not a requirement that the computer functioning as the IC*VERIFY* master station be the same computer that acts as the network server. Therefore, to avoid confusion, this manual uses the term “master station” to refer to the computer that will be running ICVMLT32.EXE and handling modem communications for the network stations. These other stations on the network use IC*VERIFY* (IC*VERIFY*.EXE) for transaction entry, and are generally referred to as “substations”. If you are using a point-of-sale system that has been designed to integrate with IC*VERIFY*, you may use this point-of-sale system in place of IC*VERIFY* on some or all of the network stations where transactions will be processed.

A program called ICVMLT32.EXE is loaded at the master station. This program processes transaction requests submitted by other stations on the network. If you are using a point-of-sale system that has been designed to integrate with IC*VERIFY*, you may use this point-of-sale system in place of IC*VERIFY* on some or all of the network stations where transactions will be processed.

Setting up The Master Station

1. Choose the network station which will function as the master station. This computer must contain the modem which the master station will use to submit transactions to the processing network.
2. Install *ICVERIFY* on this computer. Run the setup program and enter your processor setup information. Make sure that the **Evaluated Response** field (located under the **Merchant Info** tab in Advanced Setup) is set to **Y**.
3. Load *ICVERIFY* and try a test transaction to make that there you are able to connect to the processing network without any problems.
4. On the computer functioning as the master station, start the program **ICVERIFY Multi User** from the *ICVERIFY* program group (or run *ICVMLT32.EXE* from the copy of *ICVERIFY* that has been installed on the computer housing the master station). This will bring up the screen shown below:



5. Set the **Request Directory** field to contain the full path to a shared directory accessible by all stations running *ICVERIFY*.

This directory will be used by the other stations on the network to submit transactions for the master station

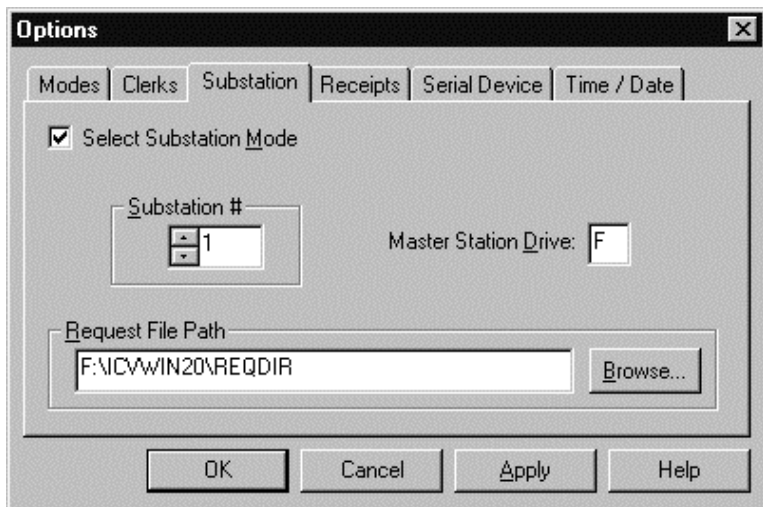
6. Set the **Process Files Every ... Seconds** field to the number of seconds you want ICVERIFY to wait between attempts to process transaction requests. The default value is 3, which means that a check for request files will be performed every three seconds. The field accepts values from 1 to 99 (the default value of 3 should be optimal for most situations).
7. In the **Initialization String** field, enter any initialization string arguments you may require. These are command line parameters which affect how the program loads. Under normal conditions it is not necessary to enter anything into this field. See Appendix A for a list of initialization strings.
8. Click the **Initialize** button. The GetLastError() Status field should indicate successful completion of the initialization request. Whenever you process transactions, the master station copy of ICVERIFY must be running at all times.
9. Once the master station has loaded, it regularly checks the shared directory specified in the **Request Directory** field for transaction requests that need to be processed. Any transactions that are found are processed and the corresponding answer files are placed in the shared network directory to be retrieved by the substation or integrated point-of-sale system that originated the transaction.

*Note: ICVMLT32.EXE may be automatically loaded using the "/a" command line argument. This eliminates the need to press the **Initialize** button after loading the program. Once ICVMLT32.EXE has been manually loaded at least once, the /a command will cause it to load immediately, without requiring the user to press the **Initialize** button and using the same settings that were used the last time that the program was loaded. The /a command should be used by creating a Windows shortcut, then appending the /a to the command line to used to load ICVMLT32.EXE. Do not use the /a command in the Initialization String field. See Appendix A for more details.*

Setting up Substations

As mentioned earlier, all stations on the network which process transactions do so by writing a transaction request file to the shared directory which the master station is polling. Follow these steps to configure each substation:

1. Install *ICVERIFY* on the network station which will be acting as a substation (processing transactions). Do not run the setup program after installing the software.
2. Find the directory where *ICVERIFY* has been installed on the *master station*. Locate *ICVERIFY.SET* in this directory and then copy this file to the *ICVERIFY* directory on the substation.
3. Load the copy of *ICVERIFY* installed on the substation. At this point, this copy of *ICVERIFY* is not ready to process transactions. It must still be placed in substation mode and then pointed to the same shared directory which the master station was pointed to when *ICVMLT32.EXE* was loaded.
4. From the **Edit** pull-down menu, select **Options** and then click on the **Substation** tab.



-
5. Click on the **Select Substation Mode** checkbox, then select a station number for this substation. The station number can be no greater than the number of users that have been licensed for this copy of **ICVERIFY**. If you are not sure of the number of users that you are licensed for, check the **Number of Users** field under the **Terminal ID** tab of Advanced Setup.
 6. In the **Request File Path**, enter the network path to the same directory that **ICVMLT32.EXE** is pointed to. This directory will be used for the exchange of transaction requests and responses. You can also use the **Browse...** button to select the request and answer file directory.
 7. In the **Master Station Drive** field, enter the network drive letter of the drive where the master station has been installed. The substation will use this information to locate the data directory on the master station.

*Note: If you can process transactions, but experience difficulty printing reports and finding transactions, double-check the **Master Station Drive** field to make sure that you have specified the correct drive letter.*

8. Click on the **OK** button. When loading each substation, the first transaction of the session can take longer than usual, since the substation must gather information from the master station. The clerk will see the message “Waiting for response from master station” flicker for about 30 seconds. This is normal behavior. Once a copy of **ICVERIFY** has been configured as a substation, it should not be taken out of Substation Mode when processing transactions.

Setting Up ICVERIFY For Multiple Merchants

ICVERIFY can be configured to process transactions for more than one business account, or more than one merchant account. Multi-merchant processing may only be used after purchasing the appropriate licensing from ICVERIFY. You will need to gather setup information for each merchant as described in the *Quick Start Guide*, get a validation code for each merchant's setup information and then run the setup program to create a setup file for each merchant. ICVERIFY switches between these setup files when processing transactions for different merchant accounts. Configuring ICVERIFY for multiple merchants is primarily a matter of creating a setup file for each merchant, naming it correctly and making sure that each merchant's transaction data is stored in a separate directory. There are two very important concepts that must be understood if a multi-merchant setup is to be implemented properly:

Naming Convention for Setup Files

Each merchant's setup information is stored in a file that ends with a .SET extension. The default setup file in a normal, single-merchant configuration is called ICVERIFY.SET.

In a multi-merchant setup, the standard naming convention for ICVERIFY setup files is ICVExxxx.SET, where "xxxx" is a unique merchant identifier which ICVERIFY uses to locate the correct setup file when processing a transaction for a merchant.

Each merchant setup file created after setting up the first merchant should have a four-digit merchant identifier as shown below:

Setup File Name	Data Directory Name	Merchant Identifier
ICVERIFY.SET	DATADIR	<i>RIFY</i>
ICVE0001.SET	DATA0001	<i>0001</i>
ICVE0002.SET	DATA0002	<i>0002</i>
ICVE0003.SET	DATA0003	<i>0003</i>

A Different Data Directory Must be specified for Each Merchant During the Setup Process

Each merchant must have a separate data directory to store transaction data. If this is not done, transaction data from different merchant setups will be mixed together in the same files. The merchant's data directory is specified by the **Data Disk:\Directory** field under the **Merchant Information** tab of the Advanced Setup program. When naming the data directories for each merchant, it is strongly recommended that the directory name contain the merchant identifier discussed previously (you can leave the data directory for ICVERIFY.SET at its default value):

Setup File	Data Directory Name	Merchant Identifier
ICVERIFY.SET	DATADIR	RIFY
ICVE0001.SET	DATA0001	0001
ICVE0002.SET	DATA0002	0002
ICVE0003.SET	DATA0003	0003

Note: it is not necessary to use the numeric naming convention outlined above (alpha characters could be used if necessary). However, it is recommended that the numeric convention discussed above be used as it aids in troubleshooting and file maintenance.

Creating the Multi-Merchant Setup

Start by running the setup program and setting up the first merchant. Complete the Setup Wizard and then select the option to run the Advanced Setup program. Be sure to check the two setup options listed below (**Data Disk:\Directory** and **Settle All Merchants (Y/N)**), they are both important when setting up the software for multiple merchants:

Data Disk:\Directory

This field is located on the Merchant Information tab. It can be used to define the name of the data directory where the software will store its data files. *You must specify a separate data directory for each merchant in your multi-merchant setup.* The name of the data directory is usually tied into the merchant identifier as discussed earlier. For the merchant using ICVERIFY.SET, this field can be left at its default value of DATADIR, which indicates a DATADIR sub-directory of the main ICVERIFY program directory. You will use the numbering convention outlined earlier to set up the rest of your merchants. Here's an example of how a setup for four merchants should be configured:

Merchant	Data Directory	Setup File
Merchant 1	DATADIR	ICVERIFY.SET
Merchant 2	DATA0001	ICVE0001.SET
Merchant 3	DATA0002	ICVE0002.SET
Merchant 4	DATA0003	ICVE0003.SET

This makes file maintenance and troubleshooting much easier, especially in large multi-merchant setups.

Settle All Merchants? (Y/N)

If you would like to have the software settle all merchants at once when a settlement for any single merchant is attempted this field must be set to **Y** in each merchant's setup file. If you would rather manually initiate settlement for each merchant individually, leave this field at its default value of **N**.

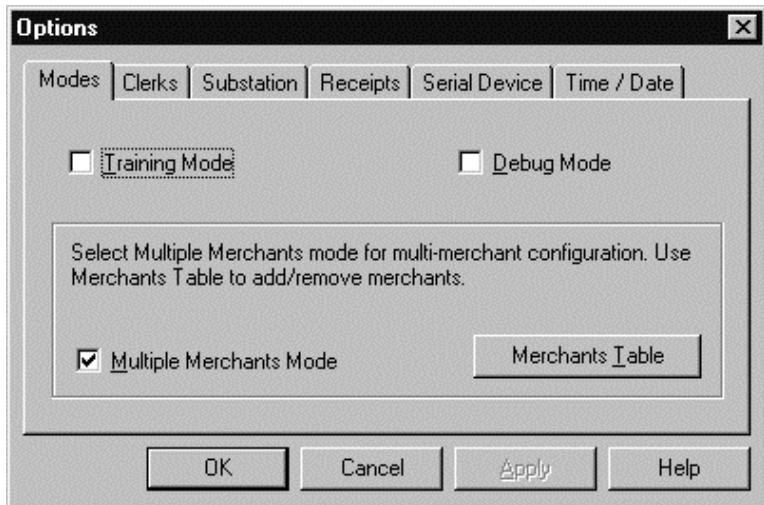
You will also want to copy down your **Modem Port** and **Initialization String** field settings (located under the **Hardware** tab). Since all of the merchants in your multi-merchant setup will use the same modem, you will need to make sure that the Modem Port and Initialization String fields are the same for each merchant's setup file.

Once you are sure that all of the Advanced Setup options are in order for the merchant using ICVERIFY.SET, save the setup and then exit. Load ICVERIFY and then try a test transaction with the first merchant setup to make sure that the modem is working correctly. It is important to do this because each merchant setup must have the correct modem settings in order to process transactions successfully. If the modem appears to be working properly, take the following steps to set up the second merchant:

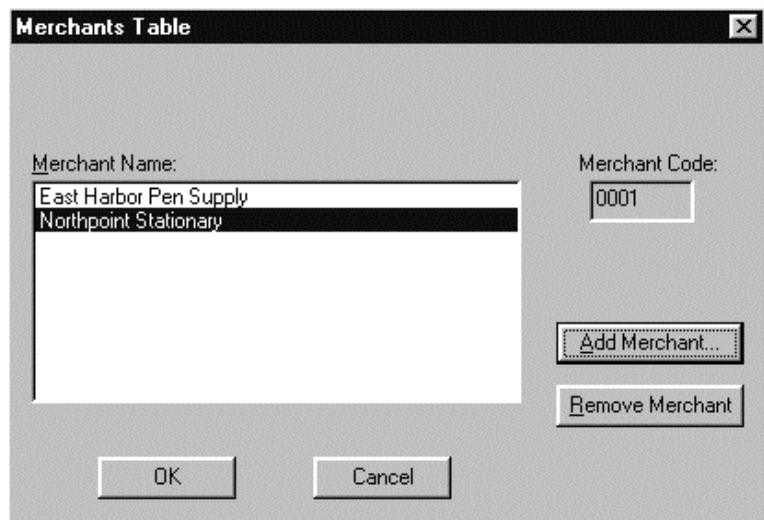
Be sure to make a backup copy of ICVERIFY.SET before proceeding any further.

1. Run the setup program again. This will load ICVERIFY.SET. Do not make any changes to this file.
2. Select **New** from the **File** pull-down menu in Advanced Setup. This will load the Setup Wizard and allow you to enter the setup information for the new merchant. Complete the Setup Wizard using the setup information for the new merchant, then load Advanced Setup after the validation code has been entered.
3. Select the Merchant Information tab. find the **Data Disk:\Directory** field and change the data directory name from DATADIR to DATA0001.
4. Change the **Settle All Merchants?(Y/N)** field as described above if you want the software to attempt to settle all merchants each time that a settlement is attempted for any one merchant.
5. Select the **Hardware** tab. Use the information from the first merchant setup to fill in the **Modem Port** and **Modem Initialization String** fields.
6. Select **Save** from the **File** pull-down menu. Save the file as ICVE0001.SET.

7. Load ICVERIFY. Select **Options** from the **Edit** pull-down menu. This will display the **Modes** tab.



8. Check the **Multiple Merchants Mode** checkbox, then click on the **Merchants Table** button. This will pop up a box titled **Select Merchant**. Click on the **Add Merchant** button.



-
9. Enter the four character merchant identifier for your first merchant. Since this merchant is using ICVERIFY.SET, the merchant identifier for this merchant would be “**RIFY**”. Then click on the **OK** button. **Only “RIFY” or numeric identifiers should be used when setting up merchants.**



10. Click on the **Add Merchant** button again to add the merchant using ICVE0001.SET. The merchant identifier for this merchant would be “**0001**”. The first two merchants (which use ICVERIFY.SET and ICVE0001.SET) are now set up. You can switch between these two merchant accounts by selecting **Switch Merchants** from the **Function** pull-down menu.

Use the process outlined above to set up each additional merchant.

Installments

Installments are used in situations where a customer is billed the same amount on a recurring basis. For example, an internet provider that charges customers a regular monthly fee could use ICVERIFY's installment billing feature to help automate the billing process. To select installments, click on the **Installments** button (the button that has a picture of a calendar on it) or select **Installments** from the **Function** pull-down menu. You will then be presented with the two tabbed selections that are used for handling installments:

Manage Installments

This tab can be used to add, edit or delete installment payments. To set up a customer for billing, enter the customer's account information, the number of installments that the customer will be billed and the period between billings. You will also specify a start date which the software will use to start calculating the billing of the customer. The start date specifies the point at which the installment cycle for the customer begins (the installment period specified must pass before the customer is eligible for the first installment billing).

Transmit Installments

Customers will not actually be billed until the Transmit Installments tab is used to submit installments to the processing network. When installments are transmitted, ICVERIFY checks all of the installment records that have been set up to determine which are due for billing, then dials out to the processing network to approve these records. You can transmit installments as many times a day as you need to (see note below).

***Important Note:** Many processing networks have safeguards to prevent the approval of duplicate transactions. This places some limitations on installment billing, since submitting more than one installment per day for any particular customer can result in a decline from the processing network. If you fall behind on transmitting installments for one or more customers, the software will transmit only the first past due installment when installments are transmitted. Any other past due installments will be eligible for transmission on subsequent days (but only one installment per customer may be*

transmitted on any given day). Setting up two separate installment records for the same card number may also cause a rejection in some cases.

Adding Installments

To add an installment payment, click on the **Installments** button (the one that has a picture of a calendar on it) or select **Installments** from the **Function** pull-down menu to open the **Manage Installments** tab. Enter the customer's credit card information. Then take the following steps:

1. Use the **Start Date** field to enter the date that the software should begin tracking the installment record. An installment payment does not become eligible for billing on the start date. It will be eligible for the first billing after the period of time specified in the **Installment Period** field has passed. If you need to bill a customer immediately, you will need to back-date the installment by the period of time specified in the Installment Period field.

Example: a merchant sets up a customer for monthly installment billing on March 15, and needs to bill the customer for the first payment that day. To do this, the start date field must be set to February 15. If the start date is set to March 15, the customer would not be eligible for billing April 15.

2. Configure the total number of payments that the customer will be billed for using the **Number of Payments** field. You may want to continually bill the customer until you specify otherwise. If this is the case, click on the **Infinite Payments** radio button.

-
3. Select the period between installment billings by checking one of the **Installment Period** radio buttons:
 - **Annually** bills the same date the following year (April 28 to April 28).
 - **Semi-Annually** will bill 6 months later, same date (April 28 to October 28). If the date doesn't exist, then the next day will be used as an alternate (for example, September 31 doesn't exist, so an installment due on this date would become eligible for billing on October 1 instead).
 - **Quarterly** will bill 3 months later, using the same date as the initial billing date. If the date doesn't exist, then the next day will be used as an alternate.
 - **Monthly:** will bill one month later, using the same date as the initial billing date. If the date doesn't exist, then the next day will be used as an alternate (for example, February 30 doesn't exist, so an installment due on this date would become eligible for billing on March 1 instead).
 - **Semi Monthly** bills on the first and fifteenth of each month.
 - **Weekly** bills the customer on the same day as the start date on the following week (e.g., every Tuesday).
 - **nnn days** can be used to set the exact number of days between each installment billing for the customer.
 4. Click on the **Add** button to finish adding the new installment. It will then show up in the transaction list box at the bottom of the Manage Installments tab.

Editing or Deleting Existing Installments

To change an installment, select the **Manage Installments** tab. Use the transaction list box at the bottom of the tab to find the installment and double-click on it. This will fill in the **Manage Installments** tab with the information for the installment payment so that it can be edited. You then have the following options:

- Use the **Reset** button to clear the Add Installments tab of any changes to the original record.
- Use the **Save** button to save any changes made to the installment record.
- Use the **Delete** button to remove the installment record from the current list of installments.

Transmitting Installments

Use this tab to transmit installments. Pressing the **Transmit** button causes ICVERIFY to begin a check all installment records that are due for billing. Those that are due will be submitted to the processing network in the form of a sale transaction (they will still need to be settled after they have been approved). The other fields on this tab provide information to help the user to determine what happened during the transmission.

The screenshot shows a software interface with two tabs: "Manage Installments" and "Transmit Installments". The "Transmit Installments" tab is active. On the left side, there is a vertical label "Installments". The main area is titled "Transmit Transactions Monitoring" and contains several input fields: "Number Sorted" (0), "Total to Sort" (0), "Approved" (0), "Not Approved" (0), and "Current Transaction" (empty). A "Transmit" button is located to the right of these fields. At the bottom, there is a "Transmit Transactions Progress" bar.

Number Sorted

This field shows the number of installment records that the software has checked to see if they are eligible for billing.

Total to Sort

This field shows the total number of installments that will be evaluated for eligibility in the current session.

Approved

This field shows the number of installments that have been approved by the processing network during the current session.

Not Approved

This field is updated as installment transactions are being transmitted to the processing network. It keeps a running total of the number of installments that have not been approved during the current session. This number also includes sorted records that are not eligible for billing at the time of transmission.

Current Transaction

This field displays the status of the transaction that is currently being transmitted.

Transmit Transactions Progress

This field displays the overall progress of the current session.

Note: Once all of the installments have been transmitted, the Find Transactions feature can be used to review the results after exiting to the Credit Card Form.

Importing Transactions

If you have a database or spreadsheet capable of exporting a batch of transactions to a quote-comma delimited ASCII textfile, *ICVERIFY* allows you to import and process this batch of transactions. Once imported, these transactions are stored in an Off-Line Group Input file for transmission to the processor at the operator's convenience. Importing was possible with earlier versions of *ICVERIFY*, but version 2.0 gives the user more control over how the information for each transaction is formatted.

ICVERIFY requires that transaction data be presented in a rigidly defined format in order to be successfully imported and processed. The new import feature in version 2.0 functions an interpreter between your application and *ICVERIFY*, allowing you to specify the order in which the fields will be imported. The import feature converts transactions into the format that *ICVERIFY* requires for processing, then stores them in the Off-Line Group Input file for transmission at some later time (if your Off-Line Group Input file already contains transactions, the imported transactions will be appended to the transactions already in the file). Once this has been done, the imported transactions can be submitted to the processing network for approval by selecting **Transmit Off-Line Group** from the **Function** pull-down menu.

Before explaining how the new import feature works, it is necessary to explain a little about the format that *ICVERIFY* will be expecting once the transactions have been imported. Here is an example of the information required for a basic sale transaction with no address verification information included.

```
"C1" , "ANNE" , "1429" , "431430196985032" , "9804" , "24.00"  
  1      2      3      4      5      6
```

The text string shown above is generally referred to as a "Transaction Record". A breakdown of each field for this particular record is provided on the next page. A table of transaction record formats for retail and mail order (and descriptions of the fields used when creating them) are provided in appendices B and C.

Field 1

This field contains a two-character command which tells *ICVERIFY* what type of transaction it will be processing. This information is for the program's internal use only - it is not passed across to the merchant's processing network. The transaction currently being discussed is a Sale (C1).

Field 2

This is the Clerk or "First Comment" field. It normally contains the name of the Clerk entering the transaction. *ICVERIFY* does not pass the information contained in this field to the processor - it is used for internal record keeping purposes only. Some people do not use this field, however, it cannot be left out when building a transaction record. If the Clerk field is not selected for import, the Import Transactions feature will insert a null Clerk field into the record created for the Off-Line Group Input file so that it is accepted by *ICVERIFY* when the Off-Line Group is submitted.

Field 3

This is the Comment or "Second Comment" field. It is often transmitted to the processor, especially in the Restaurant, Mail Order and Hotel credit card formats. It is usually used to store an invoice number which can later be used to pull up a transaction using *ICVERIFY*. The information contained in this field may show up on the customer's credit card statements. Some people do not use this field, however, it cannot be left out when building a transaction record. If the Comment field is not selected for import, the Import Transactions feature will insert a null Comment field into the record created for the Off-Line Group Input file so that it is accepted by *ICVERIFY*.

Field 4

This field contains the customer's credit card account number - no spaces.

Field 5

This is the Expiration Date field. The expiration date should be exported in MMY format. If a slash is included between the month and the year (e.g., "09/99" as opposed to "0999"), the slash will automatically be removed as the transaction is imported.

Note: ICVERIFY requires that the expiration date be presented in YYMM format, but the Import Transactions feature will automatically switch the format from MMY to the YYMM when adding the transactions to the Off-Line Group Input file. Applications using request and answer files or directly creating an Off-Line Group Input file without using the Import feature must pass the expiration date to ICVERIFY in YYMM format.

Field 6

This is the amount field. It should contain a Dollar amount with the decimal included.

The file created by your application may contain a virtually unlimited number of transaction records, but each record must be separated by a carriage return. Here is an example of a file containing two sales transactions ("C1") and one book transaction ("C4").

```
"C1", "KATE", "1429", "4017750003100019", "9804", "17.25"  
"  
"C1", "RON", "1432", "5499740000000040", "9910", "141.00"  
"  
"C4", "BOB", "1437", "372233154021042", "9907", "91.87"
```

An older version of ICVERIFY would require that you export transactions from your database or spreadsheet using the exact format that was just described, but the new import feature in 2.0 allows you to specify the order in which ICVERIFY reads the data exported by your application. For example, the following sale transaction:

```
"C1", "BOB", "1437", "372233154021042", "9907", "91.87"
```

could be exported by your application as any of the following:

```
"372233154021042", "BOB", "1437", "C1", "91.87", "9907"
```

```
"C1", "BOB", "1437", "372233154021042", "9907", "91.87"
```

```
"C1", "BOB", "91.87", "372233154021042", "9907", "1437"
```

Each of the examples shown above contain the same information but the order is different. The transaction could also be formatted in the following manner:

"Sale", "BOB", "1437", "372233154021042", "9907", "91.87"

Note that the "C1" transaction type code was replaced with the word "Sale". ICVERIFY can automatically replace the word "Sale" with the transaction type ("C1") as part of the import process. Please note that if you use this method you will need to use the terminology that is specific to your processing network for the transaction that you want to process. Processor terminology for specific transactions can vary. For example, a credit transaction can also be referred to as a refund or a return transaction depending on the processing network being used. If you would rather use the name of the transaction instead of the two letter code that the software uses to identify it internally, load the ICVERIFY graphical user interface and look at the tabs that allow you to switch between transactions, then use the terminology that is shown there.

Note: When exporting transaction data from your application, it is important to make sure that the database of spreadsheet application isn't automatically formatting any of the fields (e.g., inserting a dollar sign in the Amount field).

Let's assume that you use a database or spreadsheet application to create a file containing one sale transaction, and that you will be using the standard transaction record format for a sale as outlined above. Here's the contents of the file:

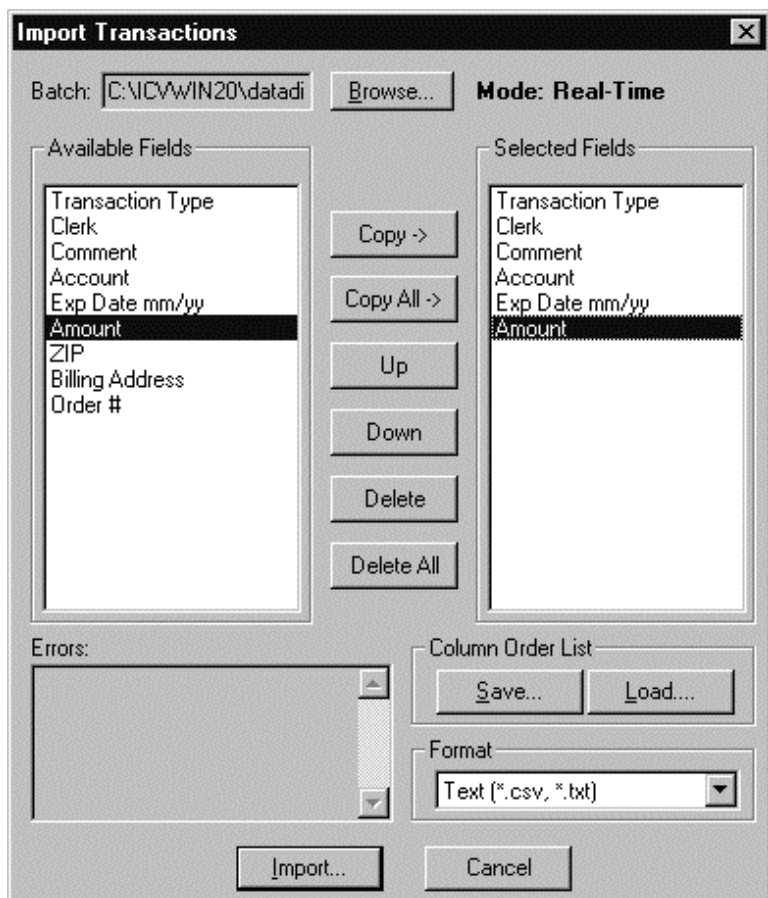
"C1", "BOB", "1437", "372233154021042", "9907", "91.87"

Here's the order of the fields for the transaction record shown above. The order of the selected fields shown below (top-down) should match the order of the exported data (left-to-right):

Transaction Type
Clerk
Comment
Account
Expiration Date
Amount

Export the transaction data to a comma or quote-comma delimited file in **.txt** or **.csv** format without column headings. Once the file has been exported, take the following steps to import the transaction data it contains into **ICVERIFY**:

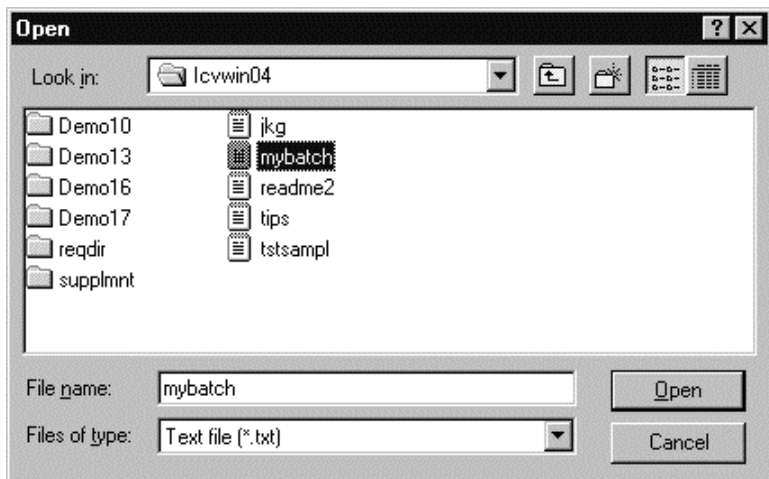
1. Load **ICVERIFY** if it is not already running. Select **Import Transactions** from the **File** pull-down menu. This will display the box shown below. Highlight the first field for the format that you will be using, then click on the **Copy** button to add it to the **Selected Fields** list.



-
- Continue to add the fields that you need in the order that your application will be exporting them. When you have finished, click on the **Save** button to save the field configuration that you have just set up. This will store the configuration in a filename of your choosing (with a default extension of **.imp**) for future use. If you need to, you can save multiple configurations which can be accessed by clicking on the **Load** button.

Note: in order for a batch containing different types of transactions to be successfully imported, you will need to add all of the fields that are required by your processor for all of the transactions that you will be importing.

- Once you have defined the field order that **ICVERIFY** will use when importing the transactions from the file that you have created, click on the **Import** button to import your file. You will then be presented with a box that will allow you to select the file that you have created with your application:



- Locate your file and double-click on it, or highlight it and then click on the **Open** button. If the file is imported successfully, you will get a dialog indicating how many records were successfully imported. If the import was not successful, you will be returned to the **Import Transactions** box, where the **Errors** field will provide some information as to why the import failed.
-

Selections for Import Transactions Dialog

Batch

This field displays the path to the Offline Group Input file that your transactions will be imported to. This is the default path and filename defined by the Offline Group Input File field under the **Merchant Info** tab in Advanced Setup. The **Browse** button to the right of the field allows you to import the transactions to a file other than the default Offline Group Input file.

Available Fields

Lists all of the available fields which can be used to define a transaction. Click on each field necessary for the transaction that you will be doing in the order that you have exported the transaction records, then click on the **Add** button. This will add the field to the **Selected Fields** box (see **Appendix B: Transaction Record Formats** for guidance as to which fields are required when creating transaction records).

Selected Fields

Contains all of the fields that have been added from the Available Fields box. This is the field order that will be used when the transaction data is imported.

Copy

This button copies the field highlighted in the **Available Fields** box to the **Selected Fields** box.

Copy All

This button copies all of the fields in the **Available Fields** box to the **Selected Fields** box. If you plan on using most of the available fields when importing your transactions, this button saves you the effort of copying fields to the Selected Fields box one at a time. You can remove any extra fields by highlighting them and clicking on the **Delete** button.

Delete

This button allows you to remove fields displayed in the **Selected Fields** box.

Up and **Down** buttons

These buttons are used to change the position of a field displayed in the **Selected Fields** box. This allows you to make adjustments in the field order without clearing the Selected Fields box and starting from scratch. To change the position of a field in the list, highlight the field, then use the up or down buttons to move it to the desired position.

Column Order List

The **Save** button allows you to save the field configuration that is currently displayed in the **Selected Fields** box. You will be able to specify the name of a configuration file containing the order and type of fields that were selected. This file will have a **.imp** extension. Once you have stored a field configuration, you can select that configuration by using the **Load** button.

The **Load** button allows you to load a previously saved field configuration. You will be presented with a dialog that will allow you to select the configuration that you wish to use. Once you have selected the file that contains the configuration that you want, the fields for that configuration will be displayed in the correct order in the **Selected Fields** list.

Format

This drop-down menu is used to specify the type of file that will be imported. Files with a **.txt** or a **.csv** extension can be selected for import.

Errors

If the import failed for some reason, the Errors box will contain information that indicates why the operation failed. The first line of the error message contains the first record of the import that failed and the second line describes the nature of the error.

*Note: All records in error are written to a file called **ERRORS.TXT**.*

Exporting Transactions

This feature can be used to export transaction data to a spreadsheet or database application. You can export the data as ASCII text or Microsoft Access files. The source of the data exported depends on the mode that is currently selected. If you are processing transactions real-time, all transactions that are currently in the open batch will be exported. If you are currently running in Off-Line Group Mode, all of the transactions stored in the **Off-Line Group Output** file will be exported.

The processor's response can be exported by including **Response** in the **Selected Fields** box for export. You may only export a response for credit card transactions, not debit or check guarantee.

Example of a Response From an Approved Transaction

```
"Y12345612345678"
```

The Y at the beginning of the field indicates that the transaction was approved. This is followed by a six-digit approval code (in italics) and an optional reference number.

Example of a Response From a Declined Transaction

```
"NPICK UP CARD"
```

The N at the beginning of the field indicates that the transaction was declined. The text of the response from the processor follows.

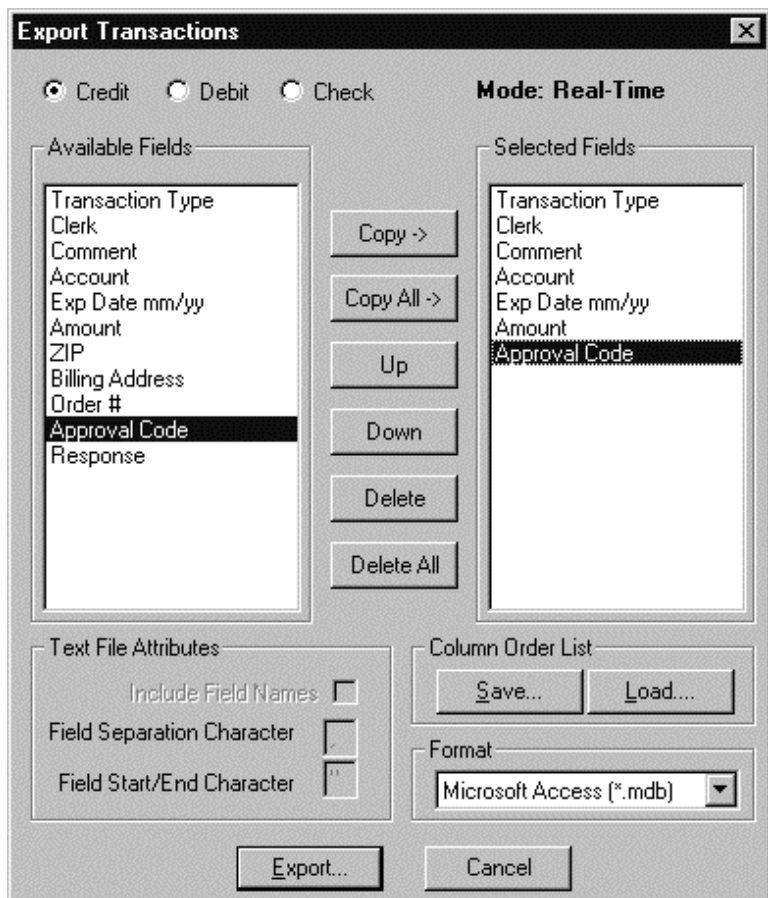
If you have configured *ICVERIFY* for address verification (AVS), the software will return a one character response that indicates how valid the address information is:

```
"Y12345612345678Y"
```

The Y at the end of the field indicates that the address and five-digit ZIP code provided matched with the account information. See Appendix D for a list of possible AVS result codes.

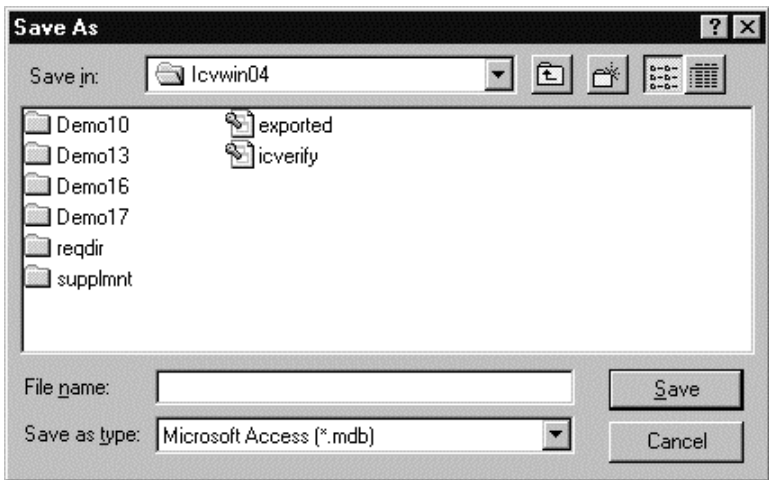
Here are the steps that you will need to take to export transaction data to a file:

1. Select **Export Transactions** from the **File** pull-down menu. This will display the window shown below. Use the radio buttons near the top of the window to select the type of data to be exported:



2. Highlight the first field for the format that you will be using, then click on the **Copy** button to add it to the **Selected Fields** list. Continue to add the fields in the order that you wish them to be exported.

-
3. You can export data as ASCII text or Microsoft Access (.mdb) files. If you are exporting the data as ASCII text, use the **Text File Attributes** section to specify how the file will formatted for export. If the **Include Field Names** check box is checked, the first line of the exported text file will be a list of the field titles in the order that they were exported.
 4. When you have finished, click on the **Save** button to save the field configuration that you have just created. This will store the configuration in a filename of your choosing (with a default extension of **.exp**) for future use. If you need to, you can save multiple configurations which can be accessed by clicking on the **Load** button.
 5. Once you have specified the structure of the file that you will be exporting, click on the **OK** button. You will then be prompted to enter a name for the file:



5. Enter a file name, then click on the **Save** button to export the file.

Selections for Export Transactions Dialog

Radio Buttons (Credit, Debit and Check Guarantee)

Use these radio buttons to select the type of data you will be exporting.

Available Fields

This box lists all of the available fields which can be used when exporting transaction data. Click on each field that should be included in the order that you want exported, then click on the **Add** button. This will add the field to the **Selected Fields** box on the right.

Selected Fields

Contains all of the fields that have been added from the Available Fields box. This is the field order that will be used when the transaction data is imported.

Column Order List

The **Save** button allows you to save the field configuration that is currently displayed in the **Selected Fields** box. You will be able to specify the name of a configuration file containing the order and type of fields that were selected. This file will have a **.exp** extension. Once you have stored a field configuration, you can recall it for use by selecting the **Load** button. Once you have loaded the file that contains the configuration that you want, the fields for that configuration will be displayed in the correct order in the **Selected Fields** list.

Format

This drop-down menu is used to specify the type of file that will be exported. Transaction data can be exported as ASCII text or Microsoft Access files.

Text File Attributes

These options are used when exporting data as ASCII text. You can specify the field separation character, the start/end character for each field and whether or not field names will be exported (the first line of the file is a list of field titles in export order).

*Note: If you wish to export transactions in tab-delimited format, enter a "t" into the **Field Separation Character** field.*

Generating Reports (The Report Menu)

How to View or Print Transaction Reports

The report menu allows you to create a variety of simple or detailed reports summarizing transaction activity. These are the kinds of reports that you may create: **Credit Card Report**, **Debit Card Report**, **Check Guarantee Report**, **Settlement Report** and **Off-Line Group Reports**. Each report is described in this section.

Credit Card Report

This report allows you to view or print a summary of credit card activity for a specified date range or to match select data (customer, clerk, account or card type). Use it to track credit activity for a defined period. Note that this report will show only credit card activity.

The screenshot shows a dialog box titled "Credit Card Report" with a close button (X) in the top right corner. The dialog is organized into several sections:

- Starting Date:** A text box containing "05-11-1997".
- Ending Date:** A text box containing "05-11-1997".
- Summary Only:** A section with two radio buttons: "Include Details" (selected) and "Totals Only". There is also a checked checkbox for "Sub Totals".
- Report Options:** A section with two columns of checkboxes. The first column includes "VISA & MasterCard", "VISA", "MasterCard", "American Express", "NOVUS", "Carte Blanche", and "Diners Club". The second column includes "Captured" (checked), "Not Captured", "Missing Tips", "Errors", "Other", and "Serial # Seq".
- Matching Data:** A section with several text boxes: "Clerk", "Comment", "Account #", "Expiration Date", and "Customer Name". The "Amount" field is a small box containing "0.00".
- View/Print Options:** Two radio buttons: "View Report" (selected) and "Print Report".
- Printer:** A text box for specifying the printer name.
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

Starting Date and Ending Date

Use these fields to set the date range for your report. If the current date is used as both the starting date and ending date, the report will show current transactions that have not yet settled/closed. If a report showing the current day's settled/closed transactions is required, enter today's date as the starting and tomorrow's date as the ending date.

Month-to-Date totals are printed if the date range includes only one month, starting with the first day of the month. Year-to-date totals are printed if the date range includes only one month, starting from the first day of the month, and that month is the current one.

Include Details or Totals Only

One one of these options may be selected at a time. **Include Details** will generate a detailed summary report. **Totals Only** will generate a summary report only.

Sub Totals

Displays settlement totals at each closing.

Report Options

Use these check boxes to narrow the search criteria for your reports. The boxes to the left are all credit card types. If you wish to do a search for one credit card type only, be very careful to make sure that the **Captured** checkbox has been left UNCHECKED. If this isn't done, the report will reflect all transactions for the selected card type plus all CAPTURED transactions (approved transactions which can be settled) for ALL card types. The checkboxes in the right column are described below:

- **Captured**

This option will list all transactions that have been approved and can be settled. This option does not include transactions such as book or pre-authorization/auth only transactions, which cannot be settled until they have been completed by a ship (in the case of a book transaction) or a force/ticket only (in the case of a pre-authorization/auth only transaction). If you want to search for one specific card only, make sure that the Captured box has been unchecked or you will get a report for the card that you have selected plus all other transactions that qualify as captured.

-
- **Not Captured**
This option will list all transactions that cannot be settled directly, such as book or pre-authorization /auth only transactions (see Captured above).
 - **Missing Tips**
Lists all transactions that are missing tips.
 - **Errors**
This option will list all transactions that have been declined.
 - **Other**
Lists inquiries.
 - **Serial # Seq**
Lists all transactions regardless of status.

Debit Card Report

Use this report to view or print out a summary of debit card activity

Debit Card Report

Starting Date: 05-11-1997 Ending Date: 05-11-1997

Summary Only:
 Include Details Sub Totals
 Totals Only

Report Options:
 Captured Errors
 Not Captured Other
 Serial # Seq

Matching Data:
Clerk: _____
Comment: _____

Amount: 0.00 Additional Cash: 0.00

View Report Print Report
Printer: _____

OK Cancel

Starting Date and Ending Date

Use these fields to set the date range for your report. If the current date is used as both the starting date and ending date, the report will show current transactions that have not yet settled/closed. If a report showing the current day's settled/closed transactions is required, enter today's date as the starting and tomorrow's date as the ending date.

Month-to-Date totals are printed if the date range includes only one month, starting with the first day of the month. Year-to-date totals are printed if the date range includes only one month, starting from the first day of the month, and that month is the current one.

Include Details or Totals Only

One of these options may be selected at a time. Include Details will generate a detailed summary report. Totals Only will generate a summary report only.

Sub Totals

Displays settlement totals at each closing.

Report Options

Use these check boxes to narrow the search criteria for your reports.

- **Captured**
This option will list all transactions that have been approved and can be settled.
- **Not Captured**
This option will list all transactions that cannot be settled directly, such as Book or Pre-Authorization /Auth Only transactions (see Captured above).
- **Missing Tips**
Lists all transactions that are missing tips.
- **Errors**
This option will list all transactions that have been declined.
- **Other**
Lists inquiries.
- **Serial # Seq**
Lists all transactions regardless of status.

Check Guarantee Report

Use this report to view or print out a summary of check guarantee activity

Check Guarantee Report

Starting Date: 05-11-1997 Ending Date: 05-11-1997

Matching Data

Clerk: _____

Comment: _____

Driver's License #: _____

State: _____ Date Of Birth: _____

Check #: _____ ABA#: _____ Amount: 0.00

Account #: _____

Summary Only

Include Details Sub Totals

Totals Only

Report Options

Below Floor Limit Errors

Captured Other

Serial # Seq

View Report Print Report

Printer: _____

OK Cancel

Starting Date and Ending Date

Use these fields to set the date range for your report. Month-to-Date totals are printed if the date range includes only one month, starting with the first day of the month. Year-to-date totals are printed if the date range includes only one month, starting from the first day of the month, and that month is the current one.

Include Details or Totals Only

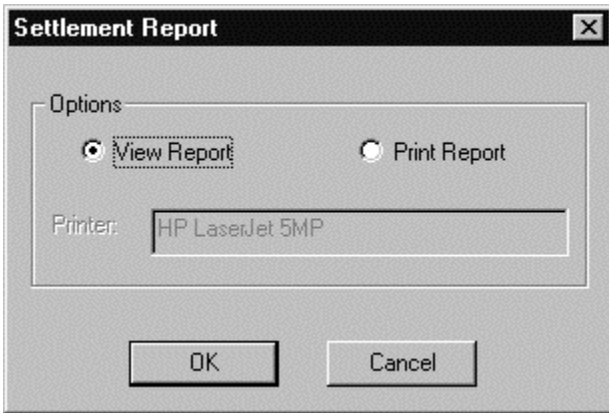
One of these options may be selected at a time. Include Details will generate a detailed summary report. Totals Only will generate a summary report only.

Sub Totals

Displays settlement totals at each closing.

Settlement Report

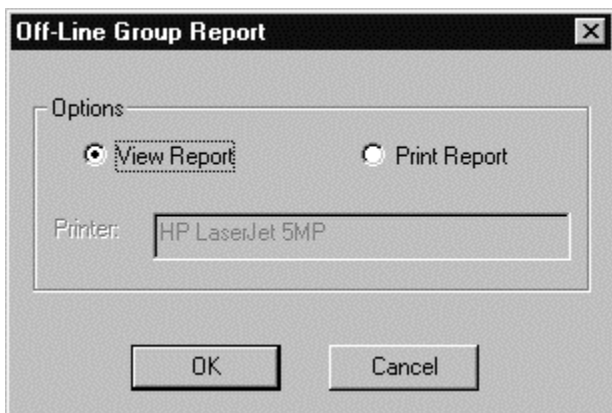
The settlement report can be used to view or print a report of the last settlement/close batch procedure that was performed. It can be used to produce a hard copy of the settlement for filing. Use the radio buttons to select whether you wish to view or print the report (there are no other options for Settlement reports):



Note: Some merchants use host-based processing networks that auto-settle transactions. This type of processing network settles the merchant's captured transactions at its end, usually on a daily basis, without requiring the merchant to perform a Settlement/End Day procedure. For this type of processing network, ICVERIFY must internally "settle" captured transactions, transferring them from the open batch to the history files so that it stays in synch with the processing network. This means that a settlement report printed by a merchant using this type of processing network will show a settlement report containing the previous day's transactions only.

Off-Line Group Reports

There are a number of reports that are designed specifically to keep track of Off-Line Group activity. To access them, select **Off-Line Group** from the **Report** pull-down menu. For each type of report selected, you will be presented with the option to view or print the report as shown below (there are no other options for Off-Line Group reports):



Here are the available reports:

Group

This prints a report of the transactions in the current Off-Line Group (Use this report when you wish to view the group that is about to be transmitted).

Result

This prints the results of the last transmitted Off-Line Group.

Duplicate

This report shows transactions in the current Off-Line Group that have matching card numbers.

History Duplicate

Prints the transactions in the Off-Line Group File that have card numbers which match History transactions.

File Menu Options

Import Transactions

Allows the user to import a batch of credit card transactions created by another application (see page 42 for more details).

Export Transactions

Allows the user to export credit card, debit card and check guarantee transaction data for use by another application such as a database or spreadsheet (see page 50 for more details).

Print Receipt

Allows the user to print a receipt for any transaction that is currently being viewed.

Printer Setup

This selection is used to define the report and/or receipt printer that will be used by IC*VERIFY*.

Save Installments

Allows the user to save a new installment or an existing installment that is currently being edited.

Exit

Closes IC*VERIFY*.

Edit Menu Options

Undo, Cut, Copy and Paste

These are all typical Windows functions that can be used while editing transactions.

Find Current Transaction

Used to locate and edit current transactions (approved transactions that have not been settled or Off-Line Group transactions that have not been submitted to the processing network). The Find Current Transaction feature has been integrated with transaction types where finding transactions comes into play. (see page 20 for more details).

Save Transaction

Used to save a transaction that is currently being edited.

Delete Transaction

Used to delete a transaction that is currently being edited.

Stop Transaction Editing

Stops transaction editing without saving any changes to the transaction that is currently being edited.

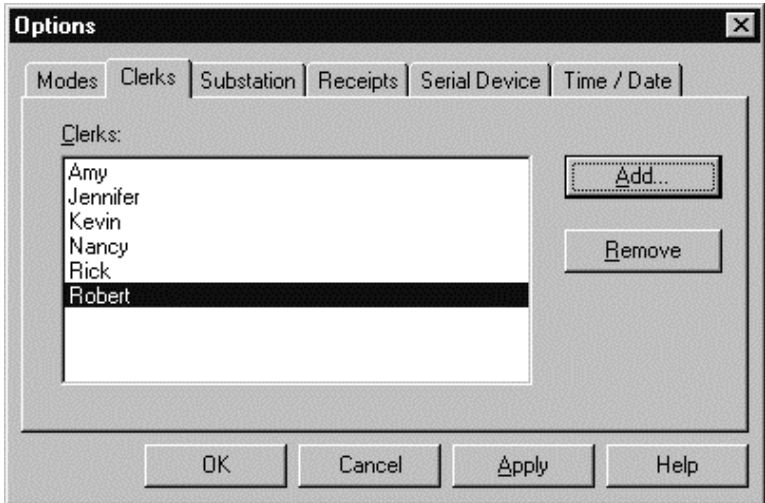
Options

Brings up a tabbed dialog box that presents various options for configuring *ICVERIFY* (see next page).

Options Dialog

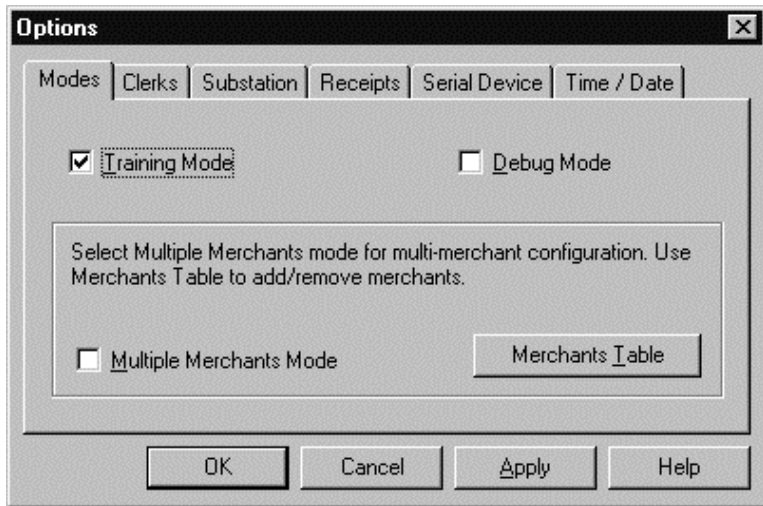
Clerks tab

This tab allows you to store and maintain the list of clerk names that can be accessed from the **Clerk** pull-down menu while processing transactions.



Clicking on the **Add** or **Remove** buttons will allow you to add or remove clerks from the pull-down list. To select a clerk, click once on the clerk's name to highlight it and then click on the **OK** button.

Modes tab



Debug Mode Check Box

Debug mode is used to troubleshoot software problems. When operating in debug mode, the software will log information that is useful to programmers. This information is written to a file called ICVERIFY.DBG, which is stored in the directory where the program files have been installed. This file can be opened using any text editor, however, the information contained in the file is in a highly technical format. Each time that the program is started in debug mode any pre-existing debug file is renamed to ICVERIFY.DBO.

Multiple Merchants Mode Check Box

This box must be checked to enable Multiple Merchants Mode. To add, remove or select merchants, click on the **Merchants Table** button to the right of the check box.

Merchants Table Button

Used to add, delete or switch merchants in a multi-merchant setup.

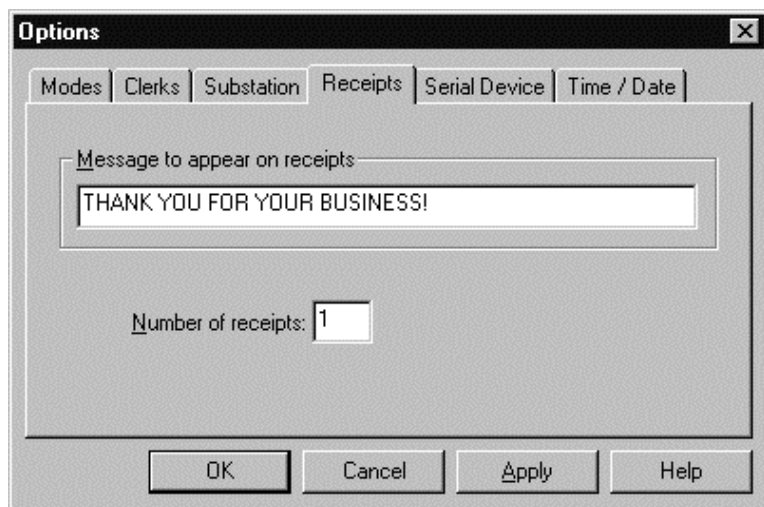
Training Mode Check Box

This selection causes ICVERIFY to simulate a response from the processing network for training purposes. No dial-out will occur when transactions are submitted. Any transactions authorized or settled while in Training Mode are stored separately from live transactions.

Note: Training Mode transactions are always approved if done for an even amount. Transactions done for an odd amount are rejected unless they end with 5 cents (i.e., \$12.95 or \$1.05 would be approved).

Receipts tab

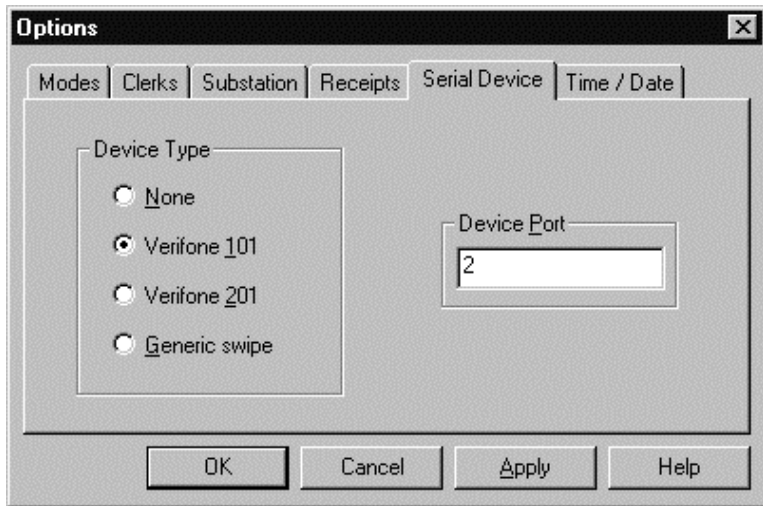
Use this tab to enter a receipt message and to set the number of receipts that will be printed whenever a transaction is approved. The receipt message can be up to 30 characters in length.



To set up a receipt printer, select the **Printer Setup** Option from the **File** pull-down menu.

Serial Device tab

This tab is used to specify the COM port and device type for serial devices. Supported devices are Verifone 101 compatible pinpads, Verifone 201 compatible pinpads with card swipe and a generic serial card swipe setting.



Device Port

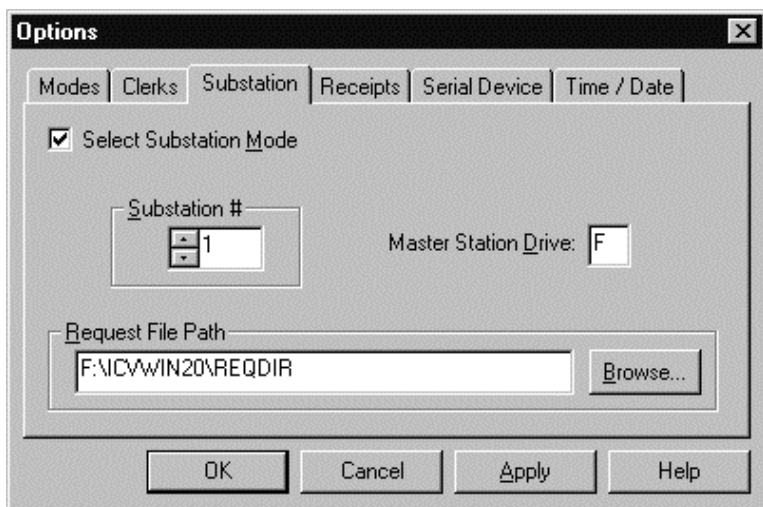
Used to enter the port setting the serial device will be using.

Device Type

Enter the type of serial device here. Pinpad devices must be Verifone 101 or Verifone 201 compatible.

Substation tab

This selection is used to configure a copy of **ICVERIFY** to run in Substation Mode in a multi-user setup (see page 25 for more details about configuring **ICVERIFY** for multiple users).



Select Substation Mode

This box must be checked before the other fields become active.

Substation

This selection is used to assign a unique station number to this substation. The station number cannot exceed the number of users licensed to use the software. Up to 999 substations can be supported with the appropriate licensing. A single-user license will allow only one substation. A basic multi-user or network license allows 4 users, so you would be able to configure substations with station numbers ranging from 1 through 4. If you are unsure of the number of users you are licensed for, load the **Advanced Setup** program and check the **Number of Users** field (located near the bottom of the **Terminal ID** tab).

Master Station Drive

This is the drive where the master station has been installed to.

Request File Path

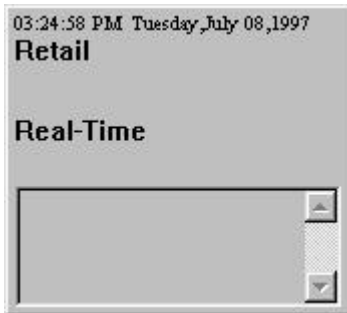
This field is used to enter a path to the shared directory that will be used to exchange request and answer files. This path must point to the same directory which was entered into the Request Directory field when setting up ICVMLT32.EXE.

Time/Date tab

This selection is used to configure the time and date format for the Clock Pane, which is located in the lower left hand corner of the Graphical User Interface:



The selections on the time and date tab *do not affect* the format of the time and date display in the Status Box (shown below):



View Menu Options

Toolbar

This menu option is used to show or hide the **Toolbar**, which is the row of buttons located underneath the pull-down menu selections:



If the **Toolbar** pull-down menu option is checked in the **Edit** menu, then this row of buttons will be displayed (this is the default). If **Toolbar** is not checked, the row of buttons will be hidden.

*Note: All **Toolbar** items are also available through the pull-down menus. If a button is disabled, this means that the function that the button represents is not set up or is currently unavailable. For example, the button which allows you to reprint a receipt (second from right) will be inactive until a transaction has been processed.*

Status Bar

This setting allows you to choose whether or not the status bar will be displayed. The status bar is the bar running along the very bottom of the user interface:



The status bar displays some information about the item the user has currently selected, and also contains the **Clock Pane** (the date/time display at the right end of the status bar).

Credit Card Form

Used to switch to the Credit Card Form.

Debit Card Form

Used to switch to the Debit Card Form.

Check Guarantee Form

Used to switch to the Check Guarantee Form.

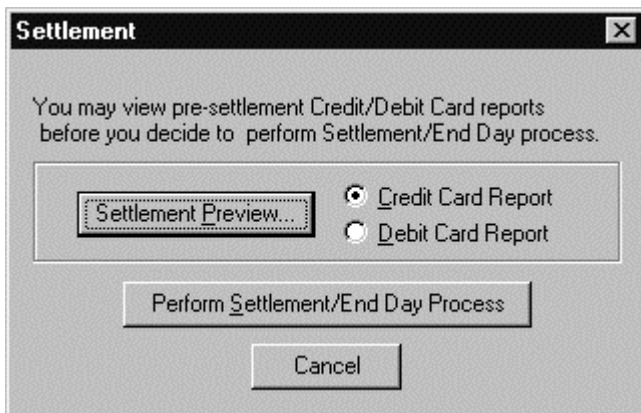
Function Menu Options

Convert Book To Ship

Finds and converts approved book transactions to ship transactions.

Settlement/End Day

This selection is used to perform the settlement/end of day process, or to preview the batch before settlement.



Switch Merchants

Use this selection to switch merchants when ICVERIFY is in Multiple Merchants Mode (see page 30 for more details).

Off-Line Group Mode

Toggles Off-Line group Mode off and on. Off-Line Group transactions are stored in an Off-Line Group Input file for batch transmission to the processing network (see page 22 for more information).

Transmit Off-Line Group

Used to transmit all transactions stored in the default Off-Line Group Input file. A non-default file may also be selected (see page 22 for more information).

Installments

Loads the Installment (recurring billing) selections (see page 36).

Report Menu Options

Credit Card

Allows the user to print a report of credit card activity (see page 54 for more details).

Debit Card

Allows the user to print a report of debit card activity (see page 57 for more details).

Check Guarantee

Allows the user to view or print a report of check guarantee activity (see page 59 for more details).

Settlement

Used to view or print a report of the last settled batch (see page 60 for more details).

Off-Line Group

This selection provides access to several Off-Line Group report options (see page 61).

Utilities Menu Options

File Print

This is a simple file printing utility that is usually used to print debug files. When file print is selected, the path to the debug file is already specified. It is possible to enter an alternate path and filename by either manually entering the information or by using the browse option.

Ymodem File Send

This test is often used by merchants setting up for American Express. It is used to transmit a specified file to a specified phone number using the Ymodem format.

Substation Test

The substation test is used after the software has been configured to act as a substation in a multi-user setup. A test sequence is sent to the master station to make sure that it is responding correctly. If a substation test fails, the first thing to do is to make sure that the substation and the master station are both pointed to the directory which will be used for the exchange of transaction requests and responses.

Delete Partial Off-Line Group

This function is used when an Off-Line Group transmission has failed. It deletes the tracking file that is used to keep the position in the Off-Line Group file.

Reset Batch

This feature allows the user to reset the number of the current batch. Under normal conditions, this feature is not used. It is recommended that you do not reset the current batch number unless you have been instructed to do so by a technician.

Clear Batch

This feature is used to clear the open batch file without performing a settlement/close batch procedure. When clear batch is selected, the software will transfer the transaction data from the open batch to the history files without dialing out. Do not use this function unless you

are certain that your current open batch has already been settled by your processing network.

Delete Current Batch

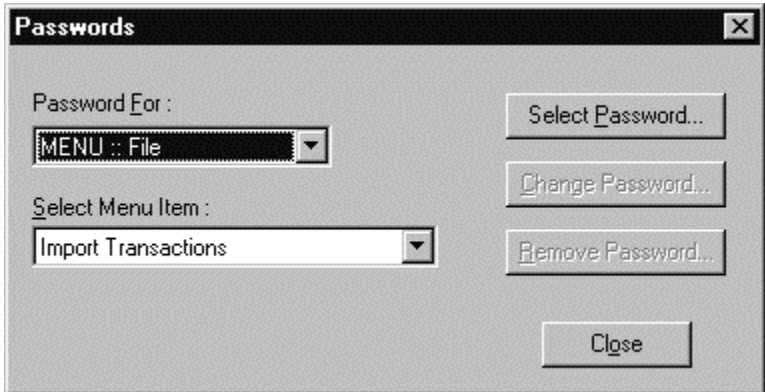
This function clears the current batch of all transactions. It is normally used only during testing with test account setup information.

Find Settled Transaction

This feature is used to find settled transactions stored in ICVERIFY's history files. It is most commonly used when a merchant wishes to print a receipt for a settled transaction. Please note that settled transactions cannot be located using the Find Current Transaction menu selection (accessed from the Edit pull-down menu) because it only searches for unsettled transactions stored in the current open batch or Off-Line Group Input file.

Password Protection

This dialog box allows for the password protection of various menu selections. It is also possible to create a password for the entire application. *If you use this feature, it is strongly suggested that you keep copies of your password(s) in a safe place to help ensure that you do not get locked out of a password-protected feature or the program itself.*



Password For:

This drop-down list allows you to select a pull-down menu or transaction form for password protection. This selection affects the items presented in the **Select Menu Item/Select Transaction** pull-

down menu described below. Use the **Entire Application** selection to create a password that will be requested whenever *IC VERIFY* is loaded.

Select Menu Item/Select Transaction

This is the drop-down menu below the **Select Menu / Form** drop-down menu (the title varies depending on whether a menu or a form is selected for password protection). The selections associated with this item are dependent on the form or menu selected.

Select Password

Allows the entry of a new password for the selected transaction type or menu item.

Change Password

This can be used to change an existing password.

Remove Password

This can be used to remove password protection for the selected item.

Help Menu Options

Help

This selection loads the online help file, which can also be accessed by pressing **F1**.

Tip of the Day

This selection displays the Tip of the Day window, which is normally displayed when the program is first loaded.

Tooltips

This enables or disables the flyby help that appears when a cursor is placed over an object.

Context-Sensitive Help

Determines whether the context-sensitive help tab is active or inactive. If this item is not checked, the Help tab will not be updated when it is selected.

About ICVERIFY

Displays information about the version of *ICVERIFY* that is currently being used and the product serial number.

Appendix A: Initialization Strings

There are a number of command line parameters that can be used with ICVMLT32.EXE. These commands (with the exception of /A) are entered into the Initialization String field when loading the program. The /P command discussed below can be used with both ICVMLT32.EXE and ICVERIFY.EXE.

/A (Auto Initializes ICVMLT32.EXE)

Once ICVMLT32.EXE has been initialized at least once, the /A argument will cause ICVMLT32.EXE to automatically initialize using the same settings that were used the last time that the program was initialized manually. *This switch should not be used in the Initialization String field.* Instead, create a shortcut to run ICVMLT32.EXE, then append the /A to the command line in this fashion:

C:\ICVWIN\ICVMLT32.EXE /A

The example above assumes that ICVERIFY was installed to C:\ICVWIN.

/DD (Places ICVMLT32.EXE In Training Mode)

The /DD command line parameter can be used in the Initialization String field to place ICVMLT32.EXE into Training Mode. When the /DD command is used, ICVMLT32.EXE *will treat all transactions it receives as Training Mode transactions and process them accordingly.* This command line parameter is generally used only when testing an integration between ICVERIFY and another application. If you wish to place the GUI into Training Mode, choose **Options** from the **Edit** pull-down menu and then check the **Training Mode** check box (this will only affect the substation where Training Mode was selected).

/P (Loads a Setup File other than ICVERIFY.SET)

This command line parameter can be used to load a setup file other than the default. This is sometimes useful in testing and multi-merchant setups. The syntax for this command line parameter is **/P [Set File Name]** where **[Set File Name]** is the name of the set file to be loaded. To load ICVMLT32.EXE using ICVE0005.SET enter the following into the Initialization String field:

/P ICVE0005.SET

The /P switch can be used with ICVERIFY.EXE by creating a shortcut and appending the switch and set file name to the command line in the same manner as shown above.

Note: When specifying the setup file name, the .SET extension must be specified or the setup file will not be loaded.

/O[x] (Evaluated Response)

This command line parameter forces the program to use the short, evaluated response when returning the response from the processing network. This response type is required from ICVMLT32.EXE by the substations in order for a multi-user setup to function properly. The response type can also be configured in the setup file by using the **Evaluate Rsp (Y/N/B/L/D/S)** field under the **Merchant Information** tab in Advanced Setup. The optional 'x' causes ICVMLT32.EXE to return the original request on the first line and the short, evaluated response to the request on the second.

/XX (Debug Mode)

The /XX parameter can be used to force ICVMLT32.EXE into debug mode. All program activity will be logged to a file called ICVERIFY.DBG, which will be located in the directory where the program files have been installed. This file is often used for software troubleshooting, however, the information it contains is in a highly technical format.

Appendix B: Transaction Record Formats

These transaction records provided as a guide for use when importing transaction data from another application. The formats shown below are correct for most credit card networks and options. There are a small number of special options not included. The most common names are used in this table. The first column is a literal transaction type indicator (C1,C2, ST, etc.). The remaining columns are defined in appendix C.

Retail Charge Card Authorization Formats

Sale								
C1	CMc	CMM	ACT	EXP	AMT		ZIP	ADD
Void								
C2	CMc	CMM	ACT	EXP	AMT	APV		
Credit/Return								
C3	CMc	CMM	ACT	EXP	AMT			
Credit Void								
CR	CMc	CMM	ACT	EXP	AMT	APV		
Force								
C5	CMc	CMM	ACT	EXP	AMT	APV	ZIP	ADD
Auth Only								
C6	CMc	CMM	ACT	EXP	AMT		ZIP	ADD

The ZIP & ADD are optional and for record keeping purposes in a Force Sale).

Mail Order Charge Card Authorization Formats

Book								
C4	CMc	CMM	ACT	EXP	AMT		ZIP	ADD
Ship								
CO	CMc	CMM	ACT	EXP	AMT		ZIP	ADD
Sale								
C1	CMc	CMM	ACT	EXP	AMT		ZIP	ADD
Void Sale								
C2	CMc	CMM	ACT	EXP	AMT	APV		
Credit/Return								
C3	CMc	CMM	ACT	EXP	AMT			
Credit Void								
CR	CMc	CMM	ACT	EXP	AMT	APV		
Force Sale								
C5	CMc	CMM	ACT	EXP	AMT	APV	ZIP	ADD
Auth Only								
C6	CMc	CMM	ACT	EXP	AMT		ZIP	ADD

(ZIP & ADD are optional and for record keeping purposes in a forced sale)

Appendix C: Field Descriptions

Field ID	Min Len	Max Len	Field Type	Field Description
ABA	9	9	0	ABA Number
ACT	6	19	0	Credit Card Account number
ADD	0	20	1	Address (Optional field)
AMN	0	13	5	Amount of Additional Cash (Cash-back)
AMT	0	13	5	Amount of Purchase
AMt	0	13	5	Total Amount
APV	2	6	1	Approval Code
CKN	2	6	0	Check Number
CHo	3	16	0	Account Number
CH2	2	25	0	Account Number
CMA	10	10	2	Check-in Date (format: MM/DD/YYYY)
CMc	0	32	1	1st Field (Clerk)
CMD	10	10	2	Departure Date (format: MM/DD/YYYY)
CMe	2	2	1	State Code
CME	0	7	5	Additional Charges
CMI	0	6	0	Invoice/folio number
CMM	0	32	1	2nd Field (Comment)
CMN	0	20	1	Customer Name
CmP	1	1	3	Preferred Cardholder (Y/N)?
Cmr	0	13	5	Room Rate
CMS	0	20	1	Server ID
CMT	0	20	1	Ticket ID
DOB	10	10	2	Date of Birth
DLn	4	30	1	Driver's License Number
EDT	10	10	2	Ending Date (format: MM/DD/YYYY)
EXP	3	4	0	Expiration date (YYMM only. May also hold card swipe)
HRD	1	1	3	Printer? (Y/N)
MID	0	4	1	Merchant ID
MTD	0	30	1	Message of the Day
NUL	0	0	-	Null field (just "")
PIN	16	16	1	Encrypted PIN number as returned from the PIN PAD
REF	7	8	0	Reference Number
RPS	0	10	4	Report Options
SDT	10	10	2	Starting Date (format: MM/DD/YYYY)
STE	2	2	1	State Code
SUM	1	1	3	Summary? (Y/N/S/D)
SWP	0	38	1	Swiped card information (track 2 only)
TAG	1	1	3	Print receipts? (Y/N)
TIP	0	13	5	Amount of tip
ZIP	5	9	1	ZIP Code (optional field)

Field Types

0	=	Numeric	3	=	"Y" or "N"
1	=	Alphanumeric	4	=	Report Type
2	=	Date (MM/DD/YY)	5	=	Currency

Appendix D: Address Verification Result Codes

This list of result codes is provided for use when exporting transaction data to a database or spreadsheet.

LETTER/CODE	DESCRIPTION
A (ADDRESS)	Address matches, ZIP does not match
E (EDIT ERROR)	(For example, address verification not allowed for this transaction)
N (NO)	Both address and ZIP do not match
R (RETRY)	System unavailable or timeout
U (UNAVAILABLE)	Address information is unavailable
W (WHOLE ZIP)	Nine-digit ZIP matches, address does not match
X (EXACT)	Address and nine-digit ZIP both match
Y (YES)	Address and five-digit ZIP match
Z (ZIP)	Five-digit ZIP matches, address does not match

The information in this appendix was taken from National Data Corporation's Electronic Data Capture Technical Specifications, Release March 1991, Copyright 1987-1991 by National Data Corporation.