IC*VERIFY*

Quick Setup Guide

IC*VERIFY*, Inc.
473 Roland Way
Oakland, CA 94621
Phone: (510) 553-7500
Fax: (510) 553-7553
BBS: (510) 553-7554
E-Mail: info@icverify.com
Internet: http://www.icverify.com

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Getting Started

Thank you for selecting IC*VERIFY* for your transaction processing needs. This *Quick Setup Guide* is designed to ease you through the process of setting up IC*VERIFY* for your business.

A number of steps have been outlined below. Before taking these, you must have established a merchant account with a financial institution. IC*VERIFY* only functions with a merchant account. You will also want to check the minimum system requirements on the following page.

If you already have a merchant account (and meet the minimum system requirements) take the following steps to set up IC*VERIFY* to process transactions:

Step 1 Obtain your processor setup information. IC*VERIFY* cannot process transactions unless it is configured with setup information for the processing network (or networks) which you have been set up for (see page 4 for more details). Your financial institution will be able to provide you with this information. Each network used will require different setup information (See Appendices A, B and C of this manual for lists of setup information required for each processor).

Step 2 Install IC*VERIFY*

Step 3 Run the setup program and enter your processor setup information. At the end of setup, you will be prompted for a validation code (see step 4).

Step 4 Contact IC*VERIFY* to obtain a validation code. To receive one, you will need your setup information as described above and your product serial number (See page 6 for details on how to contact IC*VERIFY* for your validation code).

Once you have completed setup, use the reference manual included with your software to get information about how to configure IC*VERIFY* for multiple users or merchants, or for general information about transaction processing.

Minimum System Requirements

Important: If you are using Windows 3.X as an operating system, you will need to install Win32s on your computer. Win32s is a program which allows 32-bit programs to run on Windows 3.X, which is a 16-bit operating system - it can be obtained from IC*VERIFY at no charge. Do not install Win32s on a system that is running Windows 95 or Windows NT. If you obtain Win32s from a source other than* IC*VERIFY, make sure that it is version 1.30.X. Earlier versions of Win32s are not supported.*

In order to begin using IC*VERIFY* for Windows, you will need:

- A 386 DX40 computer (Windows 3.X) or a 486 computer (Windows 95 or NT) with 20 megabytes of free hard drive space.
- 8 megabytes of RAM for systems running Windows 3.X (16 megabytes if running Windows 95 or Windows NT).
- A 100% Hayes compatible modem (Bell 103 for 300 baud, Bell 212a for 1200 baud, CCITT V22bis for 2400 baud). High speed modems must be able to step down to 300 baud.
- A 1.44 megabyte floppy disk drive.
- If you plan to accept debit/ATM cards you will need to install an encrypted pinpad (pinpads must be programmed by your bank before they can be used with IC*VERIFY*).
- IC*VERIFY* can be configured to accept input from a magnetic card stripe reader. In many cases, this allows the merchant to obtain a better rate for processing credit cards. For "card not present" transactions (such as mail order) card information may be entered via the keyboard.

Note: Before processing credit cards, debit cards, or check guarantee transactions, it is first necessary to establish a merchant account through a financial institution. IC*VERIFY only functions with a merchant account.*

Gathering Setup Information

Merchants are set up by their financial institution to process their transactions through a **processing network**. This processing network is almost always a totally separate entity from the financial institution where your merchant account is established. There are over 100 processing networks in the United States, most of which process credit cards (some only handle debit or check guarantee processing, or some combination of credit cards, debit cards and check guarantee). The processor acts as an intermediary between the merchant and the bank - 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 when the approved transaction is settled.

Although they work identically in many ways, each processing network has variations in the procedures that they use to recognize merchants and process transactions. In order to set up IC*VERIFY* correctly, you will need to gather setup information for the processor that you intend to use. IC*VERIFY* can also be configured for additional processing networks if this is necessary (see below). If you already know which processing network you will be using, check the appendices listed below to determine if you have all the information necessary to set up IC*VERIFY*.

Appendix A lists credit card setup information for processing networks which support credit card transactions (starts on page 46).

Appendix B lists debit card setup information for processing networks which support debit card transactions (starts on page 52).

Appendix C lists check guarantee setup information for processing networks which support check guarantee transactions (starts on page 54).

If you are not yet sure as to which processing network you will need to use, contact the merchant help desk at the financial institution that handles your merchant account. They will be able to aid you in determining which processors you will be using and help you obtain the information you will need to set up IC*VERIFY*. When obtaining

the data required to communicate with your processors, it is suggested that you do the following:

- Make sure your financial institution understands which cards you intend to accept (or not accept). Determine which credit cards you intend to accept and make sure that you communicate this information clearly to the financial institution which will be setting up your account with the processors. If you intend to process debit card or check guarantee transactions, find out which processors will handle them - some processing networks do not handle debit or check guarantee transactions and these transactions may need to be routed through another processing network.

- If you intend to accept American Express or Discover cards, find out whether or not you will be processing them through your primary credit card processing network. IC*VERIFY* has the capability to keep separate batches for these cards and process them directly through American Express or Novus (for Discover cards). This procedure is generally referred to as split dialing - it often gets the merchant a better processing rate. If you do plan to process these cards directly through their parent networks, you will need another set of processor setup information for each card.

If you do not have everything on this list, contact your merchant help desk to acquire the missing information. The IC*VERIFY* help desk is unable to provide processor setup information - we have no direct access to this data.

Example: A merchant is set up by her financial institution to process all types of credit cards through the CES processing network. She is provided with this information:

Terminal Type	**W.**
CES Merchant Number	**740100362325**
CES Terminal ID	**800471**
Category SIC/MCC code	**5999**

*She checks this against the list of **CES** setup information provided in Appendix A and determines that she has everything that she needs to set up the software to process credit cards through CES. She then*

calls IC*VERIFY*'*s help desk, obtains a validation code and proceeds to set up and run* IC*VERIFY*. *Note that the above setup information assumes that all credit cards will be processed through CES's network. As mentioned above, this is not always the case. If this merchant is going to process her Discover cards directly through Novus (using CES for everything else) she would need to obtain the following Novus setup information to set up* IC*VERIFY* *to process Discover cards:*

Terminal Number
Category SIC/MCC Code
City or Zip Code
DCSI Terminal ID
POS Condition Code
Location Number
Authorization Type
Terminal Serial Number

This information would normally be entered into setup at the same time as the CES information. It can also be entered at a later date, but this would require a new validation code from IC*VERIFY*'s Validations desk.

Once you are reasonably sure that you have gathered the required information for your processing network (or networks), you will be ready to run the setup program and obtain a validation code.

Obtaining a Validation Code

IC*VERIFY* will not load without a validation code. In order to obtain a validation code you will need the following information:

- Your IC*VERIFY* serial number. This is located on your install disks.
- Your company name, address and phone number.
- A complete list of setup information for the processing network (or networks) that you will be using.

If you are split-dialing (see pages 5 and 6) you will need to gather additional information. Setting up for debit cards or check guarantee also requires setup information. A complete list of information must be obtained before calling the IC*VERIFY* Validations desk. This is because the validation code which they will issue is directly generated from your processor setup data and IC*VERIFY* serial number. Contact the IC*VERIFY* validation desk (1-800-900-6133) Monday through Friday, 6:00am to 6:00pm Pacific Time. You can also fax validation information to (1-510-553-7541) or send it via e-mail to *support@icverify.com*. Include the information listed above.

If you fax your validation request, make sure that you include a return fax number and contact name. If you e-mail your request, make sure that you include a return e-mail address.

Note: If you have your setup information and wish to enter it into ICSetup (but do not have a validation code yet), you will be able to do this by changing the ***Expiration Date*** *field in setup to "****0000****". This field is normally set to "****9999****", which means that there is no expiration date. You will then be able to save the information you have entered, but the software will not load until you have reset the expiration date field to 9999 and have entered an actual validation code.*

Installing Your Software

Windows 3.X Installation Instructions

Important: If you are using Windows 3.X as an operating system, you will need to install Win32s version 1.30.X on your computer. Win32s is a program which allows 32-bit programs to run on Windows 3.X, which is a 16-bit operating system - it can be obtained from IC*VERIFY at no charge (http://www.icverify.com/win32s/). Do not install Win32s on a system that is running Windows 95 or Windows NT.*

1. Insert the copy of the IC*VERIFY* installation disk into your disk drive (Typically, this is the **A:** or **B:** drive).

2. From the Windows **Program Manager**, select the **File** pull-down menu and choose **Run**.

3. Type **A:\install** (or **B:\install**) and press **Enter** or click the **OK** button using the mouse.

4. IC*VERIFY* will then begin the process of installation. You will be asked for a "Configuration Diskette". Some organizations will pre-configure the merchant's setup information and provide it on a disk separate from the package IC*VERIFY* comes in. A configuration disk is not necessary to set up your software.

Windows 95/Windows NT 4.0 installation:

1. Insert the copy of the IC*VERIFY* installation disk into your disk drive (Typically, this is the **A:** or **B:** drive).

1. Using your mouse, double-click the **My Computer** icon.

2. Select and open the floppy drive (**A:** or **B:**) where the installation disk is located.

3. Using the mouse, double-click the **Install** icon.

4. The install program will prompt you for the name of the directory on the hard drive where you wish to install IC*VERIFY*. You may press **Enter** to select the default directory or enter another directory name and then press **Enter**.

5. IC*VERIFY* will then begin the process of installation. You may be prompted for a "Configuration Diskette". Some organizations will pre-configure the merchant's setup information and provide it on a disk separate from the package IC*VERIFY* comes in. A configuration disk is not necessary to set up your software.

Important: Do not install Win32s on a system running either Windows 95 or Windows NT.

Using the Setup Program

ICSetup is a program that you will need to run in order to enter all of your processor and business information. ICSetup has two modes of operation:

- The **Setup Wizard** streamlines the process of setup, presenting only the selections that are absolutely necessary to complete setup and run IC*VERIFY*. The first time IC*VERIFY* or ICSetup is loaded the Setup Wizard will "pop up" automatically so that you can enter all of the information needed to allow you to connect with your processing network. When the Setup Wizard has been completed, users are given the option of running Advanced Setup.

- **Advanced Setup** provides access to all of the processor setup options presented in the Setup Wizard, as well as a number of secondary selections which control various aspects of how the software operates. Most merchants will need to make few, if any, changes to the settings in advanced setup.

*Note: After the setup wizard has been completed and the changes have been saved, advanced setup will always load first. The setup wizard can still be accessed by loading setup, selecting the **File** pull-down menu and then **Setup Wizard**.*

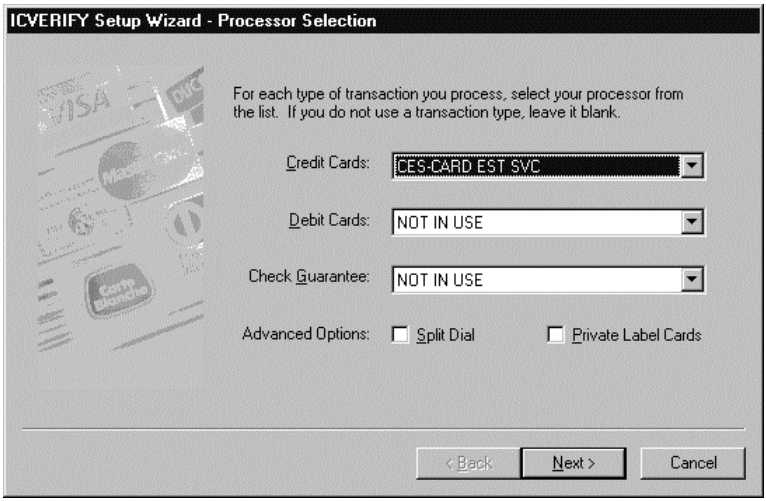
To Load the Setup Wizard in Windows 3.1 and Windows NT 3.5.1

Navigate to the IC*VERIFY* program icon in the *Program Manager* group, then double-click the IC*VERIFY* icon. If you have never run setup before, you can also run IC*VERIFY* and setup will load automatically.

To Load the Setup Wizard in Windows 95 or Windows NT 4.0

Click on the *Start Button*, then select *Programs*, then move to the IC*VERIFY* group and highlight IC*VERIFY* setup. If you have never run setup before, you can also run IC*VERIFY* and setup will load automatically.

Processor Selection Screen



This is the screen which you will use to tell the IC*VERIFY* which processing network (or networks) you will be using. Select only the processing networks for which you are sure you are set up.

Split Dial
Check this box if one or more of the credit cards you will be processing are set up for a different network than the rest (see the example which starts on page 6). You should also check this box if you have been set up to authorize transactions through one processing network and settle through another.

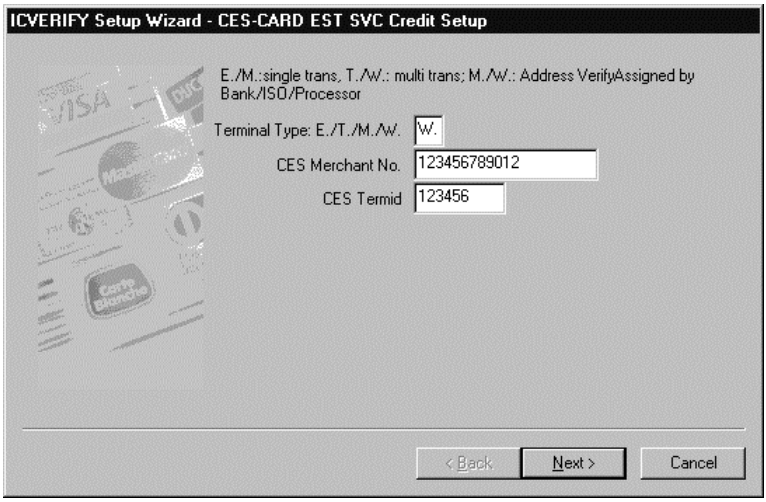
If one processing network will be handling all of your credit card transactions, do not check this box.

Private Label Cards
Check this box if you will be accepting any private label cards. If these cards will handled by a processor other than the credit card processor already selected, you will also need to have setup information for that processor.

Processor Setup

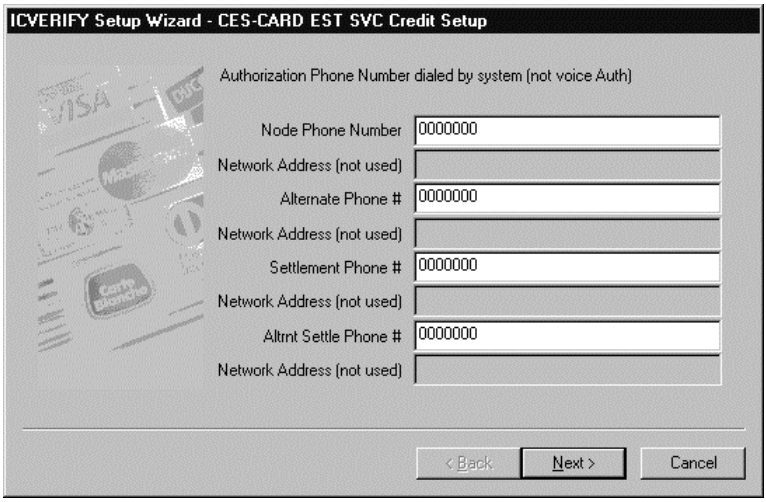
Once you have completed your selections on the *Processor Selection* screen, the Wizard will present you with a series of screens prompting setup information for each network which you have selected. Because each network requires different setup information, the content of the next few screens you will vary according to the processor (or processors) that you have selected.

Every processor has different setup requirements and "specialty terms". Processor-specific items for processor setup are not included in this manual because it would be impossible to present all of the combinations in a single document in any sufficient detail. The screen shown below is presented as an example only; it shows the first screen of a setup for the CES - Cardnet processing network. Merchants using another processing network would be presented with a screen requesting an entirely different set of setup information.



To complete processor setup, you will need the setup information for the network (or networks) that you are using.

One thing that is common to the *Processor Setup* portion of the Setup Wizard for each processing network is that each merchant will be asked to enter phone numbers for authorization and settlement. These numbers will be used by IC*VERIFY* to connect to the processing network. A sample screen is shown below:



On the screen pictured above there are four fields that can contain phone numbers. The first two of these fields are for authorization, the second two are for settlement. Most processing networks require that a merchant perform a settlement or "close batch" procedure before receiving funds from approved transactions, so the last two phone numbers are important. Unless you are sure that your processing network does not require a settlement/close batch procedure, be sure to enter settlement numbers into these fields (refer to your reference manual for more information about authorization and settlement).

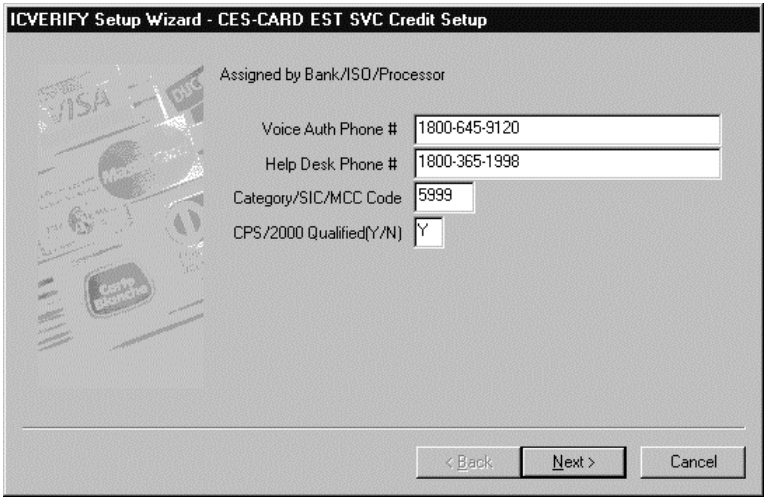
Node Phone Number
The node phone number is the first phone number that will be used when IC*VERIFY* attempts to authorize a transaction through your processing network.

Alternate Phone #
This phone number will be used if IC*VERIFY* is unable to establish a connection with the node phone number.

Settlement Phone #
This is the first phone number that IC*VERIFY* will use when performing a settlement/end day procedure..

Alternate Settle Phone #
This number will be used if IC*VERIFY* is unable to establish a connection using the settlement phone number.

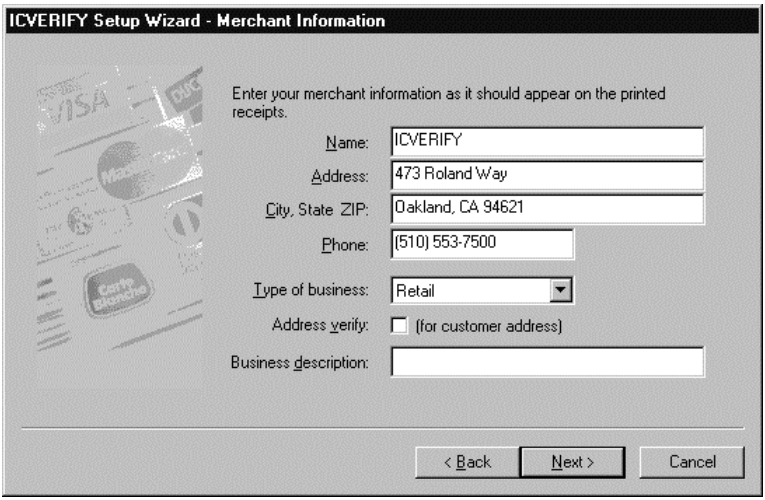
In addition to authorization and settlement numbers, the Setup Wizard will request two other phone numbers: a voice authorization phone number and a help desk phone number. The screen pictured below also requests some setup information specific to a CES setup.



Voice Auth Phone #
Enter your processor's voice authorization number here. It will be displayed onscreen for the operator when a transaction is declined. This number can be used to call the processor for a voice authorization if a transaction submitted by IC*VERIFY* is declined by the processor. This number is useful, but it is not necessary to enter it to complete setup.

Help Desk Phone Number
Enter your processor's help desk number here. It will be displayed onscreen for the operator when a transaction is declined. It is not necessary to enter this number to complete setup.

Merchant Information



The merchant's name, address, ZIP code and phone number should be entered here. Unless specified in Advanced Setup this information will appear on every receipt. There are also some other selections on this screen:

Type of Business
For most merchants, this drop-down menu should be set to Retail or Mail Order. The Type of Business menu controls the market format which IC*VERIFY* will use when processing transactions. Each format supports specific transaction types, such as *Book* and *Ship* for the Mail Order format, and *Check-in* and *Check-out* for the Hotel format. The format selected affects how IC*VERIFY* submits the transaction information to the processing network. Because of this, it is important to set the Type of Business field to the format that your processor is expecting. If this is not done, your ability to process transactions will be affected. Unless you are integrating IC*VERIFY* with another application, choose only the Retail or Mail Order formats. If

IC*VERIFY* is to be integrated with another application, the other formats may be selected.

Note: Not all processors support all of the market format selections listed. If an incorrect format is selected, IC*VERIFY* *will fail to load, returning an "INVALID PROCESSOR/TYPE OF BUSINESS" message.*

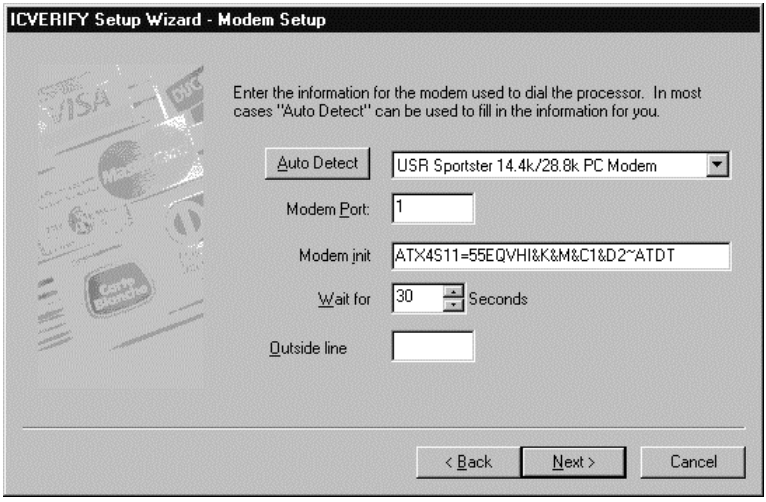
Address Verify
This checkbox enables or disables address verification. If the address verify box has been checked, IC*VERIFY* will return a response that indicates whether or not the customer's street address and ZIP code are incorrect. This information can then be used by the merchant to evaluate the transaction. Incorrect address verification information will not cause a transaction to be rejected. Even if both the address and ZIP information are bad, the processor will return an approval if the card is valid and there is enough credit available.

Note: *Some processors do not support address verification, or support it only for certain formats or transaction types.*

Business Description
This field can be used to enter a business description if provided by the processing network.

Modem Setup

This screen is used to configure your modem for use by IC*VERIFY* when connecting to your processing network. There is a drop-down list (adjacent to the auto-detect button) which can be used to select a dial string for your modem. If your modem is not on this list, use the Auto Detect feature described below.



Auto Detect
This button causes IC*VERIFY* to search for your modem and, if one is found, query the modem for the information that IC*VERIFY* needs to set it up automatically.

If Auto Detect is unable to determine a proper dial string for your modem, then you will need to enter the appropriate information in the Modem Init String box.

Modem Port
This selection defines the communications port used by the modem (e.g. COM1 or 1). You can also enter the interrupt and address. For example, if the modem is using IRQ5 and COM 3 (3E8), the modem port field can be filled out in this manner: **5 3E8**.

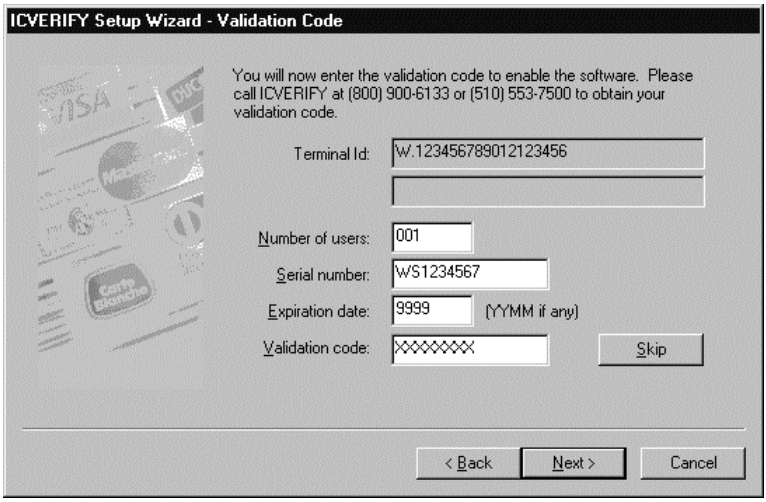
Modem Init
This is the modem string which IC*VERIFY* will use when it initializes your modem. You can use the pull-down menu to select your modem from the list, or click on Auto Detect to have IC*VERIFY* to determine the modem string. Selecting the modem from the pull-down menu causes the software to automatically enter a dial string into this field. Clicking Auto Detect causes the software to attempt to determine a dial string which the modem will recognize.

Wait for… Seconds
This selection determines how long the modem will wait for a connection before redialing. The value entered into this field is timed in seconds. The default value for this field is 30, which means that IC*VERIFY* will wait 30 seconds for a connection before terminating the attempt. In nearly every case, 30 seconds should be more than enough time to establish a connection. If you set up the software and experience constant redialing without establishing a connection, it is usually a good idea to check the authorization and settlement phone numbers that have been entered into setup. If these appear to be correct, the modem initialization string may need to be altered.

Outside Line
Use this field to enter any numbers you need to enter to get an outside line. For example, if a phone system requires the user to enter a **9** to make an outside call, then enter that number in the **Outside Line** field. IC*VERIFY* will then add that number to the end of the dial string so that the modem will be able to access an outside line. Commas can be used to provide a pause in the dialing process if the modem is reacting too quickly for the phone system. For example, if it is necessary to dial **805** and then **9** to get an outside line a comma could be added in this manner: **805,9**. This would create a short pause in the dialing between the **805** and the **9**, giving the phone system more time to react correctly.

Entering Your Validation Code

For most users, this screen represents the final part of the setup process. Once you have finished filling out the fields on the validation code screen your software will be enabled and ready for credit card processing.



Terminal ID
This field contains all of the information entered into processor setup. Each processor has its own set of data elements which combine to make up the Terminal ID. This field is normally not altered; do not make any changes to it unless specifically instructed to do so by a technician.

Number of Users
Use this field to enter the number of terminals licensed for this copy of IC*VERIFY*. The default value of this field is 001, which indicates a single-user license. If you have a multi-user license enter the number of users you have licensed (up to 999 users can be supported if licensed). A basic multi-user license allows for 4 users (the software can accommodate up to 999 users if the appropriate licensing has been purchased). In addition to the processor setup information, this is one of the fields used when generating the validation code.

Serial Number
This is the IC*VERIFY* serial number found on your disks and packaging. The serial number is one of the items used when generating the validation code. A serial number which begins with a "**WS**" indicates a single-user license. A serial number beginning with "**WM**" indicates a multi-user license. If your serial number begins with **WS**, be sure to set the **Number of Users** field to **001**.

Expiration Date
This is the IC*VERIFY* expiration date. This field is normally set to **9999**, which means that there is no expiration date. To save your setup information without a validation code, enter **0000**. This will allow you to save the changes you have made. However, IC*VERIFY* will not load until a valid validation code has been entered and the expiration date has been set to **9999**.

Validation Code
This is an eight character, alphanumeric code derived from your processor setup data. It is obtained by calling IC*VERIFY*'s Validations desk (1-800-900-6133). In order for a validation code to be generated you must provide your processor setup information to the Validations desk, which will then provide you with a number to activate your software.

Skip
The Skip button allows you to skip entering the validation code so that all other setup information may be saved to disk. If for any reason you are unable to enter a validation code at this time, choose skip so that you will not have to re-enter the previous setup screen data again once you have received validation code.

If you are having trouble getting the validation code to be accepted, go back and check all of your processor setup information - your validation code was generated from this data and if any of it was entered incorrectly the code will not be accepted.

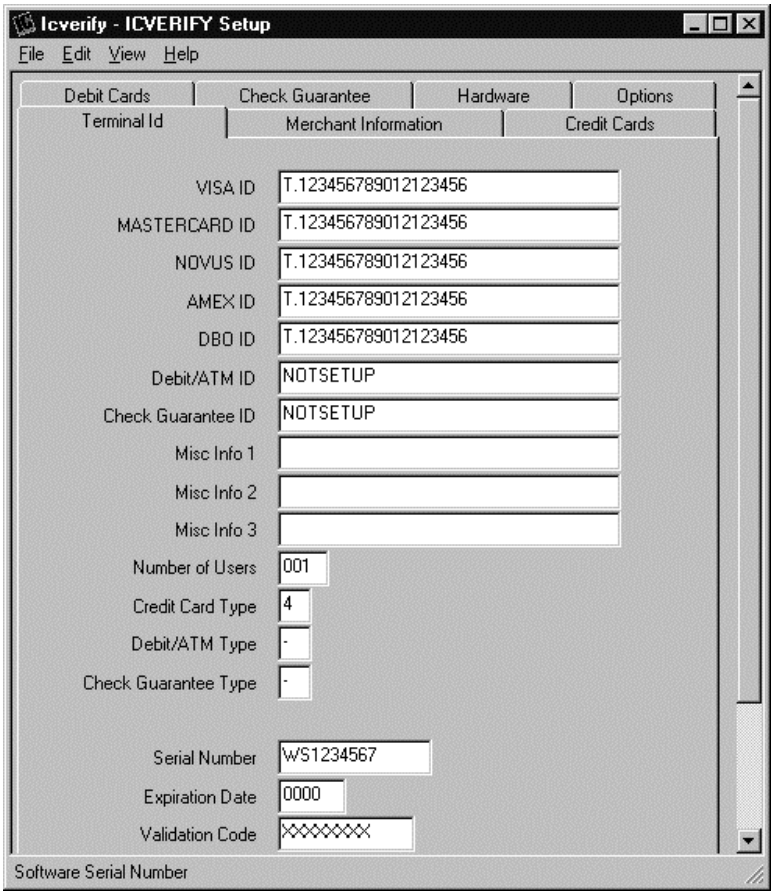
What Do I Do From Here?
At this point, you have completed entering all of the required setup information and IC*VERIFY* should be ready for use. Once you have entered the validation code and clicked on the finish button, you will be given the option of running advanced setup. The tabbed "pages" on

the advanced setup panel include the information which you have already entered during setup as well as additional setup options. You will notice that the information is presented in a much more technical manner than the setup wizard.

If you want to use the advanced set-up options, enter the required information for the options which you want to set up. When you are finished, go to the **File** menu and select **Save** to save all settings to disk. Afterward, you may select **File** menu again, followed by **Exit**, to close the setup program. IC*VERIFY* should now be ready to begin processing transactions.

If you have no further information to enter, check each of the advanced setup tabs to ensure that all of the information which you previously entered is correct. After you have looked everything over, go to the **File** menu and select **Save** to save all settings to disk. Once you have done this, select the **File** menu again, followed by **Exit**, to close the setup program.

The Terminal ID tab of the setup control panel. Descriptions for each field start on the next page.



Note: *You can view or update this panel at any time while running* IC*VERIFY* *by going to the Utilities menu and selecting Run Setup. You must then close and restart* IC*VERIFY* *before the changes will take effect.*

Terminal ID Tab Options (Advanced Set-up)
The Terminal ID tab may contain some of the information previously entered, formatted to match the processor's requirements. This information is used by IC*VERIFY* to identify your company to the processing network (or networks) which you are using.

VISA ID/MASTERCARD ID/NOVUS ID/AMEX ID/DBO ID/Debit/ATM ID/ Check Guarantee ID
These IDs are created using the previously entered processor setup information. Each card processor has its own set of identifying codes that combine to make up the Terminal ID number. Under most circumstances, the information appearing in the Visa, Mastercard, Discover, American Express and DBO fields will all be the same. One or more of the ID fields will be different if one or more card types are authorized or settled separately. To restrict authorization for a particular card type, enter "NOTSETUP" as the terminal ID for that card type.

Note: *Do not enter "NOTSETUP" in the DBO field. The processor ID fields are used in special circumstances only. Do not alter information that appears in these fields unless instructed to do so by a technician.*

Number of Users
This is the number of users (terminals) licensed to use this copy of IC*VERIFY*. The default is 004 for a multi-user copy, and 001 for a single user copy. For example, if a merchant has a multi-user license for eight users (number of users = 8) this would mean that IC*VERIFY* would be able to accept a total of 8 network stations and no more. With appropriate licensing, a single copy of IC*VERIFY* can handle up to 999 network stations.

Credit Card Type
This is a one character code which represents a credit card processing network. This code is was selected as a result of the choices made using the processor selection screen of the setup wizard, and is not normally changed on the Terminal ID Set-Up screen. If split dialing is setup, verify that the field is set to the code for the main processor (See Appendix A).

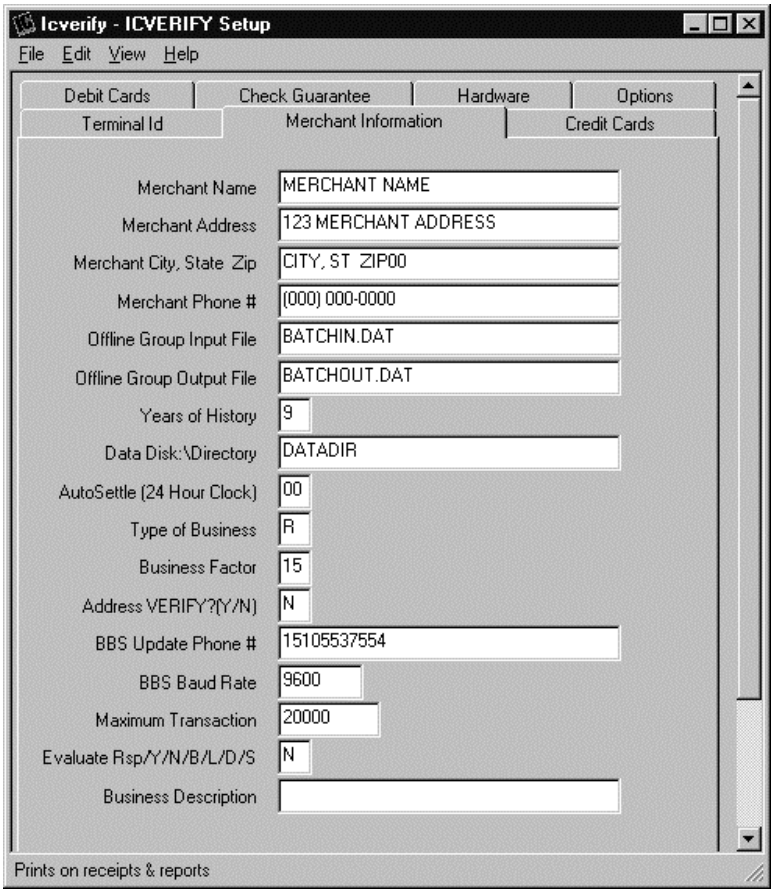
Debit/ATM Type
This is a one character code representing the network that will be processing Debit/ATM transactions. If debit card processing has not been set up, leave this field at the default value: - (hyphen). This code is entered through the processor setup screens and not normally changed on the Terminal ID Set-Up screen.

Check Guarantee Type
This is the code representing the network that will be used for Check Guarantee processing. If check guarantee processing has not been set up, leave this field at the default value: - (hyphen). This code is entered through the processor setup screens and not normally changed on the Terminal ID Set-Up screen.

Serial Number
This is the IC*VERIFY* Serial Number found on the original IC*VERIFY* disks and on the packaging. This is a nine character, alphanumeric code which begins with a **WS** or a **WM** prefix (WS indicates a single-user license and WM indicates a multi-user license).

Expiration Date
This is the IC*VERIFY* Expiration Date. This field normally defaults to **9999**, which means that there is no expiration date for the software. If you did not have a validation code while running the setup wizard and selected the **Skip** option, this field will be set to **0000**. Setting the expiration date to **0000** allows the data entered into setup to be saved, but IC*VERIFY* will not run until **9999** (or a valid expiration date) has been entered along with a validation code.

The Merchant Information tab of the setup control panel. Descriptions for each field start on the next page.



Note: *You can view or update this panel at any time while running* ICVERIFY *by going to the Utilities menu and selecting Run Setup. You must then close and restart* ICVERIFY *before the changes will take effect.*

Merchant Information Tab Options (Advanced Set-up)

Merchant Name
The merchant's company name should be entered here. It is reported to the card processor and prints on charge slips/receipts and reports.

Merchant Address
The merchant street address. It is reported to the processor and prints on charge slips/receipts.

Merchant City, State, Zip
The merchant city, state, and 5 digit zip code. These are reported to the processor and print on charge slips/receipts.

Merchant Phone # The merchant voice phone number. It is reported to the processor and prints on charge slips/receipts.

Off-Line Group Input File
The name of the input file for Off-Line Group processing. IC*VERIFY* stores all transaction done in Off-Line Group Mode in this file for processing. The default name for this file is BATCHIN.DAT.

Off-Line Group Output File
The name of the output file for Off-line Group processing. Once the Off-Line Group input file has been transmitted, IC*VERIFY* writes the results to this file. The default name for this file is BATCHOUT.DAT.

Years of History
The number of years of historical transaction data which will be stored by IC*VERIFY*. The default is 9, which means that IC*VERIFY* will store up to nine years of transaction data.

Data Disk:\Directory
This field defines the directory where IC*VERIFY*'s data will be stored. The data directory should only be used to store IC*VERIFY* data and should be different from the IC*VERIFY* program directory. For multi-user configurations it should also be different from the shared directory used to exchange request and answer files.

Important Note: *When configuring* IC*VERIFY* *for multiple merchants, you must specify a different data directory for each*

merchant using the Data Disk:\Directory field (refer to the multi-merchant setup instructions in your reference manual for details).

Auto Settle (24 Hour Clock)
The hour of the day for automatic settlement. This uses a 24-hour clock, e.g. 1:00 P.M. = 13. The default setting is 00, which indicates manual or host settlement. Auto Settle requires IC*VERIFY* Multi-User to be running. If the processor is host-based a batch closing or settlement may not be needed. In that case IC*VERIFY* will automatically close the batch when the date changes, moving the previous day's transactions to the history file. If a host-based processor is being used, prevent this Automatic Settle by entering "99" in this field.

Type of Business
The business profile that has been established with your processor. Enter one of the following:

F	-	Food or restaurant
H	-	Hotel
A	-	Auto Rental
M	-	Mail Order
L	-	Airline
C	-	Communications
P	-	Purchase Card
T	-	Travel
B	-	Bar
S	-	Sundries
R	-	Retail (default)
G	-	Gas Station

The default is R (retail); use it if you are uncertain about how the processor has set up the merchant. Unless you are integrating IC*VERIFY* with another application, choose only the Retail or Mail Order formats. If IC*VERIFY* is to be integrated with another application, the other formats may be selected if they are supported by your processing network. Operating modes other than R are available only from certain card processing networks.

Note: *If an invalid code is entered,* IC*VERIFY* *will fail to load, displaying an "Invalid Processor/Type of Business." message to the user.*

Business Factor
This field applies to the restaurant and hotel types of business. If the restaurant format is used, this field is used to enter a percentage amount that will be added to the sale amount during authorization to allow for a tip amount. If the hotel format is being used, this field can be used to set the floor limit for "Prestigious Properties". Enter "05" for a $500 limit, "10" for a $1,000 floor limit, "15" for a $1,500 limit, "00" if not a Prestigious Property.

Address VERIFY? (Y/N)
"**Y**" enables Address Verification. ZIP code and address entry will be added to transaction. "**N**" to disable address verification. Not all card processing networks support address verification.

BBS Update Phone #
The phone number and baud rate for updating IC*VERIFY* automatically. The default baud rate is 9600. The BBS phone number is already entered.

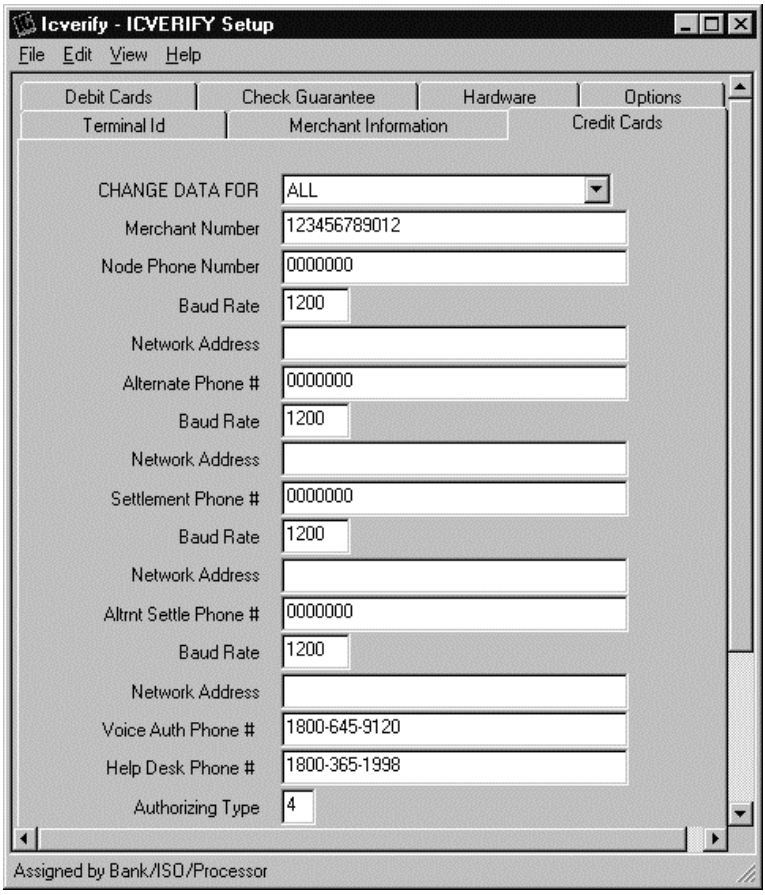
Maximum Transaction
The field is used to specify the largest transaction amount allowed by IC*VERIFY*. The default is $20,000.

Evaluated Response?
This applies to integrated systems using request and answer files only.

Y: Produces a simple response.
N: N produces the full response. The default is N.
B: Returns the text of the request as well as the simple response.
L: L includes the request, date and time, with the simple response.
S: S outputs as Dbase format.

Business Description
Description of the merchant's business provided by the processing network.

The Credit Cards tab of the setup control panel. Descriptions for each field start on the next page.



Note: *You can view or update this panel at any time while running* IC*VERIFY* *by going to the Utilities menu and selecting Run Setup. You must then close and restart* IC*VERIFY* *before the changes will take effect.*

Credit Cards Tab Options (Advanced Set-up)

Change Data For
This option sets the credit card type for the processor setup information entered (e.g. Visa, Mastercard, American Express, DBO). The pull-down menu allows selection of any of the credit card types or may be set to "All" if all of the credit card types will be handled by the same processor.

Merchant Number
The merchant number used for processing credit cards of this card type. The merchant number will be printed on receipts and may be used in the settlement/close batch process.

Node Phone Number
The primary processing network phone number used for authorizations.

Baud Rate
The baud rate which will be used when dialing the Node Phone Number. The default baud rate is 1200.

Network Address
Some card processing networks require this address to locate the processor on their network. Leave this field blank if it is not required. The format for the network address consists of a one character code followed by network address information.

B = BT North America (MCI)
C = CDC (Ceridian), Telemoney
D = DATAPAC
I = MCI
Q = Buypass
M = FIRST USA
N = NABANCO
S = SPRINT
T = TELENET
X = DIRECT CONNECT
7 = 3270
8 = 3780

Alternate Phone #
Alternate phone number for your authorization network.

Baud Rate
Baud rate for the alternate phone number (default baud rate is 1200).

Network Address
Alternate address for your authorization network.

Settlement Phone #
The primary phone number used in the settlement/close batch procedure.

Baud Rate
The primary baud rate used in the settlement/close batch procedure. The default baud rate is 1200.

Network Address
The primary network address used in the settlement/close batch procedure.

Alternate Settlement Phone#
The alternate settlement phone number used during the settlement/close batch procedure.

Baud Rate
The alternate baud rate used during the settlement/close batch procedure. The default baud rate is 1200.

Network Address
The alternate network address used during the settlement/close batch procedure.

Voice Authorization Phone #
The information in this field will appear on the screen when a transaction is declined.

Help Desk Phone #
The phone number entered into this field will appear on the screen when a transaction is declined.

Authorizing Type
This is the one character code that represents the processing network that will be authorizing transactions for this type of card.

Settlement Type
This is the one character code for the card processing network that will be used when performing a settlement/end day procedure for transactions of this card type.

Card Name
This is the actual name of the card type. It will appear on reports and allows you to track this card type. Not changeable for the standard card types.

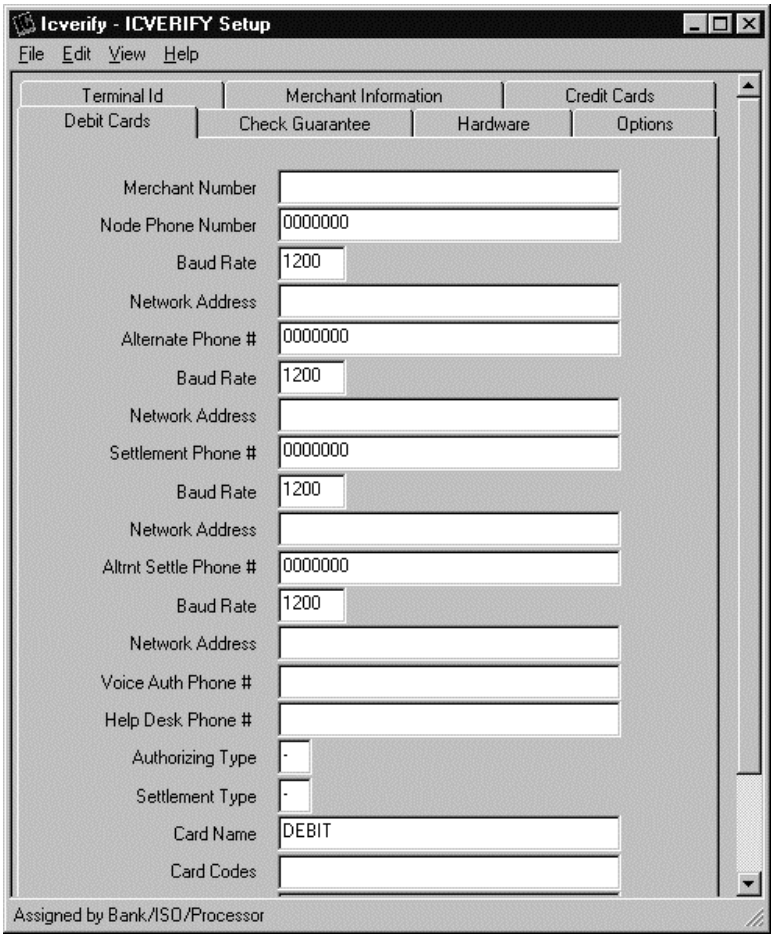
Card Codes
This field is for special codes used by the credit card processor and it is not normally changed.

Type Control
For the major card types, this field is not modifiable. For private label cards, IC*VERIFY* uses this information to differentiate each card type. This field is normally created and modified when entering processor setup information through the setup wizard, and should not be changed here.

AAAAAAAABBBBBBBBCCDDEFGGG
A is the card's low range (8 digits).
B is the card's high range (8 digits).
C is the card's minimum length (2 digits).
D is the card's maximum length (2 digits).
E is 1 if there is a check digit, 0 if not (1 digit).
F is Y if this card type has an expiration date, N if not (1 digit).
G is an optional field (3 digits).

Warning: If there is a Settlement Type in one Credit Card Screen that differs from the Settlement Type in the other Credit Card Screens, IC*VERIFY will attempt to store and settle transactions for that Card Type separately. This can cause processing problems. Unless you are certain that split processing is needed and is set up properly, make sure all Credit Card Screens are set to the same Settlement Type.*

The Debit Cards tab of the setup control panel. Descriptions for each field start on the next page.



Note: *You can view or update this panel at any time while running* IC*VERIFY by going to the Utilities menu and selecting Run Setup. You must then close and restart* IC*VERIFY before the changes will take effect.*

Debit Cards Tab Options (Advanced Set-up)

Merchant Number
The merchant number for processing Debit Cards. The merchant number will print on the receipt and may be used in the settlement/close batch process.

Node Phone Number
The primary network phone number used for authorizations.

Baud Rate
The baud rate which will be used when dialing the Node Phone Number. The default baud rate is 1200.

Network Address
Some card processing networks require this address to locate the processor on their Network. Leave this field blank if it is not required. The format for the network address consists of a one character code followed by network address information.

B	=	BT North America (MCI)
C	=	CDC (Ceridian), Telemoney
D	=	DATAPAC
I	=	MCI
Q	=	Buypass
M	=	FIRST USA
N	=	NABANCO
S	=	SPRINT
T	=	TELENET
X	=	DIRECT CONNECT
7	=	3270
8	=	3780

Alternate Phone #
Alternate phone number for your authorization network.

Baud Rate
Alternate baud rate for your authorization network. The default baud rate is 1200.

Network Address
Alternate address for your authorization network.

Settlement Phone #
The primary phone number used in the settlement/close batch procedure.

Baud Rate
The primary baud rate used in the settlement/close batch procedure. The default baud rate is 1200.

Network Address
The primary network address used in the settlement/close batch procedure.

Alternate Settlement phone #
The alternate settlement phone number used during the settlement/close batch procedure.

Baud Rate
The alternate baud rate used during the settlement/close batch procedure. The default baud rate is 1200.

Network Address
The alternate network address used during the settlement/close batch procedure.

Voice Authorization Phone #
The phone number entered into this field will appear on the screen when a transaction is declined.

Help Desk Phone #
The phone number entered into this field will appear on the screen when a transaction is declined.

Authorizing Type
Enter the one character code that represents the processing network that will be authorizing transactions for this type of card.

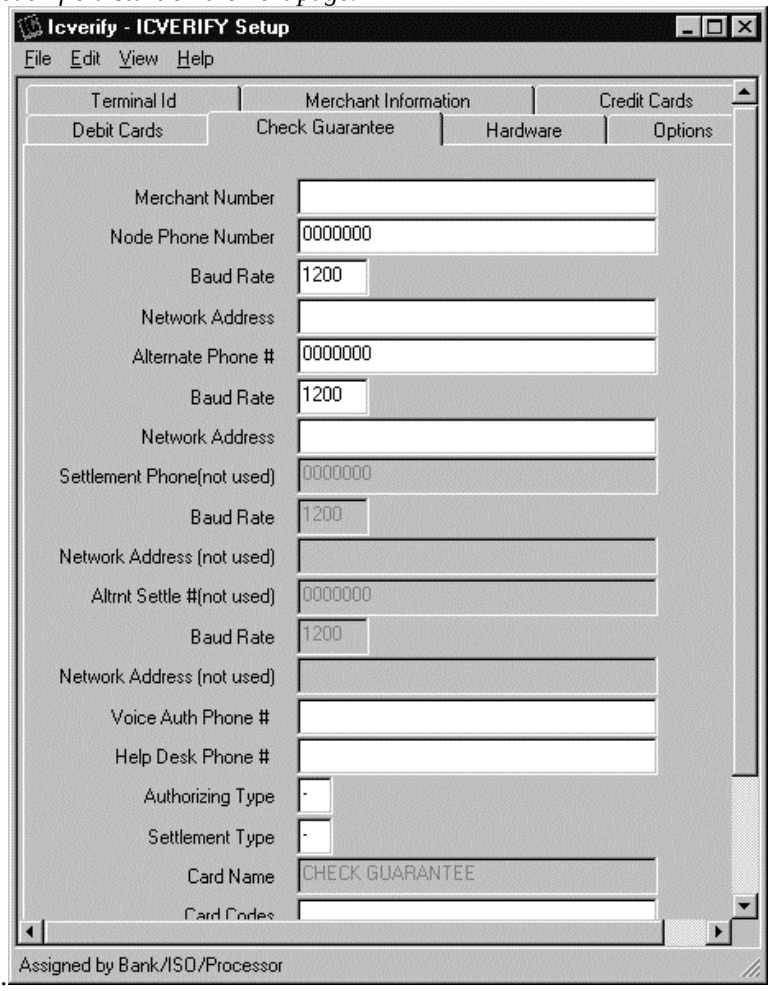
Settlement Type
Enter the one character code for the card processing network that will be settling/closing the batch transactions for this Card Type.

Card Name
This is the actual name of the card type. It will appear on reports and allows you to track this card type. Not changeable for the standard card types.

Card Codes
This field is for special codes used by the credit card processor and it is not normally changed.

Type Control
Not used for Debit Cards

The Check Guarantee tab of the setup control panel. Descriptions for each field start on the next page.



Note: *You can view or update this panel at any time while running* ICVERIFY *by going to the Utilities menu and selecting Run Setup. You must then close and restart* ICVERIFY *before the changes will take effect.*

Check Guarantee Tab Options (Advanced Set-up)

Merchant Number
The merchant number for processing checks. The merchant number will print on the receipt and may be used in the settlement/close batch process.

Node Phone Number
The primary network phone number used for authorizations.

Baud Rate
The baud rate to be used when dialing the Node Phone Number. The default baud rate is 1200.

Network Address
Some card processing networks require this address to locate the processor on their network. Leave this field blank if it is not required. The format for the network address consists of a one character code followed by network address information.

B	=	BT North America (MCI)
C	=	CDC (Ceridian), Telemoney
D	=	DATAPAC
I	=	MCI
Q	=	Buypass
M	=	FIRST USA
N	=	NABANCO
S	=	SPRINT
T	=	TELENET
X	=	DIRECT CONNECT
7	=	3270
8	=	3780

Alternate Phone #
Alternate phone number for your authorization network.

Baud Rate
Alternate baud rate for your authorization network. The default baud rate is 1200.

Network Address
Alternate address for your authorization network.

Settlement Phone #
Not used.

Baud Rate
Not used.

Network Address
Not used.

Alternate Settlement phone #
Not used.

Baud Rate
Not used.

Network Address
Not used.

Voice Authorization Phone #
The phone number entered into this field will appear on the screen when a transaction is declined.**Help Desk Phone #**
The phone number entered into this field will appear on the screen when a transaction is declined.

Authorizing Type
Enter the one character code that represents the processing network that will be authorizing transactions for this type.

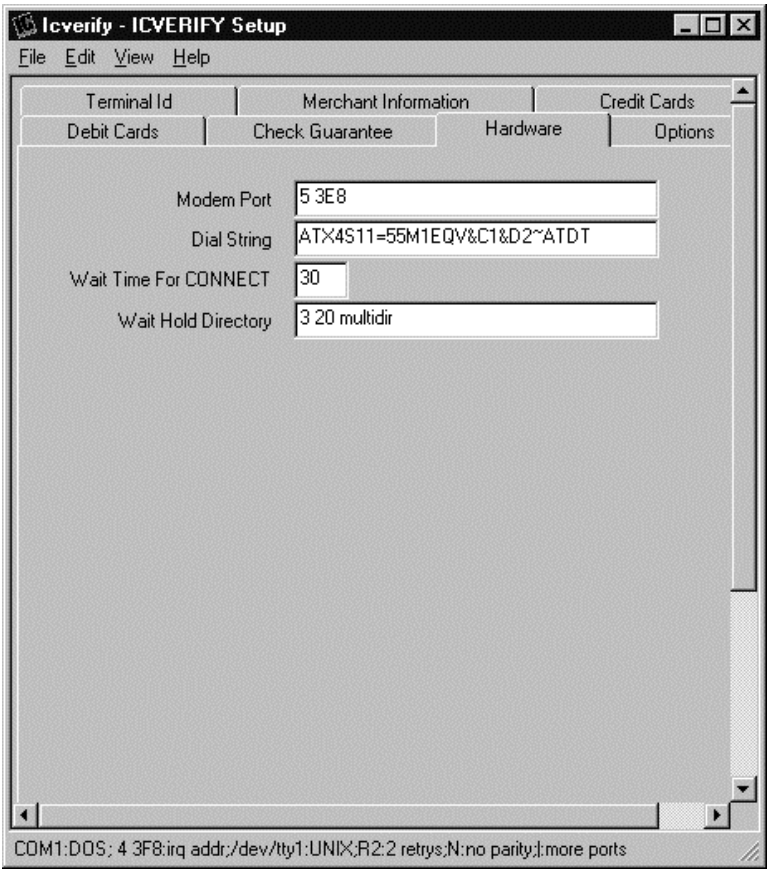
Settlement Type
Enter the one character code for the card processing network that will be settling/closing the batch transactions for this type.

Card Name
This is the actual name of the card. It will appear on reports and allows you to track this card type. Not changeable for standard card types.

Card Codes
This field is for special codes used by the credit card processor and it is not normally changed.

Type Control
Not used for Check Guarantee.

The Hardware tab of the setup control panel. Descriptions for each field start on the next page.



Note: *You can view or update this panel at any time while running* IC*VERIFY* *by going to the Utilities menu and selecting Run Setup. You must then close and restart* IC*VERIFY* *before the changes will take effect.*

Hardware Tab Options (Advanced Set-up)
Modem Port
This field is used to specify the communications port to which a modem is attached. The port can be specified as **1** or **COM1**. If a non-standard interrupt is being used, specify the interrupt, then leave a space, then enter the port address. For example, if a modem on **COM3** was using **IRQ 5**, then it would be necessary to enter **5 3E8** into the modem port field.

By default, IC*VERIFY* will try each phone number (primary and alternate) twice. The number of retries is set by following the port information with "Rx" where x is the total number of times to retry using the phone number. Putting an "N" after the port information forces IC*VERIFY* to translate the parity on the data coming in from the port. This is necessary for some modems that have trouble communicating at even parity. Here is an example of setting up a modem on COM3, retrying twice, and determining the parity: "COM3 R2 N".

Dial String
The dial string is used to set up the modem and dial the processing network. Because all the files that IC*VERIFY* uses are quote-comma delimited files, DO NOT put a double quote in this string. If the modem requires a double quote, use two single quotes and IC*VERIFY* will translate as transmission to the modem occurs. The tilde character ("~") translates to a carriage return and waits for an acknowledgment to come back from the modem. Use of a tilde at the beginning of the dial string causes IC*VERIFY* to pause before it starts sending data to the port after it opens. This is necessary for some modems which take time to come online after the port has been opened. Extra features on a modem can cause trouble obtaining authorizations. Almost all bank computers use generic 1200 baud modems and are programmed to disconnect if there is any extra data during the initial handshaking. When a modem with error correction, data compression, or high speed communications connects to another modem, it tries to match the features of that modem. This involves a negotiating process which is seen as extra data by the bank's computers, and they disconnect. To solve this, disable these modem features. This can often be done by selecting Auto Detect in the Setup Wizard. The Setup Wizard scans COM ports for a modem and when it finds one, it will attempt to build a dial string that disables these features. If Auto Detect is unable to

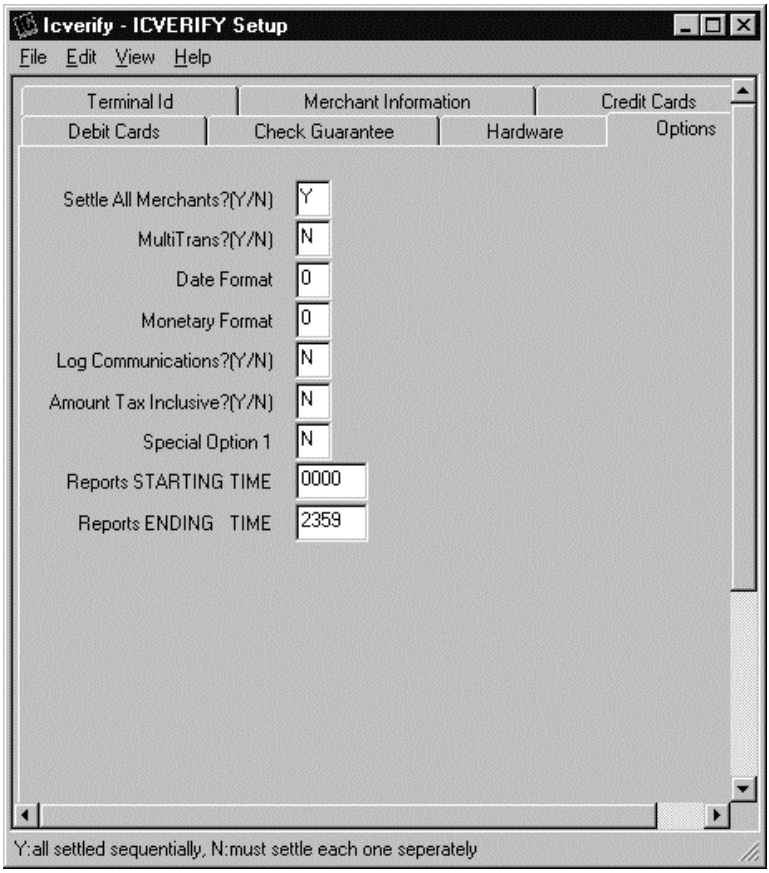
find your modem or unable to generate a working string, contact the modem manufacturer's technical support and request a dial string that will disable error correction, data compression and any high speed negotiation. (Appendix D: Modem Dial Strings also contains modem dial string suggestions.)

Wait Time for Connect
This field determines the number of seconds which the modem will wait for a connection before redialing.

Wait Hold Directory
This field is used to enter information related to a multi-user setup. Three separate values can be entered into this field, each separated by a space. The first value determines the amount of time the IC*VERIFY* is to *wait* before checking for transaction requests submitted by other stations on the network. The second value determines how long IC*VERIFY* will *hold* the line open once a connection is established with the processing network. The third value which can be entered is the name of the *directory* which will be used to process request and answer files. Note that the *hold* value has no effect on how the processor handles communications, and that they may drop the connection well before the time specified by the hold value has been reached.

Note: *Previous versions of the setup program displayed printer setup options on the hardware tab. This is no longer the case. You can set up your report and receipt printers by loading* IC*VERIFY's graphical user interface and selecting* ***Printer Setup*** *from the* ***File*** *pull-down menu.*

The Options tab of the setup control panel. Descriptions for each field start on the next page.



Note: *You can view or update this panel at any time while running* ICVERIFY *by going to the Utilities menu and selecting Run Setup. You must then close and restart* ICVERIFY *before the changes will take effect.*

Options Tab (Advanced Set-up)

Settle All Merchants? (Y/N)
Used for multi-merchant setups. This determines whether IC*VERIFY* should attempt to perform a settle/close batch for all merchants whenever a settle/close batch is attempted for any one merchant. This option must be set to **Y** for each merchant's setup file in order for this function to work correctly. If set to **N**, the user will be required to settle each merchant individually.

MultiTrans
Not used in IC*VERIFY* for Windows
Y: Allow multiple transactions with a single dialout (when transactions entered through IC*VERIFY* screens).
N: Redial for each transaction. Note: Multitrans is always on for Offline Group or Multi-User modes (if supported by the processor).

Date Format
This field is only applicable for integrated Windows applications.
0: Set to MM-DD-YY format.
1: Set to DD-MM-YYYY format
2: Set YYYY-MM-DD format.

Monetary Format
Only applicable for integrated Windows applications and DOS product. **0**: Set to NNN.NN format (default).
1: Set to NNN,NN format.

Log Communications
If this field is set to **Y**, IC*VERIFY* will create log files of communications with the processing network. These files will be written to IC*VERIFY*'s data directory (see the Data Disk:\Directory field located under the Merchant Info tab). If this field is set to **N**, log files will not be created. **N** is the default value.

Amount Tax Inclusive?
Not used in IC*VERIFY* for WindowsApplies to DOS product for Purchase Cards using VAT Tax only.
Y: Tax is included in the amount.
N: Tax to be added to amount (default.)

Special Option 1
This field only applies to merchants using the Restaurant market format. It controls how a restaurant *Authorization* transaction is handled by IC*VERIFY*:

N: This is the default value. IC*VERIFY* will require that each authorization transaction be completed by a corresponding *Add Tips* transaction before it is eligible for settlement..

Y: Authorizations do not require an add tips transaction to settle.

Note: *Some restaurant point-of-sale packages may require this field to be set to* ***Y*** *in order to settle transactions. Consult the documentation included with your point-of-sale package for more information.*

Reports Starting Time/ Reports Ending Time
The *Reports Starting Time* and the *Reports Ending Time* fields can be used to set the default starting and ending times for reports. The default starting and ending times are **0000** and **2359**, which means that any daily report will start at 12am and end at 11:59pm. Changing the starting time to **0200** and the ending time to **0159** would set the default starting time to 2am and the ending time to 1:59am. When using these fields, be sure that a 24 hour time interval is specified.

APPENDIX A - Credit Card Setup Data

AMEX PCARD - 9(see AMERICAN EXPRESS)

AMERICAN EXPRESS – A
Terminal ID Prefix
Merchant #
Process Control/Service ID
Network Address Profile ID
Format Code/Industry Type
Invoice Batch
Invoice Sub-Code
Currency Code
Base ID
Cap# Chn Afltd Prpty SE#
Airline Process ID/ATA
Settlement ID

BUYPASS – Q
Terminal Id Number
Info Byte
Bypass Password
Bypass Key

CCA-COMP COMM AM – 7
Merchant Number
Terminal Number
Terminal Type

CES - CARDNET
(See FDMS - CARDNET)

CHECK FREE – K
Merchant Number
Terminal Number
Network Routing
Optional Serial Number

CVE - CREDIT CHEQUE – b
Terminal ID Prefix
Terminal ID Number
Bin Number
Plan Number
Company Number
Store Number

DELUXE DATA - x
Terminal ID
Switch Terminal ID

DPI – D
Merchant Number
Environment ID Number
Sender ID Number

EAS - e
Terminal ID

ECHO – H
Terminal ID Number

EDS ISO-8583 - @
Merchant Number
Terminal Number
Network Routing Number
Terminal Type ID Number
POS Condition Code
Bank/Group Number

EFS – G
Merchant Number
Terminal Type
Merchant Location Number
Merchant Terminal Number
Access/Security Code

ENVOY
(See FDMS - ENVOY)

FCS - BANK ONE – O
Merchant Number
Terminal Type
Network Routing

FDMS - CARDNET – 4
Terminal Type
CES Merchant Number
CES Termid
Merchant Type

FDMS - ENVOY – Y
MID Number
TID Number

FDMS - FDR Type 2 – F
Merchant Number
Terminal Type

FDMS - FDR Type 7 – r
Merchant Number
Terminal Type

FDMS - FDR Tape - Q
Merchant Number
FDR System Number
Principal Bank Number
RJE ID
Merchant ID

FDMS - NABANCO – T
Merchant Number
Terminal Type
PS2000 Flag
Serial Number
Qual Code
Category SIC/MCC Code
American Express SE Number
Novus SE Number
State Code
Country Code
City or Zip Code
POS Entry/Condition
POS Terminal Type
POS Terminal Capability
JCB SE Number
Sequence Number

FDMS - TELEMONEY – C
Terminal Id Number
Terminal Type

FDR
(See FDMS - FDR)

FHB - First Hawaii – h
Merchant Number
Terminal Number
Network Routing
Optional Serial Number
ISO ID Number
American Express SE Number

FIRSTUSA – S
Merchant Number
Terminal Number
BIN Number
Terminal Type 50 or JO
Store Number
Category/SIC/MCC Code
Country Code
City or Zip Code
Time Zone Differential
Terminal ID
Network Login String (2x's)
Application ID

FIRSTUSA K – s
Merchant Number
Terminal Number
BIN Number
Store Number
Country Code
City or Zip Code
Time Zone Differential
Terminal Type KO or AO
Device Code
Industry Code
Currency Code
Language Indicator
Category SIC/MCC Code
Terminal ID
Network Login String (2x's)

FNBO - First Omaha – n
Merchant Number
Terminal Number
Network Routing
Optional Serial Number
ISO ID Number
American Express SE Number

FTB - First Tenn – f
Merchant Number
Terminal Number
Network Routing
Optional Serial Number
American Express SE Number

GECC – Z
Terminal ID Number
Plan Number

GPS - MAPP HOST – M
Terminal Number
Terminal Type

GPS - MAPP TERM. – m
Terminal Number
Terminal Type
Category SIC/MCC Code

GPS - MDI – I
Terminal ID Number
Terminal Type
Infact Number
Email ID
Email Password

GPS - NDC - CNET – N
Terminal ID Number (2x's)
Bank Bin Number
Plan Number
Company Number
Store Number

Global PS/GPS - NDC - g
Bank BIN Number
Terminal ID
Terminal Type
Category SIC/MCC Code
Data Input Capability
Authentication Capability
Operating Environment
Cardholder Present
Language Code
Card Input

ICCA – I
Terminal ID Number

KB – k
Merchant Number
Terminal Number
BIN Number
Terminal Type 50 or JO
Store Number
Category/SIC/MCC Code

Country Code
City or Zip Code
Time Zone Differential
Access Security Code
Agent Number
Chain Number
Reimbursement Attribute
Blocking Factor
Location
Terminal ID

LYNK –E
Merchant Number
Capture Type

MAPP HOST
(See GPS - MAPP HOST)

MAPP TERMINAL
(See GPS - MAPP TERM.)

MCI/BT – B
Terminal ID Number
Terminal Type

MDI - MODULAR DATA
(See GPS - MDI)

NABANCO – T
Merchant Number
Terminal Type
PS2000 Flag
Serial Number
Qual Code
Category SIC/MCC Code
American Express SE Number
Novus SE Number
State Code
Country Code
City or Zip Code
POS Entry/Condition
POS Terminal Type
POS Terminal Capability
JCB SE Number
Sequence Number

NPC - NAT CITY – p
Merchant Number
Terminal Number
Network Routing
Store Number
Category SIC/MCC Code

NOVUS - 0 (zero)
Terminal Number
Category SIC/MCC Code
City or Zip Code
DCSI Terminal ID
POS Condition Code
Location Number
Authorization Type
Terminal Serial Number

NOVA 1.0 – 3
Merchant Number
BIN Number
Terminal Type 50 or JO
Category SIC/MCC Code
Country Code
City or Zip Code
Time Zone Differential
Padding
Access/Security Code
Agent Number
Chain Number
Reimbursement Attribute
Location #
Terminal ID
Blocking Factor

NOVA 3.0 – y
Terminal ID Number

Bank BIN Number
Application ID

PAYMENTECH - DMGT – d
MID Number
Division Number

PAYMENTECH - FUSA – L
Merchant Number
Terminal Number
Network Routing
Optional Serial Number
ISO ID Number
American Express SE Number

PAYMENTECH - FUSA – u
Merchant Number
Terminal Number
System Indicator
Network Routing
ISO ID
American Express SE Number
Encryption Key

PAYMENTECH - LITLE – l
SID Merchant Number
PID Merchant Number
Merchant ID: Merchant
PID Password
SID Password

POSTECH/HONOR – o
Terminal ID Number
Device Type
Trans Number
American Express SE Number
Encryption Key

REDBOOK – 5
Terminal ID Number (2x's)

SPS – P
Terminal Location ID
Company Identifier
Company ID

STDV1 – 1
Terminal ID

STDV2 – 2
Terminal ID Number

TELEMONEY
(See FDMS - TELEMONEY)

URUG - 24 - *
Terminal ID Number
URUGUAY – U
Terminal ID Number

VISANET J
Merchant Number
Terminal Number
BIN Numbe
rTerminal Type 50 or JO
Store Number
Category SIC/MCC
CodeCountry Code
City or Zip Code
Time Zone Differential
Access Security Code
Agent Number
Chain Number
Reimbursement Attribute
Blocking Factor
Location
Terminal ID

VISANET K
Merchant Number
Terminal Number
BIN Number
Store Number
Country Code
City or Zip Code
Time Zone Differential
Terminal Type KO or AO
Device Code
Industry Code
Currency Code
Language Indicator
Category SIC/MCC Code
Access/Security Code
Agent Number
Chain Number
Reimbursement Attribute
Location
Terminal ID

WRT XPRS – w
Terminal ID Number

WELLS – W
Terminal ID Number
Terminal Type

APPENDIX B - Debit Card Setup Data

BUYPASS – Q
Info Byte
Terminal ID Number
Bypass Password
Bypass Key

CES - CARDNET
(See FDMS - CARDNET)

COMMLINK – 1
Terminal ID Number

CORE DATA – D
Merchant Number
Debit Fee (Cents)

DELUXE DATA
Terminal ID
Switch Terminal ID

EDS ISO - 8583 - @
Merchant Number
Terminal Number
Network Routing
Terminal Type ID
POS Condition Code
Bank/Group #

FDMS - CARDNET – 4
Terminal Type E/T/M/W
CES Merch Number
CES Termid
Encryption Key
Key Number Debit Fee (Cents)

FDMS - FDR Type 7 – r
Merchant Number
Terminal Type

GLOBAL PS/GPS-NDC - g
Bank BIN Number
Terminal ID
Terminal Type
Category SIC/MCC Code
Data Input Capability
Authentication Capability
Operating Environment
Cardholder Present
Language Code
Card Input

GPS - MAPP HOST - M
Terminal Number
Terminal Type

GPS - MDI – I
Terminal ID Number
Terminal Type
Infact Number
Email ID
Email Password

GPS - NDC -CNET – N
Terminal ID Number (2x's)
Bank Bin Number
Plan NumberCompany Number
Store Number

GENSAR -UTF – u
Merchant Number
Network Routing
Terminal Number
System Indicator
ISO ID
American Express SE Number
Encryption Key

LYNK – E
Lynk Prefix
Lynk Type

Lynk ID
Debit Fee (Cents)

MAPP HOST
(See GPS - MAPP HOST)

MDI - MODULAR DATA
(See GPS - MDI)

NDC OLD - N
Terminal ID Number (2x's)
Bank Bin Number
Plan Number
Company Number
Store Number

NOVA 3.0 – y
Terminal ID Number
Bank Bin Number
Application ID

POSTECH/HONOR- o
Terminal ID Number
Device Type
Trans Number
American Express SE Number
Encryption Key

VISA K/A – v
Merchant Number
Terminal Number
Bank Bin Number
Terminal Type KO or AO
Store Number
Device Code
Industry Code
Currency Code
Country Code
City or Zip Code
Language Indicator
Time Zone Differential

Agent Number
Chain Number
Reimbursement Attribute
Security Code
Category/SIC/MCC Code
Terminal ID Number
Location

STDV1 – 1
Terminal ID Number

STDV2 – 2
Terminal ID Number

WELLS – W
Terminal ID Number
Terminal Type
Debit Fee (Cents)

APPENDIX C - Check Guarantee Setup Data

AMERI - CK – t
Terminal ID Number

ARJAY – j
Terminal ID Number

BUYPASS – Q
Terminal ID Number
Info Byte
Bypass Password
Bypass Key

BUYPASS TELECREDIT – q
Terminal ID Number
Info Byte
Bypass Password
Bypass Key

BUYPASS JBS/NPC – b
Terminal ID Number
Info Byte
Bypass Password
Bypass Key

BUYPASS ETC/SCAN – l
Terminal Id Number
Info Byte
Bypass Password
Bypass Key

CES - ETC 2
CES Merchant Number
CES Termid

CES EQUIFAX – 3
CES Merchant Number
CES Termind

CES - NPC - JBS – 4
CES Merchant Number
CES Termind

CES - TELECHECK – 5
CES Merchant Number
CES Termind

CHECKCARE
Terminal ID
Plan Number

CHECKRITE – 8
Terminal ID Number

CHECKS INC – i
Terminal ID Number

CHECKTRONIC – K
Terminal ID Number

CHECKWAY – w
Terminal ID Number

CK AMERICAN – a
Terminal ID Number

CK TECK OR AEGIS – h
Terminal ID Number

CK CONNECTION – n
Network Routing
ISO ID
Merchant Number
Terminal Number
Optional Serial Number
American Express SE Number

CROSS CK – X
Terminal ID Number
Check Floor Limit ($)

CSA - CREDIT SVC AM – U
Terminal ID Number

CSI - CARDSVC INTRN – c
Area Code

DELUXE CK – x
Terminal ID Number

EDS - ISO - 8583 - @
Merchant Number
Terminal Number
Network Routing
Terminal Type ID
POS Condition Code
Bank/Group Number

FDR Type 2 – F
Merchant Number
Terminal Type

GENSAR utf
System Indicator
Network Routing Number
ISO ID
Merchant Number
Terminal #

GLOBAL PS/NDC
Bank BIN Number
Terminal ID
Terminal Type
Category SIC/MCC Code
Data Input Capability
Authentication Capability
Operating Environment
Cardholder Present
Language Code
Card Input:

INSTA-CK – k
Terminal ID Number
Check Floor Limit ($)

JBS/NPC/EASY NET – J
Terminal ID Number

MAPP - TERMINAL – m
Terminal Number
Terminal Type
Category SIC/MCC Code

MASTERCHECK (RMB) – z
Terminal ID Number

MDI - MODULAR DATA –I
Terminal ID Number
Terminal Type
Infact Number
Email IDEmail Password

MERCANTILE:MCI/BT – B
Terminal ID Number
Terminal Type
Network Login; Password
(2x's)

MSD-NCN - 7
Terminal ID
K1 Driver's License Type
K2 MICR Type

NABANCO – T
Terminal Type
Merchant Number
PS2000 Flag
Serial Number
Qual Code
Novus SE Number
American Express SE Number
State Code
Country Code
City or Zip Code
Category/SIC/MCC Code
POS Entry/Condition
POS Terminal Type
POS Terminal Capability
JCB SE Number Seq Number

NCG - NATIONWIDE - %
Merchant Number

NDC-CNET
Message ID
Bank BIN Number
Terminal ID
Plan Number
Company Number
Store Number

NPC - NAT CITY – p
Format ID
Merchant Number
K1 Driver's License Type
K2 MICR Type

PREFERRED – 6
Terminal Type
Merchant ID Number

SCAN CK – S
Terminal ID Number

SELECT CK – s
Terminal ID Number

SPS – P
Terminal Location ID
Company Identifier
Company ID

UNI-CK - d
Terminal ID
K1 Driver's License Type
K2 MICR Type

VALICHEK - 1
Terminal ID

WELLS - W
Terminal Type
Terminal ID
K1 Driver's License Type
2 MICR Type

APPENDIX D - Modem Initialization Strings

Due to the requirements of the processors' technology, the modem must connect to the processor using the Bell 212A standard. The modem dial string must adjust the modem's functionality to communicate with this standard. ICINFO attempts to construct a modem dial string, however, adjustment may be necessary. The following information is provided to assist in building a Bell 212A compliant modem dial string. Your modem manufacturer can also provide Bell 212A compliant dial string information. If the modem dial string which ICINFO selects for your modem does not work, try one of the following three modem dial strings:

Generic 2400 baud modems

ATX4EQV&C1&D2&K&Q~ATDT

Generic 14400/28800 baud modems

AT&FX4EQV&C1&D2&K&Q~ATDT

Hayes Smart modem 300/1200/2400

ATEQVDT

If none of the three modem dial strings above work, locate your modem in the list below (also see Appendix E). This list contains modem dial strings for a variety of commonly used modems. The list does not contain every modem manufactured and may change at any time.

Initialization String List

Standard Dial String
ATX4S11=55M1E0Q0V0&C1&D2~ATDT

ActionTech Datalink 14.4
PCMCIAATX4S9=6E0Q0V0&C1&D2%C0\Q0\N0~ATDT

ATD Bell/212a 2400
AT&FX4EQV&C1&D2~ATDT

AT&T Dataport 14.4/FM
AT&F0DT

AT&T Paradyne PCMCIA modem
AT&FX4S11=55EVQ&C1&D2\C%C\N1\Q0~ATDT

Bell 33.6 SP PnP Internal T2
ATX4EQV&C1&D2&K&MDT

Best Data 2400 X
AT&FX4S11=55EQV&C1&D2&M~ATDT

Best Data Smart One Internal 28.8 Model 2834F
ATX4S11=55EQV&C1&D2&K&Q%E\G0%C0~ATDT

Black Box Corp. V.22 b/5
ATZX4S11=55EQV&C1&D2%K~ATDT

Boca 2400
ATX4S11=55EQV&C1&D2N&K&QS37=0~ATDT

Boca FAXModem 14.4k M1440 I/E
AT&FX4EQVN&C1&D2%C&Q&Q5~ATDT

Boca M144AI Online Express
AT&FX4EQVN&C1&D2%C\N\QS37=5~ATDT

Boca 28.8
ATEQVX4&C1&D2+K+Q6~ATDT

Cardinal 2400 AND 9600
AT&FX4S11=55EQV&C1&D2~ATDT

Cardinal 28800
AT&FX4&C1&D2+K+Q6~ATDT

Cheyenne 14.4 Fax/Modem
ATX4S11=55M1E0Q0V0&C1&D2%C\N\Q~ATDT

Codex 3260/3260 PIP
AT&FX4EQV&C1&D2*FL*MF*MN1*SM1*MX1*MX7*SM3~ATDT

Compaq Presario 14.4/28.8
AT&FS11=55EV&C1&D2&Q6~ATDT

Diamond Telecommander 2500 and 3500XL
ATB1EQVX4&C1&D2&K&Q6%E%CN1~ATDT

Digicom 9600+ (Internal)
AT&FS11=55S37=0EQV*E0\N~ATDT

Digitan HI-IQ Modem
AT&FX4S11=55EQV&C1&E&M~ATDT

Dynalink 14.4 Fax/Modem
ATX4S9=6S11=55EQV&C1&D2&C&Q\N~ATDT

E-Tech Bullet PC2400MH
ATX4S11=55EQVCX~ATDT

FastComm 2448
AT&FS11=55EQV&M0~ATDT

Gateway Telepath
ATX4S11=55EQV&H1&B&K&M&C1&D2~ATDT

Gateway 2000
AT&FX4EQV&C1&D&H1&B&K&M~ATDT

Gateway 2000 /Telepath II 28.8
ATX4S9=6E0Q0V0&C1&D2&A0&G0&H0&I0&K0&M0&N2~ATDT

Gateway Telepath II & IV
AT&FX4EQV&C1&D2&B&K&M&H1~ATDT

GVC FM144 and GM144
AT&F%C0\Q0\J0B5~ATDT

GVC GM144CE
AT&F%C0\Q0\J0B1~ATDT

GVC FM288 and GM288
AT&F%C0\Q0\J0B5~ATDT

Hayes Optima 9600
ATS9=9S11=60EQV&K&Q~ATDT

Hayes Optima 28.8
ATX4S11=55EQV&C1&D2N&B&K&QS37=0~ATDT

***Hayes Accura 14400/28800**
AT&FX4S11=55EQV&C1&D2&Q6~ATDT

IBM ThinkPad (pip)
AT&FX4M1EQV&C1&D2&K\Q0&Q\N0%C0~ATDT

Intel EX 2400
AT&FX4S9=20S11=55EQV&C1&D2~ATDT

Intel SatisFAXion 200 2400
AT&FX4EQV&C1&D2~ATDT

Intel PCFM 7300 9600
AT&FX4S11=55EQV%C%E\N\J\V~ATDT

Intel 14.4 FaxModem
AT&FX4S11=55&C1&D2EQV%C\J\N\V\X1~ATDT

Intel SatisFAXion 14.4
AT&FX4S11=55EQV&C1&D2\N%C~ATDT

Logicode 28.8
AT&FX4EQV&C1&D2N1%E2%C0&Q+MS=2,0\N3~ATDT

Logicode Quicktel 33.6
ATX4EQV&C1&D2&K&Q\N~ATDT

Maxtec 144I
AT&FN0~ATDT

Maxtec XM288
AT&F%C0\Q0\J0B5~ATDT

Maxtec XM288RI
AT&F%C0&K0B1~ATDT

Maxtec XPM336I
AT&F&K0&M0~ATDT

Maxtec XPV288I
AT&F%C0\Q0\J0B5~ATDT

Maxtec XPVS288I
AT&F%C0&K0B1~ATDT

Maxtec XVM144
AT&F%C0\Q0\J0B1~ATDT

Maxtec XVS144I
AT&F%C0\Q0\J0B1~ATDT

Maxtec PCM144C
AT&F%C0\Q0\JOB1~ATDT

Maxtec PCVM144C
AT&F%C0\Q0\J0B1~ATDT

Maxtec PCM288R
AT&F%C0&K0B1~ATDT

Megahertz PCMCIA 28.8
AT”HX4S11=55EQV&C1&D2%C&Q\N1-JW\J1~ATDT

Megahertz PCMCIA 28.8 alternate
AT&FEQVN&K&Q6~ATDT

Motorola FastTalk ii
AT&FX4S11=55EQV&C1&D2%C&M\N\Q3B0~ATDT

Motorola Powerline PCMCIA 14.4
AT&FX4S9=20S11=55EQV&C1&D2%C\N\Q\G%A~ATDT

Motorola 28.8
ATX4S11=55EQV&C1&D2\N\Q%C%B2~ATDT

Multi-Tech 1432
AT&FX4S11=55EQV&Q1&C1&D2~ATDT

Multi-Tech 224E
AT&F&C1&D2&E14&E0~ATDT

Multi-Tech 224EC
AT&F&E0&R0$BA1&Q3B0~ATDT

Multi-Tech 224E 2400
AT&FEQV&C1&D2~ATDT

Multi-Tech MT1932BL 14.4/MT14432DX 14.4
AT&FX4EQV&C1&D2#A3$BA1&E14#L2&Q1&R0&S1~ATDT

Multi-Tech 28.8
ATX4M1EQV#A3$BA1&C1&D2&E&E14&E12#2~ATDT

NewCom 28.8ifx-V.34 Data/Fax
ATX4EQVB1&C1&D2&K&Q0%CS37=0~ATDT

Newcom 33.6 ifxc DFV Modem (use this string at 1200 baud)
ATX4EQV&C1&D2&K%C\G\N\QS37=5~ATDT

Nuvotel 144001FX
ATX4S11=55EQV&Q%C~ATDT

Packard Bell Generic 14.4
AT&E0Q0V0X4&C1&D2~ATDT

Powercomm 28.8
AT&FEQV&C1&D2Q\N%C+MS=2,0~ATDT

Practical Peripherals 2400
AT&FX4S11=55EQV&C1&D2%C\N~ATDT

Practical Peripherals 2400 (Alternate)
AT&FX4S11=55M1E0Q0V0&C1&D2~ATDT

Practical Peripherals PM2400 V.42
AT&FX4S11=55EQV&C1&D2&Q0~ATDT

Practical Peripherals 9600
AT&FX4EQV&C1&D2NS37=0&B&K&O&K0&Q0~ATDT

Practical Peripherals PM144 MT II
ATX4S11=55EQVN&K&Q6&C1&D2~ATDT

Practical Peripherals PC144MT
ATX4S11=55EQVN&B&K&Q&C1&D2S37=0~ATDT

Prometheus Cyberphone External
ATX4S11=55V0\G0\L1\N0%N0%C0%E0~ATDT

Prometheus Cyberphone 28.8 (1200 baud, set by &H8)
ATX4S11=55EQV&C1&D2&H8&M%C\N\G\Q~ATDT

SIIG Dash 28.8i V.34
AT&FX4&C1&D2EQVN1&Q+MS=2,0\N3~ATDT

SmartLink 2400
AT&FX4S11=55M1E0Q0V0&C1&D2~ATDT

SupraFax 14.4LC/14.4I
ATX4S11=55EQV&C1&D2&K&Q6~ATDT

Supra Express/SupraFax Modem 28.8
AT&FX4S11=55EQV&C1&D2N&K&Q6~ATDT

Tetsuo
AT''HX4EQV&C1&D2%C\K\J\N-J~ATDT

Twincomm 96/42/14.4
AT&FX4S11=55EQVN&K&M%C~ATDT

UDS/Motorola FasTalk 32 &32x 14.4
AT&FE&C1&D2&M%B%C\N\Q3~ATDT

UDS V.3229 14.4
AT&F%B0\Q0\N0%C0~ATDT

Ultra High Speed 'DESIGNER' fax/14.4
ATX4S11=55EQV\N&Q&C1&D2%C~ATDT

USR Courier HST Dual Standard w/ ASL
AT&FX4S11=55EQV&A&B1&C1&D2&K&M~ATDT

USR Sportster 14.4, 28.8 and 33.6 FAX MODEMS
AT&FX4S11=55EQV&H&I&B1&K&M&C1&D2~ATDT

Viva 14.4 i/Fax/ Viva 9642I
ATX4S11=55EQV&C1&D2&K&Q\N%C~ATDT

Wang 2400
AT&FX4S7=60EQVN&C1&D2&K&Q5\NS37=0~ATDT

Zoltrix 14.4 w/ UMC Chipset
ATX4B1EQVN&C1&D2%C0\N0\Q0*N1~ATDT

Zoltrix 28.8 Data/Fax (Zolfax) Modems
~AT&FS9=9&K&Q6&C1&D2\N~ATDT

Zoom 14.4 Faxmodem
AT&FX4S11=55EQV&C1&D2N&K3&Q6S37=0~ATDT

Zoom model 470 v.34 modem
AT&FX4S11=55EQV&C1&D2&K&Q6%C+MS=1,0,300,1200~ATDT

Zyxel U-1496 Internal modem
ATX4S11=55EQV&C1&D2&K&MB1&N2~ATDT

Appendix E: Modem Troubleshooting

If you are unable to establish a connection with your processing network, it's likely that one of the following three things are occurring:

- Another application has control of the modem.
- The port information in the modem port field is not set correctly.
- The dial string is not correct for that modem.

Follow these steps to troubleshoot your modem:

1. Make sure that the modem is working. Try using another communication program to dial out with the modem. If other software fails to connect, make sure that your modem has been installed properly. If it is an external modem, verify that it is correctly plugged in to the phone line, power source and computer. Verify that the lights flash when the computer is attempting to communicate with the modem.

2. Check to see if any other applications which might be using the modem are active. If they are, shut them down. Then, restart IC*VERIFY* and try another test as described above. If the modem is still not working (and other applications have no problem accessing the modem), then it is probably a port or dial string setting issue.

3. Check the modem port setting. In Windows 95, click on the **Start** button, then move to **Settings** and select **Control Panel**. From there, double-click the **Modems** icon, select the **Diagnostics** tab and then highlight your modem. Once this has been done, select **More Info**. This should pop up a window displaying information about your modem. Copy down the **Interrupt** and **Address** information, then run IC*VERIFY*'s setup program. Advanced Setup will load instead of the Wizard. Select the **Hardware** tab. In the **Modem Port** field, enter the **Interrupt** value, then leave a space, then enter the **Address** value. For example, if the interrupt is **5** and the address is **3E8** you would enter **5 3E8**.

4. Check to see if any other applications which might be using the modem are active. If they are, shut them down while you are testing. If you made any changes while following the steps outlined above, try another test with the changed settings (make sure to restart IC*VERIFY* each time a change is made in setup). If the modem is now working, but keeps redialing each time a test is done, it is probably a dial string issue. If you are still getting a time out message, it still might be a problem with the dial string.

If the hardware setting for your modem appear to be correct, but the steps listed above did not get the modem to dial, try changing the dial string. Run the setup program and then select the **Hardware** tab and look at the **Modem Port** field. Write down the dial string that is currently in there. Once that has been done, delete everything out of this field and then enter **ATDT** only. These four characters should initialize just about every modem under normal circumstances. Save your changes and then close setup. If IC*VERIFY* is currently running, restart it and then try another test. If this doesn't work, shut down all programs that are running and then shut down your computer (turn the power off). Then turn the computer back on, load IC*VERIFY* and try another test. Be sure to shut down any other modem-using applications before the test is attempted.

If the modem is now dialing out when a transaction is submitted, then it is almost definitely a dial string issue. Refer to Appendix D for list of modem initialization strings. For a number of reasons, almost all processing networks use generic 1200 baud modems which are programmed to disconnect if there is any extra data during the initial handshaking. Newer modems use a number of advanced features which are intended to provide a more reliable connection. They are also designed to communicate at speeds much greater than 1200 baud. When a newer modem using data compression, error correction and flow control or high speed communications connects to another modem, it tries to match the features of that modem. The modems used by processing networks do not have the features necessary to correctly interpret the data sent as part of this negotiating process, and will pass this information along to the network as part of the data stream. The processor will not recognize this data and immediately terminate the connection. Contact your modem manufacturer to

request a dial string which will disable the features listed on the following page:

Data Compression
Error Correction
Flow control

The dial string should have a command forcing it to use the Bell 212a communications protocol at 1200 baud. Baud rates should be set to 1200 under the **Credit Cards** tab in Advanced Setup.