

# **Informix Client Products**

## **Installation Guide**

for Microsoft Windows Environments

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## About This Manual

This manual explains how to install the following products on computers that run the Windows operating system:

- INFORMIX-Client Software Developer's Kit for Windows:
  - ❑ INFORMIX-ESQL/C
  - ❑ INFORMIX-Object Interface for C++
  - ❑ INFORMIX-GLS
  - ❑ INFORMIX-CLI, 32-bit version
  - ❑ INFORMIX-CLI, 16-bit version
  - ❑ INTERSOLV DataDirect ODBC Driver
  - ❑ LIBMI
- INFORMIX-Connect for Windows:
  - ❑ Runtime versions of the Client SDK components

Each package also includes the **Setnet32** utility for configuring client products and may also include on-line help, example programs, and support programs.

INFORMIX-Client Software Developer's Kit and INFORMIX-Connect also include Microsoft ODBC Driver Manager, which is required to use INFORMIX-CLI or INTERSOLV DataDirect ODBC Driver.

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## Additional Documentation



**Important:** Your CD-ROM might have a **readme.txt** file in the root directory. When present, this file contains information that was available only after other documentation was complete. In particular, the **readme.txt** file might contain information that you should read before you install your Informix client product. You can open the **readme.txt** file in any Windows text editor, such as Notepad.

The documentation set for Informix client products includes manuals and on-line notes for each of the components.

The manuals for each package are described in the following table.

Package	Included Manuals
Client SDK	One manual for each component, plus the SQL manual set and other server manuals
Connect	No additional manuals

Some components have on-line notes, located in the **release\en\_us\04e4** subdirectory of your Informix installation directory. In addition, some on-line notes have icons in the program groups. On-line notes are described in the following table.

On-Line File	Purpose
Release notes	Describe the following issues: <ul style="list-style-type: none"><li>■ Feature differences from earlier versions of Informix products and how these differences might affect current products</li><li>■ Information about known problems, their workarounds, and fixed bugs</li></ul>
Documentation notes	Describe documentation errata or information obtained after the associated manual was printed
Machine notes (optional)	Describe any special actions required to configure and use Informix products on your computer's operating system

In addition to on-line notes for component products, the client products installation includes a README file, **readme.txt**.

## Preparing to Install Informix Client Products

You install Informix products for Windows environments with an installation program that copies files to your client computer.

You can install Informix products only as licensed by Informix. You cannot transfer software from one machine to another, or to another portion of your network, without reregistration and the written consent of Informix.

To use these instructions you must be familiar with your computer operating procedures and your Windows environment.

If you encounter problems, contact your Informix Technical Support department. In North America, call toll-free (800) 274-8184 or send a fax to (913) 599-8590. Outside North America, contact your distributor or the nearest Informix subsidiary.

## System Requirements

The following table outlines the system requirements for Informix client products for Windows environments.

Requirement	Windows 95/98	Windows NT
Hardware	80486 or higher microprocessor	80486 or higher microprocessor
Windows version	Windows 95 or Windows 98	Version 4.0 with Service Pack 3
RAM	12 MB	16 MB
Hard-disk storage	20 MB (or less, depending on the products and components you install)	20 MB (or less, depending on the products and components you install)

## Providing a Database Server

Client SDK Version 2.2 and INFORMIX-Connect Version 2.2 can be used on client computers connecting with Informix databases. See the on-line release notes for each client component for a list of compatible Informix servers.

## Providing a Protocol

Informix client products work with any TCP/IP protocol that complies with Windows Sockets 1.1.

You select a protocol through **Setnet32**. See [“Setting Server Information” on page 13](#) for instructions.

## Installing a C Compiler

Informix client products are certified with the Microsoft Visual C++ compiler, Version 6.0. See the release notes for individual components for other supported compilers.

## Installing Microsoft ODBC Driver Manager

To use INFORMIX-CLI or INTERSOLV DataDirect ODBC Driver, you must first install a Microsoft ODBC Driver Manager.

The Client SDK and INFORMIX-Connect products include Driver Manager Version 3.5.

Driver Manager might already have been installed on your computer by another product. You do not have to install a new Driver Manager unless you want to use a different version.

### *Finding the Version of the Installed Driver Manager*

To find out what version of Driver Manager is installed on your computer, double-click the **ODBC** icon in the Control Panel; then click the **About** tab to display the installed ODBC components.

If there is no About tab on the ODBC Control Panel, you have a Driver Manager earlier than Version 3.0. To find the specific version number, use Windows Explorer to browse your Windows system directory (**SYSTEM** on Windows 95 or **SYSTEM32** on Windows NT). Select the **odbc32.dll** file and then choose **File→Properties**. Click the **Version** tab to find the version number of the driver.



## ***Installing Driver Manager***

You can use the Informix **Setup** program to install Driver Manager.

If you want to install an older version of Driver Manager than is currently installed on your computer, first uninstall the older version using the appropriate uninstall program.

When you run **Setup**, you must specify the Custom installation type and the Driver Manager version you want to install. See [“Installing Informix Client Products” on page 5](#) for **Setup** instructions.

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## **Installing Informix Client Products**

To install Informix client products, run the **Setup** program for each package that you want to install. The **Setup** program allows you to choose which components of the package to install.

The following sections describe Informix client product installation options, how to install your software, and solutions to installation problems.

## **Order of Installation**

If you install both the database server and client products on the same computer, you do not have to install them in a specific order.

If you install more than one Informix product, complete all installation procedures for one product before you start to install the next product. Do not load the files from another Informix product onto your computer until you complete the current installation.

If you want to preserve product files of earlier versions, you must create separate directories for each version of your Informix products.

## Installation Options

While you run the **Setup** utility, you can select which components and sub-components to install. Subcomponents include on-line help and example programs. The installation options are described in the following table.

Option	Description
Typical	Includes all components, on-line help, and examples, except ODBC Driver Manager.
Compact	Includes all components without ODBC Driver Manager, on-line help, and examples.
Custom	You select the components and subcomponents to install.

The following sections describe the components of the Informix client products.

### ***Client SDK***

The Client SDK allows you to develop and run client applications in Windows environments.

The components of the Client SDK are described in the following table.

Component	Description
ESQL/C	An SQL embedded-language product used to create custom C applications. For more information, see the <a href="#">INFORMIX-ESQL/C Programmer's Manual</a> .
INFORMIX-Object Interface for C++	A C++ interface to develop object-oriented client applications for use with all Informix database servers, and client-side value objects for Universal Data Option. For more information, see the <a href="#">INFORMIX-Object Interface for C++ Programmer's Guide</a> .
INFORMIX-GLS	An interface that allows Informix products to use different locales, which have defined conventions for a particular language, culture, or code set. For more information, see the <a href="#">INFORMIX-ESQL/C Programmer's Manual</a> and the <a href="#">INFORMIX-GLS Programmer's Manual</a> .
INFORMIX-CLI	<p>The call-level interface for Informix database servers. It acts as the ODBC driver. Client SDK includes two versions:</p> <ul style="list-style-type: none"> <li>■ INFORMIX-CLI Version 2.8 complies with ODBC 2.5 and supports extended data types.</li> <li>■ INFORMIX-CLI Version 2.52 is the 16-bit ODBC driver. For more information, see the <a href="#">INFORMIX-CLI Programmer's Manual</a>.</li> </ul>
INTERSOLV DataDirect ODBC Driver	An ODBC driver that complies with ODBC 3.5. For more information, see the <a href="#">INTERSOLV DataDirect ODBC Driver User Guide for Informix Database Servers</a> .
LIBMI	An implementation of the LIBMI C API, provided to ease migration of client applications from the Informix Illustra Server to Informix Dynamic Server with Universal Data Option.

## **INFORMIX-Connect**

INFORMIX-Connect contains runtime versions of INFORMIX-CLI, INTERSOLV DataDirect ODBC Driver, Object Interface for C++, ESQL/C, GLS, and LIBMI. The runtime versions allow you to run completed client applications in a Windows environment.

## **Using Setup to Install Client Products**

Run **Setup** to install each client product.

### **To install client products**

1. Load the media for your client product into the CD-ROM drive.
2. Read the **readme.txt** file in the root directory of the CD-ROM. This file might have information you need before you continue.
3. Exit all Windows programs.
4. Start the **Setup** program. In the Run dialog box, or at the DOS prompt, type:  
`d:setup`  
Replace *d*: with the CD-ROM drive letter.  
Press ENTER or click **OK**. A serial number dialog box appears.
5. In the Enter Serial# and Key dialog box, enter your serial number and key. You can find the serial number and key on the Serial Number Card you received with the product package.  
Click **Next**. The Installation Options dialog box appears.
6. In the Installation Options dialog box, select an installation type. The installation options (Typical, Compact, and Custom) are discussed in the section [“Installation Options” on page 6](#).
7. Specify the directory where you want the Informix product to be installed. The default installation directory is C:\INFORMIX. You can click **Browse** to invoke the browser to help you select an installation path.



**Important:** *Setup sets the **INFORMIXDIR** environment variable to the destination directory you choose. Informix software products are designed to be installed in a single directory identified by this environment variable. If you install Informix products in different directories, only those in the directory identified by the **INFORMIXDIR** environment variable can run.*

Click **Next**. If you selected the Custom installation type, the Select Installation Components dialog box appears. Otherwise, the Select Folder For Informix Applications dialog box appears.

8. In the Select Installation Components dialog box, specify the components and subcomponents you want to install.

The disk-space requirements are listed next to each component and subcomponent. Informix recommends that you install all components.

When you have selected the components to install, click **Next**. The Select Folder For Informix Applications dialog box appears.

9. In the Select Folder For Informix Applications dialog box, specify the folder where you want to store Informix applications and icons. You can accept the default (**INFORMIX**), choose another existing folder, or enter the name of a new folder to create.

Click **Next**. The Ready To Install Files dialog box appears.

10. In the Ready To Install Files dialog box, make sure the information shown is correct. You cannot change any options on this screen; however, you can click **Back** to return to previous screens and change installation options.

Click **Next**.

11. If **Setup** does not encounter errors during the installation procedure, it displays the Setup Complete dialog box to indicate that the installation is successful.

Click **Finish** to exit **Setup**.

After these steps are completed, **Setup** has copied the client product software to your computer, created the **Setnet32** icon and other icons in the **INFORMIX** program folder, and created the **INFORMIX** subkey of the Windows Registry.

If **Setup** generates an error message, see [“Error Messages” on page 9](#) for assistance in diagnosing the error.

# Error Messages

Occasionally, you might experience some difficulty in the installation procedures. If your product does not install correctly, check for the following conditions.

Error Message	Problem	Solution
Invalid OS: Error	Your client computer has an unsupported operating system.	Use Windows NT 4.0, Windows 98, or Windows 95.
Invalid Processor: Error	Your computer might be too old to handle client product requirements. Possible old microprocessors include an 8086, 8088, 286, or 386.	Use a computer with an Intel 486 or higher microprocessor.

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Error Message	Problem	Solution
Error: file reading error	The installation program is unable to read the media.	You might have loaded the media disk into the wrong disk drive. Try the installation process again. If it continues to fail, you might have hardware problems. Check your hardware. Your CD-ROM or floppy drive might be broken, defective, or dirty. Your hard drive might be corrupted or disabled. If the hardware is working correctly, the media might be corrupted, and it might be necessary to obtain new media.
Not enough disk space: Error	You might not have enough hard-disk storage on your computer for the client product software.	Make more space available on the disk on which you want to install the Informix product, or choose a new disk location for the software. For the amount of disk space that the Informix software requires for installation, refer to <a href="#">“System Requirements” on page 3</a> .
Warning: Invalid serial number and key	The product cannot be installed because the serial number or key code is not valid.	You must reenter the serial information correctly to proceed with the installation script. If the installation still fails, reload the product files from the media and repeat all subsequent steps.

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## Configuring Informix Client Products

This section describes how to complete the following configuration tasks:

- Setting environment information
- Setting server information
- Setting host information
- Creating a Windows NT service

You use **Setnet32** to perform most configuration tasks, including setting most environment variables, server, and host information.

You might have component-specific environment variables to set. See individual product documentation for details.

### About Setnet32

With the **Setnet32** utility, you can set or modify environment variables and network parameters that Informix products use at runtime. The variables and network parameters are stored in the Windows system registry and are valid for every Informix client product you install.

The **Setnet32** utility has the following four tabbed pages:

- **Environment** allows you to set environment variables.
- **Server Information** allows you to set database server network information.
- **Host Information** allows you to set your host computer and login information.
- **About Setnet32** provides information about the **Setnet32** utility.



In addition, the following buttons are at the bottom of the **Setnet32** window.

Setnet32 Button	Purpose
<b>OK</b>	Updates the Registry with the information that you have entered and then exits <b>Setnet32</b> .
<b>Cancel</b>	Cancels all work that you have not already saved with the <b>Apply</b> button and exits from <b>Setnet32</b> .
<b>Apply</b>	Updates the Registry with the information that you have entered, but does not exit.
<b>Help</b>	Invokes <b>Setnet32</b> on-line help.
? (What's This)	Provides context-sensitive help. Click the <b>What's This?</b> button, near the right side of the title bar, and then click any displayed control to get context-sensitive help about that control. You can also right-click a control to access context-sensitive help.  To dismiss the help window, press any key.

## Setting Environment Information

To obtain information about Informix products and the environment in which they run, client products need to access environment variables. Some of these environment variables are required, and others are optional.

For more information on environment variables, see “[Environment Variables](#)” on page 17 and the *Informix Guide to SQL: Reference* included with your Informix database server documentation.

The *INFORMIX-GLS Programmer's Manual* describes the environment variables that you need for locales. ♦

Set your environment variables with the **Environment** tab of the **Setnet32** utility.

The **Environment** page contains the following elements:

- **Informix Client/Server Environment** list box

From this list, you select an environment variable to edit its value with the controls in the **Edit Environment Variable** group.

- **Edit Environment Variable** group

After you select an environment variable in the **Informix Client/Server Environment** list box, the environment variable name appears above the **Variable Name** text box. You can enter a new value in the **Variable Name** text box, edit the existing value, or select a value by clicking the down arrow. Click **Clear** to assign a null value to that environment variable. After you have made your change, click **Set** to save that value.

For some environment variables, you can select a value from a list; for other variables, you can either select or type a value; and for others you must type a value.

- **Save/Load** group

- Click **Load From File** to load your environment variables and their values from a specific file. However, you cannot load environment variables from a specific file unless the **Setnet32** utility has already created that file (use the **Save To File** option to create a file).
- Click **Save To File** to save your environment variables and their values to a specific file.

## Setting Server Information

A client application connects to an Informix server running on a computer that can be reached through the network. To establish the connection, you use **Setnet32** to specify the location of the Informix server on the network and the network communications protocol to use. You must obtain this information from the administrator of the server you want to use.

Set your database server parameters with the **Server Information** tab of the **Setnet32** utility.

The **Server Information** page contains the following elements:



- **Informix Server list box**

From this list, you can select an existing Informix database server, or you can type the name of a new database server.

- **Host Name list box**

From this list, you can select the host computer with the database server you want to use, or you can type the name of a new host computer.

- **Protocol Name list box**

From this list, select a network protocol from a list of protocols provided by the installation procedure.

- **Service Name text box**

In this text box, specify the service name associated with a specific database server. You can type either the service name or the port number assigned to the database server on the host computer. You must obtain this information from the database server administrator.

**Important:** *If you enter a service name, it must be defined on the client computer in the **services** file in the Windows installation directory. For Windows NT 4.0, this file is located in **system32\drivers\etc\services**. For Windows 95 and Windows 98, this file is located in the **%windir%** directory. The service definition must match the definition on the database server host computer.*

- **Make Default Server button**

Sets the **INFORMIXSERVER** environment variable to the name of the current server to make it the default database server.

- **Delete Server button**

Deletes the definition of a database server from the Windows registry. It also deletes the host name, protocol name, and service name associated with that database server.

## Setting Host Information

A client application can make connections only to a host machine that it can access through the network. You describe a connection to a host machine by specifying *host parameters*.

For more information on host parameters, see the connectivity chapter in the [Administrator's Guide](#) for your database server.

Set your host parameters for a specific host with the **Host Information** tab of the **Setnet32** utility.

The **Host Information** page contains the following elements:

- **Current Host** list box

This list displays host computers previously defined in the current Windows Registry. From this list, you can select the name of a host computer with which to establish a network connection, or you can edit or retype a name on the list to define a new host name.

- **User Name** text box

This text box displays the user name for an account on the currently selected host computer. This text box accepts a value with a maximum length of 18 characters. The value is case sensitive.

- **Password Option** list box

From this list, you can select one of the following password options:

- ☐ **Ask password at runtime**

Your application prompts the user for a password.

For information about how to use the `sqlauth()` function to prompt for a password and verify it, see the [INFORMIX-ESQL/C Programmer's Manual](#).

- ☐ **No password**

The user account has no password. When the application opens a new database, that application does not send a password to the database server. If the host machine of the database server requires a password, the connection fails and an error results.

- ☐ **Password**

The user account has a password that matches the encrypted value that the **Password** text box displays. When the application opens a new database, the database server compares the password that the user enters with the login password for the host machine of the database server. For the database server to grant access to the database, the two passwords must be identical. If the passwords are not identical, the user cannot connect to that database server across a network.

- **Password** text box

This text box, which the **Password** option activates, displays asterisks ( \* ) representing the account password. When this text box is enabled, it accepts a password value with a maximum length of 18 characters. The value is case sensitive and cannot contain any spaces.

To enter a new password, place the cursor inside the **Password** text box and type the new password. Asterisks ( \* ) represent the characters as you type.

- **Delete Host** button

This button deletes the name of the currently selected host computer from the Windows Registry, as well as the user name, password option, and password associated with that host machine.

## Windows NT

## Creating a Windows NT Service

Windows NT services do not search for configuration information in the Windows registry hive where **Setup** and **Setnet32** store client products environment variables. To enable a client application to run as a Windows NT service, you must copy the values from the **HKEY\_CURRENT\_USER\Software\Informix** registry hive of the **informix** user to the **HKEY\_USERS\.Default\Software** registry hive. You must run the **regcopy** utility each time you change the registry with **Setnet32** to synchronize data across hives.

To run the **regcopy** utility, log in as user **informix** or as another user that has administrator privileges and can run Informix software. The **regcopy** utility is in the **bin** subdirectory of the Informix installation directory. After you are done, you can check the progress by reviewing the **regcopy.log** file located in the **%TEMP%** directory. ♦

## Environment Variables

The following table lists environment variables that Version 2.2 client products support. When maximum size is specified, the terminating null character is not included.

Environment Variable	Purpose	Possible Values
CC8BITLEVEL	Specifies how the C language compiler processes non-ASCII (8-bit and multibyte) characters.	See <a href="#">INFORMIX-GLS Programmer's Manual</a> . Default is 2.
CLIENT_LOCALE	Specifies the locale that the client application uses to perform read/write operations that involve the keyboard, display, file, or printer on the client computer.	Any valid locale specifier. See <a href="#">INFORMIX-GLS Programmer's Manual</a> . No default.
COLLCHAR	Specifies a collation sequence for characters. Provided for backward compatibility with NLS products.	See <a href="#">Informix Guide to SQL: Reference</a> .
CONRETRY	Specifies the maximum number of additional connection attempts made to a database server in the time limit that <b>CONTIME</b> specifies.  Same as <b>INFORMIXCONRETRY</b> .	Default is 1.
CONTIME	Specifies the number of seconds an SQL <b>CONNECT</b> statement continues to try to establish a connection before it generates an error.  Same as <b>INFORMIXCONTIME</b> .	Default is 15.
DB_LOCALE	Specifies the locale of all the databases that a client application accesses in a single connection (the database locale).	Any valid locale name
DBALSBC	When set to 1, enables compatibility with ALS products.	0 or 1

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Environment Variable	Purpose	Possible Values
DBANSIWARN	When turned on (y), causes the preprocessor to check for Informix extensions to ANSI-standard SQL syntax at compile time, and causes an application to check for Informix extensions at runtime.	Default is n.
DBAPICODE	Enables pre-7.2 systems that use nonstandard or rare code sets to access databases that store data in a standard code set. Maximum size = 23 characters. <i>Provided for backward compatibility with NLS and ALS products.</i>	Usage and values depend on language system. See NLS and ALS documentation for descriptions.
DBASCIIBC	When set to 1, enables compatibility with ASCII products.	0 or 1
DBCENTURY	Specifies how to expand values of two-digit-year DATE and DATETIME values. P = past century, R = present century, C = closest century.	P, R, or C. See <a href="#">Informix Guide to SQL: Reference</a> . Default is R.
DBCODESET	Specifies an Asian-locale code set. Overrides the code set that <b>DB_LOCALE</b> specifies. <i>Provided for backward compatibility with Version 4.x and 5.x ALS products.</i>	Same values as ALS <b>DBAPICODE</b> . Default is 8859-1:: unless the <b>informix.rc</b> file specifies another system-wide default)
DBCCONNECT	Specifies whether or not connections are restricted.	1 or 3
DBCSCONV	Controls code-set conversion initialization. Maximum size is eight characters. <i>Provided for backward compatibility with ALS products.</i>	1 or 2:codesetname See 5.0 ALS documentation.

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Environment Variable	Purpose	Possible Values
DBCISOVERRIDE	Forces the user-specified <b>DB_LOCALE</b> value to override default restrictions on accessing databases with locales different from <b>DB_LOCALE</b> . <i>Provided for backward compatibility with Version 6.0 ALS database servers.</i>	0 or 1
DBCWIDTH	Maximum number of display bytes (1-2) and storage bytes (1-4) for the characters in up to three code sets. Display and storage widths are separated by commas; code sets are separated by colons. Maximum size of this field is, therefore, 11 characters. <i>Provided for backward compatibility with ALS products.</i>	Example: 1,1:2,3 means a display and storage width of 1 byte for character set 1; a display width of 2 bytes and a storage width of 3 bytes for code set 2.
DBDATE	Specifies the end-user format for <b>DATE</b> values so that they can conform with various international date conventions. <i>Provided for backward compatibility with pre-7.2 products. Informix recommends GL_DATE for 7.2 ESQL/C applications.</i>	Default is <b>MDY4</b> unless NLS variable <b>LC_TIME</b> is activated.
DBFLTMASK	Specifies the number of decimal digits to use when storing a <b>DECIMAL</b> , <b>SMALLFLOAT</b> , or <b>FLOAT</b> data type in a character buffer.	0-16 Default is 16.
DBLANG	Specifies the subdirectory of the Informix installation directory that contains the product-specific message ( <b>.iem</b> ) files.	Default is <b>\msg</b> .

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Environment Variable	Purpose	Possible Values
DBMONEY	Specifies the end-user format for MONEY values so that they can conform with various international and local monetary conventions.	Default is \$ , .
DBMONEYSALE	Specifies the total number of digits and number of decimal digits for monetary values. <i>Provided for backward compatibility with ALS products.</i>	
DBNLS	Specifies whether an application can access NLS features. <i>Provided for backward compatibility with NLS products.</i>	Default is n .
DBPATH	Identifies the database servers that contain databases that the application accesses.	
DBSS2	Maximum size is four characters. <i>Provided for backward compatibility with ALS products.</i>	0x00-0xff or 0-255
DBSS3	Maximum size is four characters. <i>Provided for backward compatibility with ALS products.</i>	0x00-0xff or 0-255
DBTEMP	Specifies the directory on the client computer that the client processor uses to store temporary files (also called <i>swap files</i> ).	Default is \tmp.
DBTIME	Specifies the end-user format for DATETIME values so that they can conform with various international date conventions. Informix recommends GL_DATETIME for 7.2 ESQL/C applications. <i>Provided for backward compatibility with pre-7.2 products.</i>	Default is %Y-%m-%d %H:%M:%S.

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Environment Variable	Purpose	Possible Values
DELIMIDENT	Indicates whether (y) or not (n) to interpret strings in double quotes as delimited identifiers.	Default is n.
ESQLMF	Indicates whether the ESQL/C processor automatically invokes the ESQL/C multibyte filter ( <i>value=1</i> and <i>CC8BITLEVEL&lt;3</i> , or <i>not value=0</i> ).	See <a href="#">INFORMIX-GLS Programmer's Manual</a> .
FET_BUF_SIZE	Overrides the default size of the fetch buffer.	Any valid buffer size, in bytes. Default value depends on row size.
GL_DATE	Specifies a customized end-user format for DATE values.	See <a href="#">INFORMIX-GLS Programmer's Manual</a> .
GL_DATETIME	Specifies a customized end-user format for DATETIME values.	See <a href="#">INFORMIX-GLS Programmer's Manual</a> .
INFORMIXDIR	Identifies the location of the client programs, library files, message files, header files, and other Informix software components.	Default is C:\INFORMIX.
INFORMIXSERVER	Identifies the default database server.	See <a href="#">INFORMIX-ESQL/C Programmer's Manual</a> .
INFORMIXSQLHOSTS	Specifies the name of the machine on which the central registry resides.	See <a href="#">INFORMIX-ESQL/C Programmer's Manual</a> .
LANG	Specifies the language environment (called a <i>locale</i> ) for an NLS database that an application accesses. <i>Provided for backward compatibility with NLS products.</i>	Default is C.
LC_COLLATE	Specifies a collation or sort sequence for data in NCHAR and NVARCHAR columns of an NLS database. <i>Provided for backward compatibility with NLS products.</i>	See <a href="#">Informix Guide to SQL: Reference</a> . Default is the value that LANG specifies.

Environment Variable	Purpose	Possible Values
LC_CTYPE	Specifies character attributes such as character classification and case conversion of regular expressions for data in NCHAR and NVARCHAR columns of an NLS database. <i>Provided for backward compatibility with NLS products.</i>	See <a href="#">Informix Guide to SQL: Reference</a> . Default is the value that LANG specifies.
LC_MONETARY	Specifies the end-user format for MONEY values in an NLS database. <i>Provided for backward compatibility with NLS products.</i>	See <a href="#">Informix Guide to SQL: Reference</a> . Default is the value that LANG specifies.
LC_NUMERIC	Specifies the end-user format for numeric values in an NLS database. <i>Provided for backward compatibility with NLS products.</i>	See <a href="#">Informix Guide to SQL: Reference</a> . Default is the value that LANG specifies.
LC_TIME	Specifies the end-user format for DATE and DATETIME values in an NLS database. <i>Provided for backward compatibility with NLS products.</i>	See <a href="#">Informix Guide to SQL: Reference</a> . Default is the value that LANG specifies.

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In addition, there is a set of environment variables you can use with the function call **ifx\_putenv** to override the information entered in the **Server Information** and **Host Information** pages of **Setnet32**. To use these environment variables, you must set the **INFORMIXSERVER** environment variable to a valid server name. Overrides affect only that server.

The environment variables are described in the following table.

Environment Variable	Overrides the Value For
WIN32HOST	The HOST network parameter
WIN32USER	The USER network parameter
WIN32PASS	The PASSWORD network parameter

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Environment Variable	Overrides the Value For
WIN32ASKPASSATCONNECT	The PASSWORD OPTION network parameter
WIN32SERVICE	The SERVICE network parameter
WIN32PROTOCOL	The PROTOCOL network parameter

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See the [INFORMIX-ESQL/C Programmer's Manual](#) for more information.

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