

# **LiNC-NET for Windows NT/2000™**

## **Installation Guide for LiNC-NET ver. 5.14.2**

33-10055-002

REV: C

**PCSC**  
**3541 Challenger Street**  
**Torrance, CA 90503**  
**Phone / Fax: (310) 303-3600**  
**[www.1pcsc.com](http://www.1pcsc.com)**

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## 0.1 Release Notes for LiNC-NET NT/2000™ Version 5.14.2

This release includes the following enhancement and corrections.

### 1. **New fields**

Middle name field has been added to the card database and State fields has been added to the card, panel, and host database.

### 2. **Download correction**

The download error for all on-line and modem option has been corrected. The error did not allow the download to be performed.

### 3. **Smartcard\_40**

Smartcard\_40 and Smartcard\_40/PIN\_PAD have been added to the reader type list (see section **5.1.3.4** and **5.4.3.4**)

### 4. **Report updates**

The following updates have been made to the report.

A. The Building hours report now has an option to show the calculated hours in HH:MM format.

B. The Card report has new search criteria which allows the user to search for cards that have access through a selected door.

C. The Authorization Group report now shows the names of authorization groups and panels and the user can choose to also include the reader names.

D. Scheduled time period download information has been added to the Holiday report.

E. Search criteria list fields can be erased by selecting the entire text in the fields and using the delete or backspace key

- Card: authorization group & affiliation
- Journal: code
- Card status: affiliation & department
- Authorization group: time period

F. Correction has been made for the error that occurred if affiliation search criteria button was clicked to make a new selection.

### 5. **Custom report corrections**

The following saved custom report problems have been corrected.

A. Print to file option was not saved for Operator audit report.

B. Door access search criteria was not saved for Card report.

C. Custom report was not deselected when the date/time or panel was changed on the Building hours report.

D. When no record is found, the title line identifying the report was not printed.

**6. Scheduled report corrections**

The following scheduled report problems have been corrected.

A. Search criteria section of the report output contained only the search values without identifying what they are.

B. Search for affiliation did not work for Card, Card status, and Building hours report.

C. Holiday report search for month did not work.

D. Operator audit report search for action did not work.

E. 'Unable to read record' error left the Print report window open.

**7. Time period default**

Time period 2 is now initialized to 'None'

**8. Grid windows invoked by backspace key**

The backspace key used in card number field brought up the card grid window with a square character in the Find field. The backspace key will display the grid window if the text was changed as the result of backspace and the Find field will contain the edited text. This problem has also been corrected for other similar fields.

**9. Resizing alarm window**

The grids that show the active alarms will resize with the alarm window.

**10. Language translation**

The 'Schedule...' button on report windows can now be translated. The Input Shunt screen also can be translated.

**11. Latching special option**

The latching special option is enabled by selecting the option in the Miscellaneous section on the Main tab of the ConfigLN program. When this option is enabled, the latching alarm has two modes—secure and access. If the latching alarm is enabled for an input, the Input screen shows the current mode and the buttons to change it.

**12. Panel add warning message**

If an attempt is made to add a panel that already exists, the following message is displayed to give the user a chance to cancel the add.

"Panel already exists. Are you sure you want to proceed with the add?"

**13. SMMP**

The single modem multiple panels feature is now supported in LiNC-NET.

**14. Auth Timeout**

The 'Auth Timeout' transaction can now be defined as a transaction alarm.

**15. LAN panel down problem**

LiNC-NET was not detecting panels on LAN being disconnected.

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## 1.0 Introduction

Welcome to newly redesigned LiNC-NET for Windows-NT/2000, the enterprise programming software from PCSC. This user-friendly, PC-based access control manager is fairly simple to operate and provides Help screens along the way to make operation even easier. We've recently redesigned the LiNC-NET manuals to reflect the new graphical user interface and for greater ease in installing the system in its Standalone, Host, Workstation or Concentrator modes.

LiNC-NET for Windows-NT/2000 operates under the Microsoft WINDOWS-NT/2000 operating system. The host PC should be dedicated to the access control system to ensure security integrity and management efficiency. Other WINDOWS-NT/2000 applications should not be running concurrently with LiNC-NET for Windows-NT/2000.

This manual was designed to provide the information necessary to install LiNC-NET for Windows-NT/2000. To obtain a complete understanding of LiNC-NET, this manual should be used in conjunction with the LiNC-NET for Windows- NT/2000 Administrator Manual and the LiNC-NET for Windows- NT/2000 User Manual. The Help menus provided on-screen will usually be sufficient to enter the proper data. This manual augments those screens and will detail certain fields, definitions, and procedures where needed.

### Panel Installation Manuals

MicroLPM	P/N 33-10019-001
IQ	P/N 33-10036-001
SIM	P/N 33-10037-001
Ultimate	P/N 33-10035-001

### Peripheral Installation Manuals

Modem	P/N 39-10052-001
Stallion	P/N 39-10060-001
Lantronix	P/N 39-10056-001

NOTE: For clarity in describing the use of LiNC-NET, the MicroLPM, IQ, SIM and Ultimate PCBs will be referred to as the PANEL.

## 1.1 Installation and Setup

Along with the Help screens, this guide describes how to setup your system quickly and easily. After the initial system foundation has been setup, refer to the **LiNC-NET for Windows-NT/2000 User Guide** (P/N 37-10055-001) for the day-to-day operation and maintenance of your system. The **User Guide** provides information on entering data regarding card assignment, time periods, downloading records to the Panel(s), and door operations.

**NOTE:** Most of the screens shown in the **LiNC-NET 5.14 Install Manual** make reference to **LiNC-NET 5.14.1**. Except for screens where the software now functions and appears differently in **LiNC-NET 5.14.2**, please assume that the functionality shown in these older screens is still correct for this version

## 2.0 Before You Begin - Installation Requirements

### 2.1 Software

To install LiNC-NET for Windows-NT/2000, the following requirements must be met:

- Windows NT Workstation Version 4.0 SP 4™ (or higher) Windows 2000™ (SP3 or higher) must be installed on the host computer.
- User must have knowledge of mouse and keyboard use in the WINDOWS-NT/2000 environment.

### 2.2 Hardware

Compare your computer hardware features with the chart listing the requirements for proper operation of LiNC-NET. If you have any questions regarding the computer you will be using for this application, call PCSC Application Engineering at (310) 303-3600 ext. 1694.

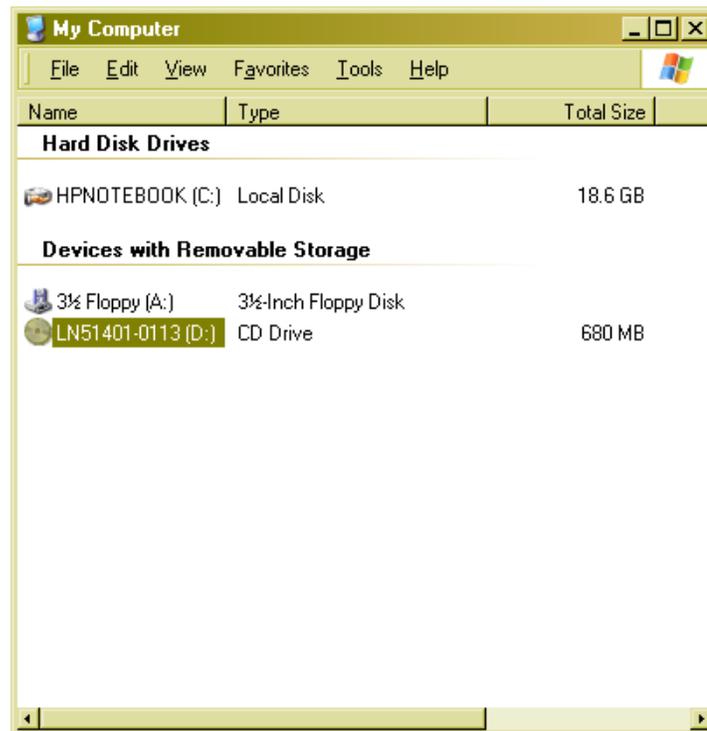
Hardware Item	Min. Requirement
CPU	IBM PC or equivalent: Pentium 4 (minimum for Host, Concentrator and Work Station – P4 3.0 GHz), Windows-NT version 4.0 SP6a, Windows 2000 SP3, or Windows XP; Award BIOS, Intel 82430 VX PCI Chipset.
RAM	1.0 GB for Host Concentrator and Workstation
Hard Drive	40.0 GB IDE
Diskette Drive	3.5 in., 1.44 MB
CDRW or DVD-RW	12X CDRW with Nero or Roxio Software
Monitor	SVGA, 1024 x 768
Keyboard	PS-2
Mouse	PS-2 Mouse
Parallel Port	LPT1 (Address 0378h IRQ7) preferred but LPT2 or LPT3 are acceptable
Serial Port	2 RS-232, 1 RS485 (COM 1 then COM 4 optically isolated preferred).
Network Interface Card	10 MBs Ethernet LAN card
U.P.S. (Uninterruptible Power Supply)	420 VA for PC & monitor

## 3.0 The Initial Installation

### 3.1 The Initial Installation

To Begin

1. Close any Windows™ programs that you are currently running before beginning the installation.
2. Insert the **LiNC-NET v. 05.14** CD into the CD-ROM drive.
3. Click on the **My Computer** icon on your desktop.
4. Your CD-ROM drive should display **LN514xx**. Double-click on **LN514xx**.
5. Several folders will appear in the **LN514xx** window:



From this location you will install the **BDE5** and **LN05.14.xx** programs which form the two halves of the **LiNC-NET 05.14.xx** program. We will start with the **BDE5** program.

The Installation of LiNC-NET is in two parts because it is comprised of:

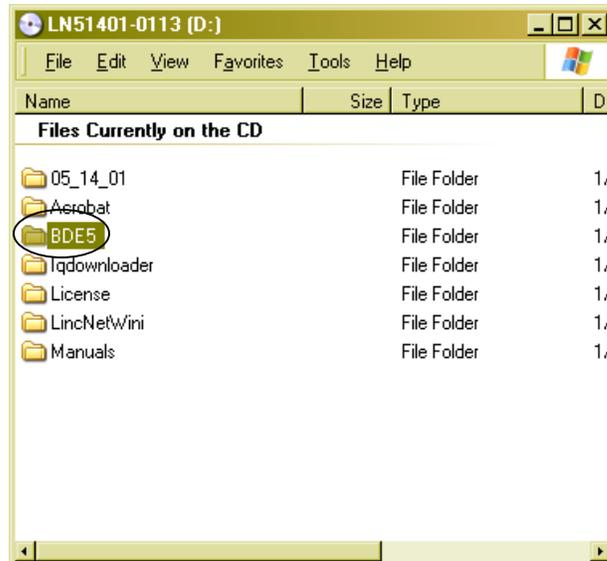
#### **-05.14.xx PCSC LiNC-NET Application Software**

#### **-Borland Database Engine Software**

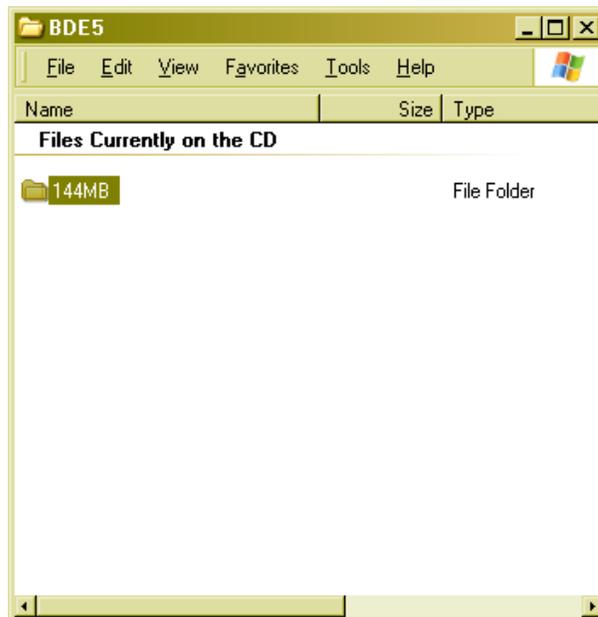
**BDE5** Borland Database Engine Version 5 software permits the operation of a database for use by LiNC-NET (the installation will also read, write and update an existing Borland Database by the LiNC-NET Application program).

## 3.2 Installing BDE5

1. Double-click on the **BDE5** folder.



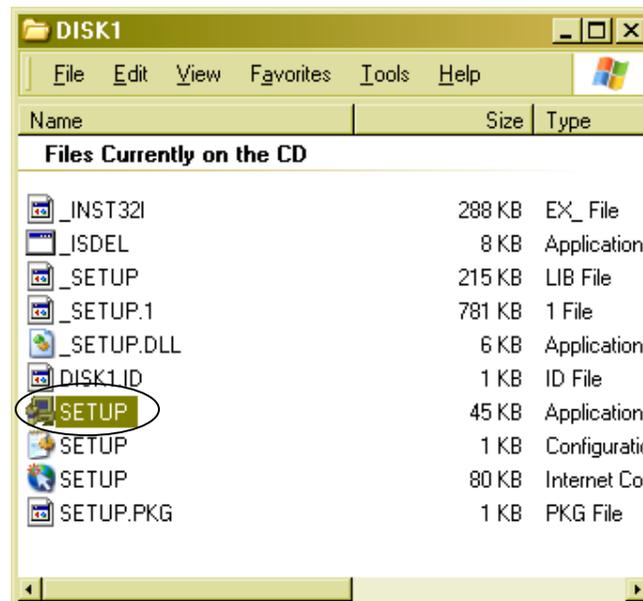
2. In the **BDE5** window, double-click on the **144mb** folder.



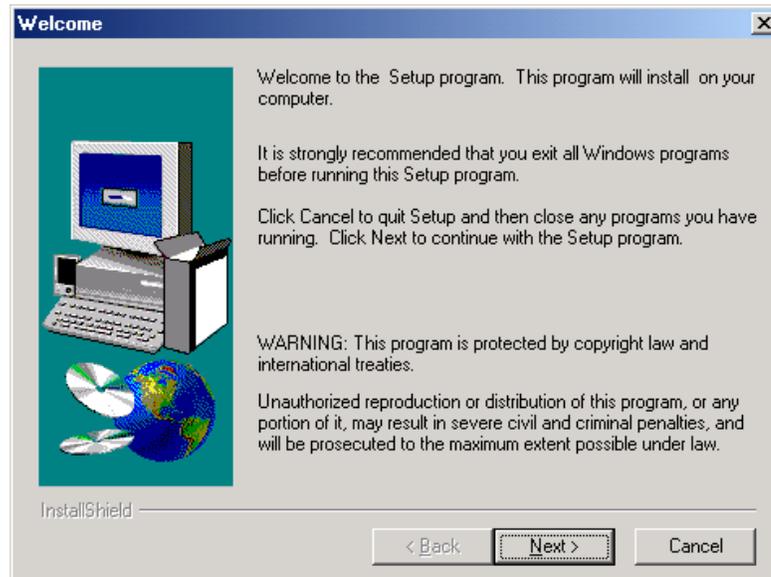
3. In the **144mb** folder, click on the **Disk 1** folder



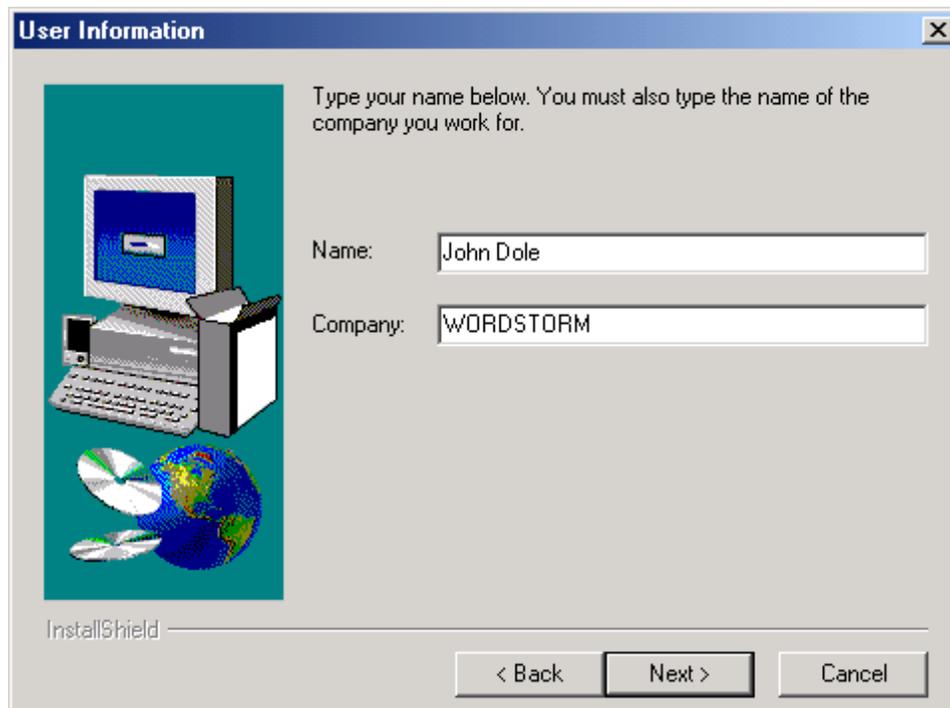
4. In the **Disk 1** window, double-click on the **setup.exe** application.



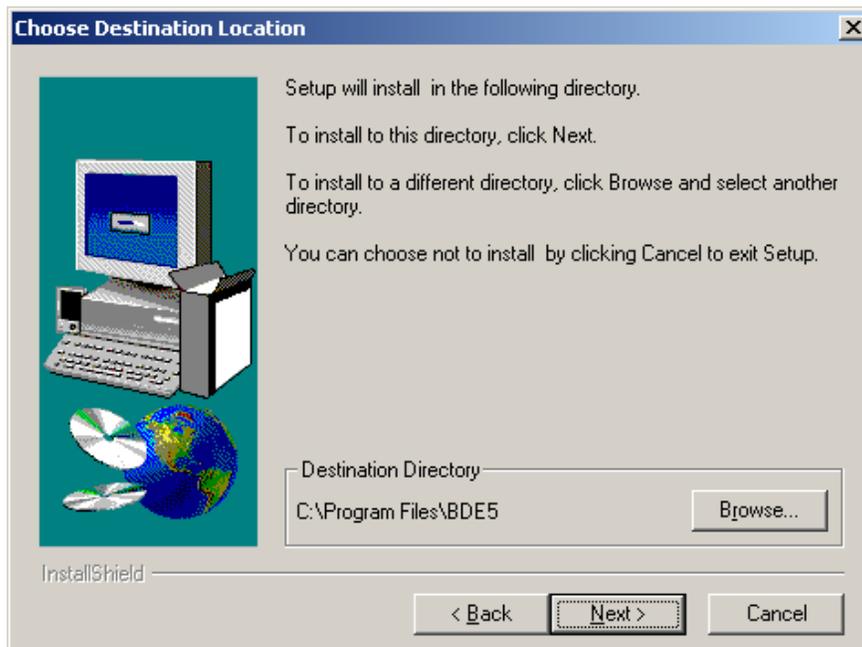
5. This will bring you to the **Install Shield Wizard**®, which will lead you through the rest of the **BDE5** installation. The initial page will be the **Welcome** page, which will state that you will be installing **BDE5** on your hard drive. Click the **Next>** button.



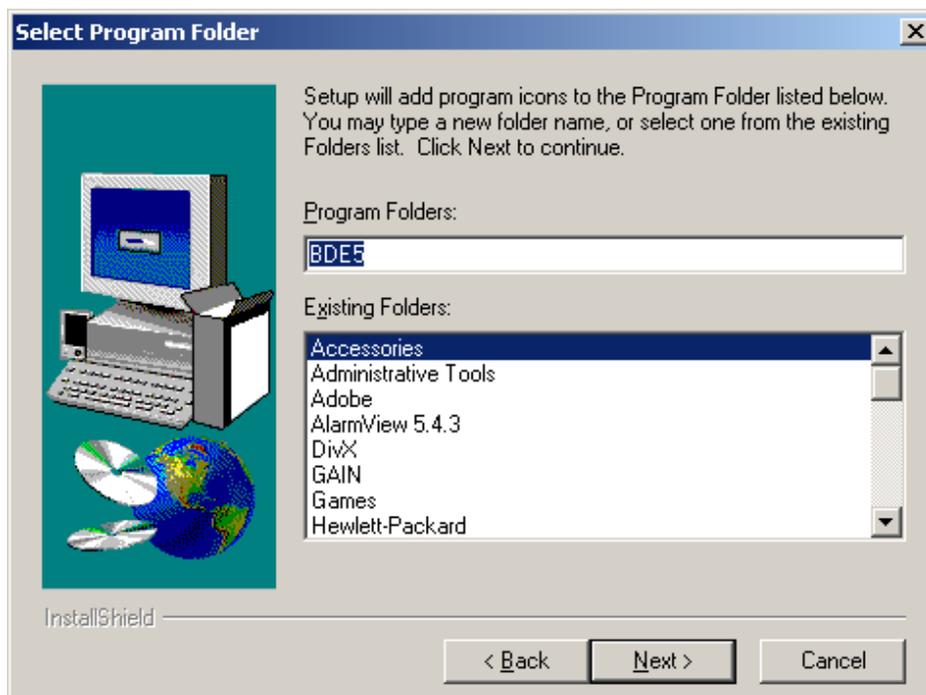
6. You will then be brought to the **User Information** page. Type in your *Name* and *Company* in the appropriate spaces. Click the **Next>** button.



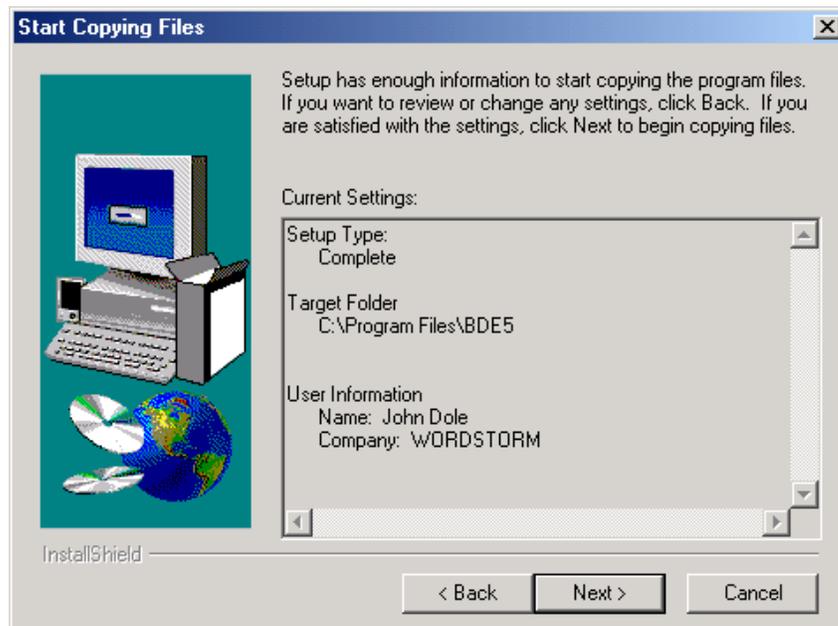
7. You will be brought to the **Choose Destination Location** page. A default directory (C:\Program Files\BDE5) will have already been established for you. Click the **Next>** button.



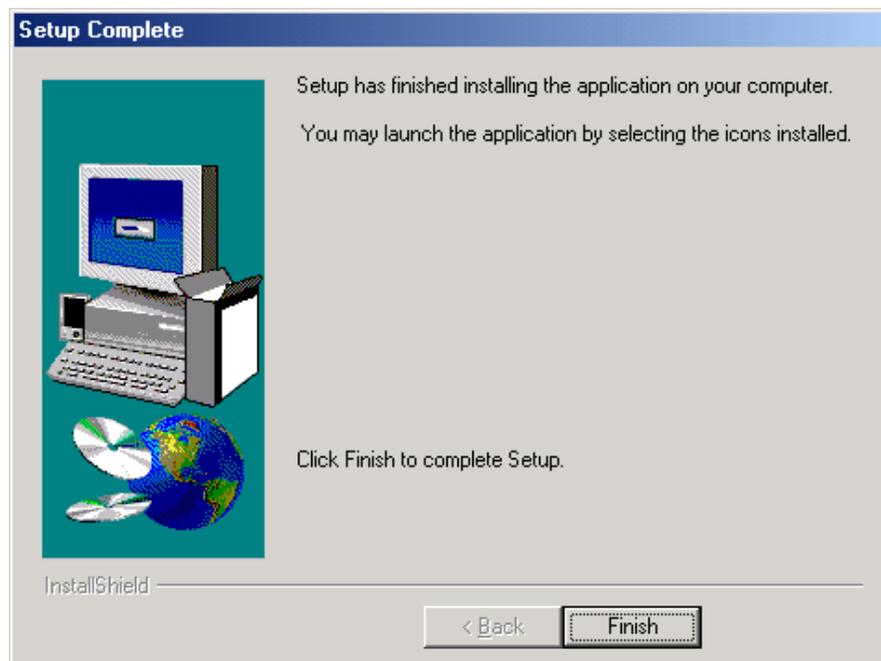
8. You will be brought to the **Select Program Folder** page. A default folder (BDE5) will have already been established for you. Click the **Next>** button.



9. You will be brought to the **Start Copying Files** page, which will specify the **Current Settings** you established in the previous pages. Click the **Next>** button.



10. The **BDE** files will now decompress onto your hard drive. When the decompression is finished, you will be brought to the **Setup Complete** page. Click the **Finish** button.

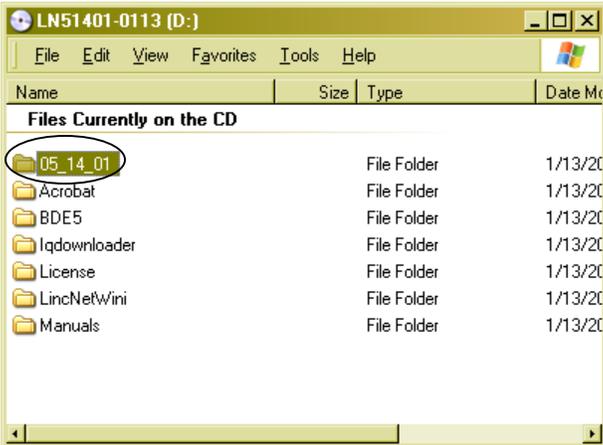


11. You will be brought back to your desktop. Return to the **LN5.14.xx CD ROM** window. You are now ready to install the **LiNC-NET 5.14.xx** program.

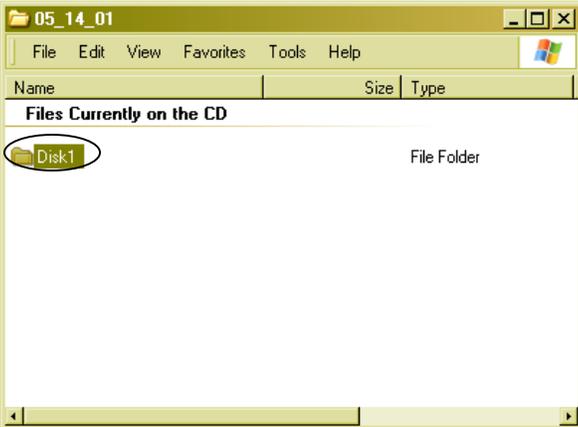
### 3.3 Installing LN05.14.xx

**NOTE** Installing the LN5.14.xx program files is very similar to installing the BDE5 program files.

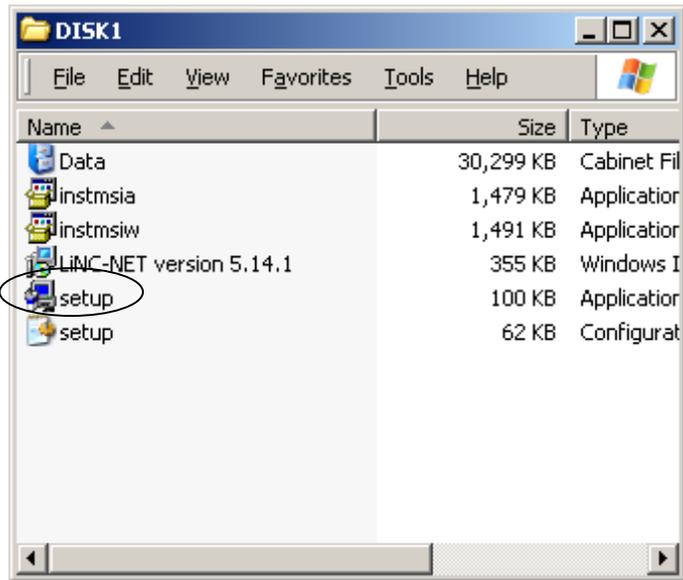
1. In the LN5.14.xx **CD ROM** window, double-click on the **5\_14\_xx** folder.



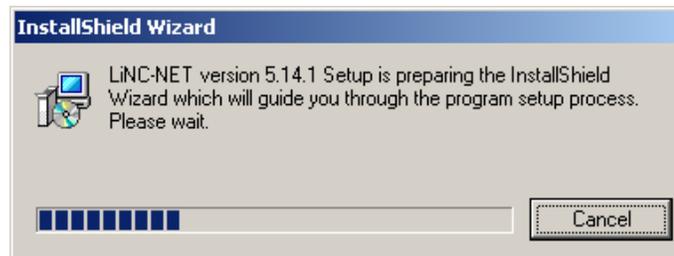
2. In the **5\_14\_xx** window, double-click on the **DISK1** folder.



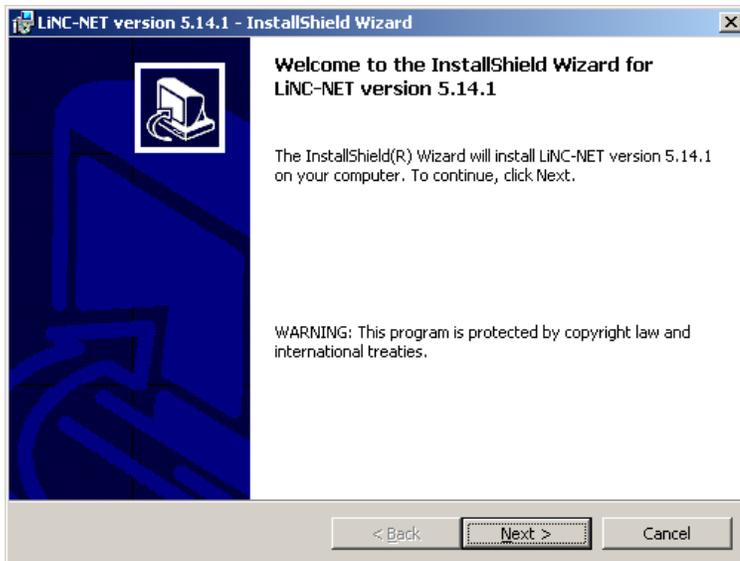
3. In the **DISK1** window, double-click on the **setup.exe** application.



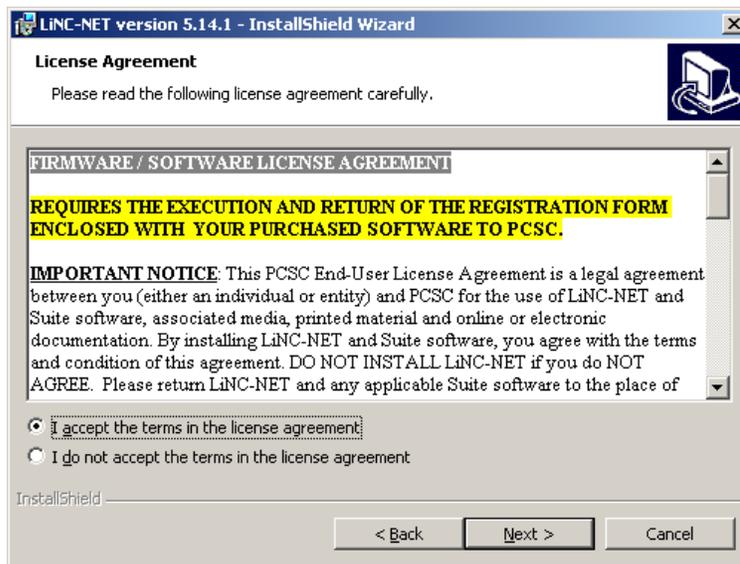
The following pop-up window will appear as the Installer loads on your system.



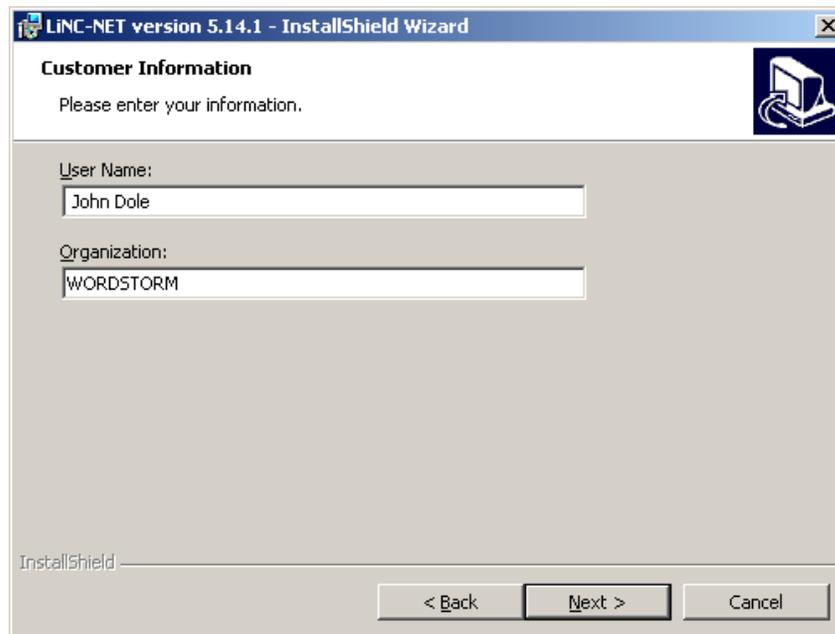
5. This will bring you to the **Install Shield Wizard**®, which will lead you through the rest of the **LiNC-NET 5.14** installation. The initial page will be the **Welcome** page, which will state that you will be installing **LiNC-NET version 5.14** on your hard drive. Click the **Next>** button.



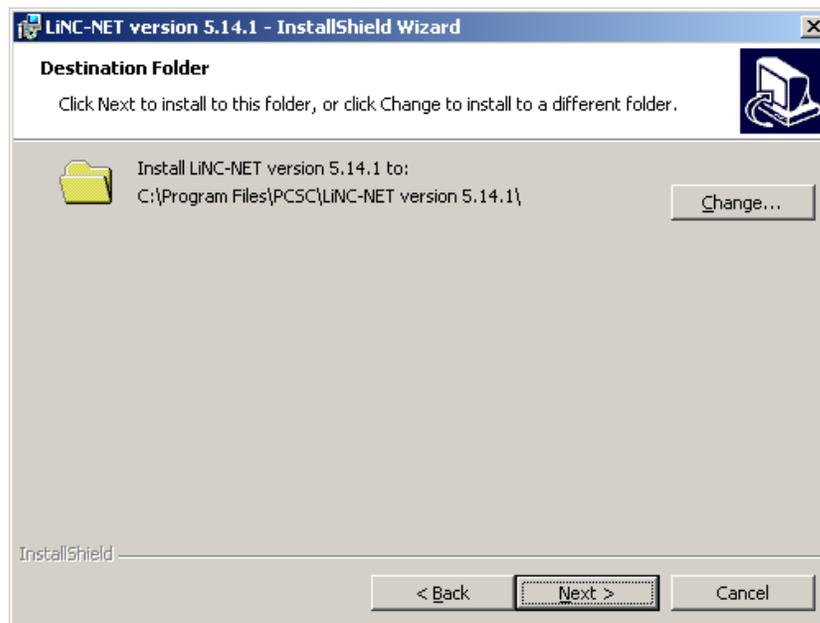
6. You will be brought to a User License Agreement. Read the Agreement and then click the radio button for "I accept the terms of the license agreement." Click the **Next>** button.



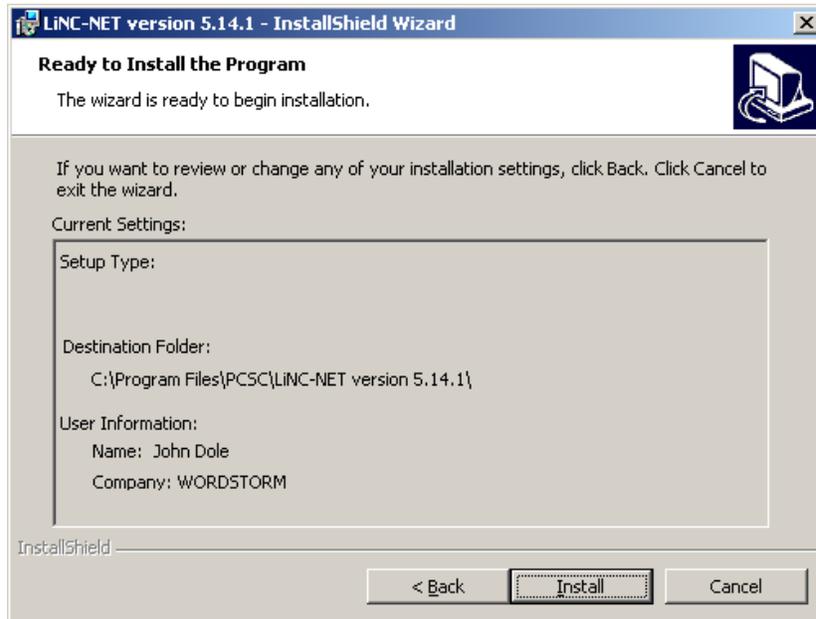
7. You will be brought to the **Customer Information** page. Type in your *Name* and *Company* in the appropriate spaces. Click the **Next>** button.



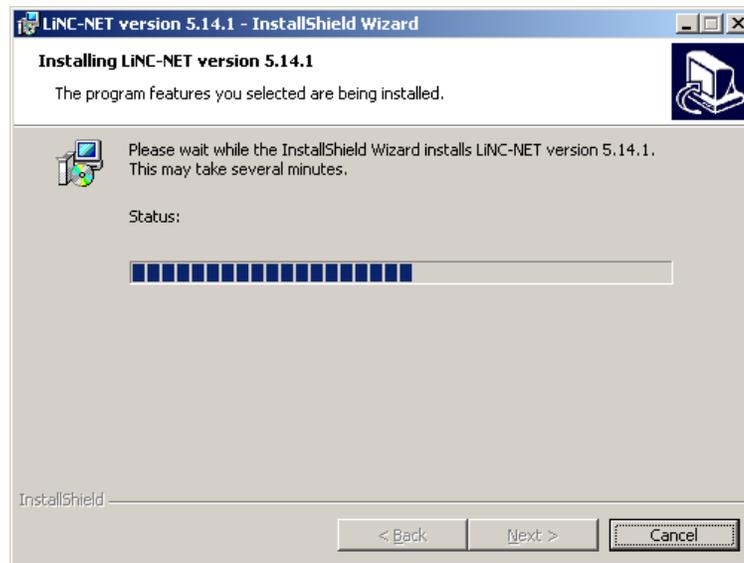
8. You will be brought to the **Destination Folder** page. A default directory (C:\Program Files\PCSC\LINC-NET version 5.14.xx) will have already been established for you. Click the **Next>** button.



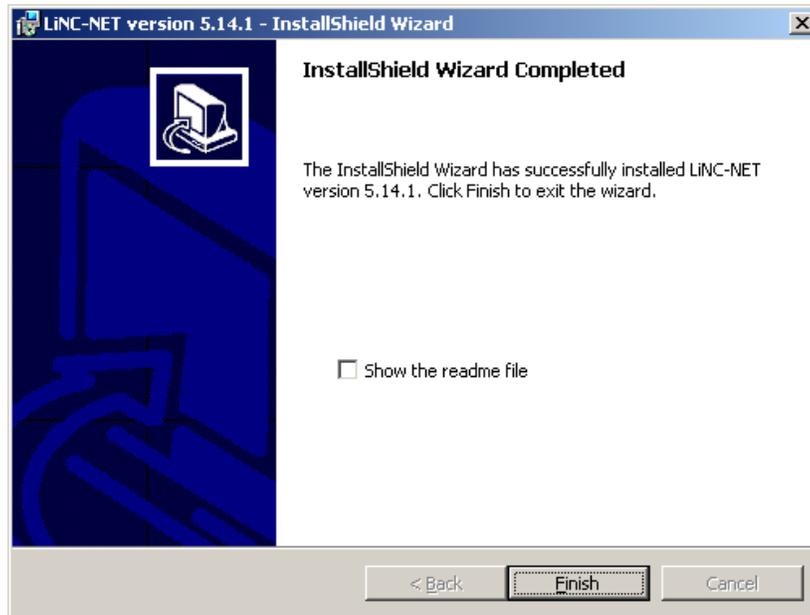
9. You will be brought to the **Ready to Install the Program** page, which will review the Destination Folder and your User Information that you entered. Click the **Install** button.



10. The **LiNC-NET 5.14** files will now decompress onto your hard drive. An **Installing LiNC-NET version 05.14.xx** window will appear briefly, showing the LiNC-NET icons that are being installed.



11. When the decompression is finished, you will be brought to the **InstallShield Wizard Completed** page.



11. Click on the **Finish** button. You will be brought back to your Windows™ desktop.

One can also access the different LINC-NET programs through the **Start** menu, in **Programs** under **LNv5\_14\_xx** folder.

**At this point, you are ready to start Section 4.0.**

## 4.0 Copy LincnetW.ini into the LNV05.14.xx Program Folder

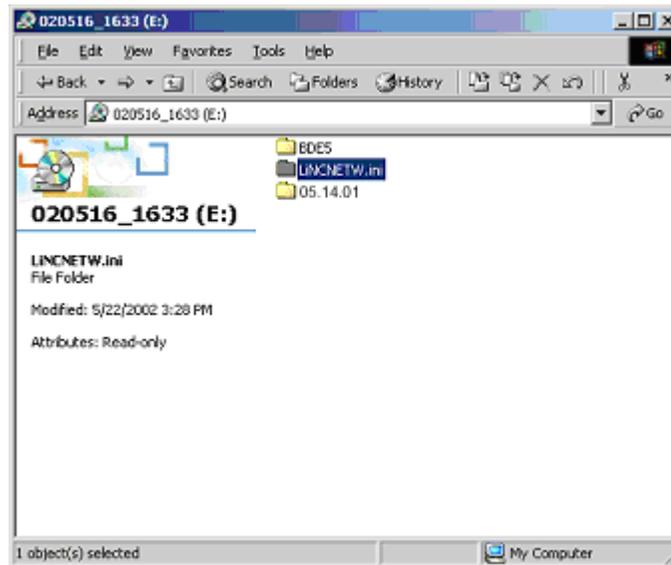
### 4.1 Enhanced Features Activated through the LincnetW.ini

The **Miscellaneous** section of ConFigLN allows an administrator to activate enhanced features that extend beyond the initial default set-up. By copying your unique *LincnetW.ini* into the LNV05.14.xx program folder, you overwrite the default *LincnetW.ini* files.

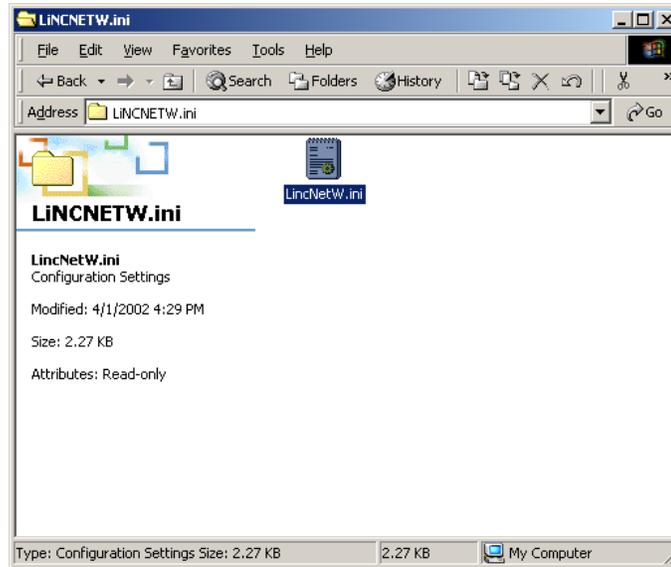
Certain features such as “MicroLPM PLUS 4 in use,” “CLIENTS (not allowed on Network),” and MicroELV in use” are determined by your LiNC-NET configuration or the type of panels used in your LiNC-NET setup. Other features, such as ORION and LiNC-ID are extra features that are requested at the time of your LiNC-NET purchase.

### 4.2 Copy LincnetW.ini into the LNV5.14.xx Program Folder

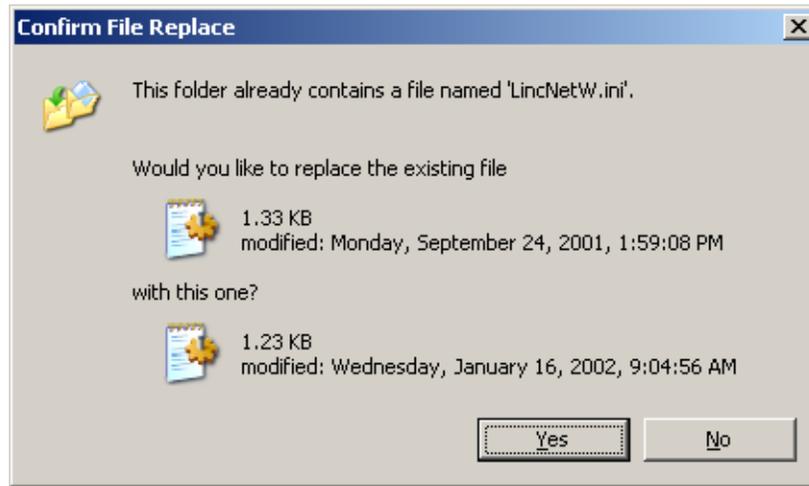
1. In the LNV5.14.xx CD ROM Window, double-click on the **LincNetW** folder.



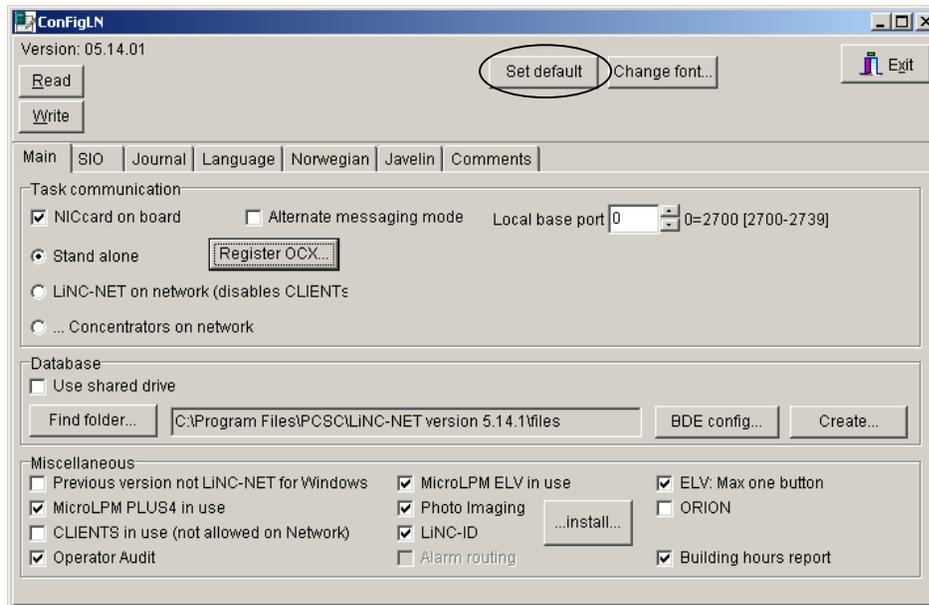
2. In the LincNetW.ini window, copy the **LincNetW.ini** file and paste it into the LN5.14.xx program folder, **C:\Program Files\PCSC\LiNC-NET version 5.14.xx** (default path).



3. Confirm that you are replacing the file by answering **yes**.



4. **NOTE: Go to Start\Programs\LNv5\_14\_xx\ConfigLN.**
- a. Select the **"Set defaults"**. This will give you the proper **LincnetW.ini** file that you purchased. This also sets a default path.
  - b. Save by clicking on the **"Write"** button. Selecting the Write button will add a duplicate file called **LincnetW.ini** in your WINNT folder.



## 5.0 Using ConfigLN to Install a Directory

**ConfigLN-** (Configure LiNC-NET) is a feature that is used to set options such as the location of the LiNC-NET database (on a local hard drive or mapped to a shared network drive) and to install the default features of the LiNC-NET system.

Choose one of the following installation procedures:

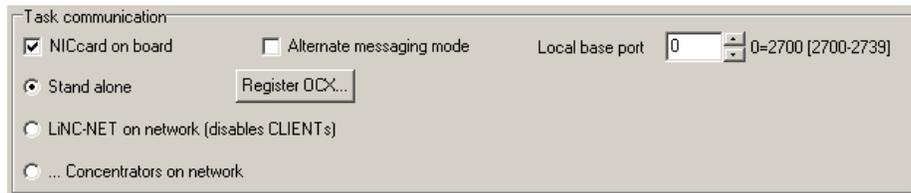
- 5.1 Installing LiNC-NET for a Standalone Configuration
- 5.2 Installing LiNC-NET for a Multi-User Host Configuration
- 5.3 Installing LiNC-NET for a Multi-User Workstation Configuration
- 5.4 Installing LiNC-NET for a Multi-User Concentrator Configuration

## 5.1 Installing LiNC-NET for a Standalone System



**NOTE** If the computer isn't equipped with a network card or you will not use a LAN connection in your LiNC-NET operations, do NOT check **NICcard on Board**. A computer without a Network Card will connect to a panel only with a direct cable (RS232 / RS485) or with a remote connection (modem).

1. Go to **Start\Programs\LNv5\_14\_xx** and click on **ConFigLN**.



The default value in the **Task Communication** shows a stand-alone computer equipped with a network card. This means that the computer will be able to connect to the panel through the network (LAN, WAN), direct cable (RS232 / RS485), remote access (modem).



**Network Card**- A Network Interface Card (NIC) is an Ethernet communication hardware device inserted in a computer allowing it to communicate with a local area network (LAN). An Ethernet is a network architecture that accommodates communications at 10 megabytes/100 megabytes per second between PC's over a BUS topology.

2. If you are using a network card with your system, click on **NICcard on Board** in the **Task Communication** section.

During the installation of LiNC-NET on your computer, Dssock32.ocx is registered to enable the communication of LiNC-NET network applications. In the event of changes to your system or your computer, you are given the option to Register (i.e. re-register) Dssock32.ocx through ConFigLN.



3. As soon as the desired configuration is set in the **Task Communication** section, save it by clicking once on the **Write** button located in the top left side of the screen.



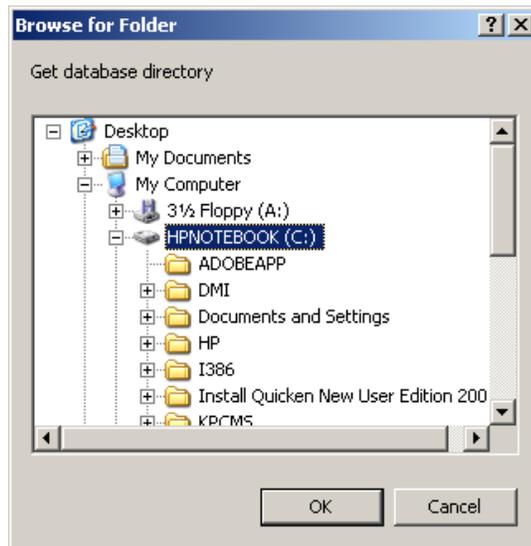
### 5.1.1 Creating the LiNC-NET Database Folder

The default setting for the database folder is set to point to the **C:\Program Files\PCSC\LiNC-NET version 5.14.xx** Files folder (see screen below).

1. Right-click the **Start** button from your **Windows** desktop.
2. Open **Explorer**.
3. Using Explorer, find **C:\Program Files\PCSC\LiNC-NET version 5.14.xx**.
4. In the menu bar of the **Explorer** window, select **File**.
5. In the **File** menu, select **New > Folder**.
6. A new folder should appear within the **LiNC-NET version 5.14.xx** directory. Rename the folder to **Files**.
7. Close **Windows Explorer**.
8. Go to **Start\Programs\LNv5\_14\_xx** and click on **ConFigLN**.



9. In the **Database** section, click on the **Find folder...** button. This will open the **Browse for Folder** window (below).
10. In the **Browse for Folder** window, select the appropriate drive and/or folder.



11. Click on **OK** to return to the **ConFigLN** menu. The **Database** section will now reflect **C:\ProgramFiles\PCSC\LiNC-NET version 5.14.xx\Files**.



## Standalone Installation

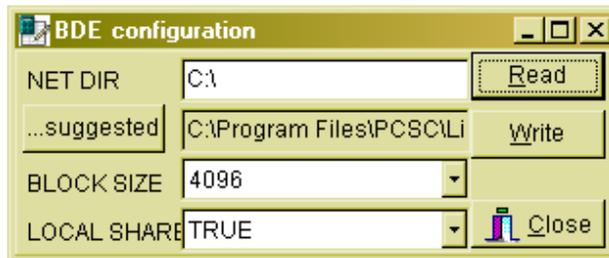
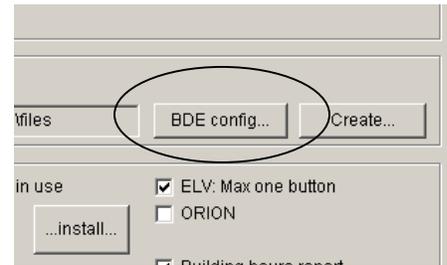
12. Click on the **Write** button in the top left side of the screen to save the new setting.



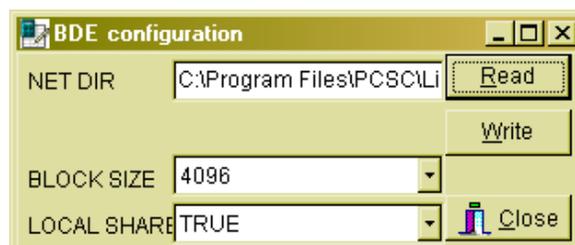
### 5.1.2 Configuring the Borland Database Engine (BDE)

This configuration is used to set the Borland Paradox database, the DBMS (Database Management System) needed to run LiNC-NET for Windows.

1. Click on the **BDE config...** button. The screen shown below will appear.
2. The NET DIR window displays the location that ConFigLN thinks the database currently resides. The **...suggested** button shows where the current location of the database if it is different from the NET DIR.



3. The **NET DIR** window must show the same drive letter set in the database window. Click on the **...suggested** button to inform ConFigLN of the new location.
4. The **BLOCK SIZE** value is **2048** (default value).
5. The **LOCAL SHARE** value must be set to **TRUE** regardless of whether or NOT a shared drive is employed.
6. As soon as all the parameters have been set, click on the **Write** button to save these changes in the **BDEAdmin** file.
7. Click on the **Close** button to complete this step.
8. Click the **Write** button in ConFigLN to save changes.
9. To verify that ConFigLN has found the location, open BDE configuration again. You will see the **...suggested** is no longer there.

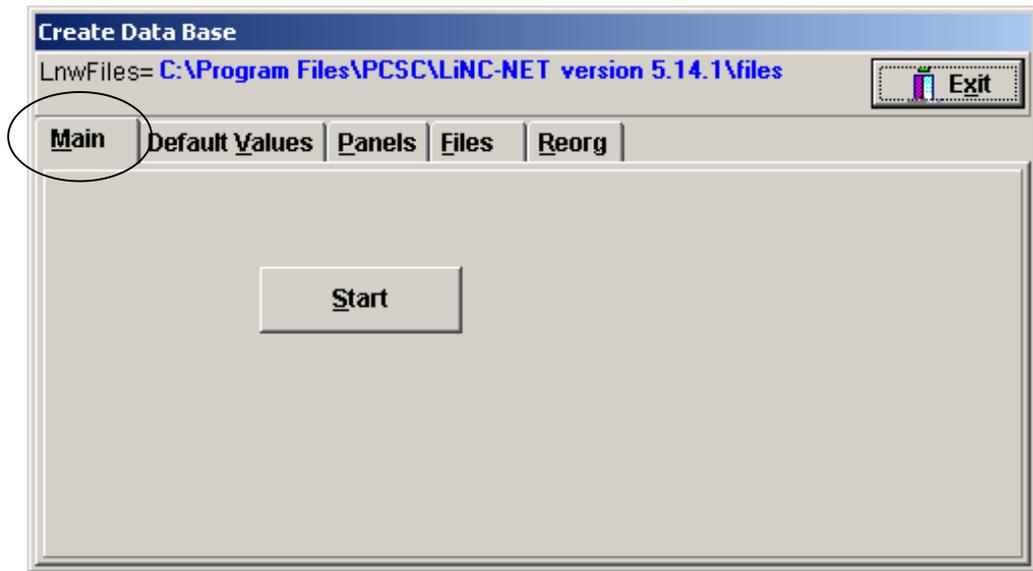


### 5.1.3 Creating the LiNC-NET Database

Creating the database is a fairly simple process. There are four steps: establishing the Default Values you wish to use in your LiNC-NET system; determining the panels you will be using with your system; determining which file-types will be monitored in your system; and then compiling the database to your specification.

In the **ConFigLN Database** section:

1. Click on the **Create...** button in **ConFigLN**. The **Create Database** screen will appear. Notice that you are currently displaying the **Main** page.



### 5.1.4 Create Data Base: Default Values

1. Click on the **Default Values** tab to select the default values for:

- Card Technology**
- Door Access Time**
- Card Table Format**
- Daylight Savings Dates**
- Entry/Exit Enforcement Options**

NOTE: If settings are correct, go to the **Panels** tab for next step.

Use the explanations provided in the following section to help you determine your **Default Values** selections

The screenshot shows the 'Create Data Base' application window with the following settings:

Section	Setting	Value
CARD TECHNOLOGY	Format	PCSC 26,37,40
DOOR LOCK ACCESS TIME	Standard	5
	Long	10
CARD TABLE FORMAT	Primary expiration (park/global)	Global
	PIN or Parking reader expiration date	Pin
	<input checked="" type="checkbox"/> Names for cardholders exist	
	<input type="checkbox"/> 12-digit card numbers	
DAYLIGHT SAVINGS	Start	3/24/1980
	Stop	10/29/1980
ENTRY/EXIT ENFORCEMENT	Parking	Off
	Department	Off
	Building	Off

### Default Values Page

### 5.1.4.1 Create Data Base: Default Values: Card Technology

In this section, you must select the card reader technology that you will implement into your access control system. Select the appropriate type of card reader in the **Format window**. The available card technology formats are as follows:

<b>ProTech</b>	BR-350, BR-351, BR-370, BR-371
<b>MagStripe</b>	BR-450, BR-451, BR-452, BR-470, BR-471
<b>Watermark</b>	Any Watermark card with the 12-digit format
<b>PCSC Wiegand</b>	34-bit PCSC Wiegand format, All Sensor Proximity Readers
<b>Indala</b>	Indala Proximity format
<b>12-Digit</b>	No site code; Magnetic Stripe, barcode
<b>Sensor 26</b>	Standard Sensor 26-bit format. All Hughes ID Proximity Readers, BR-700, and many standard OLM readers.
<b>Sensor 34</b>	Standard Sensor 34-bit format
<b>Special</b>	Special format
<b>PCSC 37</b>	Special 37 bit HID Proximity format
<b>Corp_1000</b>	Special 35 bit HID Proximity format
<b>Motorola 32</b>	Special 32 bit Motorola Proximity format
<b>Smartcard_40</b>	HID 40-bit Smartcard format

A letter or additional reference description that describes the reader type can follow the card technology:

<b>PIN-Pad</b>	PIN Pad with the reader.
<b>(I)</b>	Insert Reader

#### 5.1.4.2 Create Data Base: Default Values: Door Lock Access Time

The **Door Access Time** is the length of time that the door lock is to be energized. The actual length of time is 1/2 second less than the number of seconds specified. For example, access time value of 1 denotes 1/2 second of access and time value of 5 denotes 4 1/2 seconds. Value of 1 is generally used for turnstiles.

You must select time values for both the **Standard (Access)** and **Long (Access)**.

**Standard (Access)** is the normal door lock energize time. Select an access time from 1-998 seconds (2-998 seconds for elevator readers).

**Long (Access)** is the door-lock energize time for cardholders that require a longer access time than the standard access time (i.e. an individual with a disability). Select an access time from 2-999 seconds (3-999 seconds for elevator readers).

### 5.1.4.3 Create Data Base: Default Values: Card Table Format

#### Primary Expiration

**Global** - When selected, the Primary expiration date is used for all cards at all readers wired to the panel. It is irrelevant whether the readers are parking, building or department readers, as the secondary expiration date is not used.

If you select **Global**, the system uses the Primary expiration date for all types of readers. In selecting **Global**, the PIN feature is automatically selected (and visa versa).

If you select **Park-Only**, each cardholder has 2 card expiration dates. One date controls the access privilege for "parking" type readers and the other for all other types of readers. This unique function allows the system administrator to automatically deny access to cardholders at parking readers, yet allow them to pass through facility related readers.

#### PIN or Parking reader expiration date (Parking Readers)

**Park-Only** - When selected, the secondary expiration date is used for all cards, but only at parking readers wired to the panel. The primary expiration date is then only used at department and building type readers.

#### Names for Cardholders Exist

PCSC panel products have the ability to store the cardholder names within the panel itself. Selecting this option will decrease the number of cardholders in a standard MicroLPM panel from 1016 to 600 cardholders (IQ and SIM board capacity are unaffected by downloading names). If you require names and more cardholders than 600, you will need to purchase a memory expansion kit for the MicroLPM panel.

#### 12-Digit Card Number

Various card formats are available within the system. When using the **MagStripe** or **Watermark** format where a site code is not available, this option must be selected. For example, the MicroLPM (and I.Q. and SIM) series supports 5 - 12 digit ABA Track 2 format data.

#### 5.1.4.4 Create Data Base: Default Values: Daylight Savings

The daylight savings cycle may be programmed into the panel.

**Start:** Enter the date of the official start of Daylight Savings (In the U.S. it is normally the first Sunday of April).

**Stop:** Enter the date of the official end of Daylight Savings (In the U.S it is normally the last Sunday of October).

**NOTE** If a MicroLPM panel does not roll into Daylight Savings (no Start date programmed), then it won't roll out of Daylight Savings (even if a Stop date was programmed). However, the IQ-7.9.12Q or SIM 7.9.15S series firmware allows their respective boards to rollout of Daylight Savings, even if they didn't roll into it.

#### 5.1.4.5 Create Data Base: Default Values: Entry/Exit Enforcement

Each panel supports three separate entry/exit enforcement levels: Strict, Lenient, and Soft. Each enforcement level can be individually assigned to Parking, Department, or Building Type readers, but is enforced only when the Entry function and the corresponding Exit function readers are on the same panel.

**NOTES** Entry/Exit enforcement cannot be done (at any of the 3 levels) if the entry readers are on one panel and the corresponding exit readers are on a different panel.

These panel firmware versions require the door to be opened before changing the card status, repeated accesses will be granted (regardless of the anti-passback level of enforcement) if the door is not opened:

Standard MicroLPM-	Version 1.9.7 and above
Plus 2 MicroLPM-	Version 3.9.7 and above
Plus 4 MicroLPM-	Version 7.9.7 and above

\*All IQ and SIM panels require the door to be opened prior to updating the card status.

##### 5.1.4.5.1 Create Data Base: Default Values: Entry/Exit Enforcement: Strict Entry/Exit

The cardholder's entry/exit status must be synchronized with the system, otherwise an entry/exit error will be announced. In other words, the cardholder must have the proper status (building, department, or parking) before he uses an entry/exit reader. The card status must be as follows:

If the cardholder's Building Status is IN, then Department Status can be IN or OUT.  
If the cardholder's Building Status is OUT, the Department Status must be OUT.  
If the cardholder's Department Status is IN, then Building Status must be IN.

If the cardholder's status does not comply with the reader's entry/exit definition, then the system will deny access. In other words, when a cardholder attempts to enter a Building IN reader, the cardholder's building and department status must be OUT.

**5.1.4.5.2 Create Data Base: Default Values: Entry/Exit Enforcement: Lenient Entry/Exit**

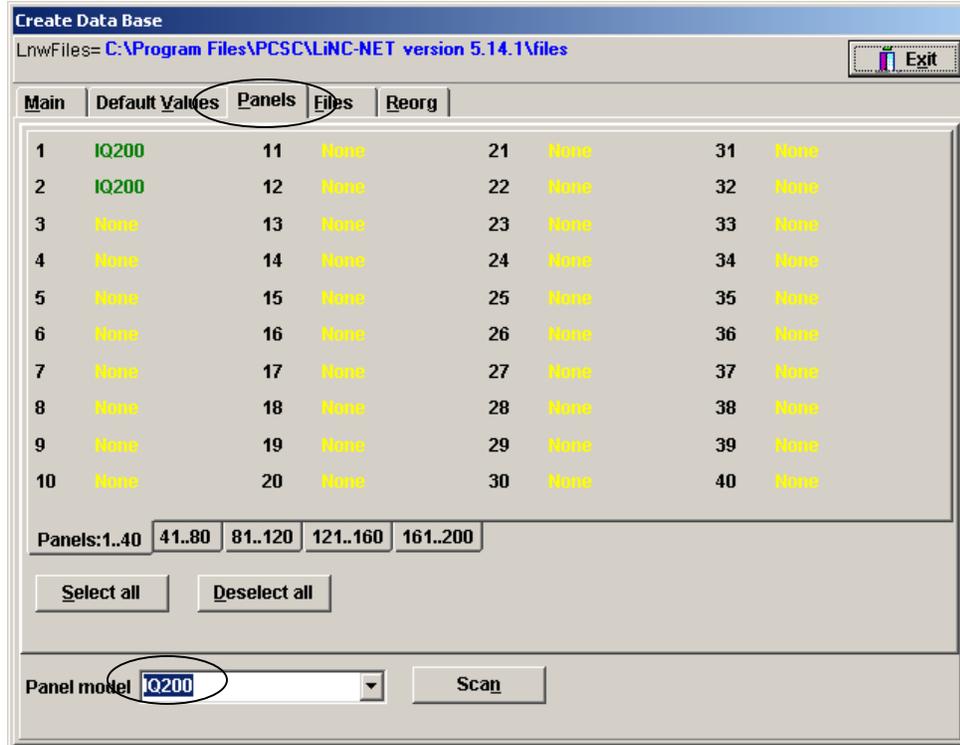
This level is the same as **Strict** except on the first use of the card, in which case the system will automatically reset the building and department status to proper synchronization. The cardholder's second attempt at the reader will then grant him access.

**5.1.4.5.3 Create Data Base: Default Values: Entry/Exit Enforcement: Soft Entry/Exit**

This level follows the same rules as **Strict** except that if an error transaction is recorded, all status levels are synchronized, and access is GRANTED.

### 5.1.4.6 Create Data Base: Panels

1. Click on the **Panels** tab. The **Panels** page shall appear.



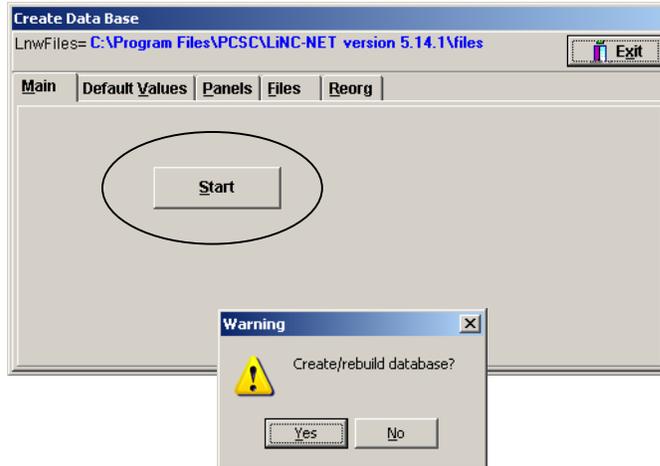
**Panels Selection Field**

2. On the **Panels** page, select panel(s) for which data files will be created by selecting the appropriate type from the **Panel Model** window.
3. To select panels individually, select the panel model in the radial button group box, then select the panel number.

### 5.1.4.7 Create Data Base: Main

When you finish making your selections

1. On the **Main** page, click on the **Start** button to begin creating the selected files.



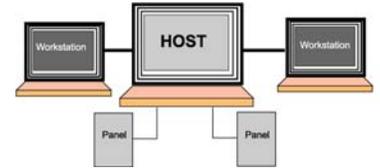
2. A pop-up window will appear, asking you if you are sure that you want to create/rebuild the database. Press the **Yes** button.
3. When complete click on the **Exit** button (located in the upper right hand corner) to exit the create database module.
4. A pop-up window will appear confirming your decision to exit **CreateDB**. Click "**Yes**".



5. You will then return to the **ConfigLN** screen. Click on the **Exit** button located in the upper right side of the screen to return to the desktop.

**NOTE:** Installation is complete. To start the LiNC-NET program go to **Start \ Program Files\LNv5.14.xx\LiNC\_NET**

## 5.2 Installing LiNC-NET for Multi-User Host Configuration



**Host** is the computer that will manage the database, display the information, and monitor alarms associated with each workstation connected to it.

**NOTE:** Before installing LiNC-NET version 5.14.xx on the Host PC or Workstation PC, you must configure all computers to communicate with each other through the network using TCP/IP as the main protocol.

1. Go to **Start\Programs\LNv5\_14\_xx** and click on **ConFigLN**.
2. In the **Task Communication** section, be sure that the **NICcard on Board** is checked.

During the installation of LiNC-NET on your computer, Dssock32.ocx is registered to enable the communication of LiNC-NET network applications. In the event of changes to your system or your computer, you are given the option to Register (i.e. re-register) Dssock32.ocx through ConFigLN.

1. Make sure **NICcard on Board** option is checked.
2. Click on the **Register OCX...**
3. In the **Register OCX** window, click on **Register**.
4. Another pop-up window will appear saying **OCX is registered**.
5. Click **OK**.
6. Click **Close** to Register OCX window.
7. Click once on the **Write** button located in the top left side of the screen.



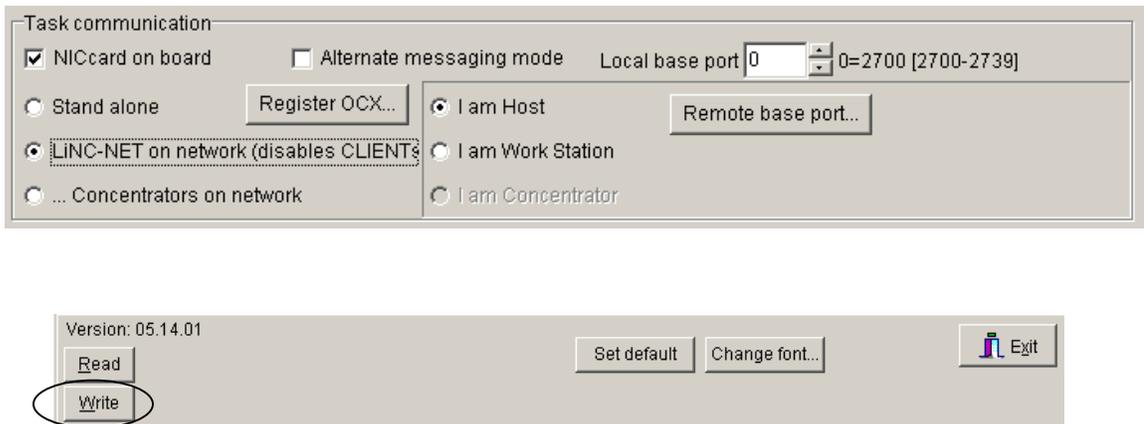
## Host Installation

Click on **LiNC-NET on Network** (disables CLIENTs) option and the computer will default to the **I am Host** selection.

**NOTE:** **I am Host** must be selected if the computer is the Host for LiNC-NET 5.14. All panels are connected to the Host PC in this configuration.

As soon as the desired configuration is set in the **Task Communication** section, save it by clicking once on the **Write** button located in the top left side of the screen.

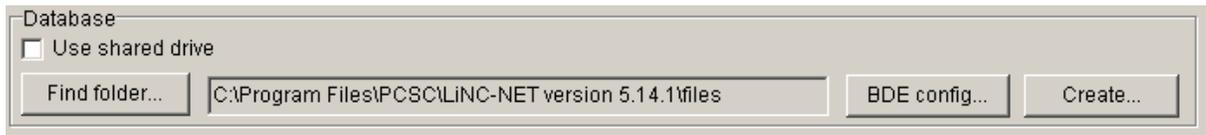
**NOTE:** All panels receive the date and time from the Host PC in this configuration.



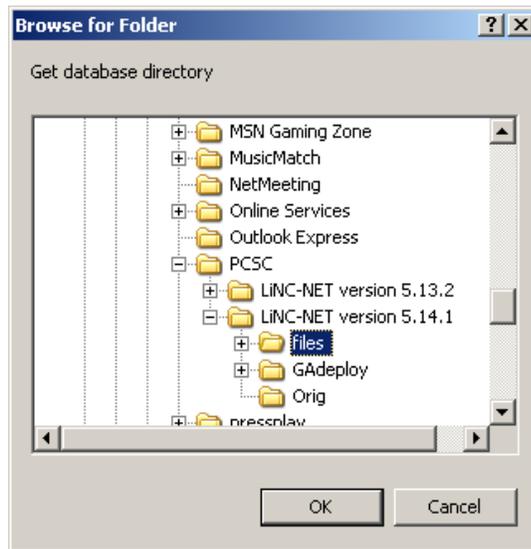
### 5.2.1 Creating the LiNC-NET Database Folder

The default setting for the database folder is set to point to the **c:\Program Files\PCSC\LiNC-NET version 5.14.xx** Files folder (see screen below).

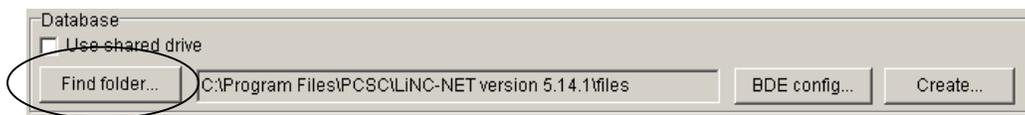
1. Right-click the **Start** button from your **Windows** desktop.
2. Open **Explorer**.
3. Using Explorer, find **C:\Program Files\PCSC\LiNC-NET version 5.14.xx**.
4. In the menu bar of the **Explorer** window, select **File**.
5. In the **File** menu, select **New > Folder**.
6. A new folder should appear within the **LiNC-NET version 5.14.xx** directory. Rename the folder to **Files**.
7. Close **Windows Explorer**.
8. Go to **Start\Programs\LNv5\_14\_xx** and click on **ConFigLN**.



9. In the **Database** section, click on the **Find folder...** button. This will open the **Browse for Folder** window (below).
10. In the **Browse for Folder** window, select the appropriate drive and/or folder.



11. Click on **OK** to return to the **ConFigLN** menu. The **Database** section will now reflect **C:\ProgramFiles\PCSC\LiNC-NET version 05.14.xx\Files**.



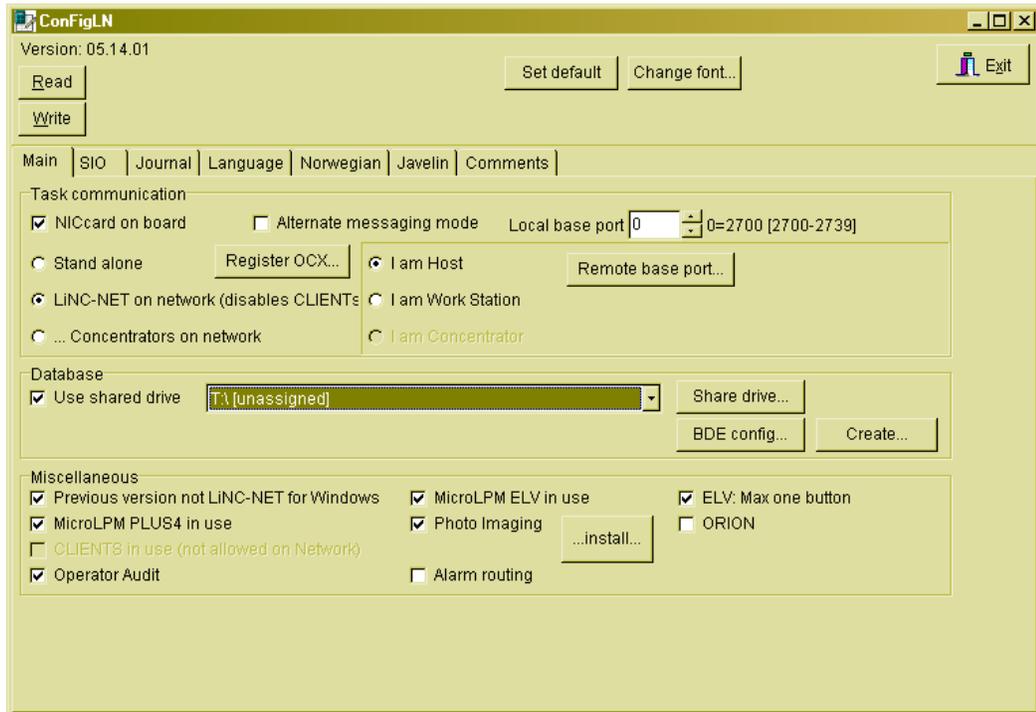
12. Click on the **Write** button in the top left side of the screen to save the new setting.

## Using a Shared Mapped Network Drive in a Multi-user System

This section shows how you can map a drive (assign a letter to the folder and authorize any workstation to see and access this folder like a physical drive). This is specifically used in a multi-user environment.

**NOTE** When you select a share drive, the **Find folder...** is not used. The database can be mapped to a drive anywhere in the network where sufficient disk space can be allocated.

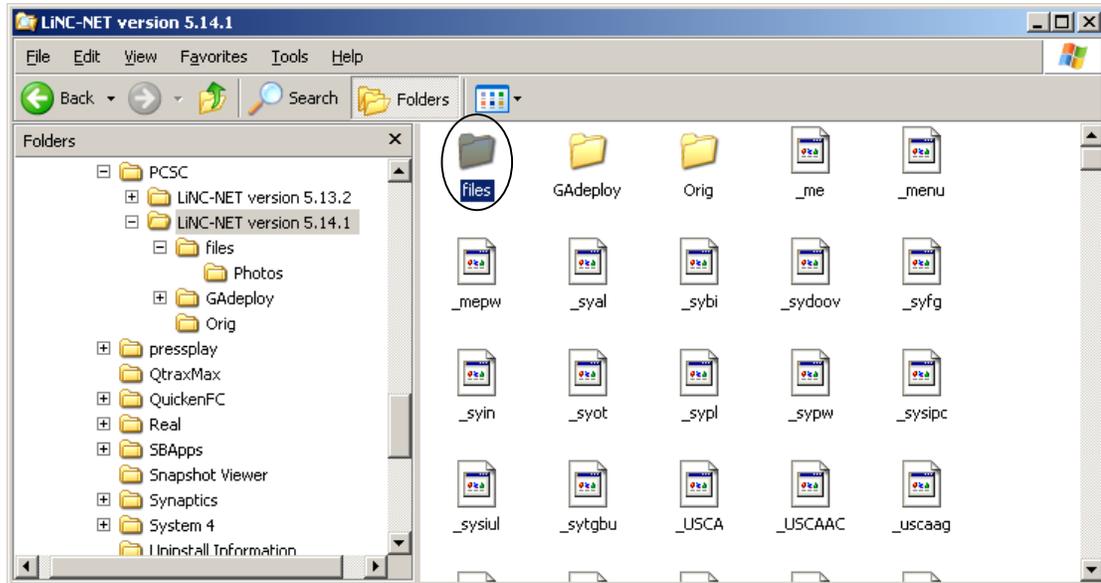
### 5.2.1.1 Sharing a Folder



1. Check on the **Use Shared Drive** square. This will create a **Share Drive...** button.
2. Click on the **Down Arrow** to select a Drive Letter you want to map (example: T:\unassigned)
3. Click on the **Share Drive...** button to see the contents of the folder.
4. If the content of the folder isn't displayed in a full screen, click the square middle button on the right top of the window menu so that it may enlarge to full-screen.

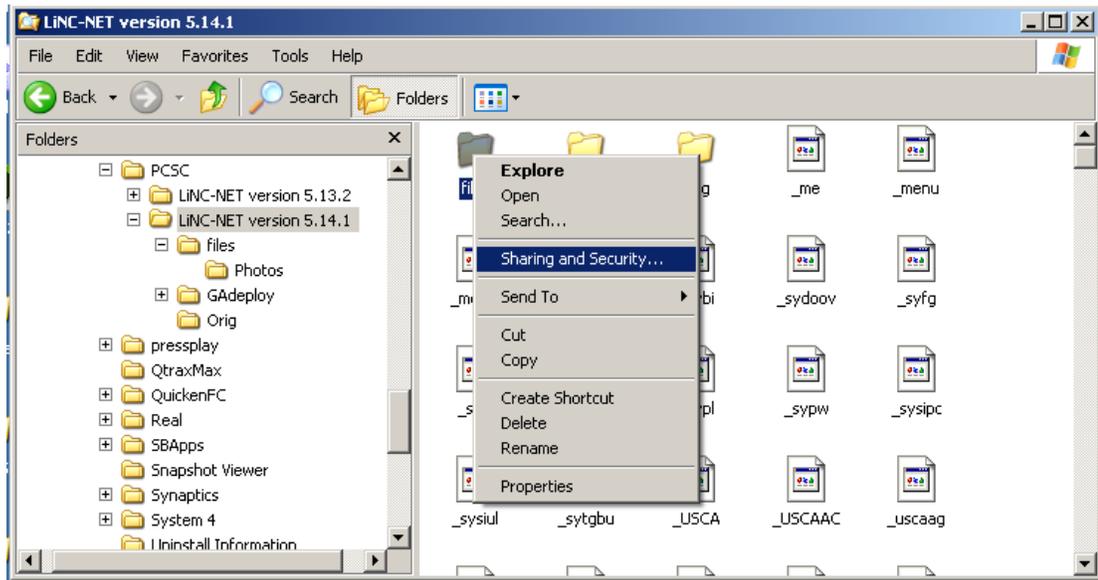
## Host Installation

5. Go to **View** and click on **Toolbar**, Check **Standard Buttons**..
6. Click on the **Up One Level** icon to go one level up in the directory.



7. Click on the folder name that has been chosen during the **previous step** configuration (in this case, **Files**).
8. Right-Click on the folder to select (highlight) it and bring up the Windows' options.

9. Click on **Sharing**.



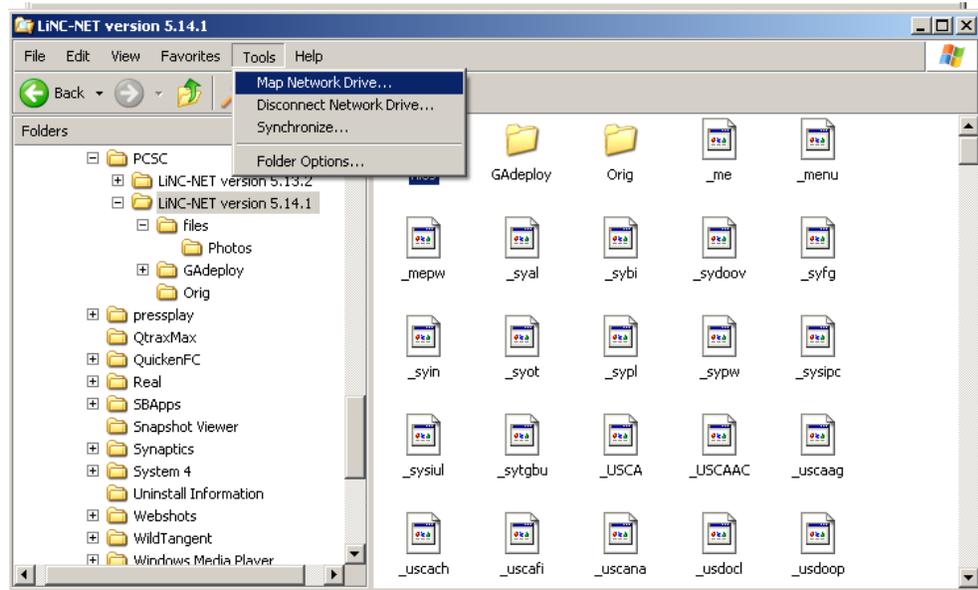
10. In the **Sharing** tab select the **Share As/Share This Folder** option. The name of the folder will appear in the **Share Name** windows.



11. Click on the **Maximum Allowed** button within the **User Limit** section.

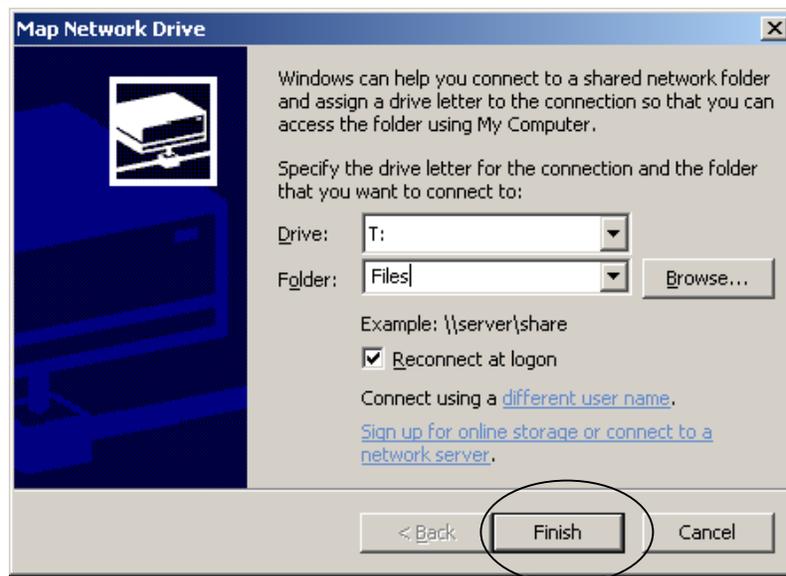
12. Click on **Apply** to confirm the share and **OK** to exit from the sharing window.

13. Windows Explorer will appear. Click on **Tools** and choose **Map Network Drive**.



**Note: Example Windows 2000**

14. The **Map Network Drive** menu illustrates that the shared drive has been chosen to be **T**, and that it is located on the PC named **HOST**. The **Files** folder contains the information (LiNC-NET data files) that will be map\shared. Use the **Browse...** button to locate the folder if necessary.

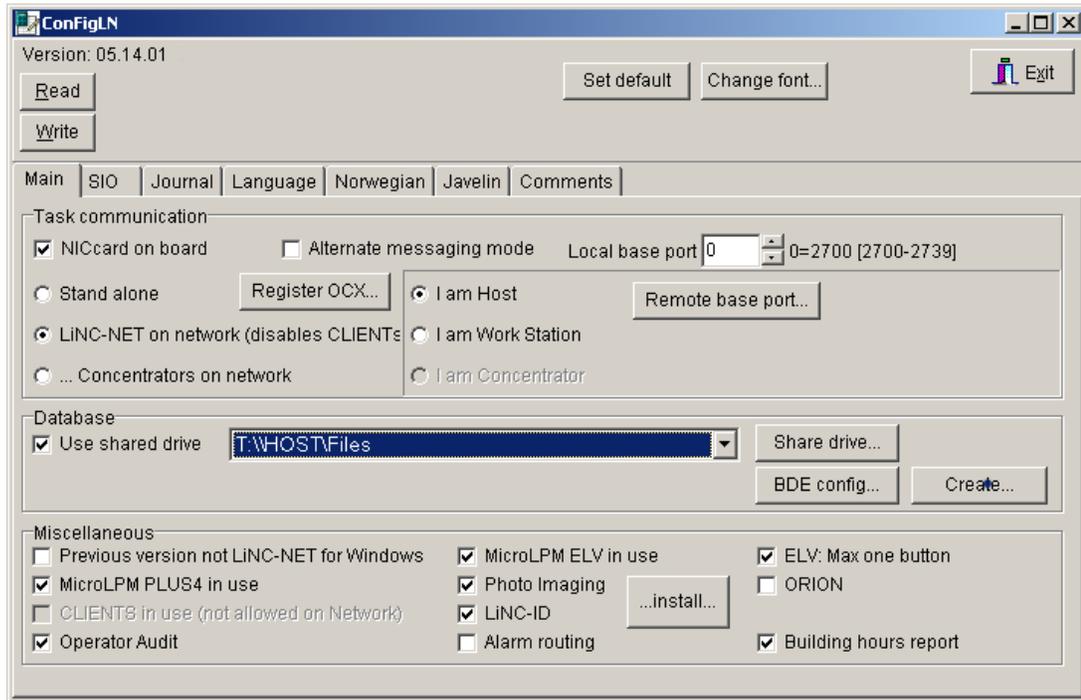


15. Click the **Finish** button. A pop-up folder displaying the contents of the LiNC-NET 5.14 folder will appear. In the folder window, go to **File** and click on **Explore**.

16. Click on the **Close** button and the **Map Network Drive** menu closes (as do all of the pop-up boxes) and the create database menu appears. Notice that the previously selected **Shared Drive** and **Path** are now displayed within the **Use Share Drive** window.

## Host Installation

- Click on the **Write** button to record the designated **Share Drive** information to the PC's hard disk drive.



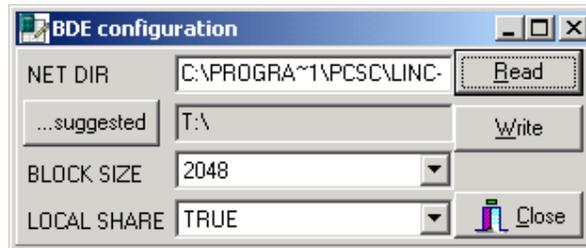
**EXAMPLE** If **FILES** is the folder created and shared, then the mapping with the letter "T" should look like the screen above.



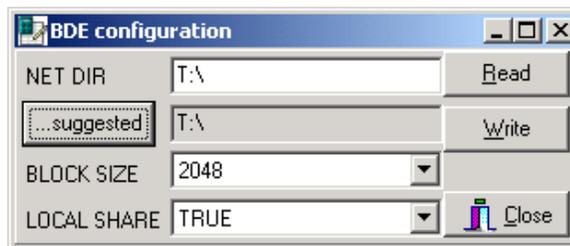
## 5.2.2 Configuring the Borland Database Engine (BDE)

This option is used to set the Borland Paradox database, the DBMS (Database Management System) needed to run LiNC-NET for Windows.

1. Click on the **BDE config...** button. The screen shown below will appear.
2. The NET DIR window displays the drive letter found in the BDEAdmin file.



3. The **NET DIR** window must show the same drive letter set in **Use Shared Drive** or the Database Find folder field. Click on the **...suggested** button to change the configuration.



4. The **BLOCK SIZE** value is **2048** (default value).
5. The **LOCAL SHARE** value must be set to **TRUE** regardless of whether or NOT a shared drive is employed.
6. As soon as all the parameters have been set, click on the **Write** button to save these changes in the **BDEAdmin** file.

**NOTE** The next time the **BDE config...** is pressed, the **BDE** configuration window will display the **NET DIR**, **BLOCK SIZE** and **LOCAL SHARE** information. The **...suggested** option will not be shown.

7. Click on the **Close** button to complete this step.
8. Click the **Write** button in ConFigLN to save changes.

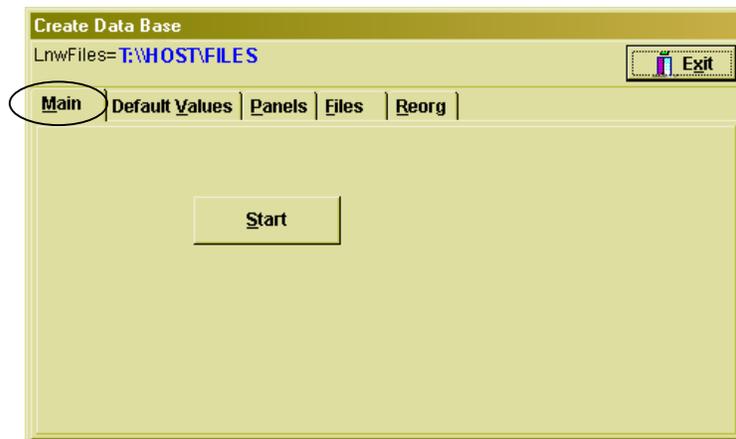
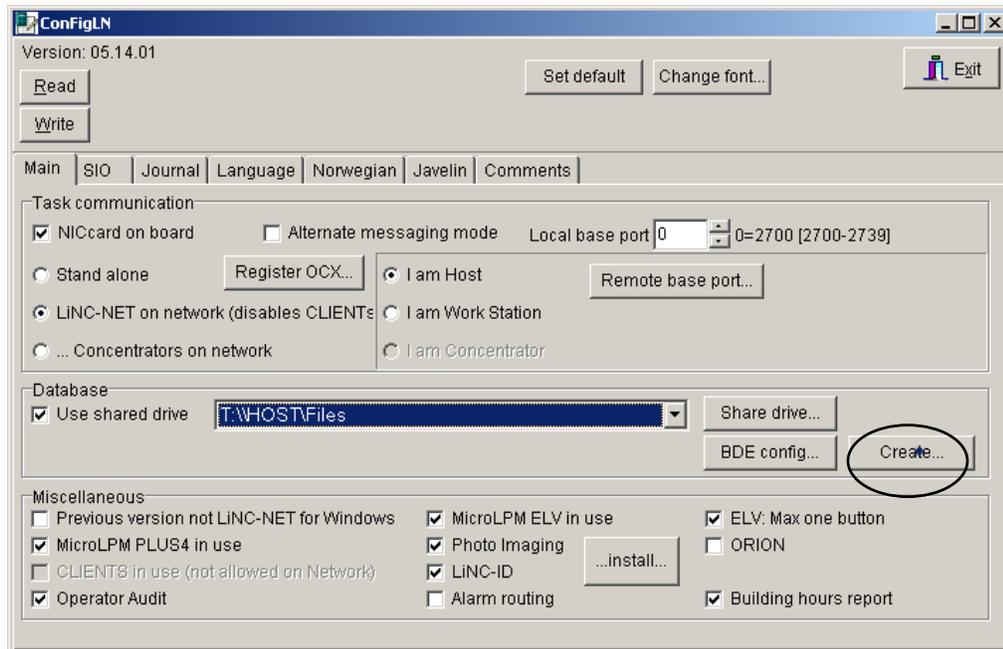
### 5.2.3 Creating the LiNC-NET Database

NOTE: If you are establishing a database for a system that uses concentrators, go to the Concentrator Installation section of the manual to see the steps to create a Concentrator database.

Creating the database is a fairly simple process. There are four steps: establishing the Default Values you wish to use in your LiNC-NET system; determining the panels you will be using with your system; determining which file-types will be monitored in your system; and then compiling the database to your specification.

In the **ConFigLN Data Base** section:

1. Click on the **Create...** button in **ConFigLN**. The **Create Data Base** screen will appear. Notice that you are currently displaying the **Main** page.



### 5.2.3.1 Create Data Base: Default Values

1. Click on the **Default Values** tab to select the default values for:

- Card Technology**
- Door Access Time**
- Card Table Format**
- Daylight Savings Dates**
- Entry/Exit Enforcement Options**

**NOTE:** If settings are correct, go to the **Panels** tab for the next step.

Use the explanations provided in the following section to help you determine your **Default Values** selections

The screenshot shows the 'Create Data Base' application window with the 'Default Values' tab selected. The window contains several configuration sections:

- CARD TECHNOLOGY:** Format is set to 'PCSC 26,37,40'.
- DOOR LOCK ACCESS TIME:** Standard is 5, Long is 10.
- CARD TABLE FORMAT:** Primary expiration is 'Global', PIN or Parking reader expiration date is 'Pin'. 'Names for cardholders exist' is checked, and '12-digit card numbers' is unchecked.
- DAYLIGHT SAVINGS:** Start date is 3/24/1980, Stop date is 10/29/1980.
- ENTRY/EXIT ENFORCEMENT:** Parking, Department, and Building are all set to 'Off'.

Default Values Page

### 5.2.3.2 Create Data Base: Default Values: Card Technology

In this section, you must select the card reader technology that you will implement into your access control system. Select the appropriate type of card reader in the **Format window**. The available card technology formats are as follows:

<b>ProTech</b>	BR-350, BR-351, BR-370, BR-371
<b>MagStripe</b>	BR-450, BR-451, BR-452, BR-470, BR-471
<b>Watermark</b>	Any Watermark card with the 12-digit format
<b>PCSC Wiegand</b>	34-bit PCSC Wiegand format, All Sensor Proximity Readers
<b>Indala</b>	Indala Proximity format
<b>12-Digit</b>	No site code; Magnetic Stripe, barcode
<b>Sensor 26</b>	Standard Sensor 26-bit format. All Hughes ID Proximity Readers, BR-700, and many standard OLM readers.
<b>Sensor 34</b>	Standard Sensor 34-bit format
<b>Special</b>	Special format
<b>PCSC 26, 37, 40</b>	Standard PCSC Proximity format
<b>Corp_1000</b>	Special 35 bit HID Proximity format
<b>Motorola 32</b>	Special 32 bit Motorola Proximity format
<b>Smartcard_40</b>	HID 40-bit Smartcard format

A letter or additional reference description that describes the reader type can follow the card technology:

<b>PIN-Pad</b>	PIN Pad with the reader.
<b>(I)</b>	Insert Reader

### 5.2.3.3 Create Data Base: Default Values: Door Lock Access Time

The **Door Access Time** is the length of time that the door lock is to be energized. The actual length of time is 1/2 second less than the number of seconds specified. For example, access time value of 1 denotes 1/2 second of access and time value of 5 denotes 4 1/2 seconds. Value of 1 is generally used for turnstiles.

You must select time values for both the **Standard (Access)** and **Long (Access)**

**Standard Access** is the normal door lock energize time. Select an access time from 1-998 seconds (2-998 seconds for elevator readers).

**Long Access** is the door-lock energize time for cardholders that require a longer access time than the standard access time (i.e. an individual with a disability). Select an access time from 2-999 seconds (3-999 seconds for elevator readers).

#### 5.2.3.4 Create Data Base: Default Values: Card Table Format

##### Primary Expiration

**Global** - When selected, the Primary expiration date is used for all cards at all readers wired to the panel. It is irrelevant whether the readers are parking, building or department readers, as the secondary expiration date is not used.

If you select **Global**, the system uses the Primary expiration date for all types of readers. In selecting **Global**, the PIN feature is automatically selected (and visa versa).

If you select **Park-Only**, each cardholder has 2 card expiration dates. One date controls the access privilege for “parking” type readers and the other for all other types of readers. This unique function allows the system administrator to automatically deny access to cardholders at parking readers, yet allow them to pass through facility related readers.

##### PIN or Parking reader expiration date (Parking Readers)

**Park-Only** - When selected, the secondary expiration date is used for all cards, but only at parking readers wired to the panel. The primary expiration date is then only used at department and building type readers.

##### Names for Cardholders Exist

PCSC panel products have the ability to store the cardholder names within the panel itself. Selecting this option will decrease the number of cardholders in a standard MicroLPM panel from 1016 to 600 cardholders (IQ and SIM board capacity are unaffected by downloading names). If you require names and more cardholders than 600, you will need to purchase a memory expansion kit for the MicroLPM panel.

##### 12-Digit Card Number

Various card formats are available within the system. When using the **MagStripe** or **Watermark** format where a site code is not available, this option must be selected. For example, the MicroLPM (and I.Q. and SIM) series supports 5 - 12 digit ABA Track 2 format data.

### 5.2.3.5 Create Data Base: Default Values: Daylight Savings

The daylight savings cycle may be programmed into the panel.

**Start:** Enter the date of the official start of Daylight Savings (In the U.S. it is normally the first Sunday of April).

**Stop:** Enter the date of the official end of Daylight Savings (In the U.S it is normally the last Sunday of October).

**NOTE** If a MicroLPM panel does not roll into Daylight Savings (no Start date programmed), then it won't roll out of Daylight Savings (even if a Stop date was programmed). However, the IQ-7.9.12Q or SIM 7.9.15S series firmware allows their respective boards to rollout of Daylight Savings, even if they didn't roll into it.

### 5.2.3.6 Create Data Base: Default Values: Entry/Exit Enforcement

Each panel supports three separate entry/exit enforcement levels: Strict, Lenient, and Soft. Each enforcement level can be individually assigned to Parking, Department, or Building Type readers, but is enforced only when the Entry function and the corresponding Exit function readers are on the same panel.

**NOTES** Entry/Exit enforcement cannot be done (at any of the 3 levels) if the entry readers are on one panel and the corresponding exit readers are on a different panel.

These panel firmware versions require the door to be opened before changing the card status, repeated accesses will be granted (regardless of the anti-passback level of enforcement) if the door is not opened:

Standard MicroLPM-	Version 1.9.7 and above
Plus 2 MicroLPM-	Version 3.9.7 and above
Plus 4 MicroLPM-	Version 7.9.7

\*All IQ and SIM panels require the door to be opened prior to updating the card status.

#### 5.2.3.6.1 Create Data Base: Default Values: Entry/Exit Enforcement: Strict Entry/Exit

The cardholder's entry/exit status must be synchronized with the system, otherwise an entry/exit error will be announced. In other words, the cardholder must have the proper status (building, department, or parking) before he uses an entry/exit reader. The card status must be as follows:

If the cardholder's Building Status is IN, then Department Status can be IN or OUT.

If the cardholder's Building Status is OUT, the Department Status must be OUT.

If the cardholder's Department Status is IN, then Building Status must be IN.

If the cardholder's status does not comply with the reader's entry/exit definition, then the system will deny access. In other words, when a cardholder attempts to enter a Building IN reader, the cardholder's building and department status must be OUT.

**5.2.3.6.2 Create Data Base: Default Values: Entry/Exit Enforcement: Lenient Entry/Exit**

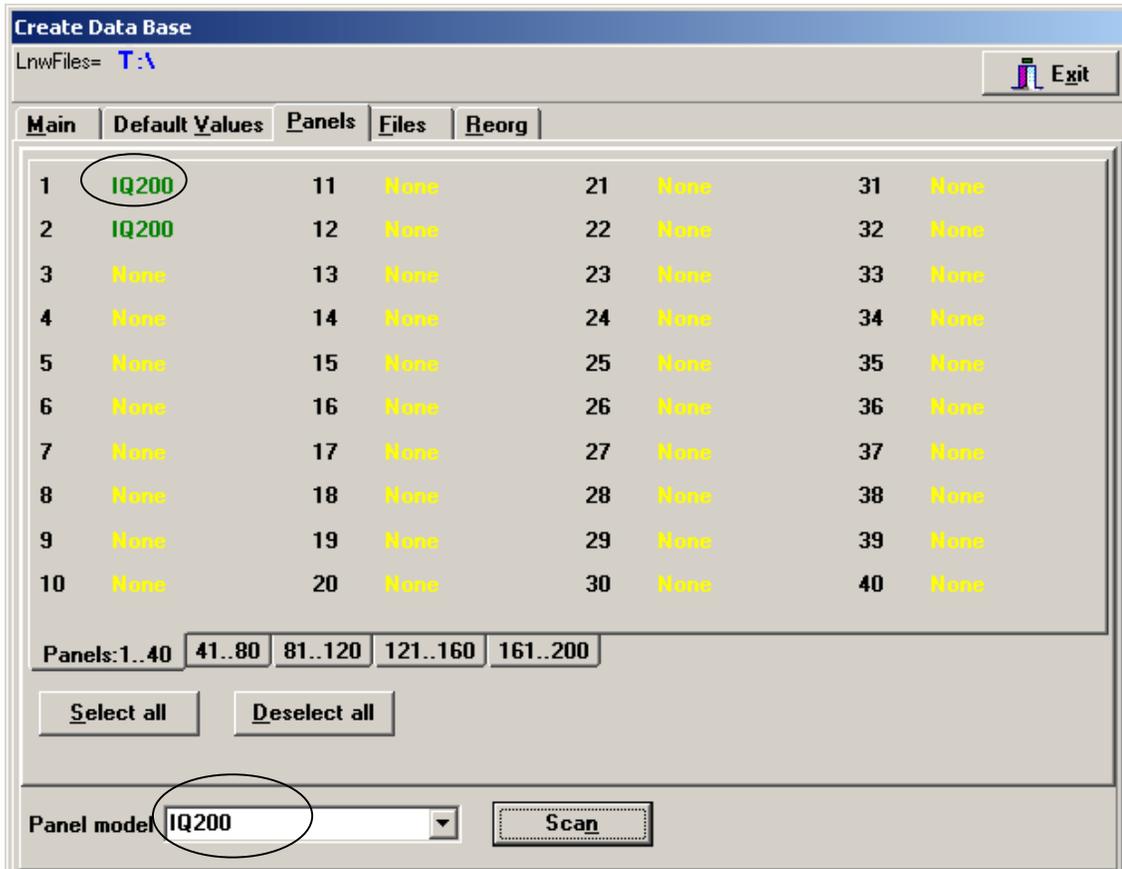
This level is the same as **Strict** except on the first use of the card, in which case the system will automatically reset the building and department status to proper synchronization. The cardholder's second attempt at the reader will then grant him access.

**5.2.3.6.3 Create Data Base: Default Values: Entry/Exit Enforcement: Soft Entry/Exit**

This level follows the same rules as **Strict** except that if an error transaction is recorded, all status levels are synchronized, and access is GRANTED.

### 5.2.3.7 Create Data Base: Panel

1 Click on the **Panels** tab. The **Panels** page shall appear.

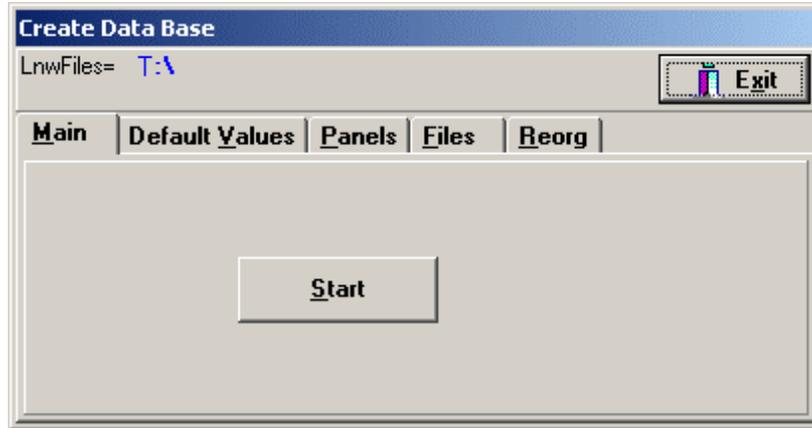


2. On the **Panels** page, select panel(s) for which data files will be created by selecting the appropriate type from the **Panel model** window.
3. To select panels individually, select the panel model in the radial button group box, then select the panel number.

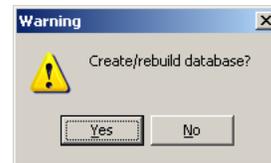
### 5.2.3.8 Create Data Base: Main

When you finish making your selections

1. On the **Main** page, click on the **Start** button to begin creating the selected files.



2. A pop-up window will appear, asking you if you are sure that you want to create/rebuild the database. Press the **Yes** button.



3. When complete click on the **Exit** button (located in the upper right hand corner) to exit the create database module.
4. A pop-up window will appear confirming your decision to exit **Create DB**. Click "Yes."

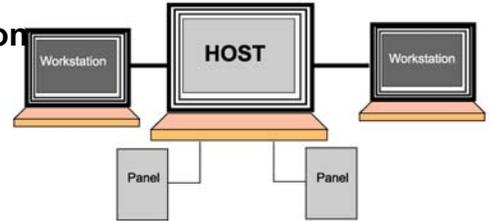


5. You will then return to the **ConfigLN** screen. Click on the **Exit** button located in the upper right side of the screen to return to the desktop.



**NOTE:** Installation is Complete. To start the LiNC-NET program, go to **Start\Program Files\LVn5\_14\_xx\LiNC\_NET**

### 5.3 Installing LiNC-NET for a Multi-User Workstation



**Workstation** - Up to 20 PC's may function as a workstation by communicating in a Peer to Peer method (equal ability to perform the same job at any PC in the local area network). Workstations do not store data, nor do they communicate directly with the panels. The Host PC in a LiNC-NET system stores all data on its hard disk drive and also communicates directly to the panels.

**NOTE** Before installing LiNC-NET for Windows-NT, version 5.14 in the Host PC or Workstation PC, you must configure all computers to communicate with each other through the network using TCP/IP as the main protocol. The user who sets the **ConFigLN** program must have a user account set in the **Host Windows NT/2000** computer in order to create a shared drive with this computer. This user account must have the right to connect remotely to the Host computer. (See **Create a User Account** section in the LiNC-NET for Windows- NT/2000 Administrator Manual for further information.)

1. Go to **Start\Programs\LNv5\_14\_xx** on **ConFigLN**.
2. In the **Task Communication** section, be sure that the **NICcard on Board** is checked.
3. Click on the **LiNC-NET on network (disables CLIENTs)** option and the computer will be set, per default, as a Host in a multi-user environment (**I am Host** selected).
4. Select the **I am Workstation** option.
5. In the **local PC number** scroll menu, choose a number between **21** and **40**. This number must be unique for each workstation (PC) installed in the multi-user environment. The number for the first workstation used in the example is 21.
6. In the **Host PC Name** window, type the **Host** computer name (check in the **Setting\Control Panel\Network\Identification** tab of the **Host** computer, if needed). In the example, the HOST PC name is HOST.



**NOTE** If the computer is a workstation, **I am Workstation** must be selected. Each workstation must be assigned a unique Local PC number (from **21** to **40**) and the **Host** computer name to which the workstation is connected.

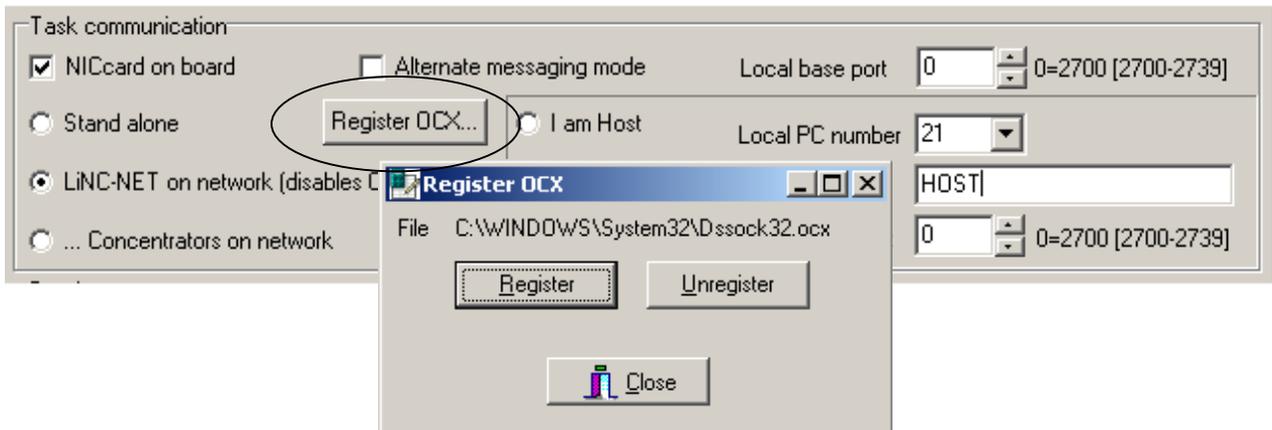
## Workstation Installation



As soon as the desired configuration is set in the **Task Communication** section, save it by clicking once on the **Write** button located in the top left side of the screen.

During the installation of LiNC-NET on your computer, Dsocket32.ocx is registered to enable the communication of LiNC-NET network applications. In the event of changes to your system or your computer, you are given the option to Register (i.e. reregister) Dsocket32.ocx through ConFigLN.

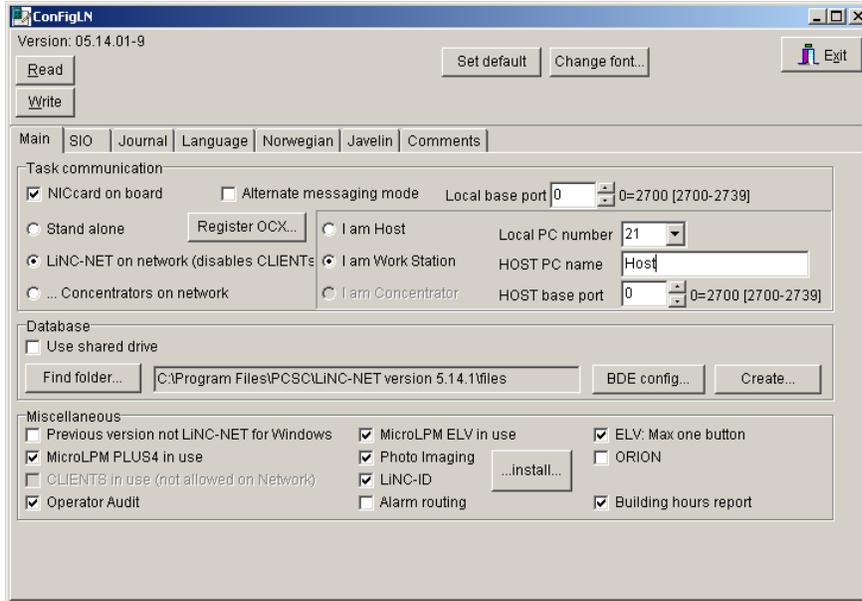
1. Make sure **NICcard on Board** button is checked.
2. Click on **Register OCX...**
3. In the **Register OCX** window, click on **Register**.
4. Another pop-up window will appear saying **OCX is registered**.
5. Click **OK**.
6. Click **Close** to Register OCX.
7. Click once on the **Write** button located in the top left side of the screen.



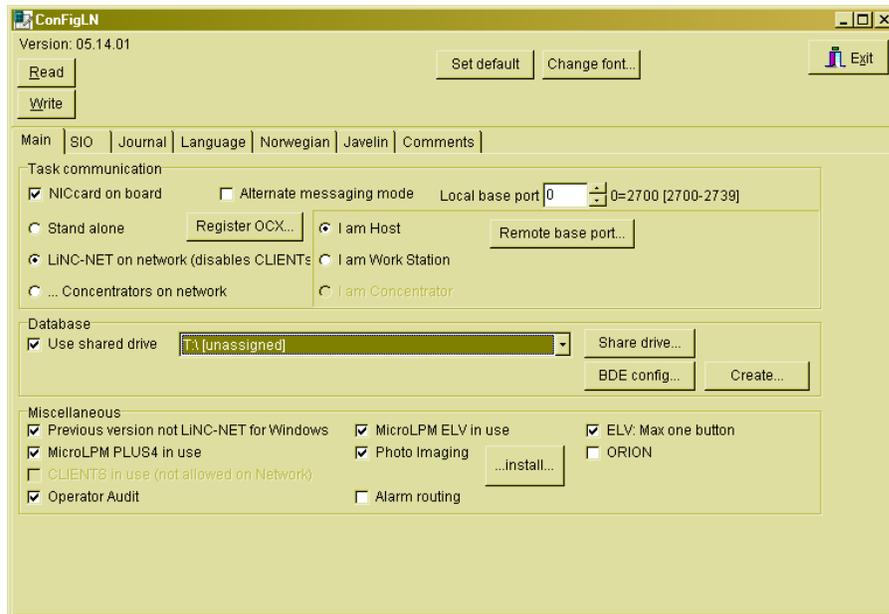
### 5.3.1 Connecting to the Mapped Host Drive in a Multi-user System

This section shows you to map to the Host Database via the network drive. This option is specifically used in a multi-user environment. To learn how to map a network drive, see the appropriate section in the Host section of this manual.

**IMPORTANT** Before selecting the Shared Drive, you must first map the Host Database during the Host setup.



1. In the Database section of ConFigLN, click the **Use shared drive** radio button to make the Share Drive active. Choose will show **[T:\unassigned]** for the mapping location.

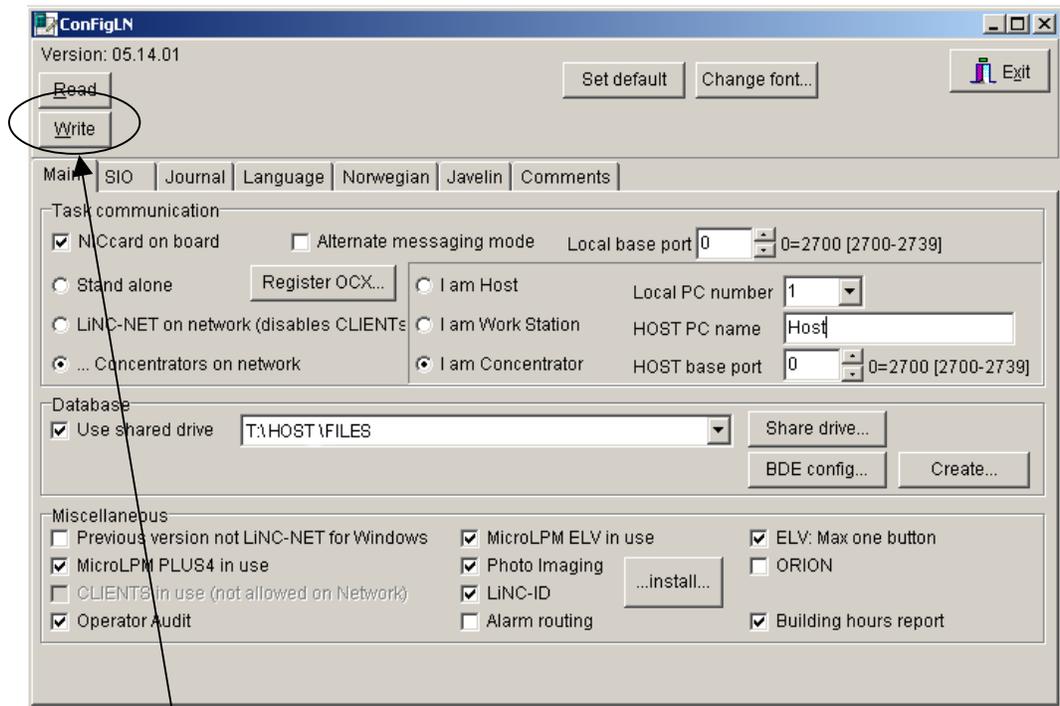


## Workstation Installation

2. Minimize ConFigLN and go you the Workstation desktop.
3. Double-click on **My Network Places (Network Neighborhood)** on NT4).
4. You will see all the computers that are currently connected to the Workstation computer. Locate the **Host** PC name on the network.
5. Double-click on Host PC name. You will see all the shared folders on the Host PC. Choose the LiNC-NET database folder (usually **Files**).
6. Right-click the folder, and select **Map Network Drive** .
7. The **Map Network Drive** pop-up window will appear. Choose the drive letter that was mapped on the **Host** (ie. **T:\HostFiles**)

**NOTE** Make sure “Reconnect at Logon” is checked before closing window

8. Click the **OK** button. The mapped folder will appear. The mapping is completed. Close all Windows Explorer windows.
9. Restore ConFigLN. You should see the T: drive mapped to the appropriate location (ie. **T:\HostFiles**).

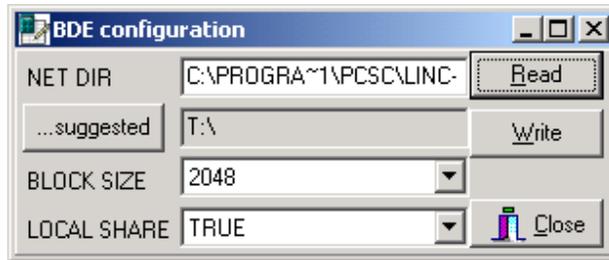


10. Click the **Write** button to save your changes.

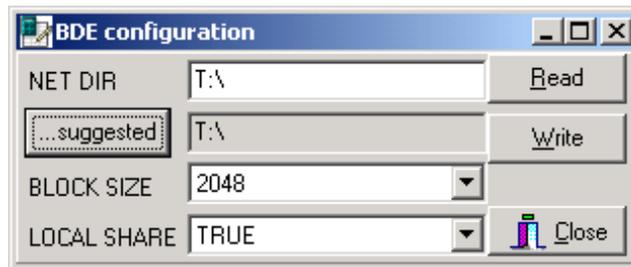
### 5.3.2 Configuring the Borland Database Engine (BDE)

This option is used to set the Borland Paradox database, the DBMS (Database Management System) needed to run LiNC-NET for Windows.

1. Click on the **BDE config...** button. The screen shown below will appear.
2. The NET DIR window displays the drive letter found in the BDEAdmin file.



3. The **NET DIR** window must show the same drive letter set in **Use Shared Drive** or the Database Find folder field. Click on the **...suggested** button to change the configuration.

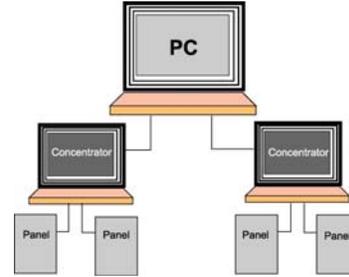


4. The **BLOCK SIZE** value is **2048** ( default value)
5. The **LOCAL SHARE** value must be set to **TRUE** regardless of whether or NOT a shared drive is employed.
6. As soon as all the parameters have been set, click on the **Write** button to save these changes in the **BDEAdmin** file.

**NOTE** The next time the **BDE config...** is pressed, the **BDE** configuration window will display the **NET DIR**, **BLOCK SIZE** and **LOCAL SHARE** information. The **...suggested** option will not be shown.

7. Click the **Close** button to complete this step.
8. Click the **Write** button in ConFigLN to save changes. You are then free to **Exit**.

### 5.4 Installing LiNC-NET for a Multi-User Concentrator Configuration



**Concentrator**- A special application for a PC that is neither the Host nor one of the Workstations. A concentrator operates as an interface between the Host PC and (up to) 200 panels each. LiNC-NET 5.14 will support up to 20 concentrators in one system, permitting a Host to monitor up to 4000 panels!

- If your LiNC-NET system includes **Concentrators**, the **Host** is not able to connect directly to the system panels. All panels must be connected through the Concentrators.
- Concentrators will often operate in a system with Workstation PCs. However, at this time, LiNC-NET 5.14 does not allow Concentrators to function as Workstations.
- All panels except modem panels receive their date and time from each concentrator PC.

#### Using a Concentrator System

1. Go to **Start\Programs\LNv5\_14\_xx** and click on **CONFIGLN**.
2. In the **Task Communication** section, be sure that the **NICcard on Board** is checked.
3. Click on the ... **Concentrator on network** option and the computer will be set, by default, as a Host in a multi-user environment (**I am Host** selected).
4. Select the **I am Concentrator** option.
5. In **Local PC Number** scroll menu, choose a number between **1** and **20**. This number must be unique for each concentrator (PC) installed in the multi-user environment. The example below indicates 5 as the Local PC Number.

Task communication		Local base port	0	0=2700 [2700-2739]
<input checked="" type="checkbox"/> NICcard on board	<input type="checkbox"/> Alternate messaging mode			
<input type="radio"/> Stand alone	Register OCX...	<input type="radio"/> I am Host	Local PC number	1
<input type="radio"/> LiNC-NET on network (disables CLIENTs)		<input type="radio"/> I am Work Station	HOST PC name	HOST
<input checked="" type="radio"/> ... Concentrators on network		<input checked="" type="radio"/> I am Concentrator	HOST base port	0
				0=2700 [2700-2739]

## Concentrator Installation

- In the **Host PC** name window, type the Host computer name (check in **Control Panel\Setting\Network\Identification** tab in the Host computer, if needed). The example above uses HOST as the HOST PC name.

**NOTE** If the computer is a Concentrator, **I am Concentrator** must be selected. Each concentrator must be assigned a unique Local PC number (from 1 to 20) and the Host computer name to which it is connected.

- As soon as the desired configuration is set in the **Task Communication** section, save it by clicking once on the **Write** button located in the top left side of the screen.



During the installation of LiNC-NET on your computer, Dssock32.ocx is registered to enable the communication of LiNC-NET network applications. In the event of changes to your system or your computer, you are given the option to Register (i.e. re-register) Dssock32.ocx through ConFigLN.

- Make sure **NICcard on Board** button is checked.
- Click on **Register OCX...**
- In the **Register OCX** window, click on Register.
- Another pop-up window will appear saying **OCX is registered**.
- Click **OK**.
- Click **Close** to register OCX
- Click once on the **Write** button located in the top left side of the screen.

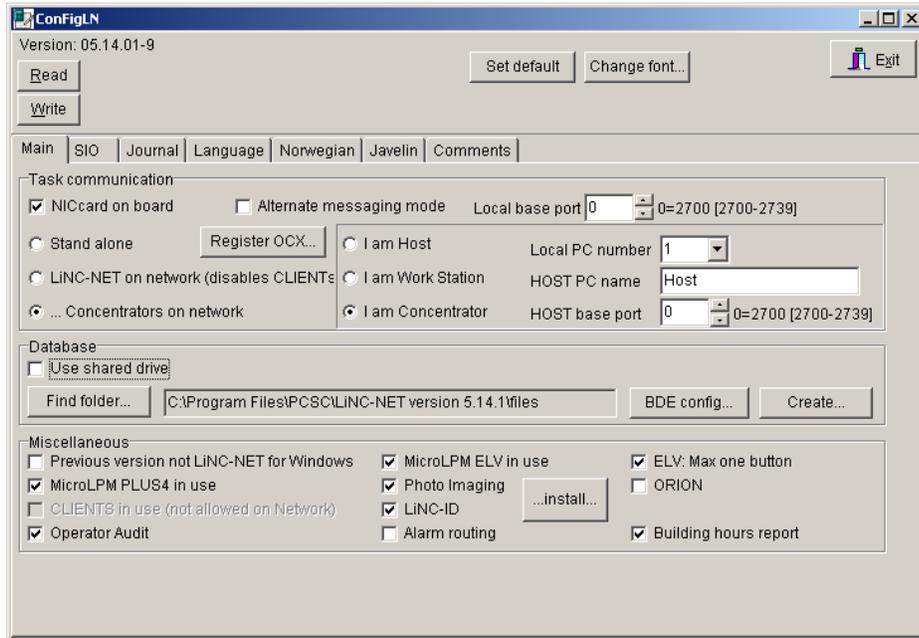


**NOTE** All panels are connected directly to the concentrator(s) and receive the date and time from the concentrator in this configuration.

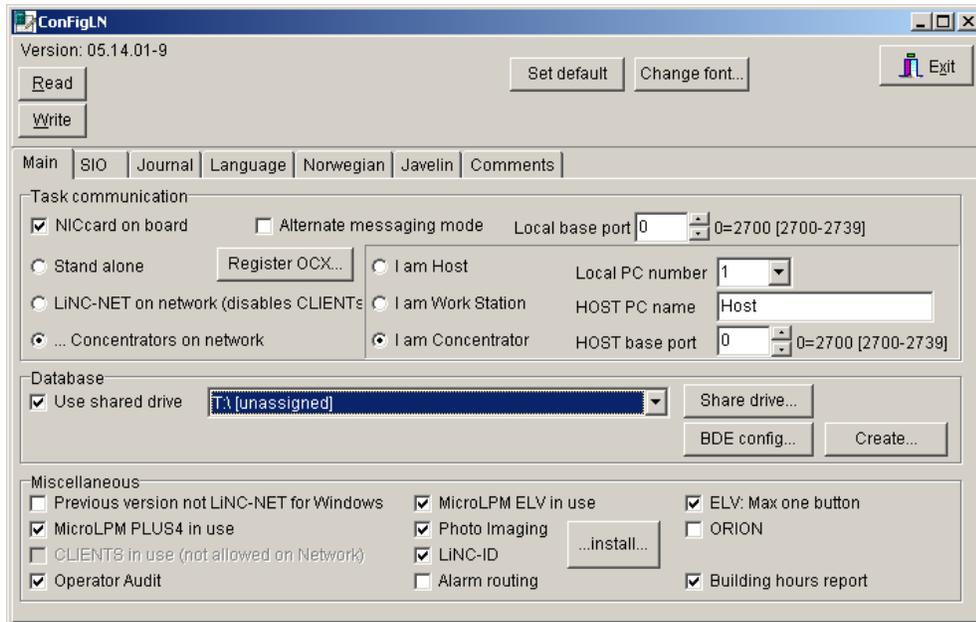
### 5.4.1. Connecting to the Mapped Host Drive in a Multi-user System

This section shows you how to map to the Host Database via the network drive. This is specifically used in a multi-user environment. To learn how to map a network drive, see the appropriate section in the Host section of this manual.

**IMPORTANT** Before selecting the Shared Drive, you must first map the Host Database during the Host setup.



1. In the Database section of ConFigLN, click the **Use shared drive** radio button to make the Share Drive active. Choose **[T:\unassigned]** for the mapping location.

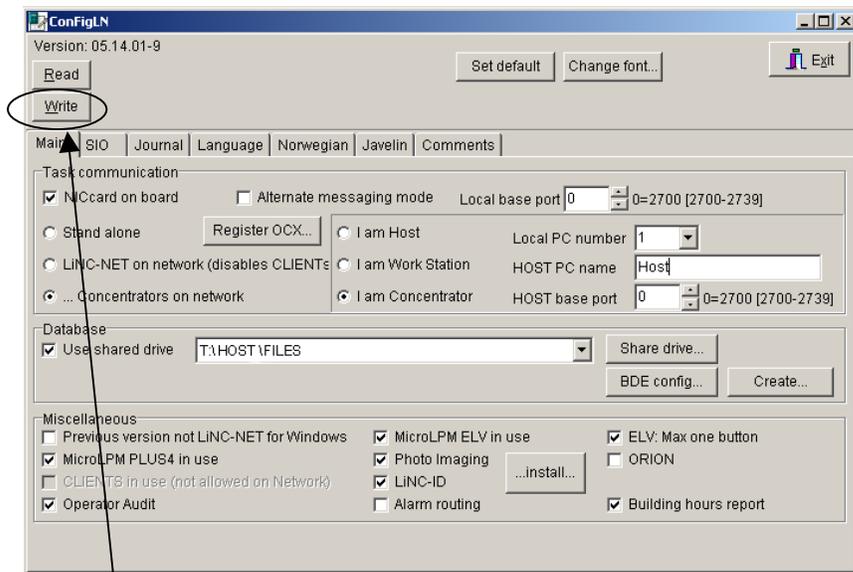


## Concentrator Installation

2. Minimize **ConFigLN** and go you the Workstation desktop.
3. Double-click on **My Network Places (Network Neighborhood)** on NT4).
4. You will see all the computers that are currently connected to the Workstation computer. Locate the **Host** PC name on the network.
5. Double-click on Host PC name. You will see all the shared folders on the Host PC. Choose the LiNC-NET database folder (usually **Files**).
6. Right-click the folder, and select **Map Network Drive** .
7. The **Map Network Drive** pop-up window will appear. Choose the drive letter that was mapped on the **Host** (ie. **T:\Host\Files**)

**NOTE:** Make sure “Reconnect at Logon” is checked before closing window

8. Click the **OK** button. The mapped folder will appear. The mapping is completed. Close all Windows Explorer windows.
9. Restore ConFigLN. You should see the **T:** drive mapped to the appropriate location (ie. **T:\Host\Files**).

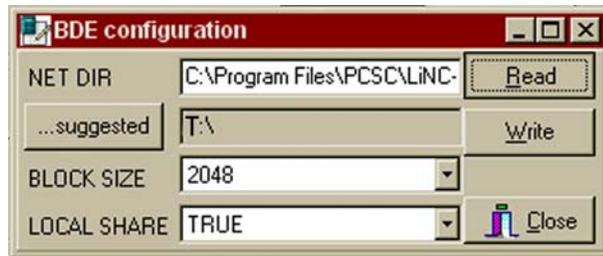


10. Click the **Write** button to save your changes.

### 5.4.2 Configuring the Borland Database Engine (BDE)

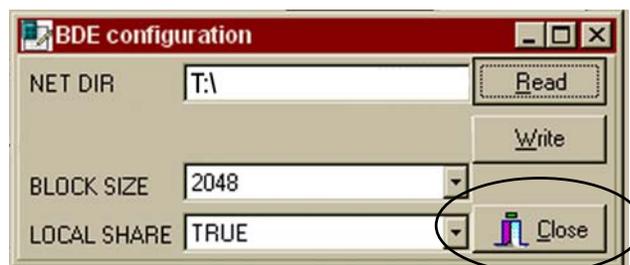
This section is used to set the Borland Paradox database, the DBMS (Database Management System) needed to run LiNC-NET for Windows.

1. Click on the **BDE config...** button. The screen shown below will appear.
2. The NET DIR window displays the drive letter found in the BDEAdmin file. Click on the **suggested** button and the suggested drive letter will appear.



3. The **NET DIR** window must show the same drive letter set in **Use Shared Drive**. Click on the **...suggested** button to change the configuration.
4. The **BLOCK SIZE** value is **2048** ( default value)
5. The **LOCAL SHARE** value must be set to **TRUE** regardless of whether or NOT a shared drive is employed.
6. As soon as all the parameters have been set, click on the **Write** button to save these changes in the **BDEAdmin** file.
7. Click the **Close** button to complete this step.
8. Click the **Write** button in ConFigLN to save changes.

**NOTE** The next time the **BDE config...** is pressed, the **BDE** configuration window will display the **NET DIR**, **BLOCK SIZE** and **LOCAL SHARE** information. The **...suggested** option will not be shown because the **NET DIR** information is the same as the **Use Shared Drive** setting.



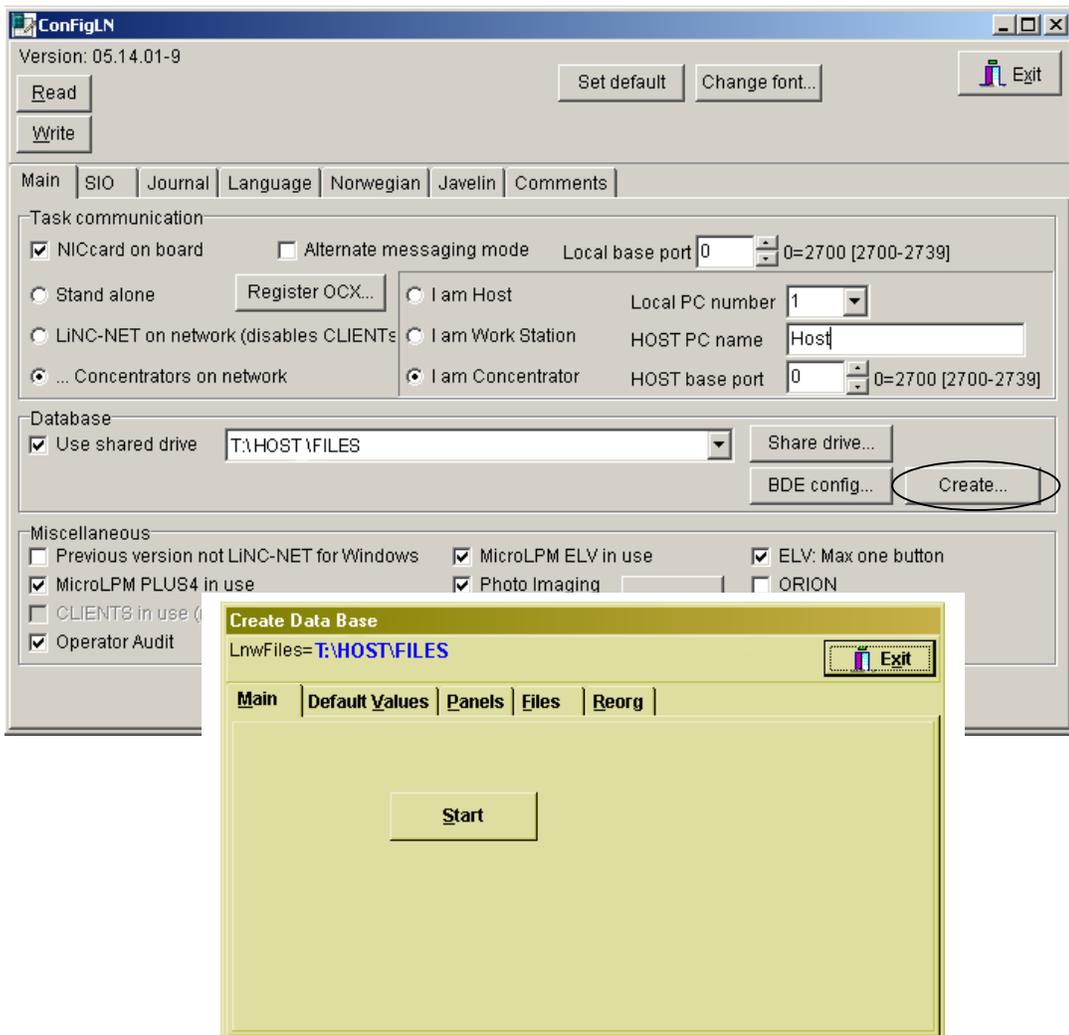
### 5.4.3 Creating a LiNC-NET Concentrator Database

Establishing a database for a system with concentrator is slightly different than creating one without them. In most cases, the database will be set up on the Host PC, though it may be set up on any computer on the network, including the Concentrator itself. In this situation, we will assume that the concentrator database is being created on the Host PC.

Creating the database is a fairly simple process. There are four steps: establishing the Default Values you wish to use in your LiNC-NET system; determining the panels you will be using with your system; determining which file-types will be monitored in your system; and then compiling the database to your specification.

In the **ConFigLN Data Base** section:

1. Click on the **Create...** button in **ConFigLN**. The **Create Data Base** screen will appear. Notice that you are currently displaying the **Main** page.



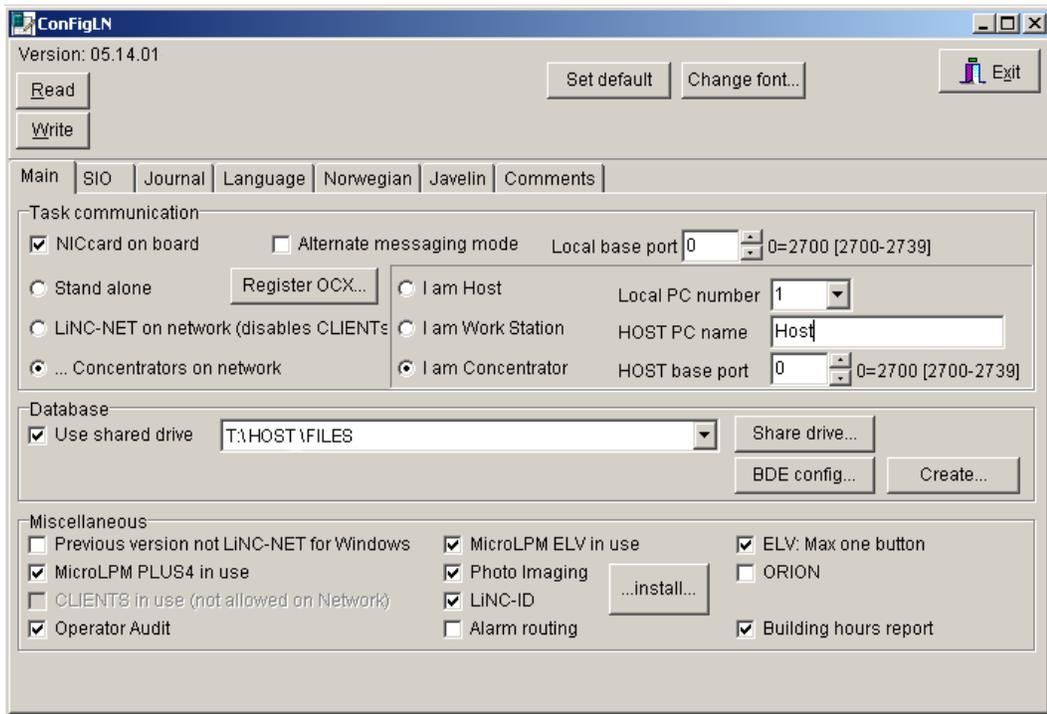
### 5.4.3.1 Create Data Base: Default Values

1. Click on the **Default Values** tab to select the default values for:

**Card Technology**  
**Door Access Time**  
**Card Table Format**  
**Daylight Savings Dates**  
**Entry/Exit Enforcement Options**

NOTE: If settings are correct, go to **Create Data Base: MicroLPMs** for next step.

Use the explanations provided in the following section to help you determine your **Default Values** selections



**Default Values Page**

### 5.4.3.2 Create Data Base: Default Values: Card Technology

In this section, you must select the card reader technology that you will implement into your access control system. Select the appropriate type of card reader in the **Format window**. The available card technology formats are as follows:

<b>ProTech</b>	BR-350, BR-351, BR-370, BR-371
<b>MagStripe</b>	BR-450, BR-451, BR-452, BR-470, BR-471
<b>Watermark</b>	Any Watermark card with the 12-digit format
<b>PCSC Wiegand</b>	34-bit PCSC Wiegand format, All Sensor Proximity Readers
<b>Indala</b>	Indala Proximity format
<b>12-Digit</b>	No site code; Magnetic Stripe, barcode
<b>Sensor 26</b>	Standard Sensor 26-bit format. All Hughes ID Proximity Readers, BR-700, and many standard OLM readers.
<b>Sensor 34</b>	Standard Sensor 34-bit format
<b>Special</b>	Special format
<b>PCSC 37</b>	Special 37 bit HID Proximity format
<b>Corp_1000</b>	Special 35 bit HID Proximity format
<b>Motorola 32</b>	Special 32 bit Motorola Proximity format
<b>Smartcard_40</b>	HID 40-bit Smartcard format

A letter or additional reference description that describes the reader type can follow the card technology:

<b>PIN-Pad</b>	PIN Pad with the reader.
<b>(I)</b>	Insert Reader

#### 5.4.3.3 Create Data Base: Default Values: Door Lock Access Time

The **Door Access Time** is the length of time that the door lock is to be energized. The actual length of time is 1/2 second less than the number of seconds specified. For example, access time value of 1 denotes 1/2 second of access and time value of 5 denotes 4 1/2 seconds. Value of 1 is generally used for turnstiles.

You must select time values for both the **Standard Access** and **Long Access**

**Standard Access** is the normal door lock energize time. Select an access time from 1-998 seconds (2-998 seconds for elevator readers).

**Long Access** is the door-lock energize time for cardholders that require a longer access time than the standard access time (i.e. an individual with a disability). Select an access time from 2-999 seconds (3-999 seconds for elevator readers).

#### 5.4.3.4 Create Data Base: Default Values: Card Table Format

##### Primary Expiration

**Global** - When selected, the Primary expiration date is used for all cards at all readers wired to the panel. It is irrelevant whether the readers are parking, building or department readers, as the secondary expiration date is not used.

If you select **Global**, the system uses the Primary expiration date for all types of readers. In selecting **Global**, the PIN feature is automatically selected (and visa versa).

If you select **Park-Only**, each cardholder has 2 card expiration dates. One date controls the access privilege for “parking” type readers and the other for all other types of readers. This unique function allows the system administrator to automatically deny access to cardholders at parking readers, yet allow them to pass through facility related readers.

##### PIN or Parking Reader expiration date (Parking Readers)

**Park-Only** - When selected, the secondary expiration date is used for all cards, but only at parking readers wired to the panel. The primary expiration date is then only used at department and building type readers.

##### Names for Cardholders Exist

PCSC panel products have the ability to store the cardholder names within the panel itself. Selecting this option will decrease the number of cardholders in a standard MicroLPM panel from 1016 to 600 cardholders (IQ and SIM board capacity are unaffected by downloading names). If you require names and more cardholders than 600, you will need to purchase a memory expansion kit for the MicroLPM panel.

##### 12-Digit Card Number

Various card formats are available within the system. When using the **MagStripe** or **Watermark** format where a site code is not available, this option must be selected. For example, the MicroLPM (and I.Q. and SIM) series supports 5 - 12 digit ABA Track 2 format data.

#### 5.4.3.5 Create Data Base: Default Values: Daylight Savings

The daylight savings cycle may be programmed into the panel.

**Start:** Enter the date of the official start of Daylight Savings (In the U.S. it is normally the first Sunday of April).

**Stop:** Enter the date of the official end of Daylight Savings (In the U.S. it is normally the last Sunday of October).

**NOTE** If a MicroLPM panel does not roll into Daylight Savings (no Start date programmed), then it won't roll out of Daylight Savings (even if a Stop date was programmed). However, the IQ-7.9.12Q or SIM 7.9.15S series firmware allows their respective boards to rollout of Daylight Savings, even if they didn't roll into it.

#### 5.4.3.6 Create Data Base: Default Values: Entry/Exit Enforcement

Each panel supports three separate entry/exit enforcement levels: Strict, Lenient, and Soft. Each enforcement level can be individually assigned to Parking, Department, or Building Type readers, but is enforced only when the Entry function and the corresponding Exit function readers are on the same panel.

**NOTE** Entry/Exit enforcement cannot be done (at any of the 3 levels) if the entry readers are on one panel and the corresponding exit readers are on a different panel.

These panel firmware versions require the door to be opened before changing the card status, repeated accesses will be granted (regardless of the anti-passback level of enforcement) if the door is not opened:

- Standard MicroLPM- Version 1.9.7 and above
- Plus 2 MicroLPM- Version 3.9.7 and above
- Plus 4 MicroLPM- Version 7.9.7 and above

\*All IQ and SIM panels require the door to be opened prior to updating the card status.

#### 5.4.3.6.1 Create Data Base: Default Values: Entry/Exit Enforcement: Strict Entry/Exit

The cardholder's entry/exit status must be synchronized with the system, otherwise an entry/exit error will be announced. In other words, the cardholder must have the proper status (building, department, or parking) before he uses an entry/exit reader. The card status must be as follows:

If the cardholder's Building Status is IN, then Department Status can be IN or OUT.

If the cardholder's Building Status is OUT, the Department Status must be OUT.

If the cardholder's Department Status is IN, then Building Status must be IN.

If the cardholder's status does not comply with the reader's entry/exit definition, then the system will deny access. In other words, when a cardholder attempts to enter a Building IN reader, the cardholder's building and department status must be OUT.

**5.4.3.6.2 Create Data Base: Default Values: Entry/Exit Enforcement: Lenient Entry/Exit**

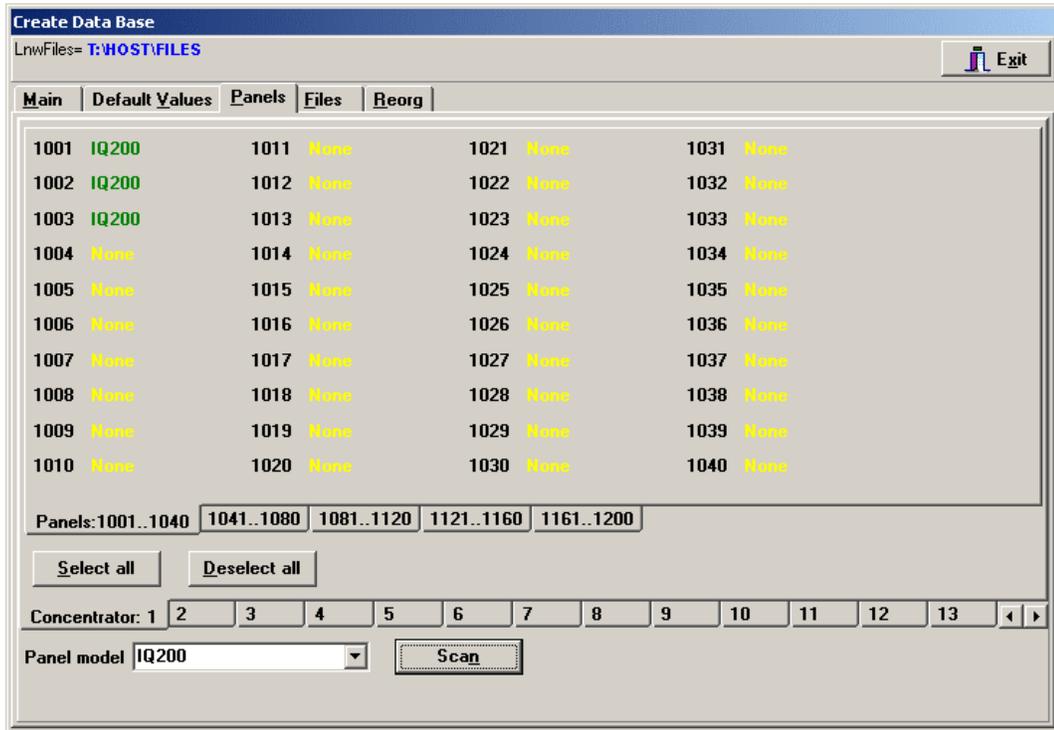
This level is the same as **Strict** except on the first use of the card, in which case the system will automatically reset the building and department status to proper synchronization. The cardholder's second attempt at the reader will then grant him access.

**5.4.3.6.3 Create Data Base: Default Values: Entry/Exit Enforcement: Soft Entry/Exit**

This level follows the same rules as **Strict** except that if an error transaction is recorded, all status levels are synchronized, and access is GRANTED.

### 5.4.3.7 Create Data Base: Panels

1 Click on the **Panels** tab. The **Panels** page shall appear. You will notice that the page appears slightly different than the Panels tab on a non-concentrator setup. A concentrator database will number panels starting from 1001 (as opposed to 1 on a non-concentrator system). The first digit denotes the concentrator number, in this case '1'.



#### Concentrator Panel Selection Field

2. On the **Panels** page, select panel(s) for which data files will be created by selecting the appropriate type from the **Panel model** window.
3. To select panels individually, select the panel model in the radial button group box, then select the panel number.

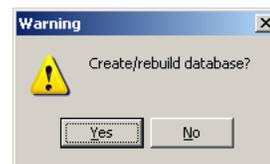
### 5.4.3.8 Create Database: Main

When you finish making your selections

1. On the **Main** page, click on the **Start** button to begin creating the selected files.



2. A pop-up window will appear, asking you if you are sure that you want to create/rebuild the database. Press the **Yes** button.
3. When complete click on the **Exit** button (located in the upper right hand corner) to exit the create database module.
4. A pop-up window will appear confirming your decision to exit **Create Data Base**. Click "**Yes**."
5. You will then return to the **ConfigLN** screen. Click on the **Exit** button located in the upper right side of the screen to return to the desktop.



**NOTE:** Installation is Complete. To start the LiNC-NET program, go to **Start\Program Files\LVn5\_14\_xx\LiNC\_NET**.

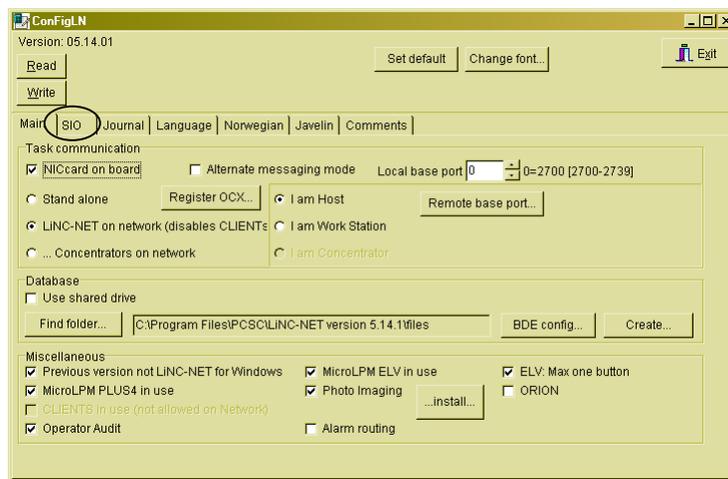
## **6.0 Appendix – Setting Regional Anti-passback**

## Regional Anti-Passback

LiNC-NET 5.14 now allows for Regional Anti-Passback capability (ie. anti-passback limitations on using readers on more than a single panel). An administrator can now decide on the range of anti-passback control for as many as 5 groups of panels in your first 200 boards within your system.

### 6.1 To set up Regional Anti-Passback

1. After setting the parameters for your panels in the System-side of LiNC-NET, press the Halt button to exit the program.
2. Input your user name and password to close LiNC-NET.
3. Open ConfigLN.
4. Select the SIO tab from the Main ConfigLN screen.



5. Press the Regional Anti-Passback button.



This will open the **Regional Anti-Passback PANELs** window.

In the Regional Anti-Passback PANELs window, select the **Regional Group** that you wish to set parameters (Group 1-5).

6. Select the panels that will function together with Regional Anti-passback.
7. Press the **Write** button to save the selection.
8. If you wish, you may choose another **Regional Group** for another group of panels.

NOTE: You may only select a panel for one Regional Group with a Max of 6 panels for any group.

9. To exit the Regional Anti-Passback PANELs window, press the **Close** button.

## 6.2 To Remove a Anti-Passback Regional Group

1. Open the Regional Anti-Passback PANELs window.
2. Select the Regional Group that you wish to remove from the Regional group selection box.
3. Press the **Clear** button.
4. Press the **Close** button to exit.

**End of Manual  
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