

LiNC-NXG for Windows 8 Professional, Windows 7 Professional,  
Vista Business Edition and XP Professional  
Installation Guide for LiNC-NXG  
33-10067-001  
REV: C

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

First Edition – May 2009  
Revision B – March 2012  
Revision C – June 2014

Information in this manual is subject to change without notice and does not represent a commitment on the part of PCSC. The software described in this manual is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of the agreement. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or information storage and retrieval systems for any purpose other than specified in the agreement without the express written permission of PCSC.

© 2014 PCSC. All Rights Reserved.

Printed in the United States of America.

Microsoft Windows 8 Professional, Windows 7 Professional, Windows Vista Business Edition and Microsoft Windows XP Professional is a trademark of Microsoft Corporation.

Published by **PCSC**  
3541 Challenger Street  
Torrance, CA 90503  
Phone: (310) 303-3600  
Fax: (310) 303-3600

## 0.2 Table of Contents

|  |     |
|--|-----|
| 0.2 Table of Contents.....                                 | iii |
| 1.0 Introduction.....                                      | 4   |
| 1.1 Installation and Setup.....                            | 4   |
| 2.0 Before You Begin - Installation Requirements .....     | 5   |
| 2.1 Software .....   | 5   |
| 2.2 Hardware.....  | 5   |
| 3.0 Creating a New Database.....                           | 6   |
| 3.1 Creating the DBRW and DBO Logins.....                  | 12  |
| 3.1.1 Creating the DBRW Login.....                         | 12  |
| 3.5 Creating the DBO Login .....                           | 15  |
| 4.0 SQL Server Network Configuration .....                 | 18  |
| 4.1 Assignment of TCP/IP Ports .....                       | 18  |
| 4.2 Enabling Named Pipes .....                             | 24  |
| 4.3 Restarting SQL Server Services .....                   | 28  |
| 5.0 Installing LiNC-NXG.....                               | 31  |
| 5.1 Starting PCSC Configuration .....                      | 56  |
| 5.2 Registering the LiNC-NXG Software .....                | 57  |
| 5.2.1 Registering via the Internet. ....                   | 57  |
| 5.2.2 Registering NXG without an Internet Connection. .... | 60  |
| 5.3 Finalizing the Install with Copy Options .....         | 61  |
| 5.4 Upgrading LiNC-NXG.....                                | 64  |
| 6.0 Installing LiNC-NXG Workstation.....                   | 65  |
| 6.1 Starting PCSC Configuration .....                      | 90  |
| 6.2 Registering the LiNC-NXG Software .....                | 91  |
| 6.2.1 Registering via the Internet. ....                   | 91  |
| 6.2.2 Registering NXG without an Internet Connection. .... | 94  |
| 6.3 Finalizing the Install with Copy Options .....         | 95  |
| 6.4 Updating the LiNC-NXG for a New Workstation.....       | 98  |
| 7.0 Importing a Database .....                             | 101 |

# 1.0 Introduction

Welcome to the **LiNC-NXG for Windows 8 Professional, Windows 7 Professional, Vista Business Edition and XP Professional**, the enterprise programming software from PCSC. This user-friendly, PC-based access control manager is simple to operate and provides Help screens along the way to make operation even easier. The **LiNC-NXG** manuals are designed to provide both written and visual instructions while installing the system in its Host or Workstation modes.

**LiNC-NXG** operates using the Microsoft Windows 8 Professional, Windows 7 Professional, Vista Business Edition, XP Professional or Windows Server 2008R2 operating systems and uses Microsoft SQL Server 2012, SQL Server 2012 Express, SQL Server R2, and SQL Server R2 Express for its database. **LiNC-NXG** is compatible with both 32-bit and 64-bit processors. The host PC should be dedicated to the access control system to ensure security integrity and management efficiency. Other Windows applications should not be running concurrently with **LiNC-NXG**.

This manual was designed to provide the information necessary to install **LiNC-NXG** and should be used in conjunction with the **SQL Installation Guide** and/or **SQL** (P/N 33-40006-001) **Installation Guide**. To obtain a complete understanding of **LiNC-NXG**, this manual should be used in conjunction with the **LiNC-NXG for Windows 7 Professional, Vista Business Edition and XP Professional User Guide** (P/N 37-10056-001). 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.

## 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-NXG for Windows 8 Professional, Windows 7 Professional, Vista Business Edition and XP Professional User Guide**. (P/N 37-10056-001) 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.

## 2.0 Before You Begin - Installation Requirements

### 2.1 Software

To install LiNC-NXG for **Windows 8 Professional, Windows 7 Professional, Vista Business Edition and XP Professional**, the following requirements must be met:

- Windows 8 Professional, Windows 7 Professional, Windows Vista Business Edition (SP1 or higher) or Windows XP Professional (SP3 or higher) on 32-bit or 64-bit processors must be installed on the host computer.
- User must have knowledge of mouse and keyboard use in the Windows 8 Professional, Windows 7 Professional, Windows Vista Business Edition Professional or Windows XP Professional environment.
- Microsoft SQL Server 2012, Microsoft SQL Server 2012 Express with Advanced Features, Microsoft SQL Server 2008 R2, Microsoft SQL Server 2008 R2 Express with Advanced Features

### 2.2 Hardware

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

| Hardware Item        | Min. Requirement   |
|----------------------|--|
| CPU                  | Intel Core 2 Dual or higher, 3.0 GHz or faster, 32-bit or 64-bit processor.  |
| Operating System     | Windows 8 Professional, Windows 7 Professional, Windows Vista Business Edition Professional, Windows XP Professional and Windows Server 2008R2 or 2012 |
| Application Software | Microsoft SQL Server 2012, Microsoft SQL Server 2012 Express with Advanced Features, Microsoft SQL Server 2008 R2, or Microsoft SQL Server R2 Express  |
| RAM                  | 3 GB memory or greater   |
| Hard Drive           | 1 – 120 GB ATA133 – 7200 RPM   |
| CDRW or DVD-RW       | 12X CDRW with Nero or Roxio Software   |
| Monitor              | SVGA, 1024 x 768, 65k color  |

**NOTE:** LiNC-NXG use of host ports requires firewall configuration only if a firewall is active between the host and a workstation, PanelProxy, or the boards.

LiNC-NXG requires the following TCP ports:

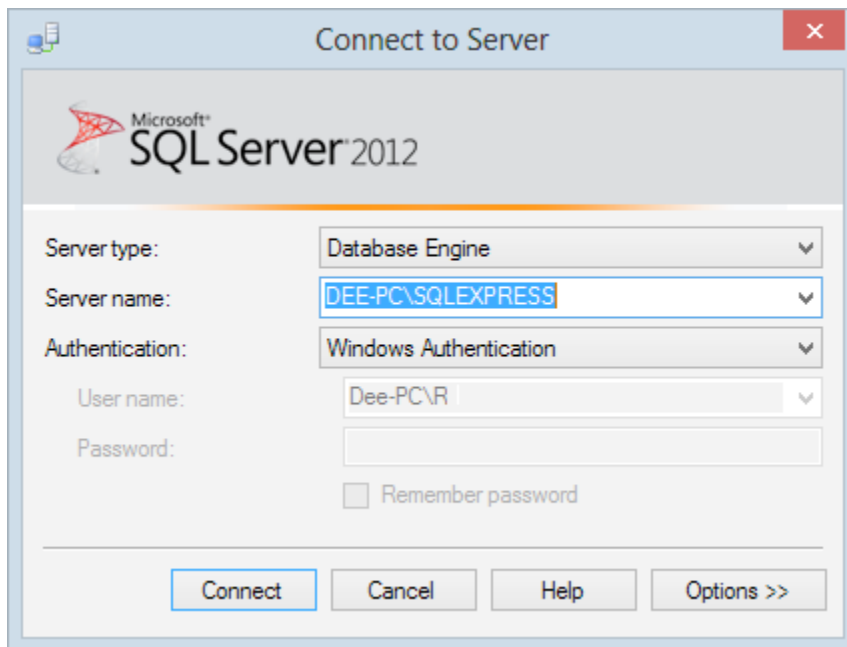
|                |                                   |
|----------------|-----------------------------------|
| PanelProxy TCP | 13001 (default)                   |
| Alarm TCP      | 1602 (default, user-configurable) |
| Batch TCP      | User configured                   |
| RPC TCP        | 3101 (default)                    |

### 3.0 Creating a New Database

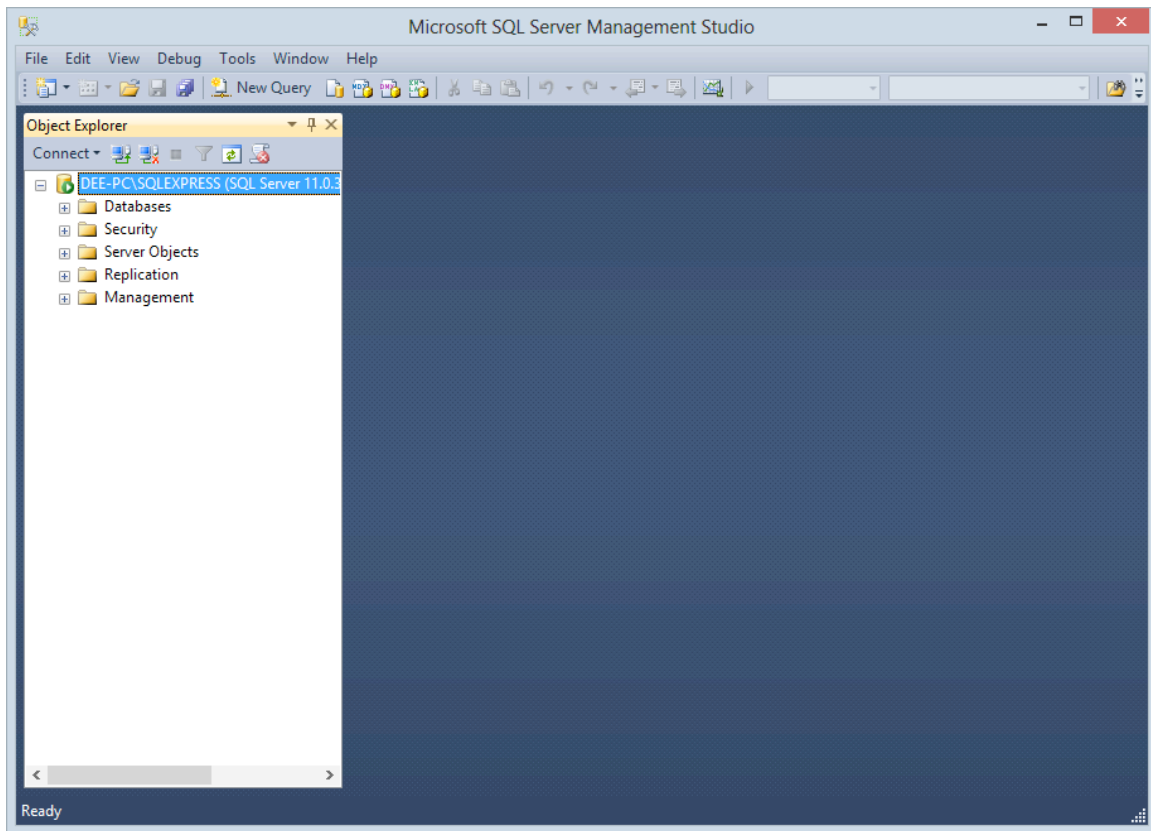
**NOTE:** It is only necessary to create a new database if you want to store the data and log files in a specific location, otherwise they will be located in the default SQL folder. If you wish to skip this step, proceed to Section 3.1.

1. From the Start Menu, open the SQL Server Management Studio from the **Start/ SQL Server Management Studio** (Windows 8) or **Start/ All Programs/ Microsoft SQL Server/ SQL Server Management Studio** (Windows 7, Vista, XP).
2. The Connect to Server window will appear. If you are using Windows Authentication, press the **Connect** button.

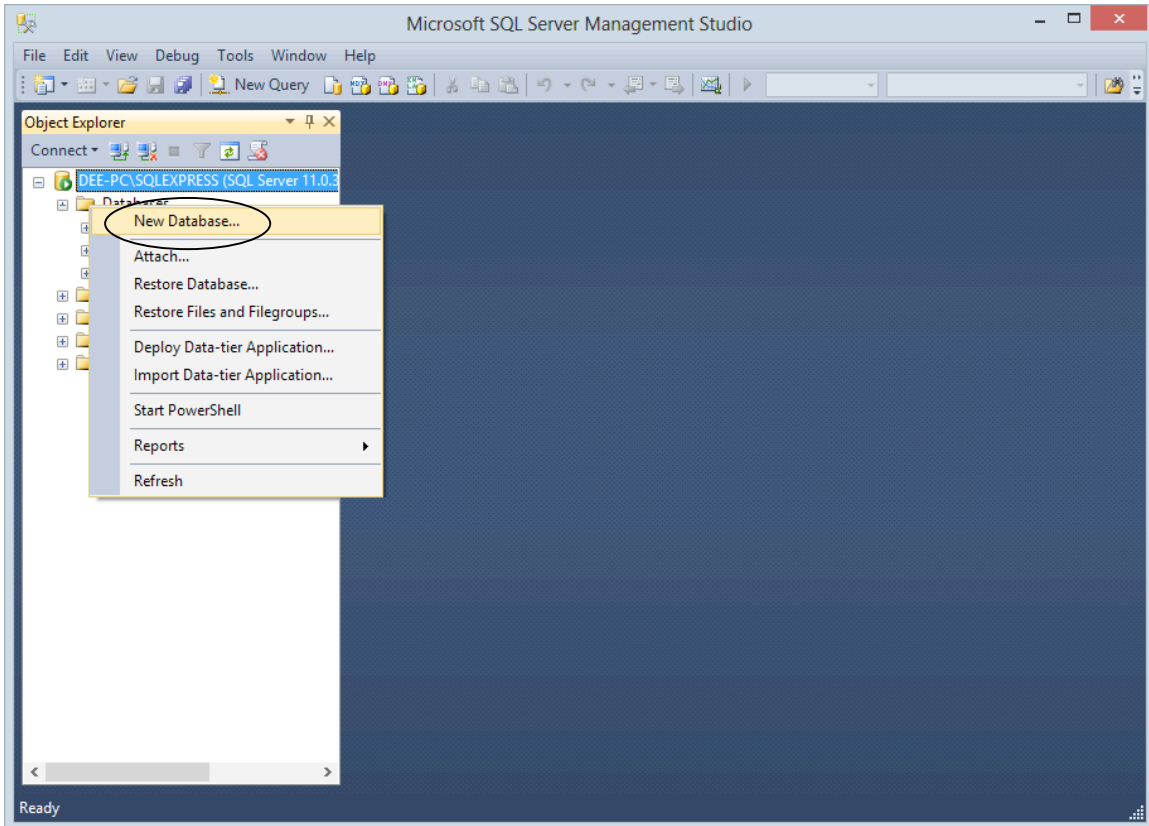
**NOTE:** If you are using SQL Server Authentication, add in your **User name** and **Password**, then press the **Connect** button.



3. **SQL Server Management Studio** will open.

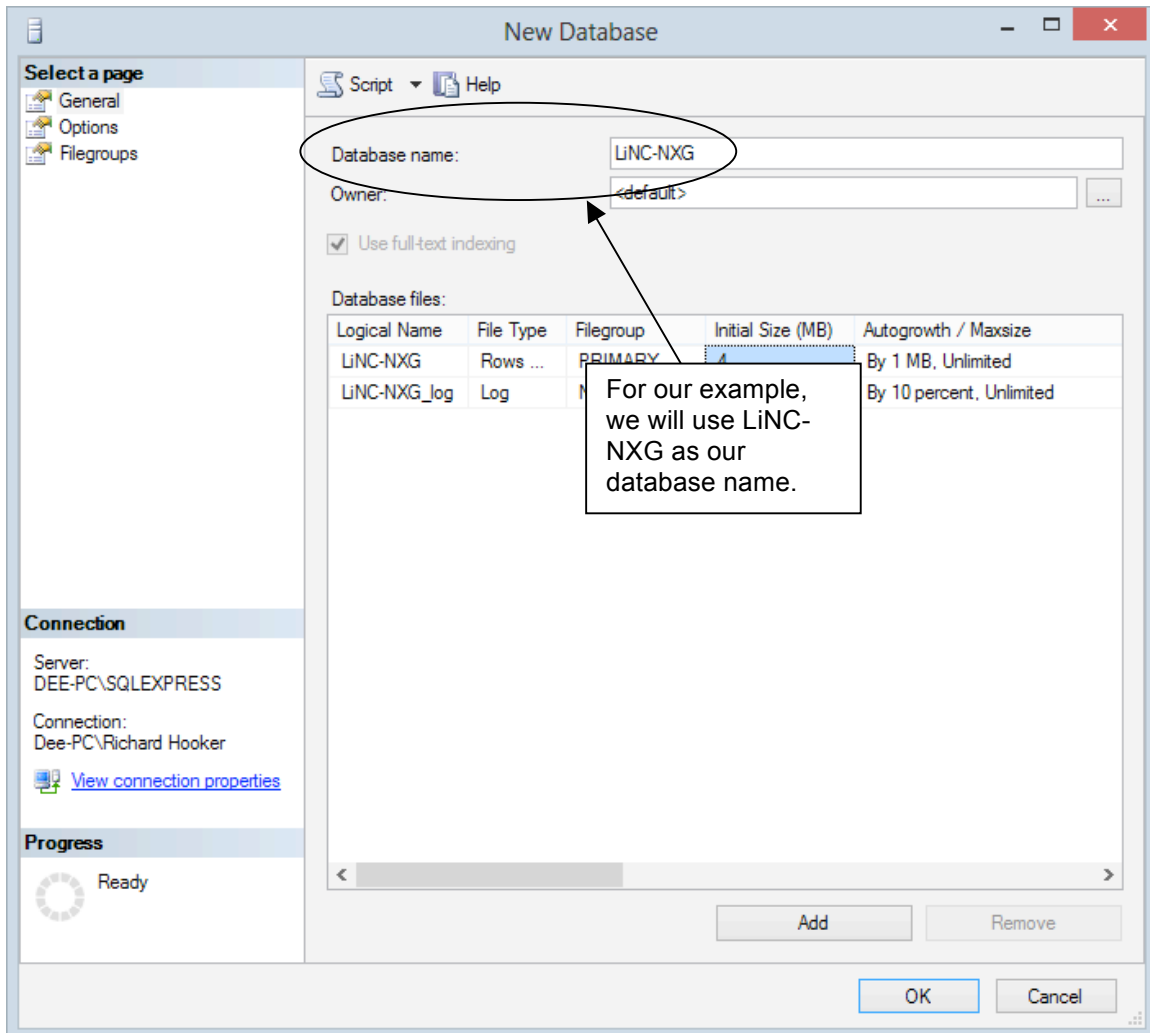


4. In Object Explorer, right -click on **Database**.
5. From the drop-down menu, select **New Database**.





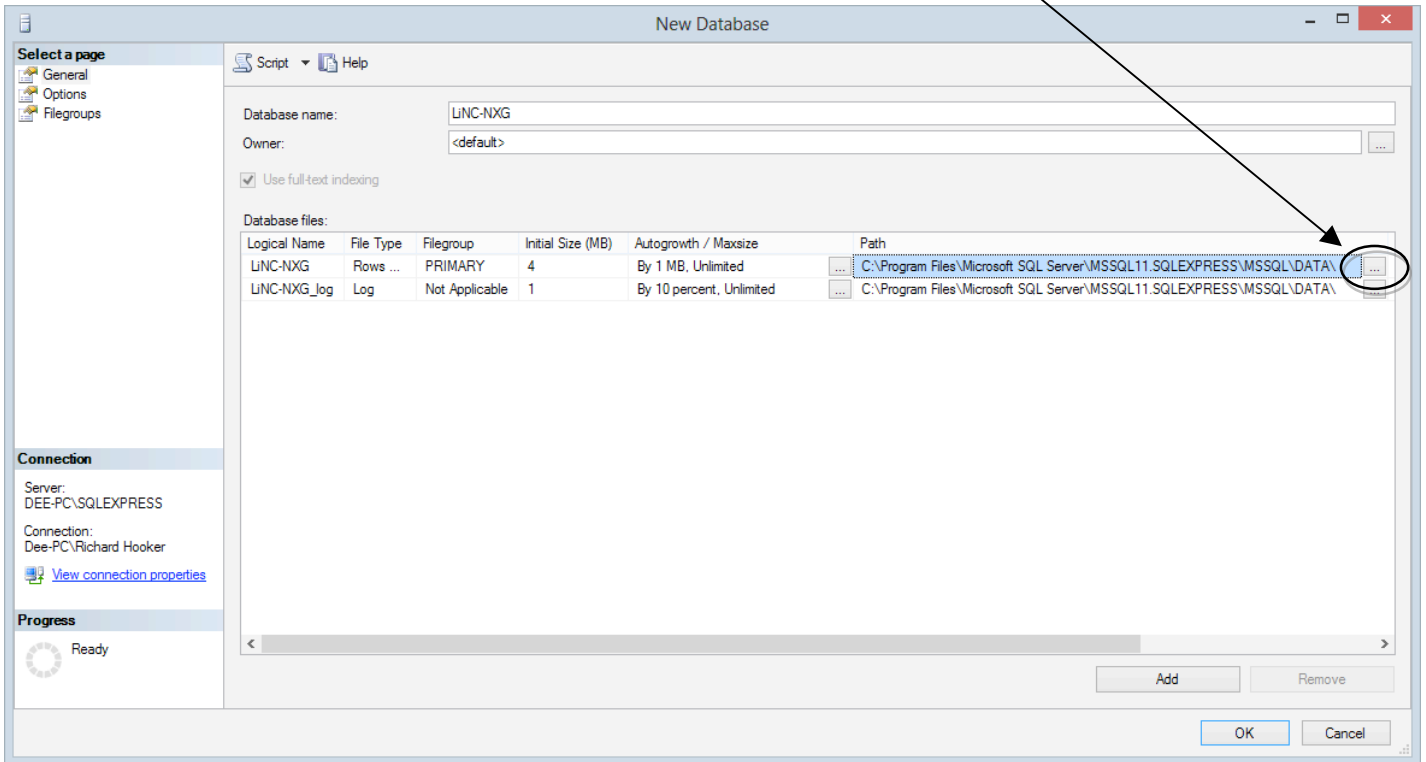
6. The New Database window will open and display the General page. Type the preferred database name in the Name field.



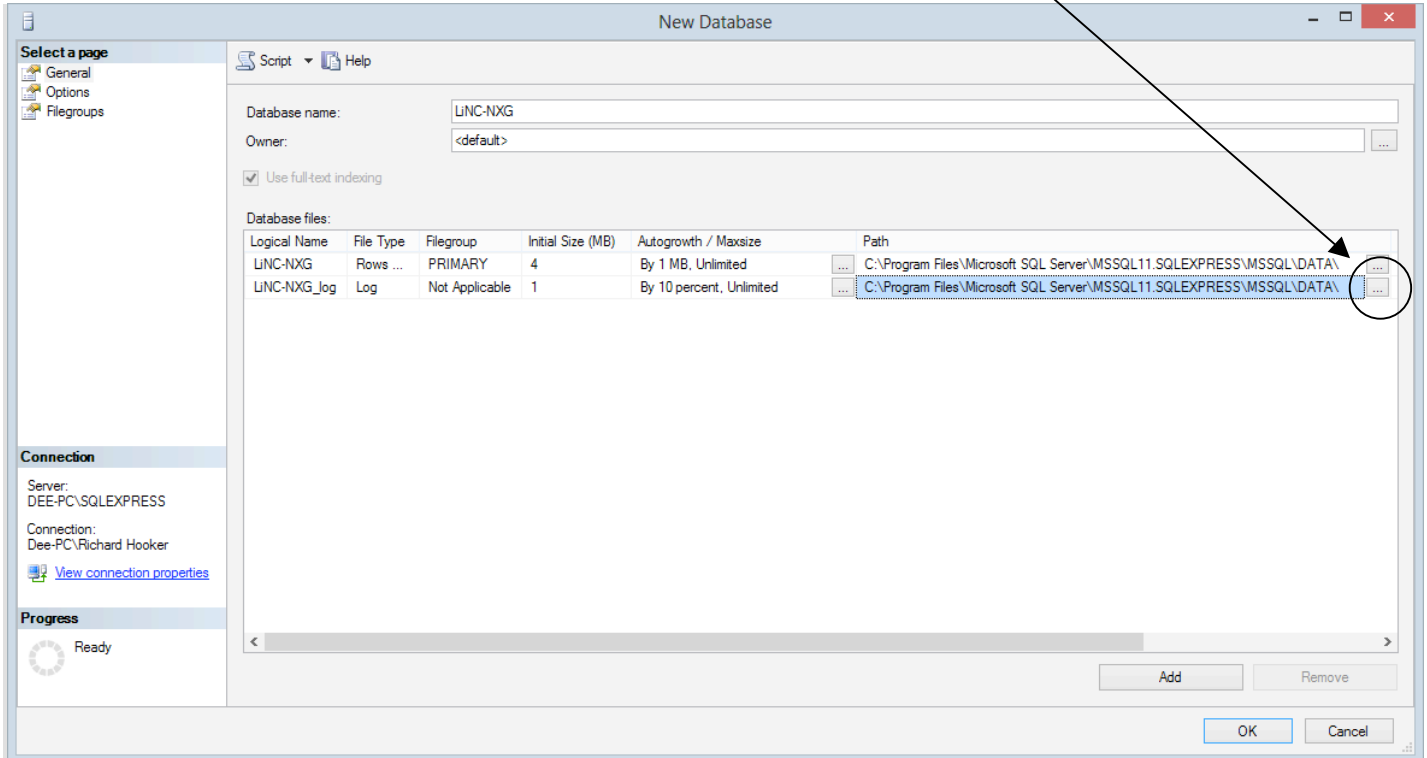
7. In the **Data Files** table, find the **Path** column which will display the directory location where the **Data** will be stored.

**NOTE:** The locations listed in the “Path” fields are the default locations.

8. If it is preferable to use the SQL default for your Data Files Path, do not change. If there is an alternate location to use for the Path, press the **Browse** button to navigate to the desired location.



- In the **Data Files** table, find the **Path** column which will display the directory location where the **Transaction logs** will be stored.
- If it is preferable to use the SQL default for your Transaction Log Path, do not change. If there is an alternate location to use for the Path, press the **Browse** button to navigate to the desired location.



- Press the **OK** button to create the database.

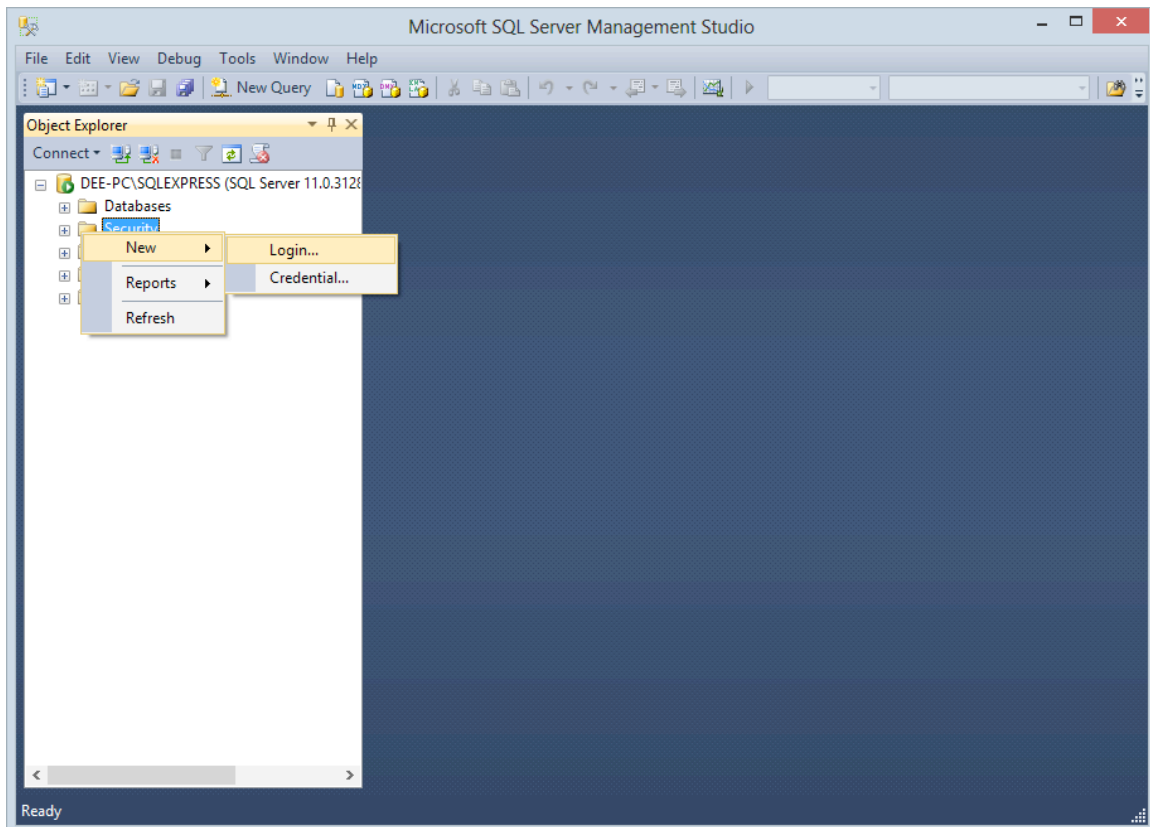
## 3.1 Creating the DBRW and DBO Logins

In an effort to enhance the security of the LiNC-NXG application, PCSC will no longer accept the default 'SA' login. It will be necessary for LiNC-NXG to connect to the SQL database using a set of unique DBRW and DBO logins.

### 3.1.1 Creating the DBRW Login

You will create the first of the two new logins by adding the **DBRW** (database read-write) login. This login will be used for NXG services and the UI.

1. Open the SQL Server Management Studio from the **Start/ SQL Server Management Studio** (Windows 8) or **Start/ All Programs/ Microsoft SQL Server/ SQL Server Management Studio** (Window 7, Vista, XP).
2. From the **Object Explorer** menu, right-click on **Security** in the menu tree, select **New**, and select **Login**.



3. The **Login – New** window will appear. In the **Login name** text box, enter a new **DBRW** login name.

**NOTE:** We will use “pcsc\_ui” in our example below.

4. Select the **SQL Server authentication** radio button
5. Enter, and then confirm, the new **Password**.
6. Unless directed otherwise by the IT Administrator, uncheck the **Enforce password expiration** and make sure **User must change password at next login** is also auto unchecked.

**NOTE:** Do not press the **OK** button yet..

Script Help

Select a page

- General
- Server Roles
- User Mapping
- Securables
- Status

Connection

Server: DEE-PC\SQLEXPRESS

Connection: Dee-PC\Richard Hooker

[View connection properties](#)

Progress

Ready

Login name: pcsc\_ui Search...

Windows authentication

SQL Server authentication

Password: ●●●●

Confirm password: ●●●●

Specify old password

Old password:

Enforce password policy

Enforce password expiration

User must change password at next login

Mapped to certificate

Mapped to asymmetric key

Map to Credential Add

| Credential | Provider |
|------------|----------|
|------------|----------|

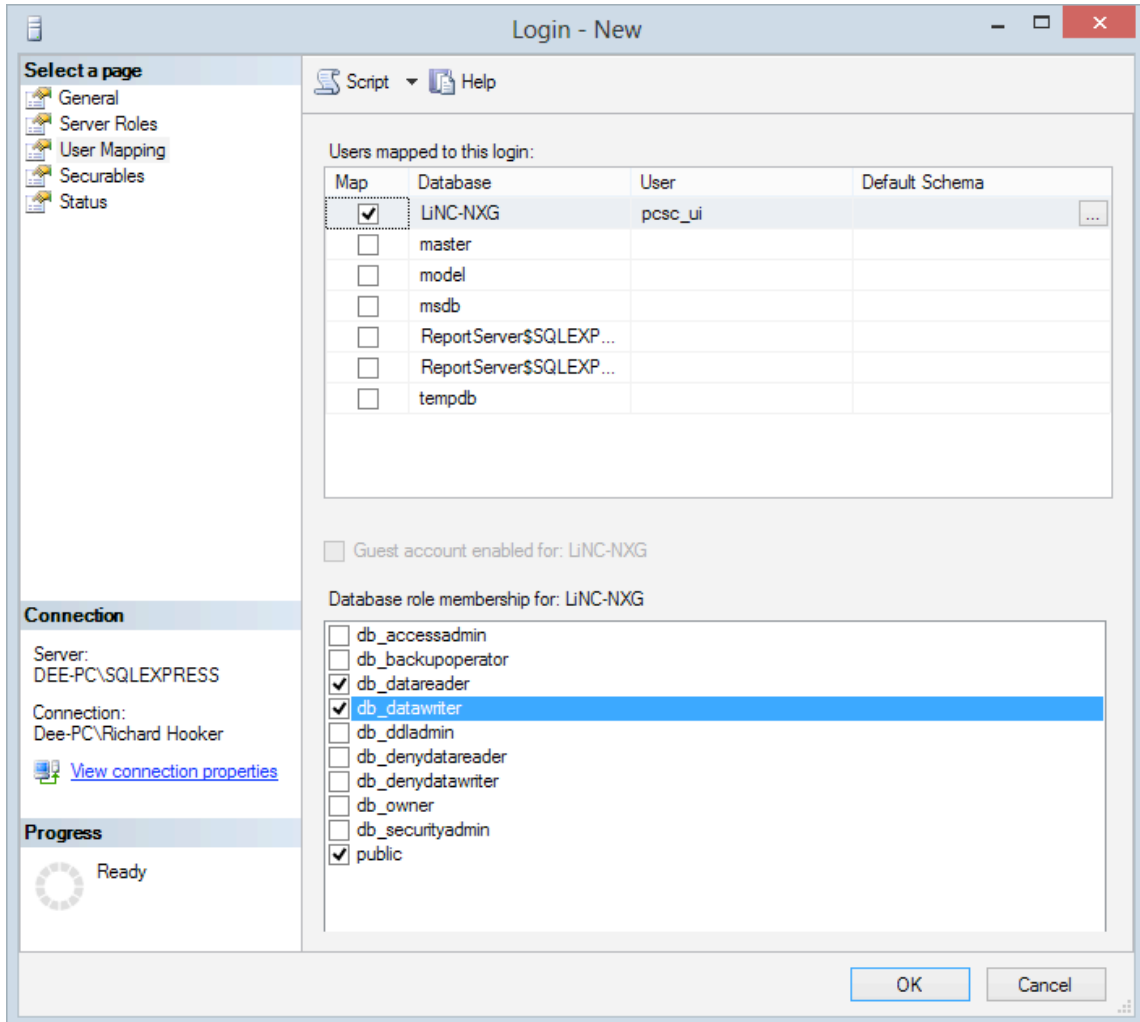
Remove

Default database: master

Default language: <default>

OK Cancel

7. From the **Select a page** left-hand menu, select **User Mapping**.
8. Check the checkbox next to your LiNC-NXG database in the **Users mapped to this login** section.
9. In the **Database role membership for <database name>** select the “**db\_datareader**” (DBR) and the “**db\_datawriter**” (DBW).
10. Press the **OK** button. You have created the **pcsc\_ui login** with the **DBRW** roles and have mapped it to your LiNC-NXG database.

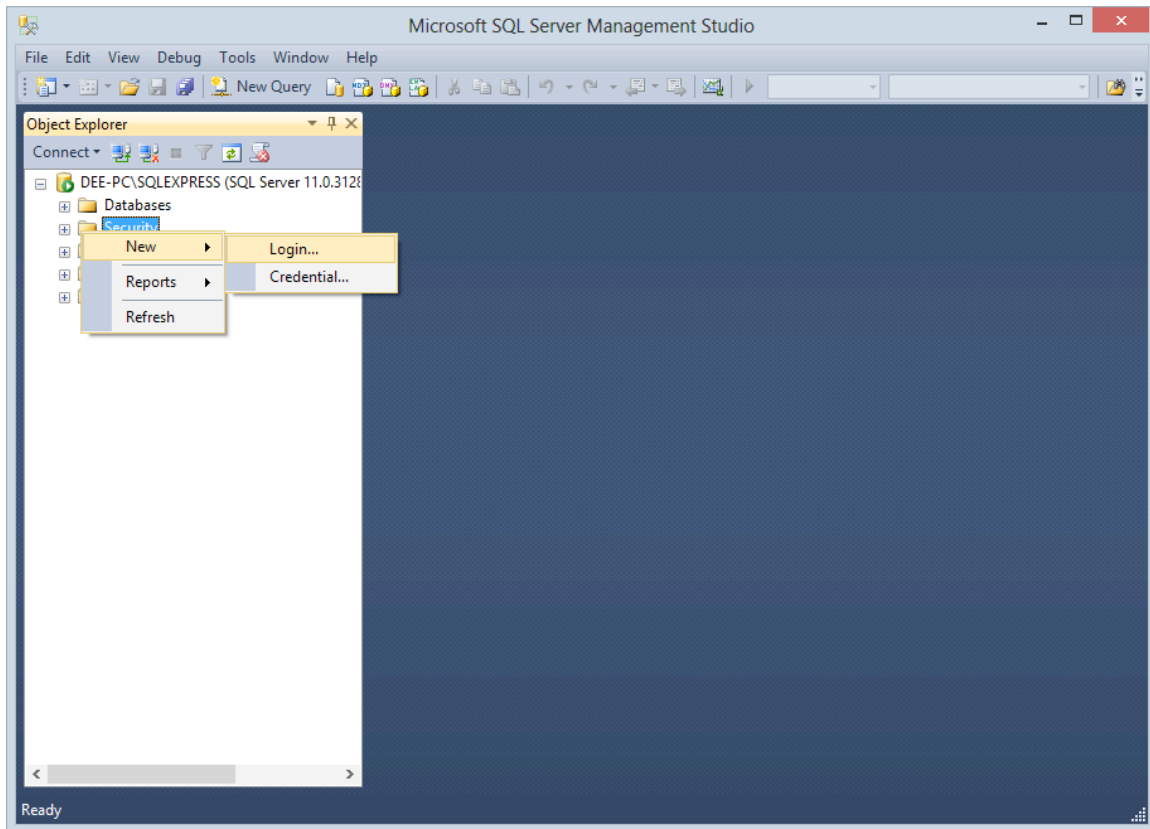


11. Go to **Section 3.1.2** to create the **DBO** Login.

### 3.5 Creating the DBO Login

Now it is time to create the **DBO** (database owner) login. The process is very similar to the creation of the **DBRW** login.

1. Open the SQL Server Management Studio from the **Start/ SQL Server Management Studio** (Windows 8) or **Start/ All Programs/ Microsoft SQL Server/ SQL Server Management Studio** (Window 7, Vista, XP).
2. From the **Object Explorer** menu, right-click on **Security**, select **New**, and select **Login**.



3. The **Login – New** window will appear. In the **Login name** text box, enter a new **DBO** login name.

**NOTE:** We will use “pcsc\_dbo” in our example below.

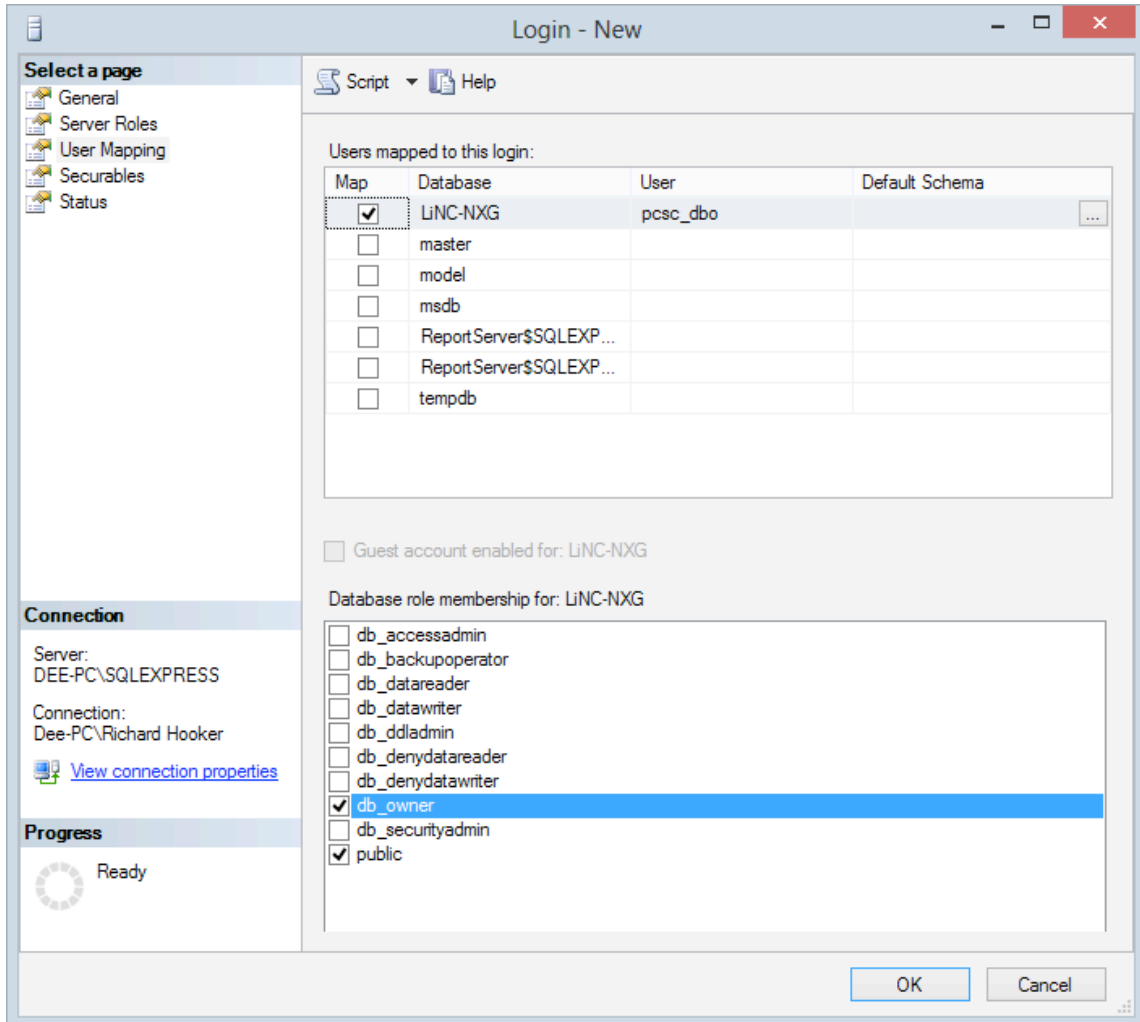
4. Select the **SQL Server authentication** radio button.
5. Enter, and then confirm, the new **Password**.
6. Unless directed otherwise by the IT Administrator, uncheck the **Enforce password expiration** and make sure **User must change password at next login** is also auto unchecked.

**NOTE:** Do not press the **OK** button yet..

The screenshot shows the 'Login - New' dialog box in SQL Server Enterprise Manager. The dialog is titled 'Login - New' and has a 'Script' dropdown and a 'Help' icon. On the left, there is a 'Select a page' sidebar with options: General, Server Roles, User Mapping, Securables, and Status. Below this is a 'Connection' section showing 'Server: DEE-PC\SQLEXPRESS' and 'Connection: Dee-PC\Richard Hooker', with a 'View connection properties' link. At the bottom left is a 'Progress' section with a circular progress indicator and the word 'Ready'. The main area contains the following fields and controls: 'Login name:' text box with 'pcsc\_dbo' and a 'Search...' button; 'Windows authentication' radio button (unselected); 'SQL Server authentication' radio button (selected); 'Password:' text box with four dots; 'Confirm password:' text box with four dots; 'Specify old password' checkbox (unchecked); 'Old password:' text box; 'Enforce password policy' checkbox (checked); 'Enforce password expiration' checkbox (unchecked); 'User must change password at next login' checkbox (unchecked); 'Mapped to certificate' radio button (unselected) with a dropdown; 'Mapped to asymmetric key' radio button (unselected) with a dropdown; 'Map to Credential' checkbox (unchecked) with a dropdown and an 'Add' button; 'Mapped Credentials' table with columns 'Credential' and 'Provider'; 'Default database:' dropdown with 'master' selected; 'Default language:' dropdown with '<default>' selected; 'Remove' button; 'OK' button; and 'Cancel' button.



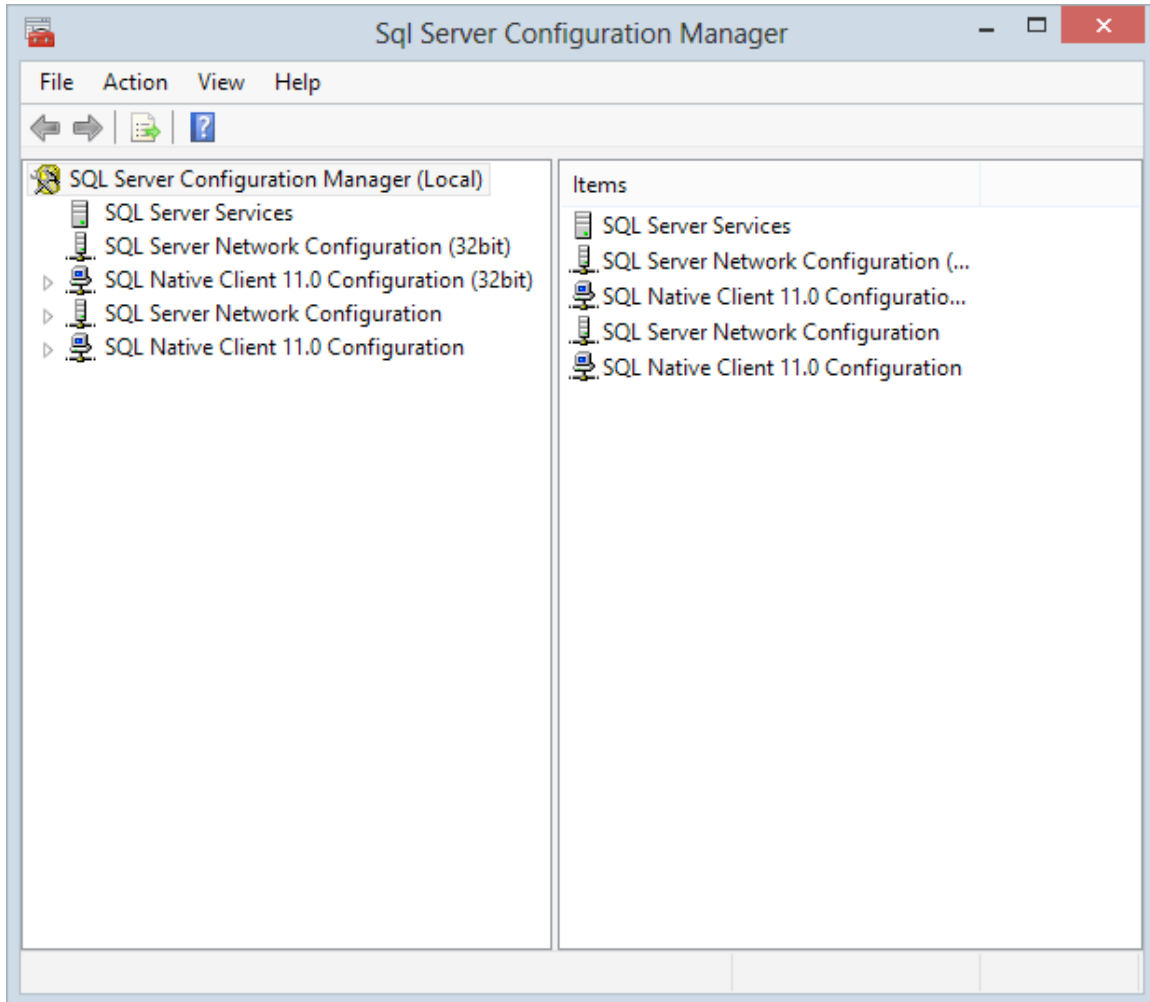
7. From the **Select a page** left-hand menu, select **User Mapping**.
8. Check the checkbox next to your LiNC-NXG database in the **Users mapped to this login** section. In our example below we are using the PCSC database.
9. In the **Database role membership for <database name>** select the **db\_owner (DBO)** role.
10. Click on **OK** button. You have created the **pcsc\_dbo login** with the **DBO** role and have mapped it to your NXG database.



## 4.0 SQL Server Network Configuration

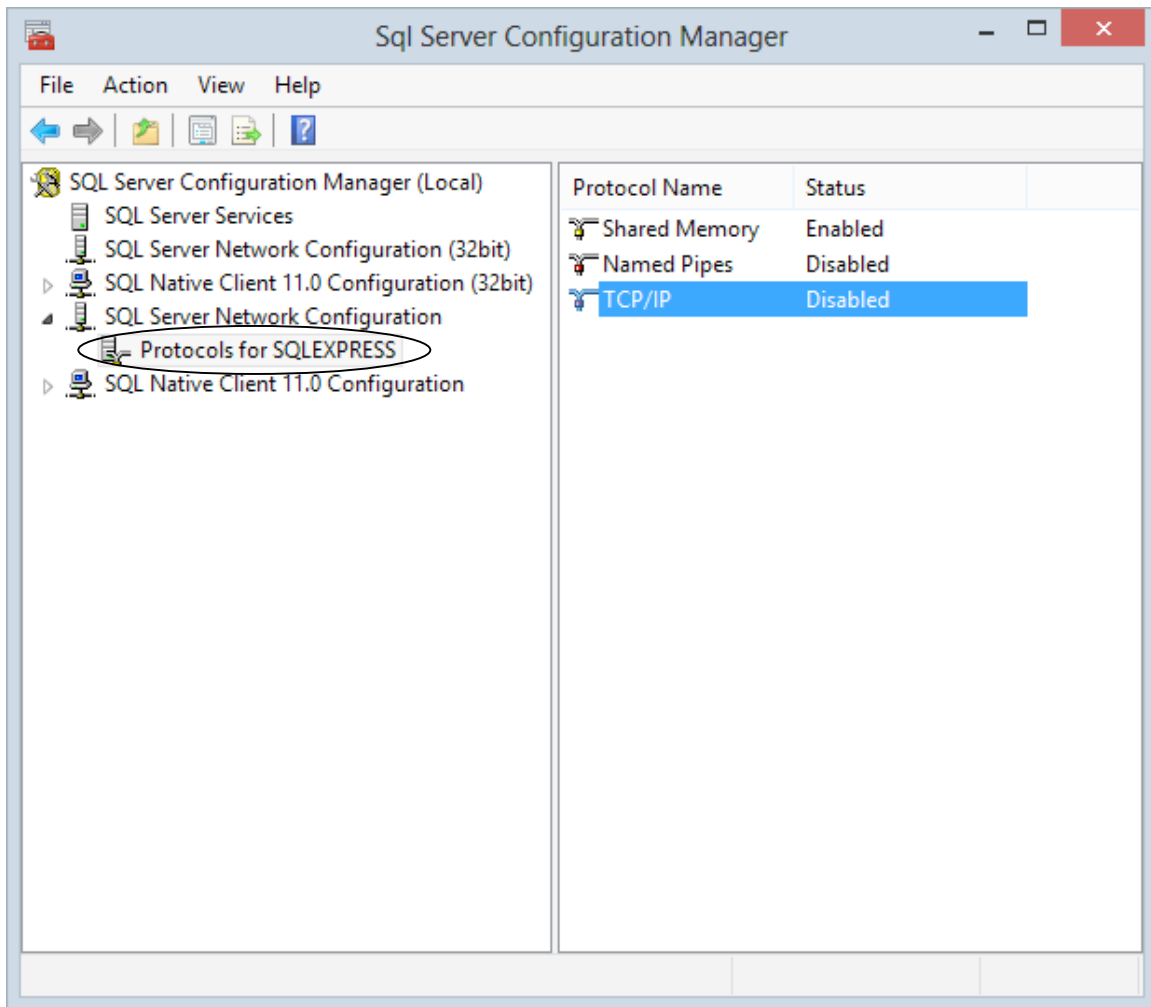
### 4.1 Assignment of TCP/IP Ports

1. Open the **SQL Server Configuration Manager** via its Windows icon or **Start/ SQL Server Configuration Manager** (Windows 8) or **Start/ All Programs/ Microsoft SQL Server/ SQL Server Configuration Manager** (Windows 7, Vista, XP).



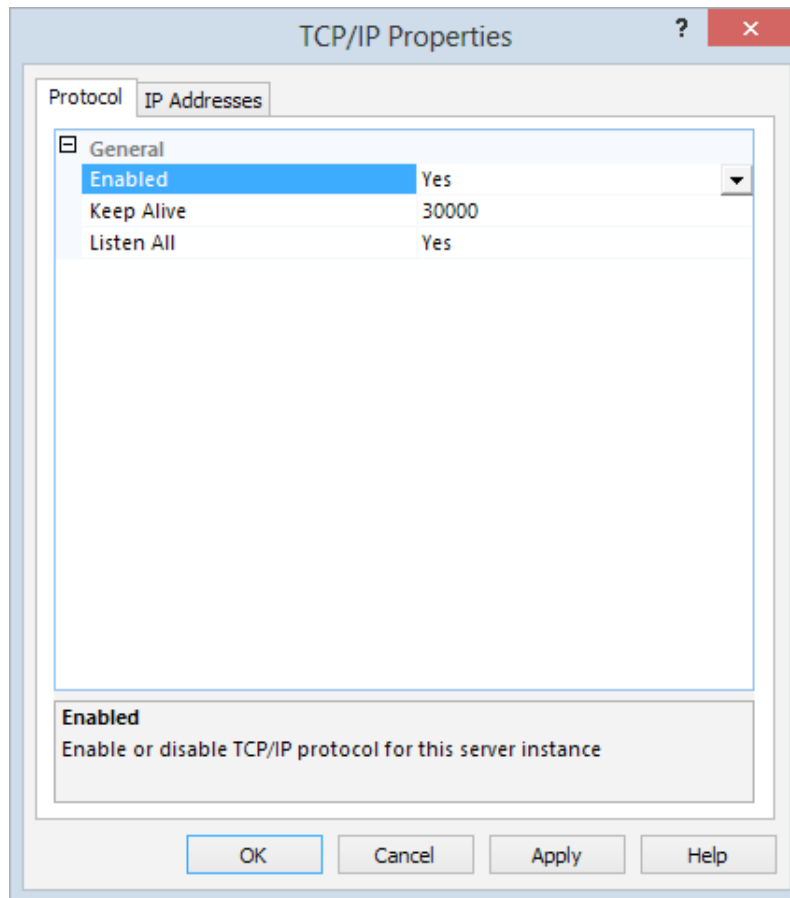
**NOTE:** Depending on your Windows Permission settings, a **User Account Control** window may display. Press the **Allow** button to proceed.

- Expand **SQL Server Network Configuration** from the decision tree and select **Protocols for MSSQLSERVER** (if using SQL Server 2012) or **Protocols for MSSQLEXPRESS** (if using SQL Server 2012 Express).

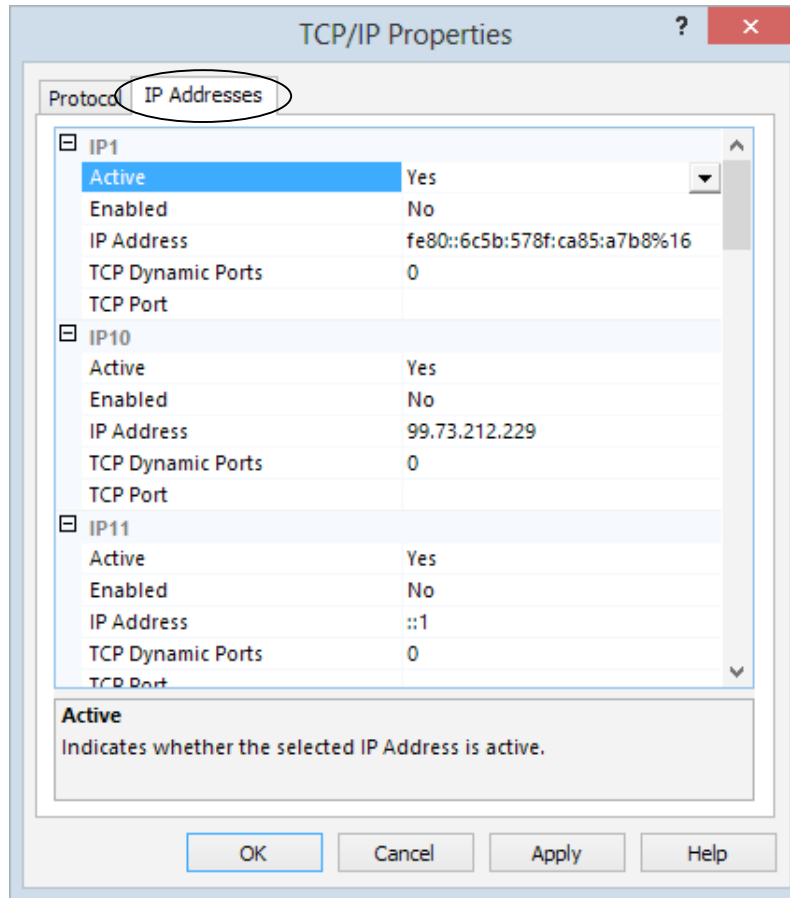


- Double-click on **TCP/IP** to open the **TCP/IP Properties** window.

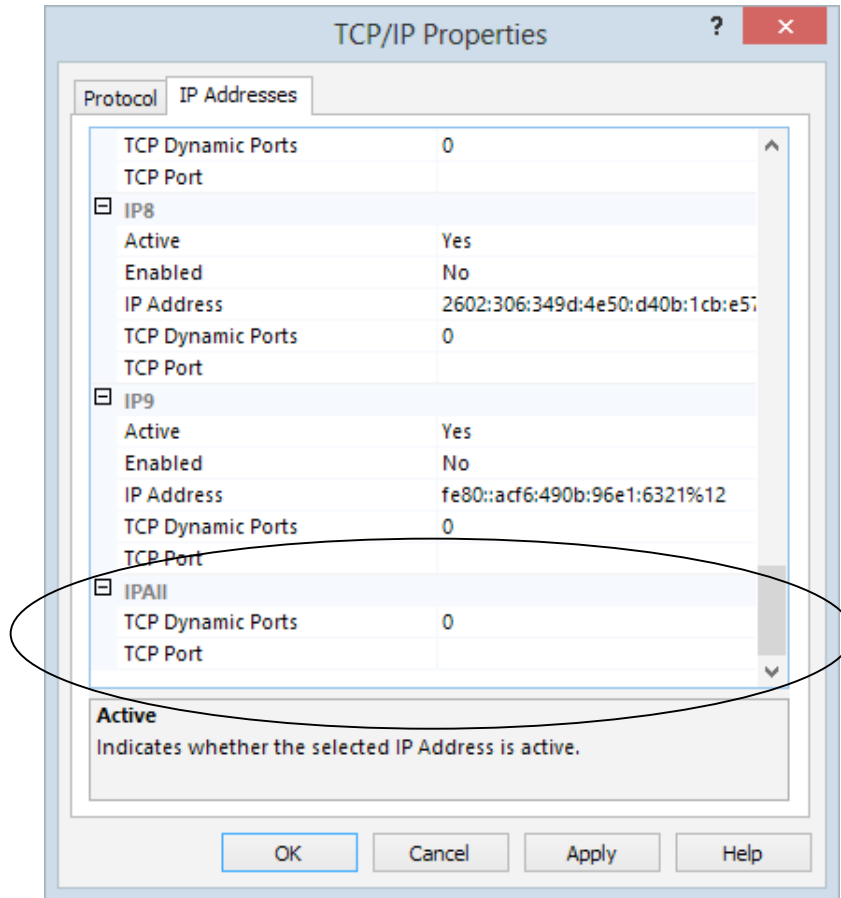
4. Within the **TCP/IP Properties** window, within the **Enabled** row, pull the dropdown to select **Yes**.



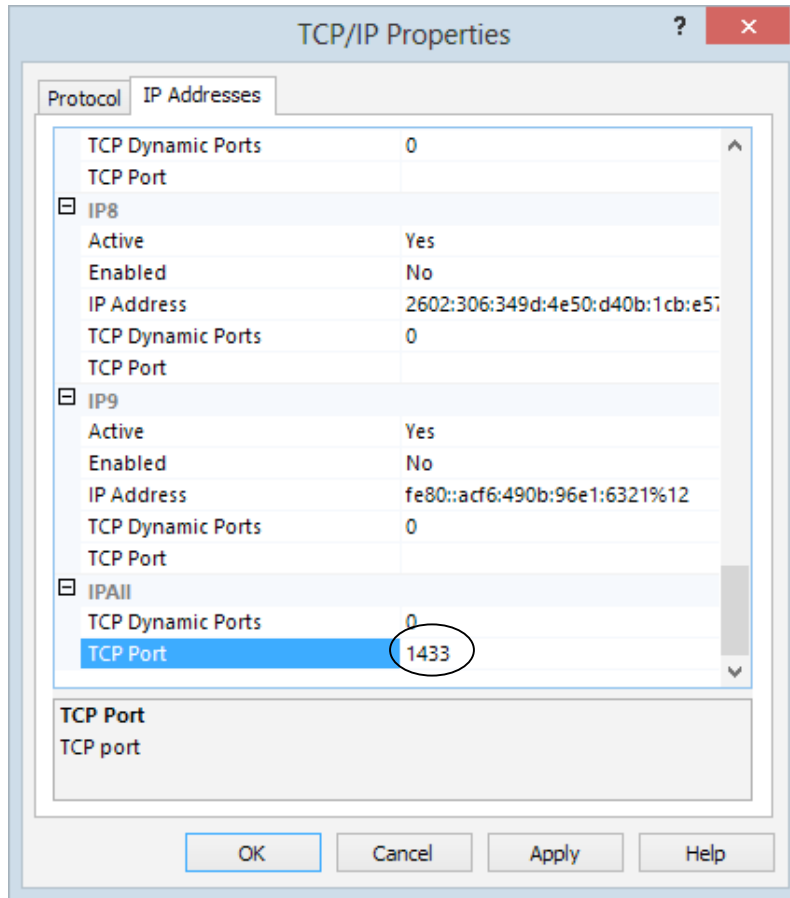
5. Select the **IP Addresses** tab.



6. Scroll down to IPALL.



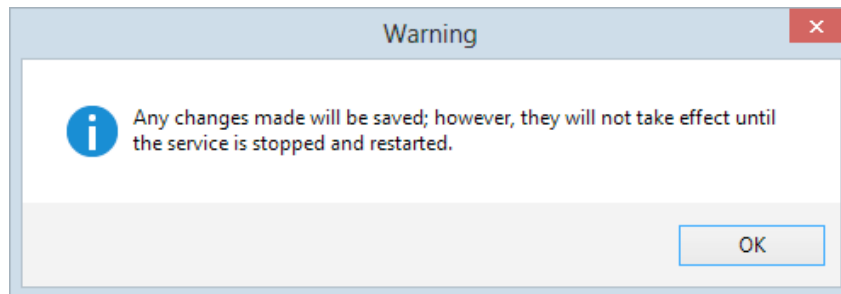
7. Within the IPAll, change **TCP Ports** to **1433**.



8. Press the **Apply** button to save the configuration.

**NOTE:** TCP Dynamic Ports is automatically assigned randomly during installation.

9. A Warning window will open, explaining that the services need to be stopped and restarted. Press the **OK** button.

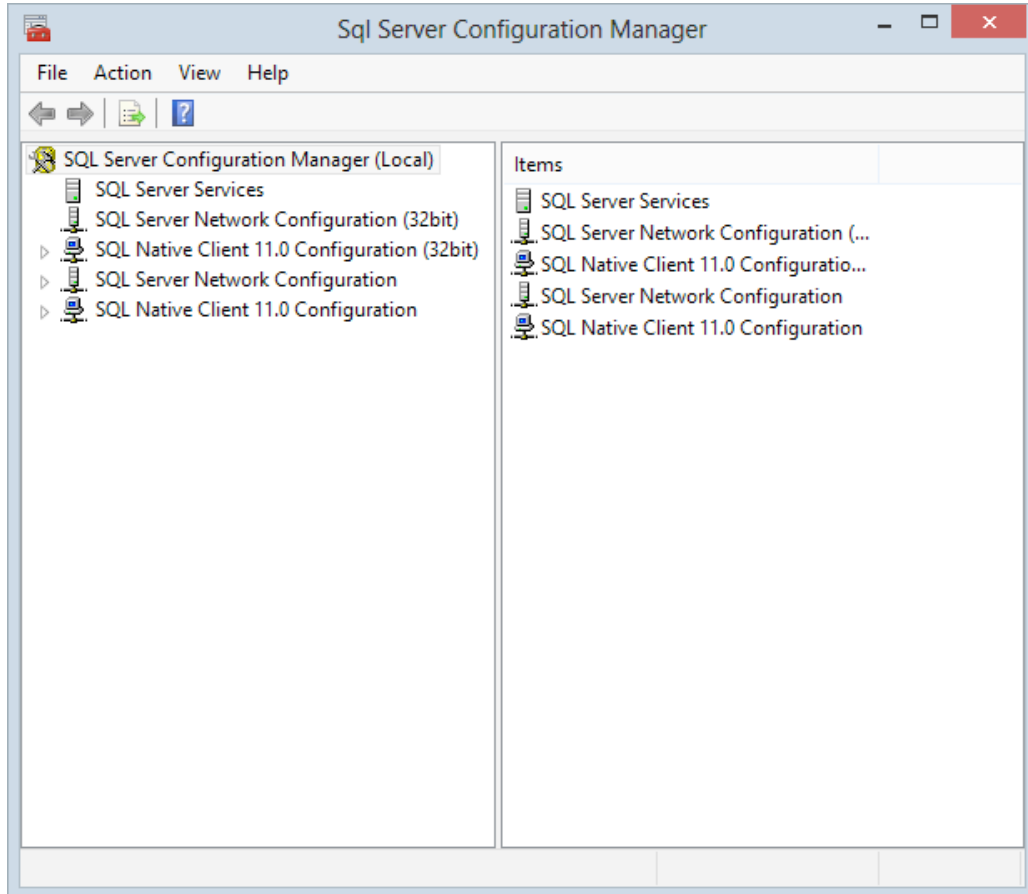


10. Press the **OK** button on the TCP/IP Properties window to close.

**NOTE:** It will be necessary to stop and restart the program for the new TCP/IP settings to take effect.

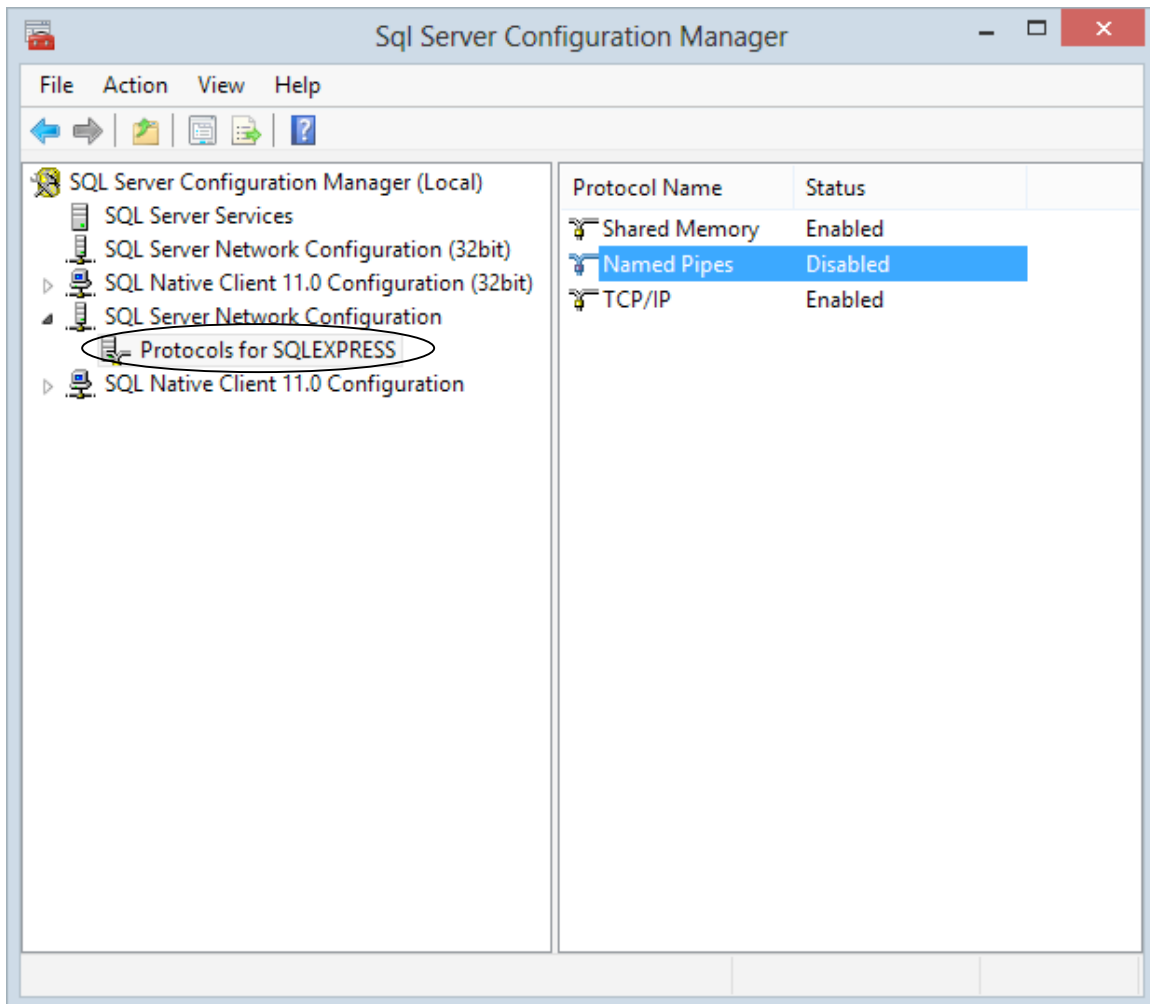
## 4.2 Enabling Named Pipes

1. Open the **SQL Server Configuration Manager** via **Start/ SQL Server Configuration Manager** (Windows 8) or **Start/ All Programs/ Microsoft SQL Server/ SQL Server Configuration Manager** (Window 7, Vista, XP).



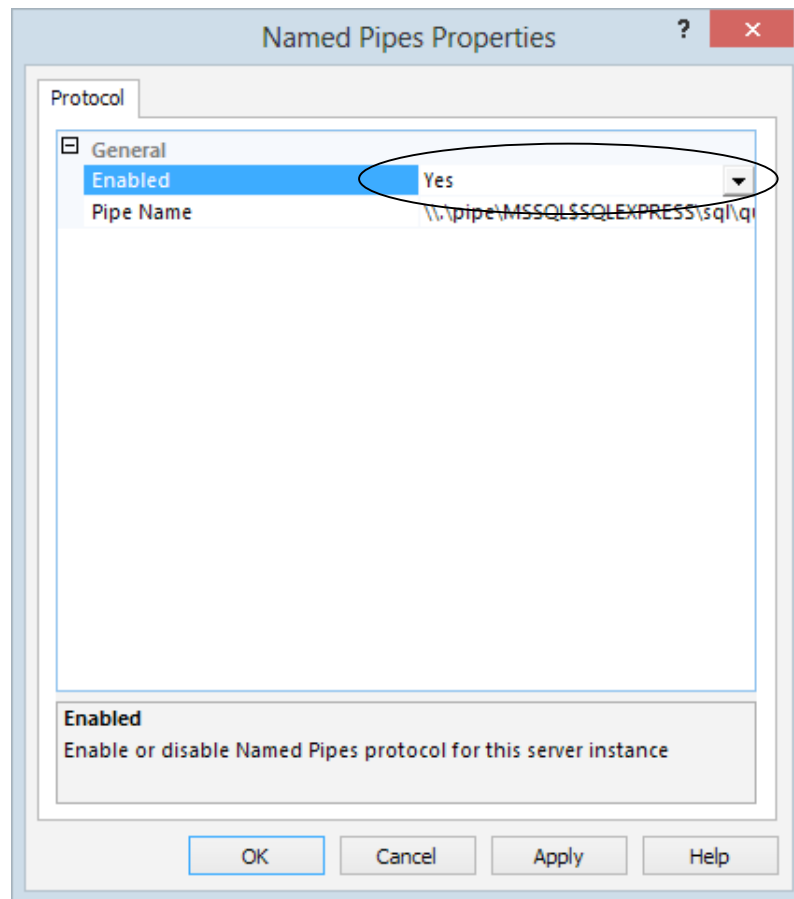


- Expand **SQL Server Network Configuration** from the decision tree and select **Protocols for SQLEXPRESS** (if using SQL 2012 Express) or **Protocols for MSSQLSERVER** (if using SQL 2012).



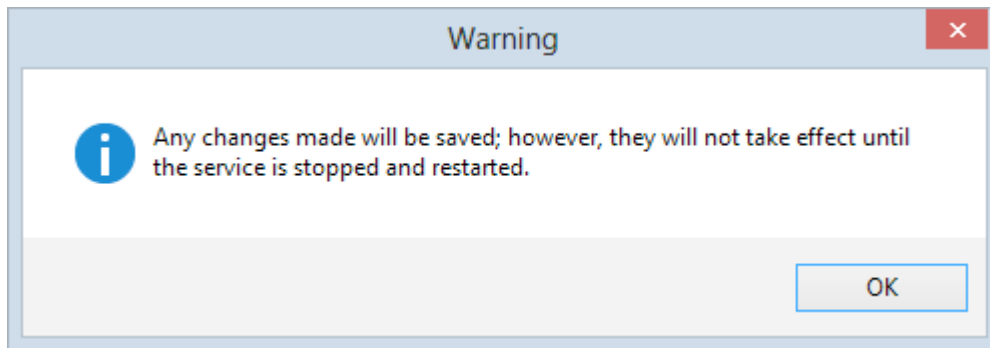
- Double-click on **Named Pipes** to open the **Named Pipes Properties** window.

4. Within the **Named Pipes** Properties window, pull the dropdown to select **Yes**.



5. Press the **Apply** button to save the configuration.

6. A **Warning** window will open, explaining that the services need to be stopped and restarted. Press the **OK** button.

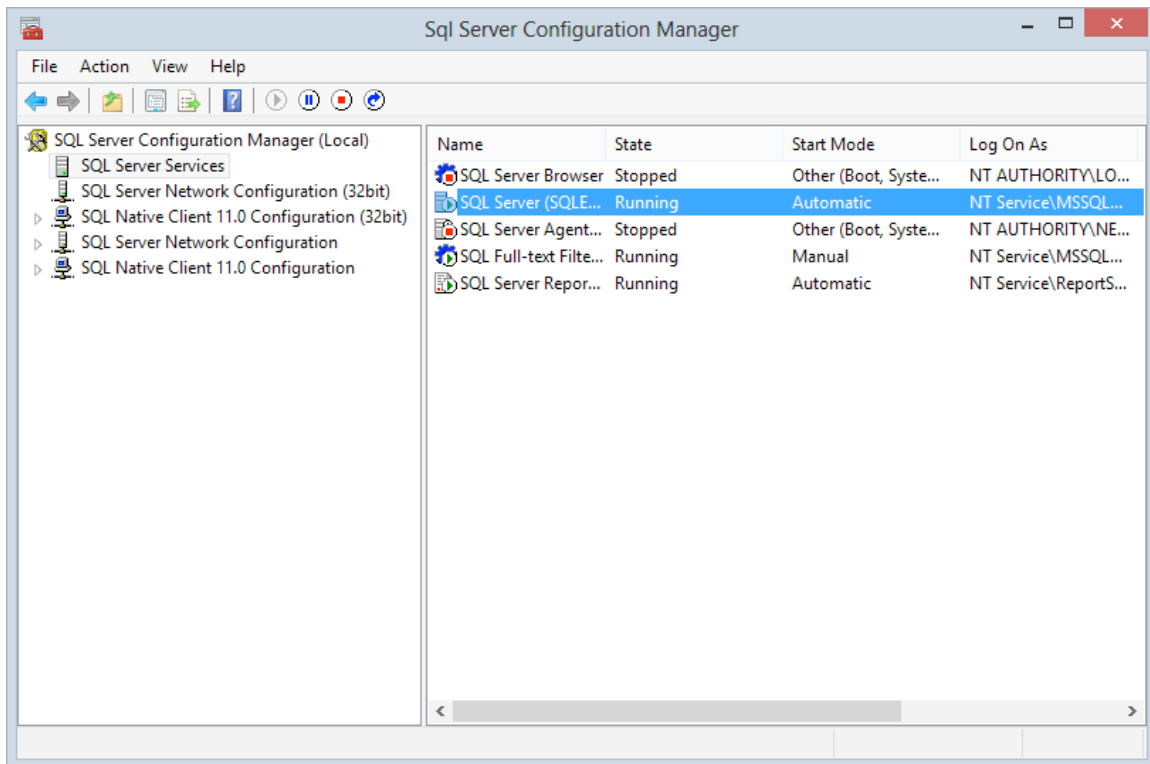


7. Press the **Ok** button on the **Named Pipes Properties** window to close.

**NOTE:** It will be necessary to stop and restart the program for the new TCP/IP settings to take effect.

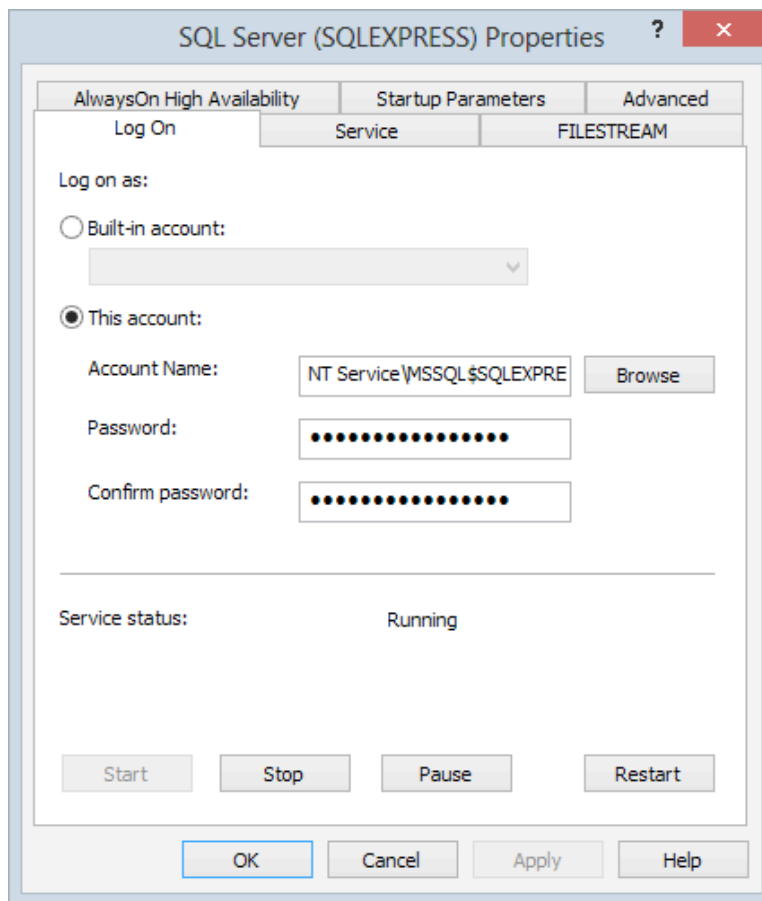
## 4.3 Restarting SQL Server Services

1. Open the **SQL Server Configuration Manager** via its Windows icon or **Start/ SQL Server Configuration Manager** (Windows 8) or **Start/ All Programs/ Microsoft SQL Server/ SQL Server Configuration Manager** (Windows 7, Vista, XP).
2. Double click on **SQL Server Services** within the Decision tree.

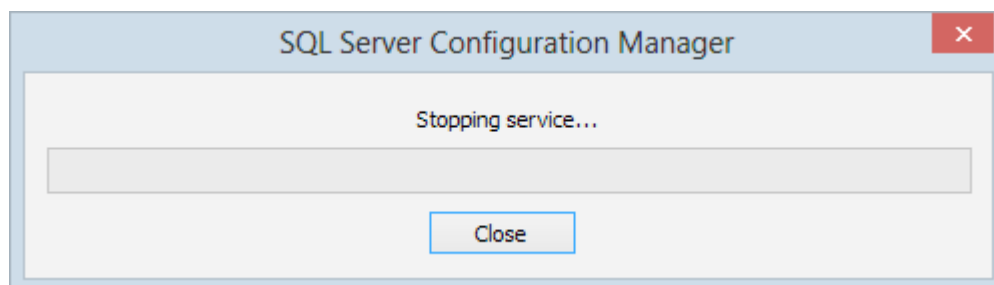


3. Double click on **SQL Server (SQLEXPRESS)** (if using SQL 2012 Express) or **SQL Server (MSSQLSERVER)** (if using SQL 2012).

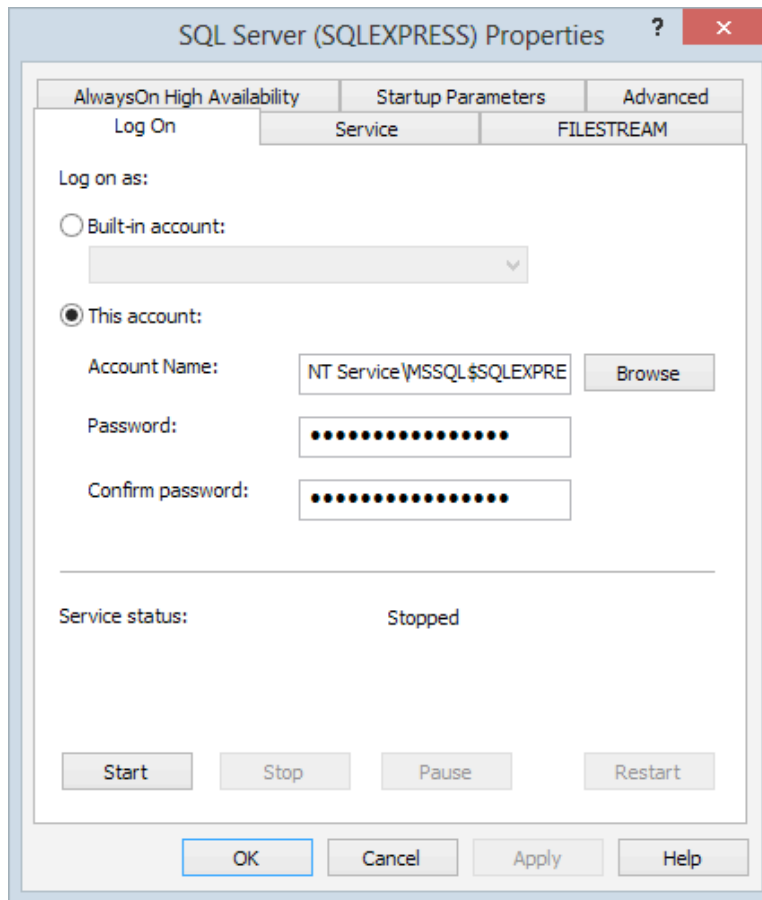
4. In the **SQL Server (MSSQLSERVER) Properties** window, press the **Stop** or **Restart** button.



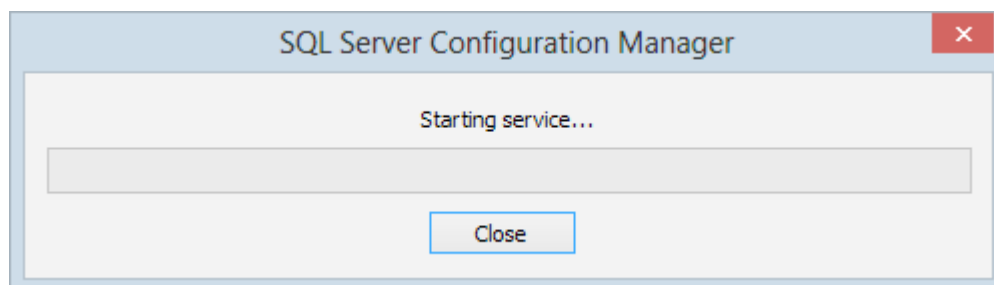
5. The **SQL Server Configuration Manager** progress screen will display.



6. If you pressed **Stop**, press the **Start** button to restart services



7. The **SQL Server Configuration Manager** progress bar will return.



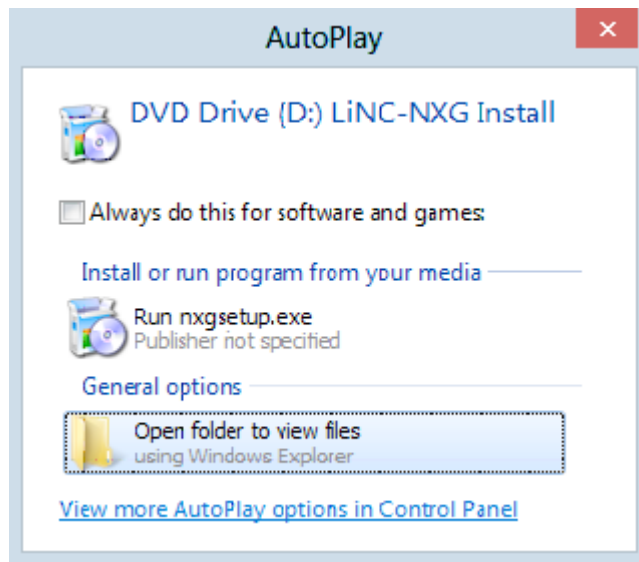
8. Press the **OK** button to close the SQL Server Properties window.
9. Select **File** from the pull-down menu and then **Exit** to close **SQL Server Configuration Manager** screen.

**NOTE:** The Restart Button will both Stop and Restart SQL Server in one action.

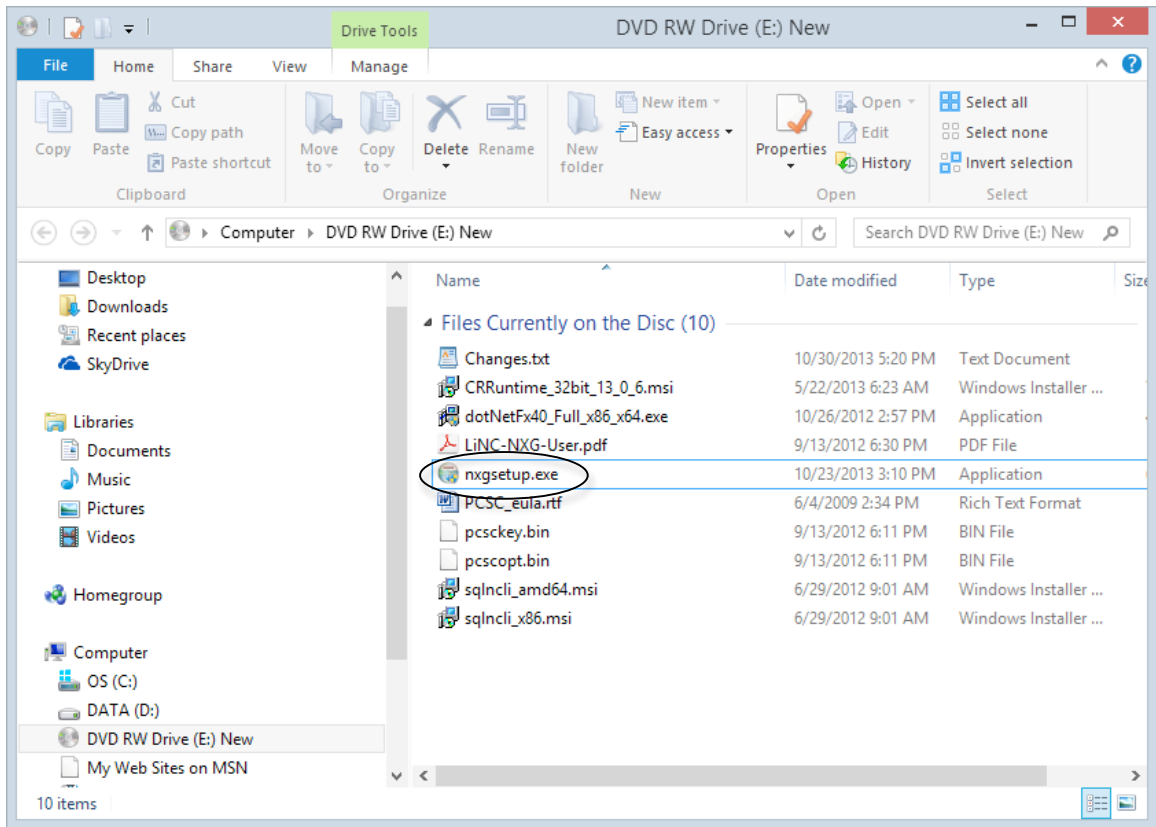
## 5.0 Installing LiNC-NXG

**NOTE:** The system should have a functional version of SQL Server 2012, SQL Server 2012 Express, SQL Server 2008 R2, or SQL Server 2008 R2 Express prior to starting this installation.

1. Insert the **LiNC-NXG** DVD into the DVD-ROM drive or download the appropriate files from the PCSC Server.
2. If using a DVD, LiNC-NXG will activate an AutoPlay of the LiNC-NXG Installer. If you choose, you can instead press the **Open folder to view files** icon.



3. When you open the LiNC-NXG files, you will see multiple folders and files.



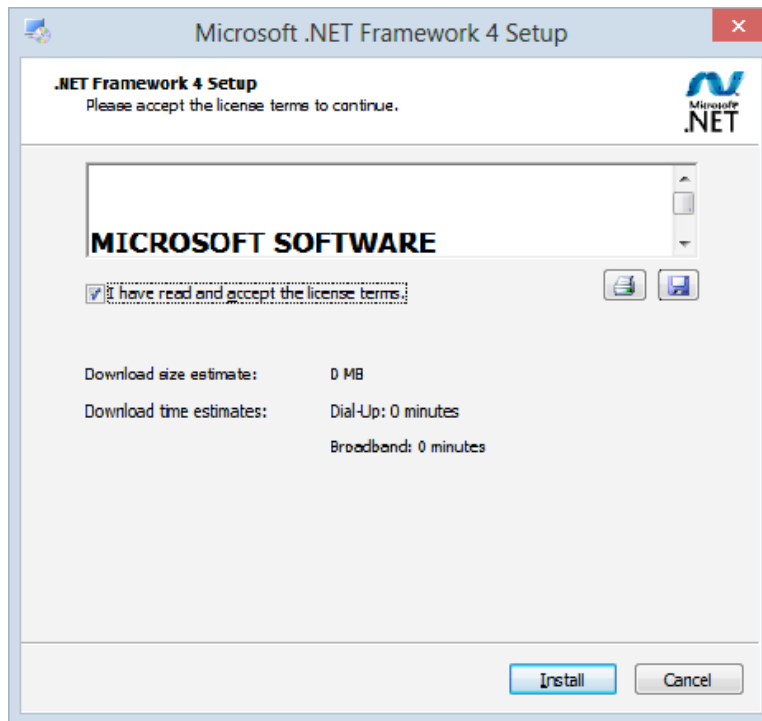
4. In the LiNC-NXG window, double-click the **NXG Setup** application.

**NOTE:** For Vista Business Edition Users, the SQL Server 2012 Express application must be **Run as administrator**:

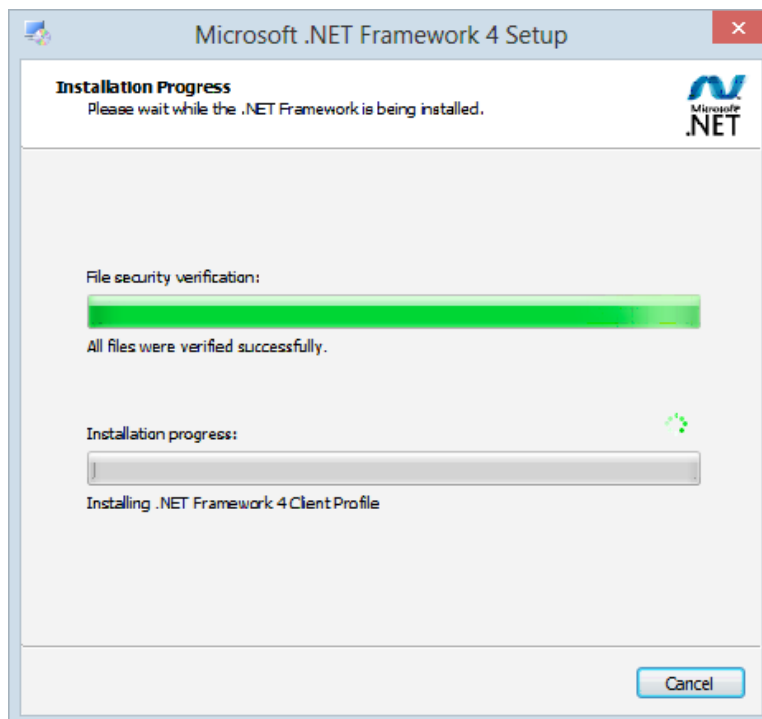
- Select the **LINC-NXG** icon
- Right-click on the application
- Select **Run as administrator**



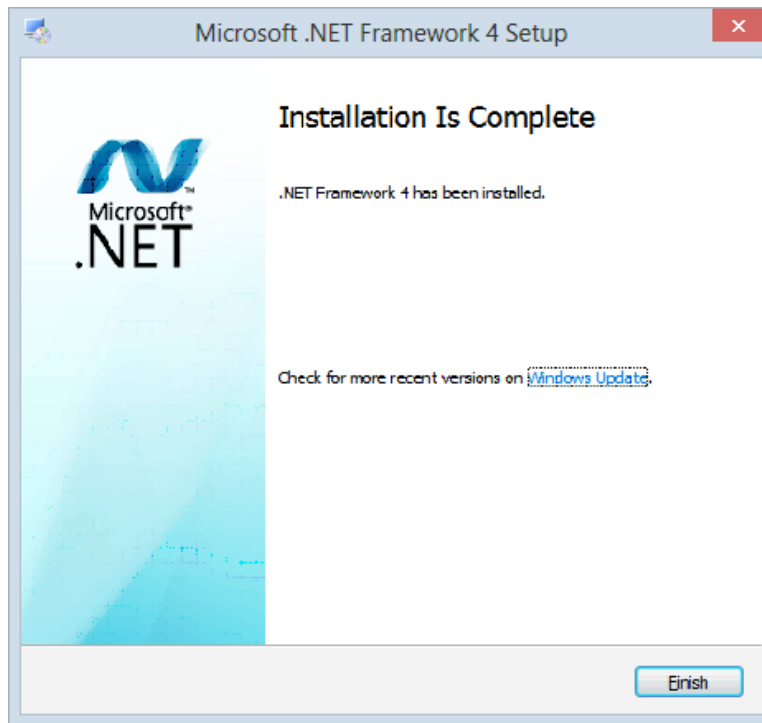
5. If the computer does not have Microsoft .NET Framework 4 installed, it will automatically start the installation with that software. Press the **Install** button to continue.



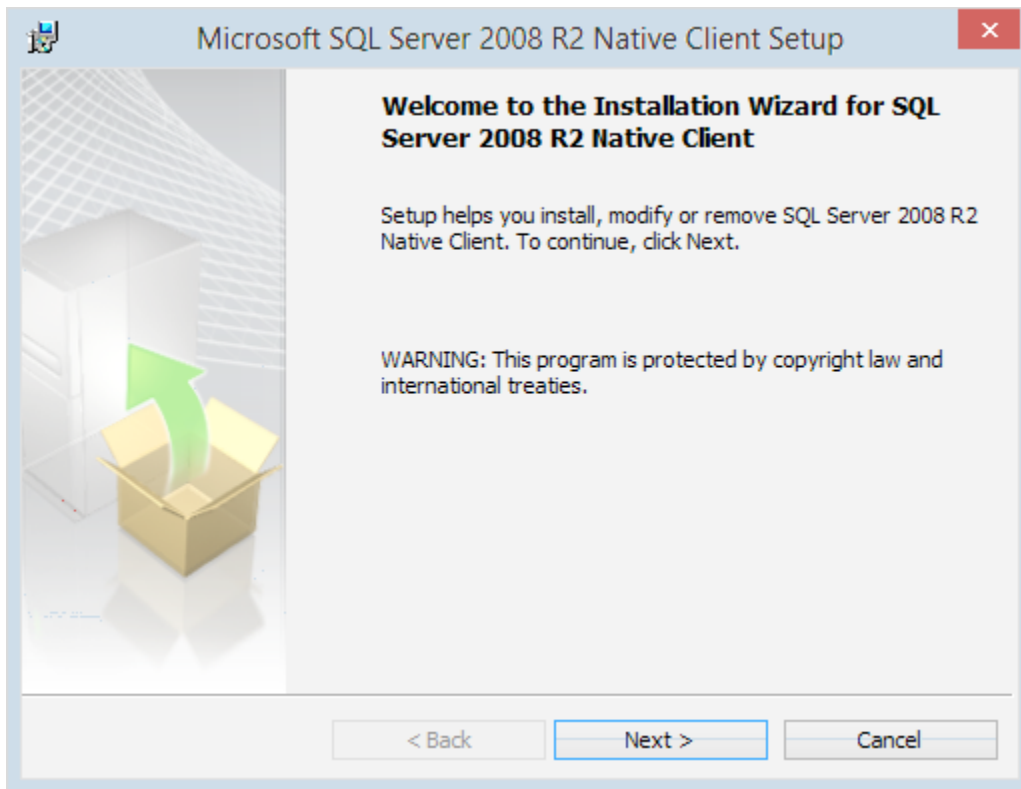
6. This will bring you to the **Microsoft .NET Framework 4 – Installation Progress** window.



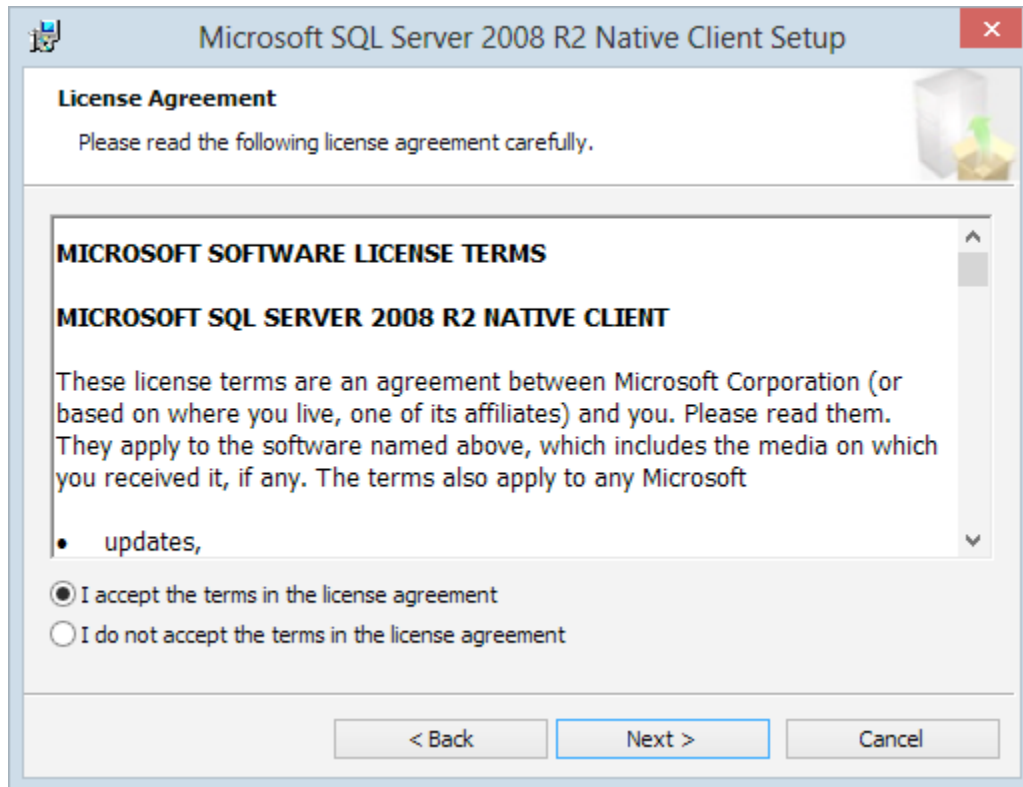
7. Once complete, the **Installation is Complete** window will appear. Press the **Finish** button.



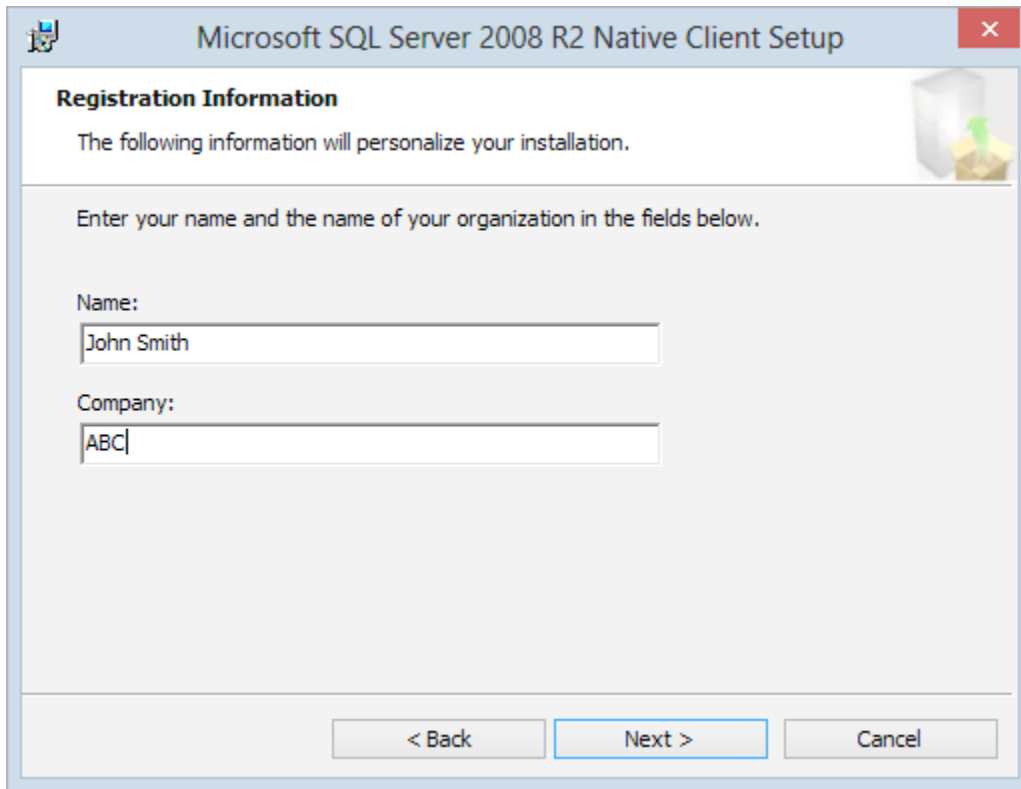
8. If the computer does not have Microsoft .SQL Server Native Client installed, it will automatically start the installation with that software. Press the **Next** button to continue.



9. The License Agreement window loads. Select the "I accept the terms of the license agreement" radio box and click **Next** to continue.

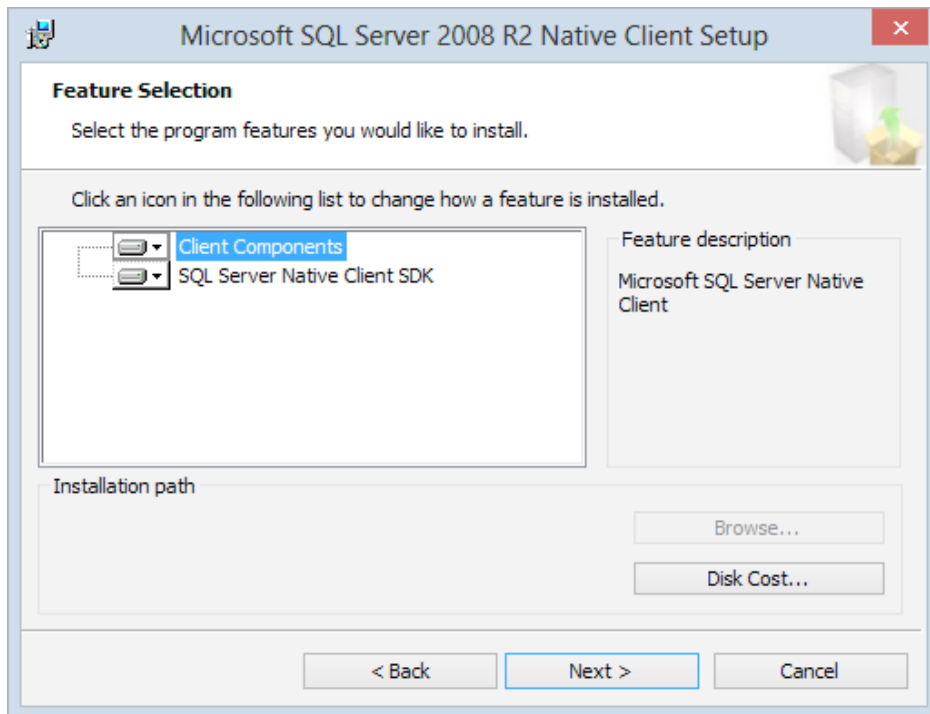


10. You are asked for registration information. Type in the appropriate name and company and click **Next**.

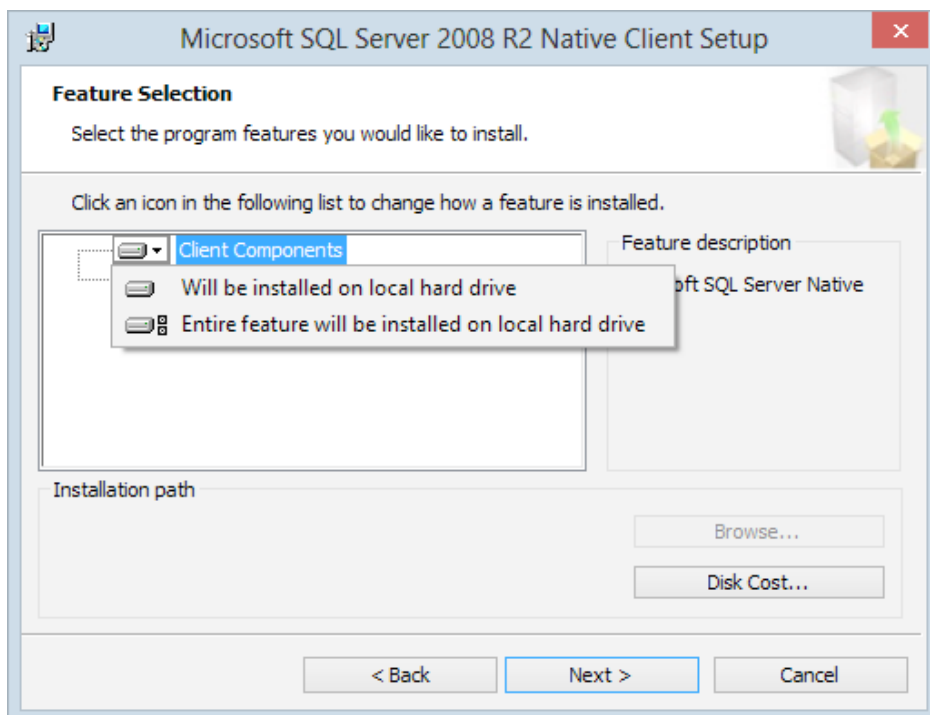


The screenshot shows a Windows dialog box titled "Microsoft SQL Server 2008 R2 Native Client Setup". The dialog has a standard Windows title bar with a minimize button, a maximize button, and a close button (red 'X'). The main content area is titled "Registration Information" and contains the text: "The following information will personalize your installation." Below this, there is a sub-instruction: "Enter your name and the name of your organization in the fields below." There are two text input fields: the first is labeled "Name:" and contains the text "John Smith"; the second is labeled "Company:" and contains the text "ABC". At the bottom of the dialog, there are three buttons: "< Back", "Next >" (which is highlighted with a blue border), and "Cancel".

11. Select the feature sets you need. **Client Components** is required for LiNC-NXG installation.

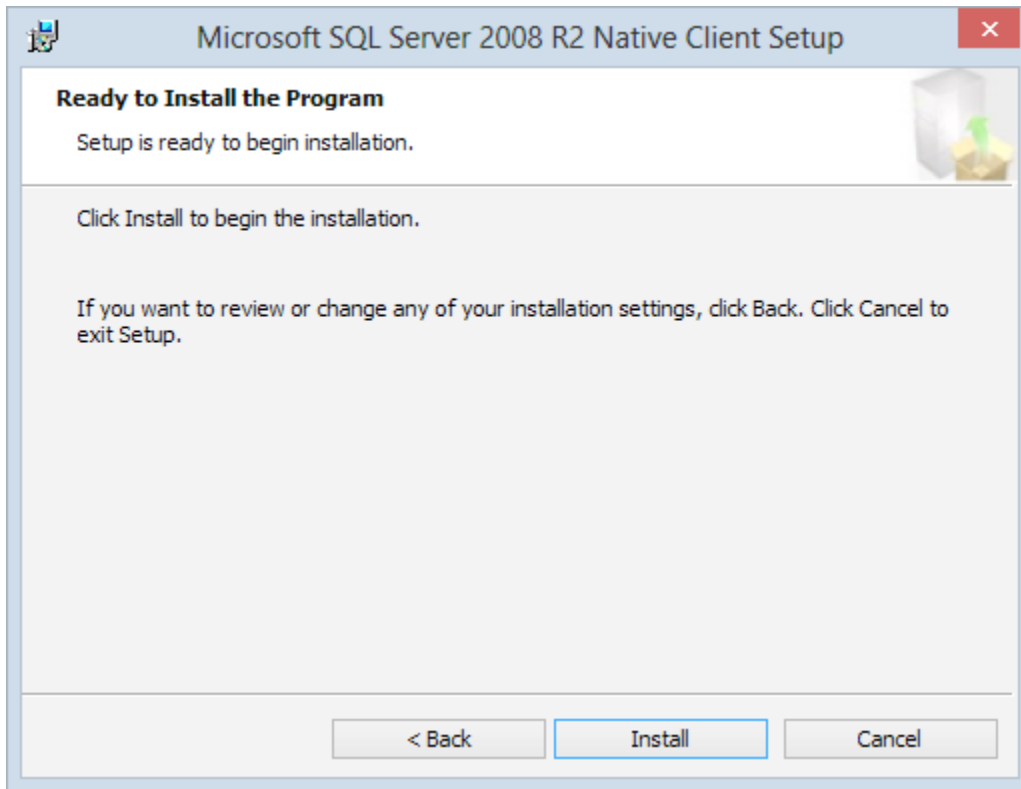


12. Right-click **Client Components** and select, "Will be installed on local hard drive." SQL Server Native Client SDK is optional and does not require installation.

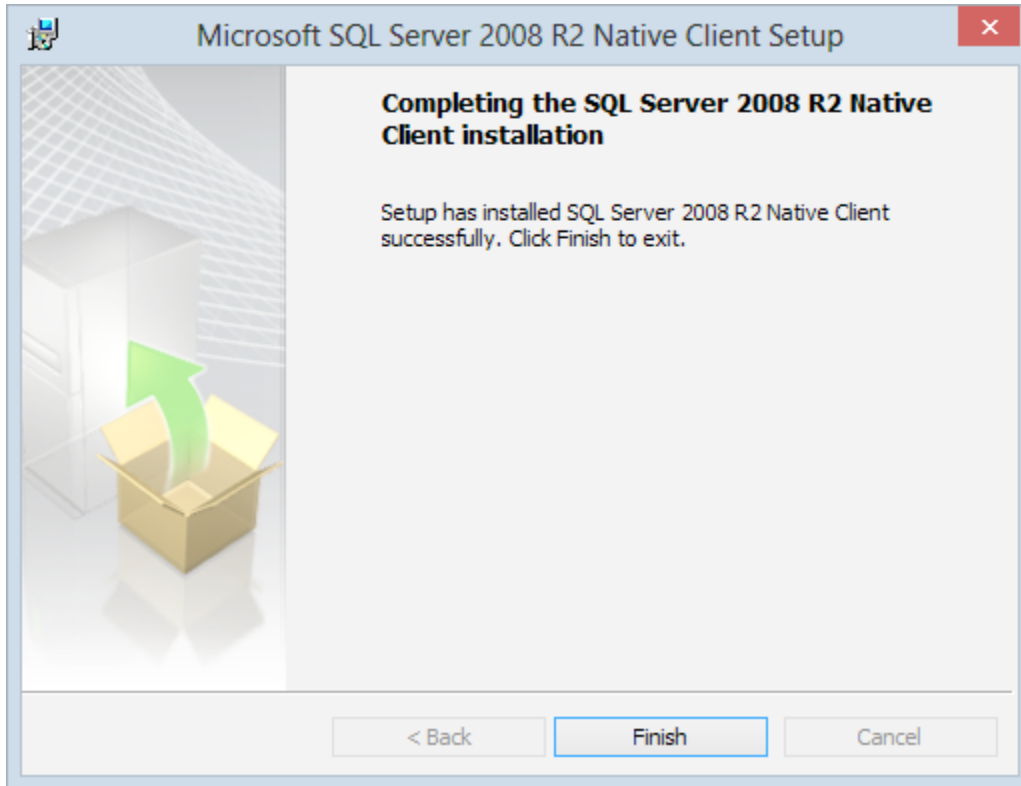


13. Press the **Next** button.

14. Click **Install** to begin the installation

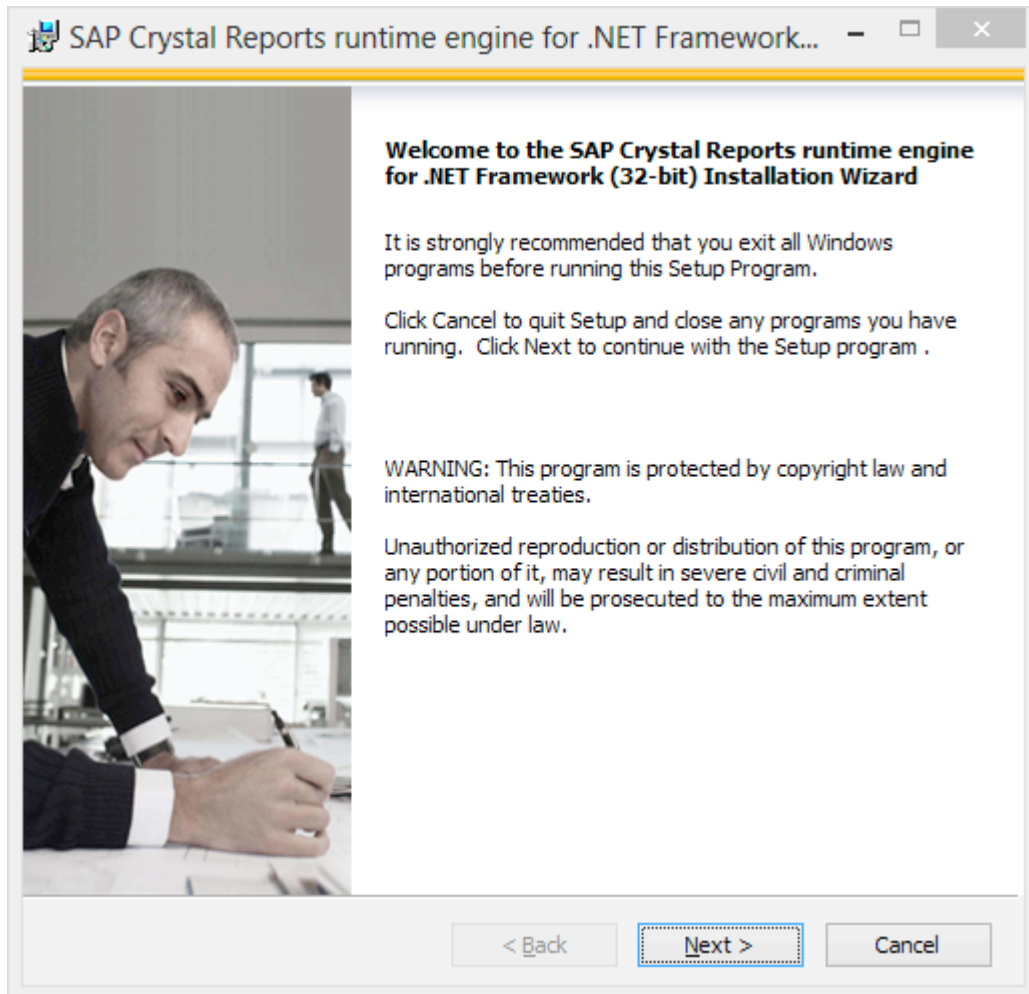


15. When the installation is complete, click Finish to proceed to the next step in LiNC-NXG installation.

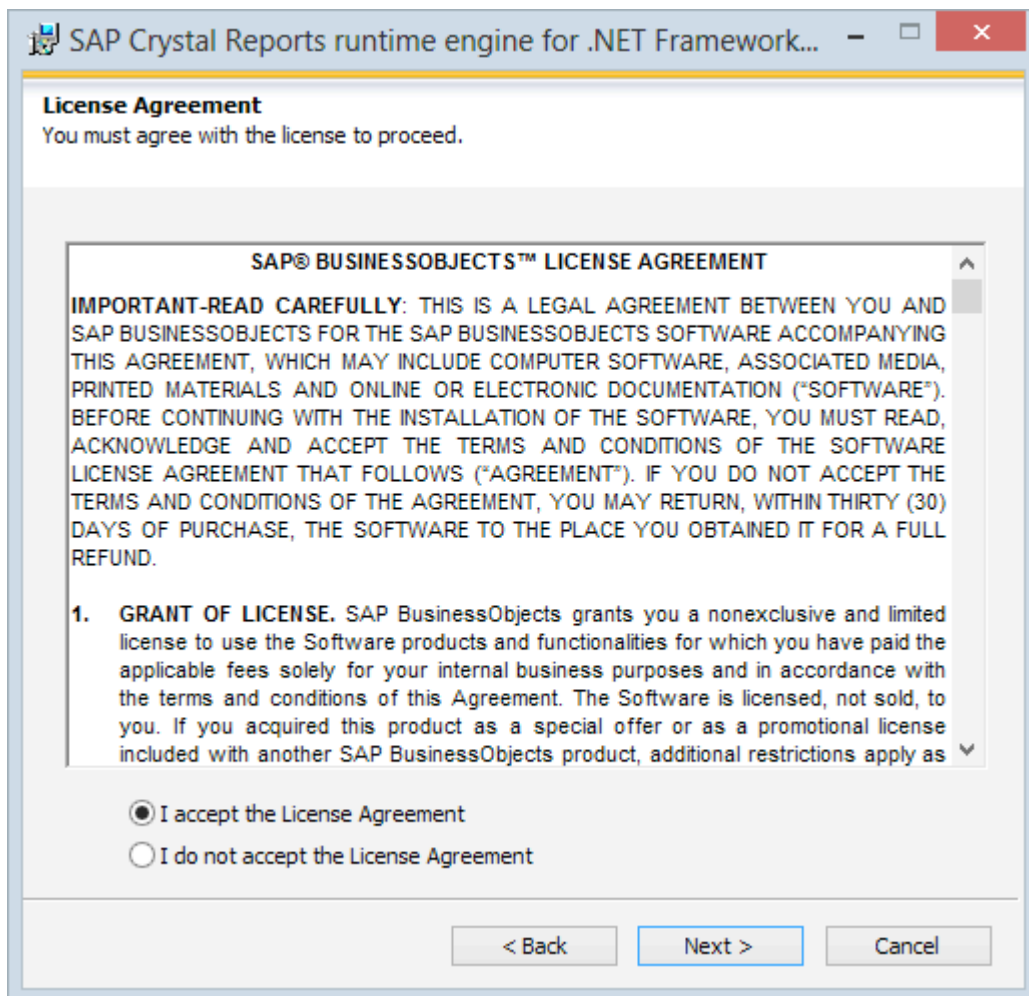




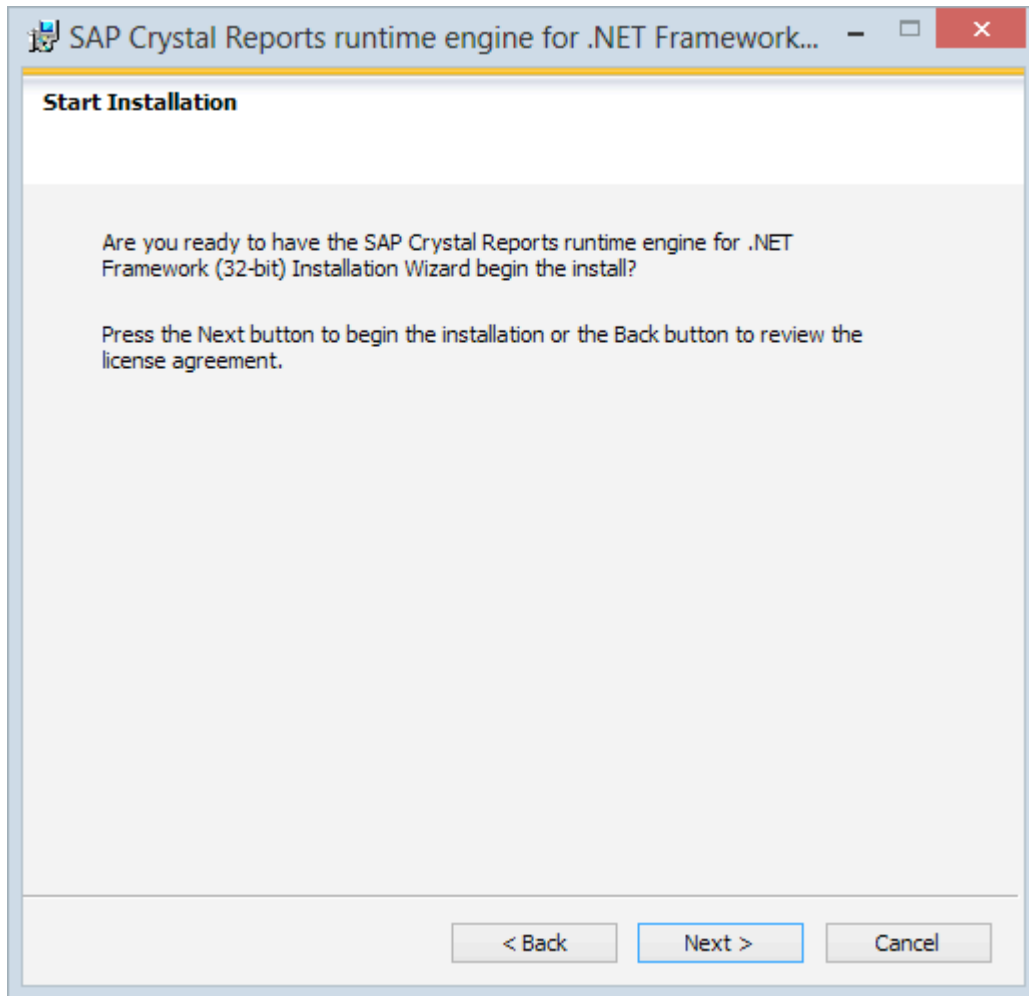
16. Once the .NET installation is complete, the system will install the latest version of SAP Crystal Reports. Press the **Next** button.



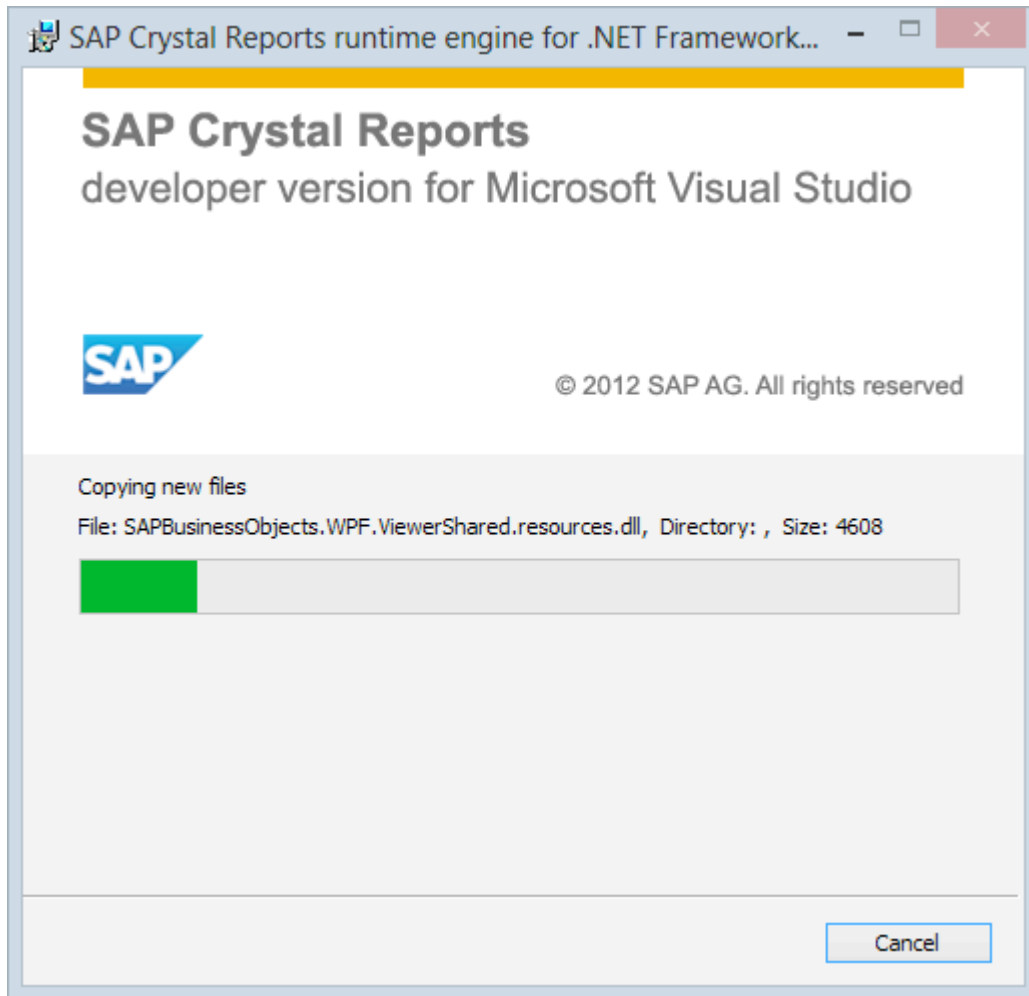
17. The SAP Crystal Reports – License Agreement will appear. Select the “I accept the License Agreement” radio button and press the **Next** button.



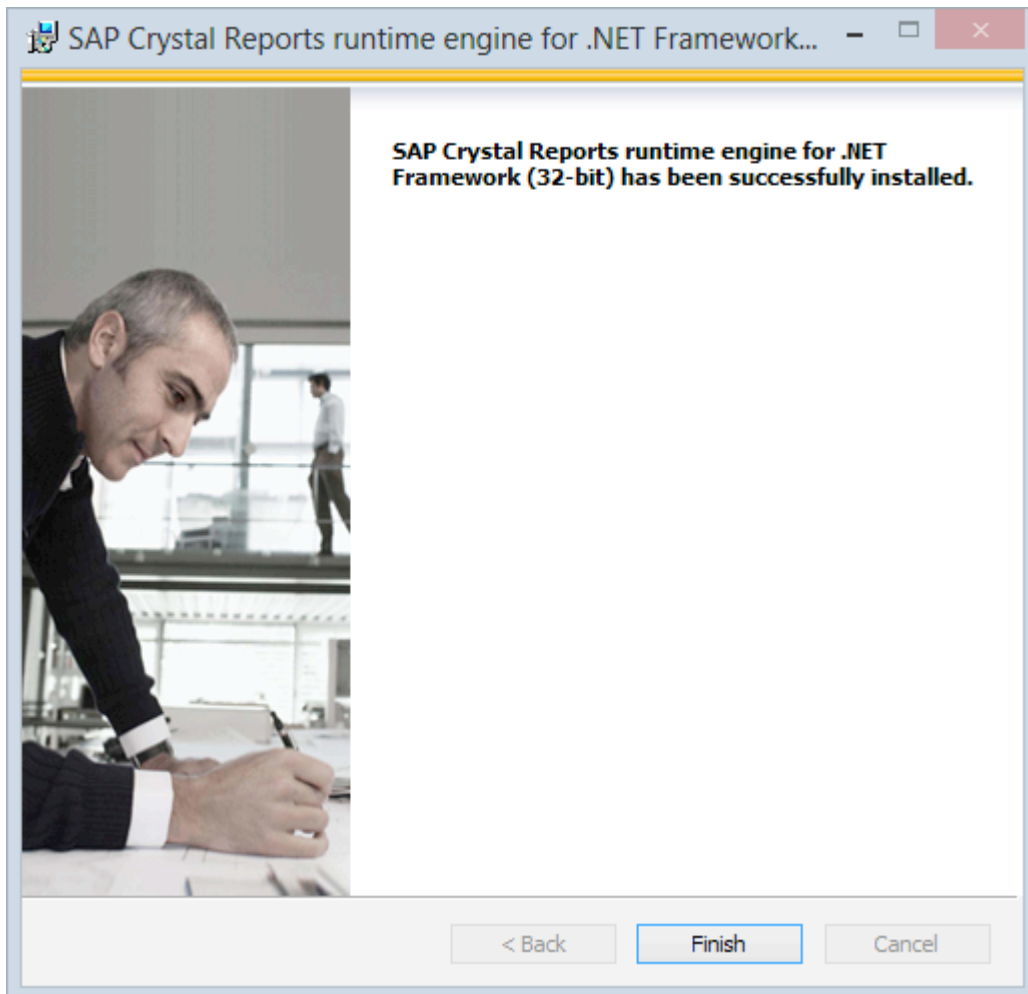
18. The SAP Crystal Reports – Start Installation window will appear. Press the **Next** button.



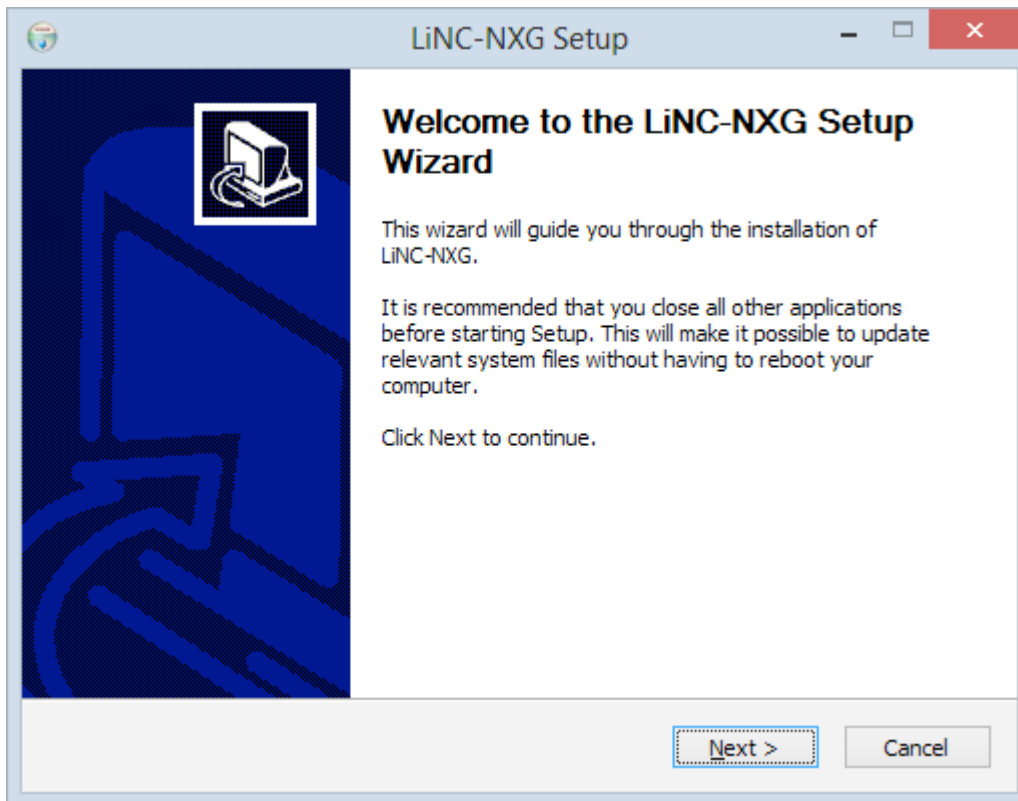
19. The installer will now install SAP Crystal Reports and all its components.



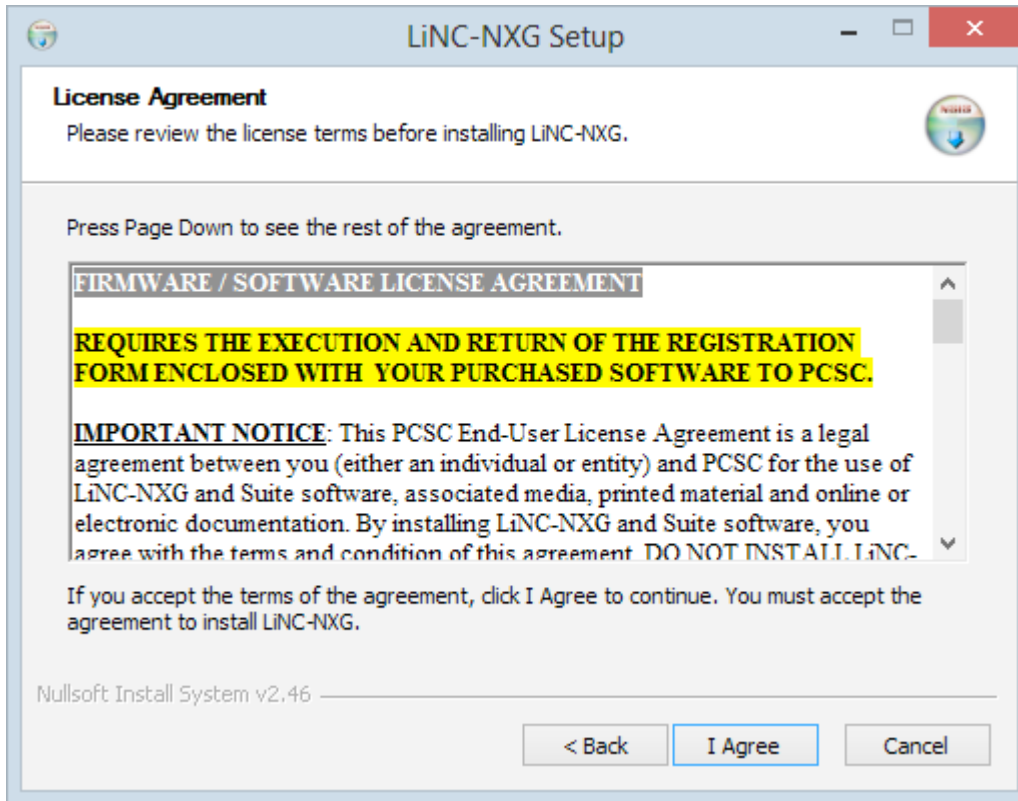
20. When SAP Crystal Reports installation is complete, click **Finish** to launch the LINC-NXG Installation Wizard.



21. The LiNC-NXG Installation Wizard launches. Click **Next**.



22. The LiNC-NXG License Agreement will appear. Press the **I Agree** button



23. The **Customer Information** window will load. Fill in the **Name** and **Organization** fields. Additionally, fill in the **Serial number** of the program that you received from PCSC or your PCSC-approved dealer.

**NOTE:** Please reference the LiNC-NXG software DVD for the serial number.

The screenshot shows the 'Customer Information' window in the LiNC-NXG Setup. The window has a title bar with 'LiNC-NXG Setup' and standard Windows window controls. The main content area is titled 'Customer Information' and contains the following text and input fields:

Enter your name and company or organization in the box below. The installer will use this information for subsequent installations.

Name:

Organization:

Enter your serial number below. The installer will use this information for subsequent installations.

Serial number:  
 -  -  -  -

At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'. The footer text reads 'Nullsoft Install System v2.46'.

**NOTE:** PCSC provides a Temporary License number within the LiNC-NXG install disk. The Temporary License will register the PC and will allow LiNC-NXG to be operational for 30 days before the program reverts back to a 48hr. DEMO mode.

**NOTE:** If you do not have a serial number (or Temporary License number), entering all zeros (0) will allow you to use the system within a 48hr. DEMO mode.

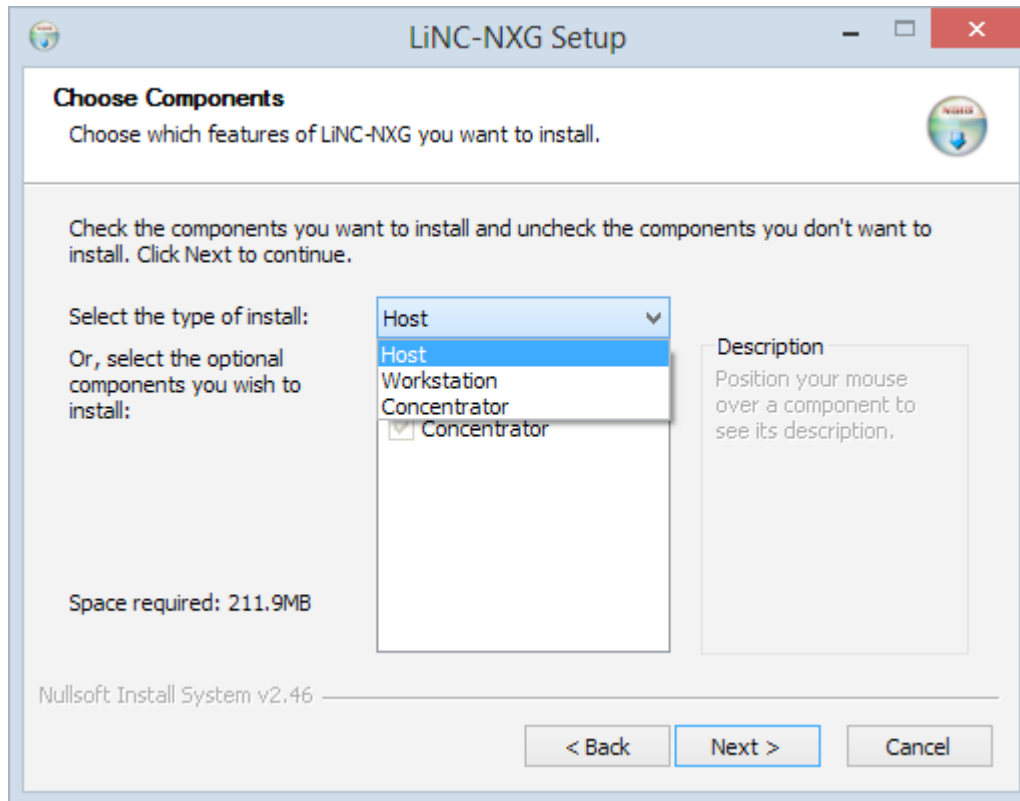
**NOTE:** In 'DEMO' mode, the default Site Code is 255.

**NOTE:** In 'DEMO' mode, the system is limited to the number of readers and cards that can be defined and also has a default Site Code of 255.

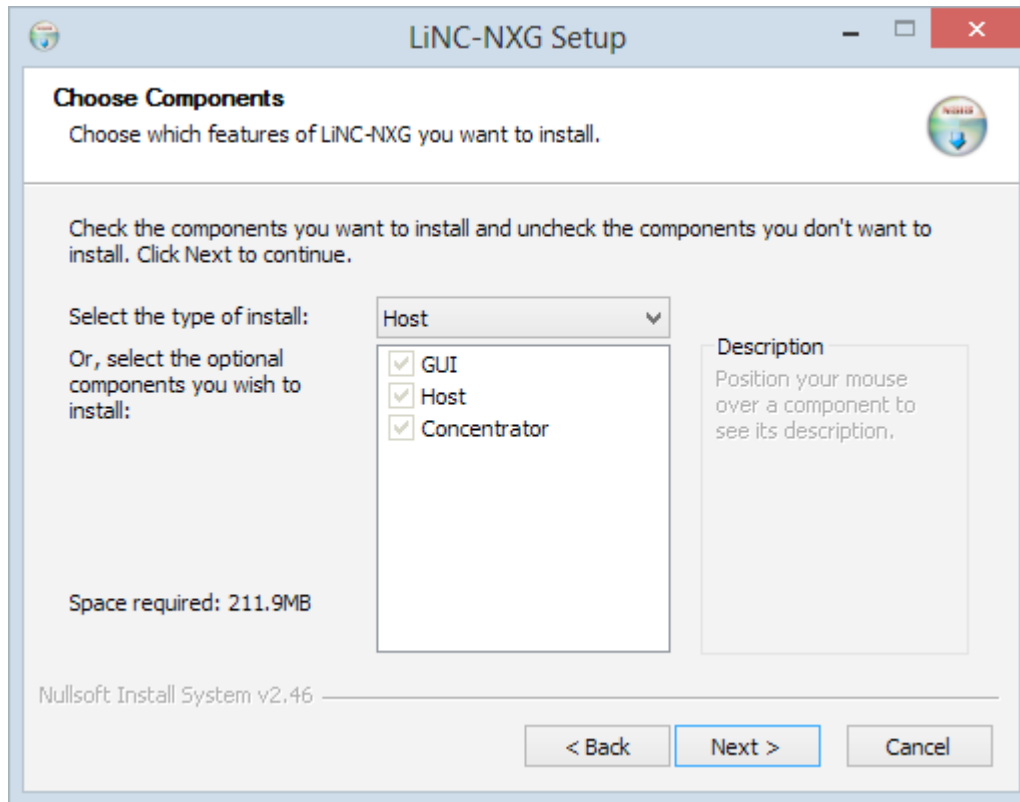
24. Press the **Next** button to continue.



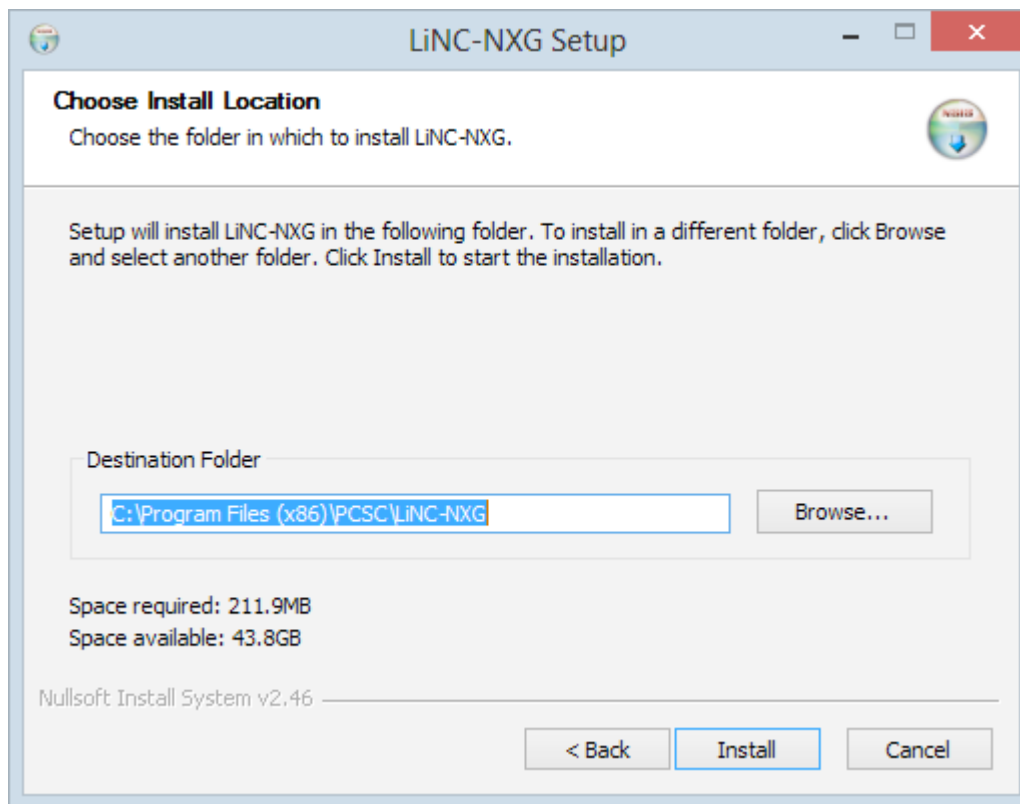
25. You will be asked to choose which components of LiNC-NXG you wish to have installed. Select **Host** as the type of install (the other types of install are “Workstation” and “Concentrator”).



26. In the **Choose Components** window, the Installation Wizard will automatically choose the necessary components for the installation. Click **Next** to continue.

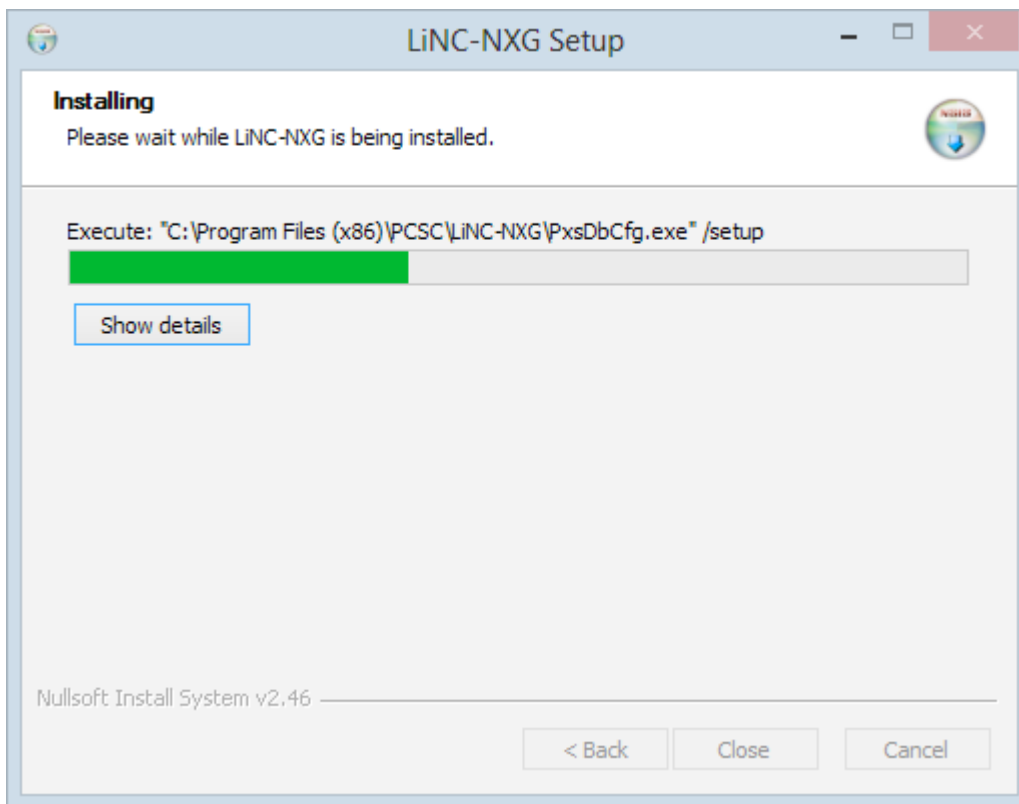


27. You will be brought to the **Choose Install Location** page. A default folder location on the local computer will be displayed. If a different location is desired, select the **Browse** button and navigate to the folder where LiNC-NXG is to be installed.



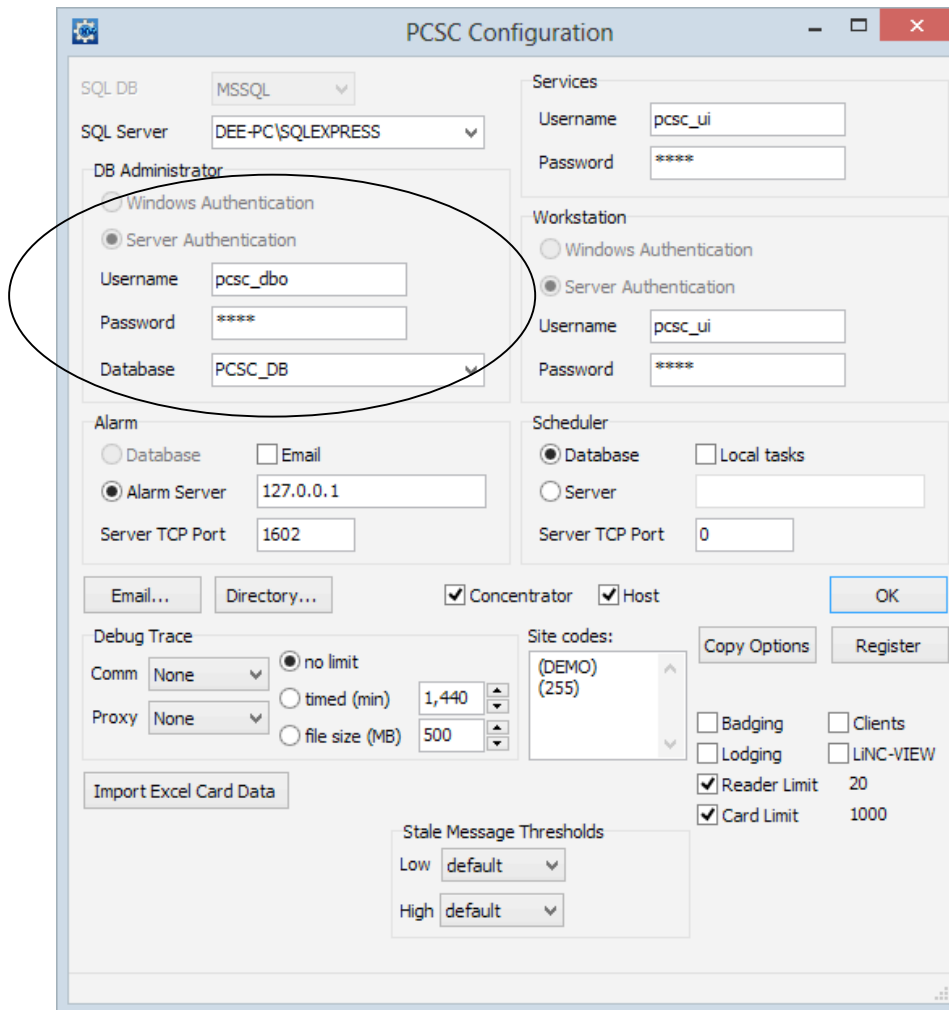
28. Press the **Install** button to continue.

29. **LiNC-NXG** will install on your system.



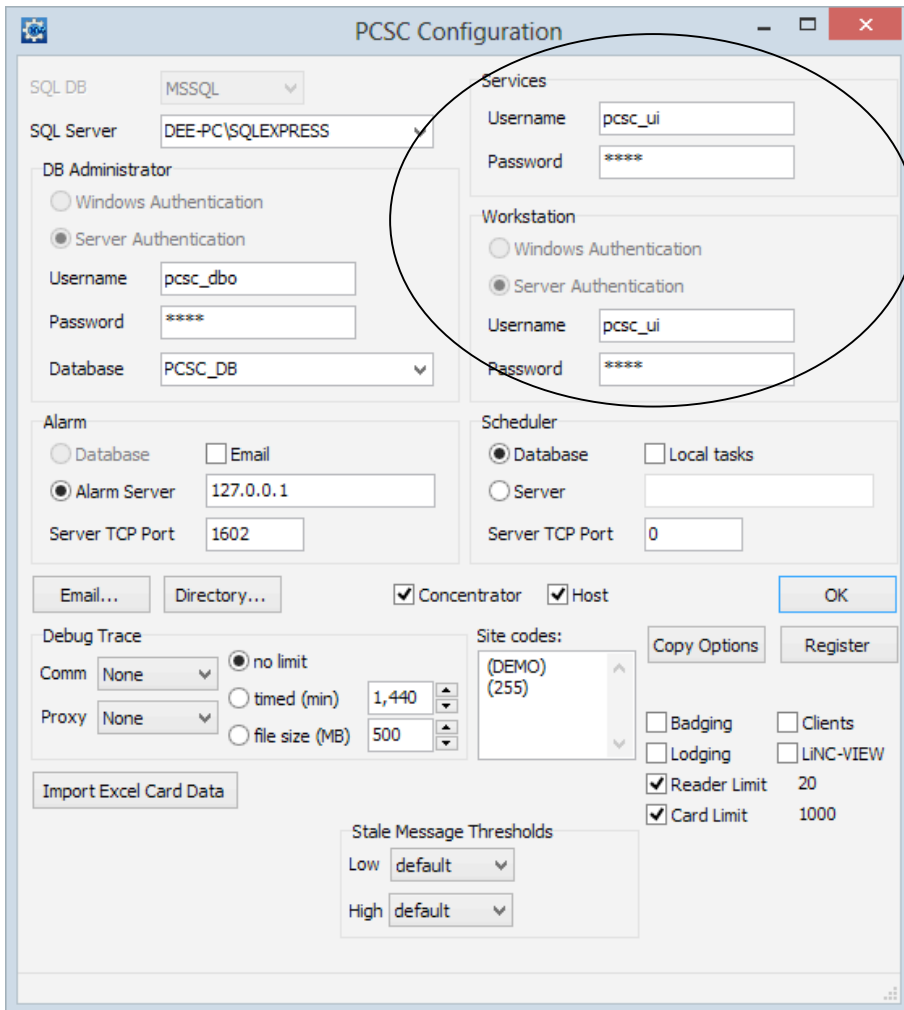
30. During the installation, the **PCSC Configuration** window will appear, confirming the location of the SQL database. Identify the SQL Server, the DB Administrator (DBO) authentication, and Services (DBRW) authentication to access the appropriate database.
31. In the **DB Administrator** section, add your new **DBO login (pcsc\_dbo)** and password for the **Username** and **Password**.

**NOTE:** You must input the **DBO login** and **password** to **DB Administrator** section of the **PCSC Configuration Utility** each time you update the database or upgrade LiNC-NXG.



**NOTE:** The SQL Server database may need to be identified by **[network location]\SQLEXPRESS** or **[network location]\SQL** in order to locate the proper **Database**.

32. In the **Services** and the **Workstation** (UI) sections, add the **DBRW login (pcsc\_ui)** and password **for the Username and Password**.



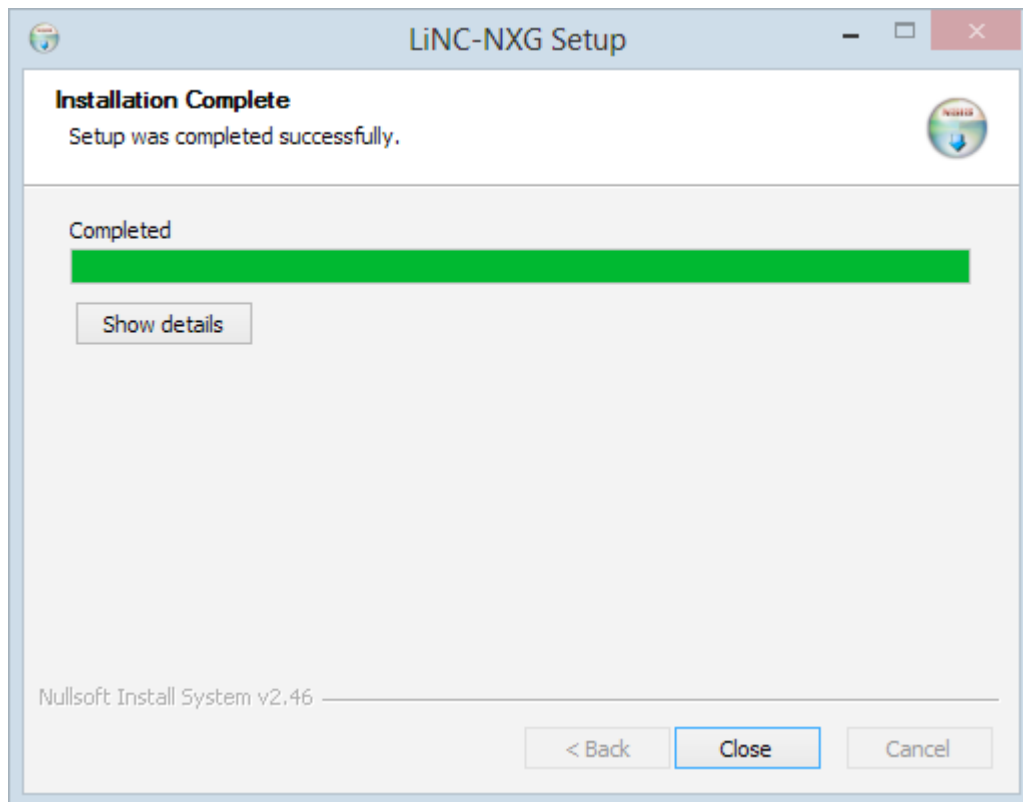
33. In the **Scheduler** section, a select the following:
- Select the **Database** radio button if the computer is monitoring the database (standalone/host)
  - Select the **Server** radio button if the computer is NOT monitoring the database (workstation)
  - Check the **Local Tasks** checkbox if the computer is going to run local tasks such as running reports.

**NOTE:** Within the **Alarm** section, the **Alarm Server** will have the IP Address of the Host Computer. All Workstations should have the Host Computer IP Address also. Check with your IT Administrator for the correct settings.

**NOTE:** To learn about how to set up alarm notifications via email, see PCSC technical bulletin, **Setting up an Alarm Notification Email within LiNC-NXG** (P/N 39-40011-001)..

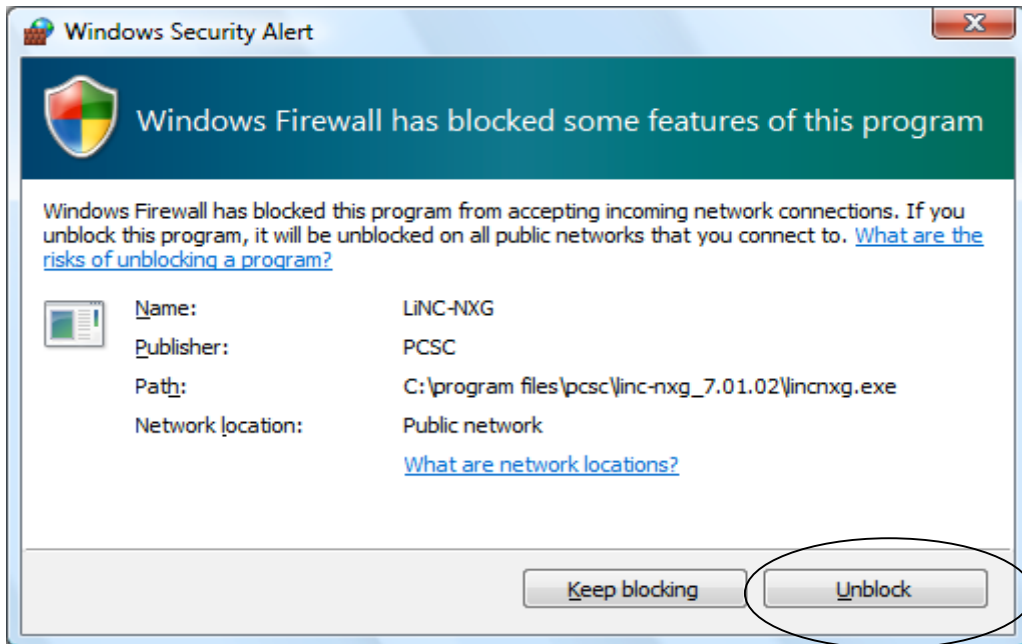
34. Press the **OK** button.

35. When the Installation is finished, the **Installation Complete** page will display. Press the **Close** button. You will be brought back to your Windows™ desktop.



## 5.1 Starting PCSC Configuration

1. Start the **PCSC Configuration** by accessing the Windows **Start** menu: **Start/ PCSC Config** (Windows 8) or **Start Menu/ All Programs/ PCSC/ LINC-NXG / PCSC Config** (Windows 7, Vista, XP).
2. A Windows Security Alert window may display while starting the **PCSC Configuration**. Press the **Unblock** button to allow the program to start correctly.



**NOTE:** The Path may look different than the one shown.



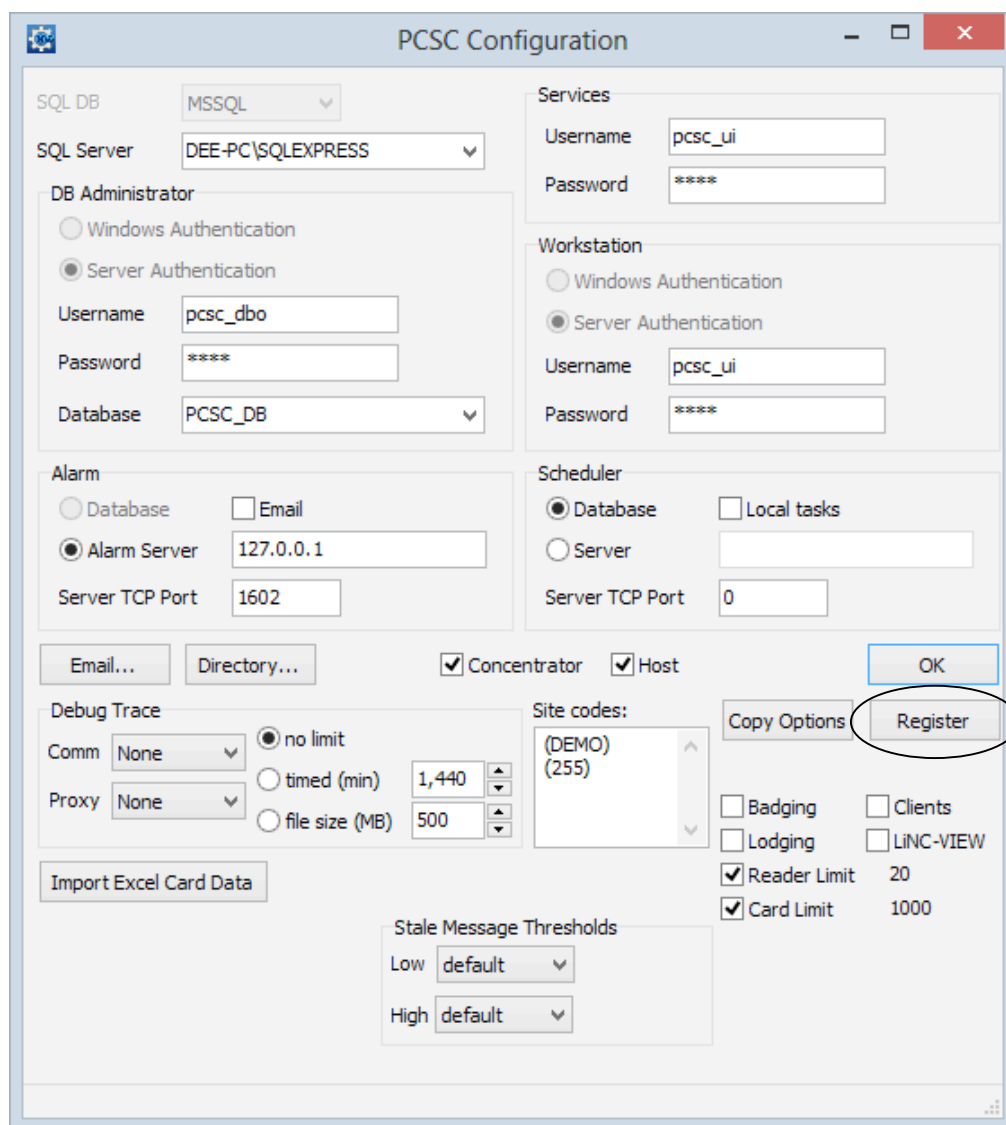
## 5.2 Registering the LiNC-NXG Software

Each copy of LiNC-NXG needs to be registered with PCSC prior to its proper use with the system.

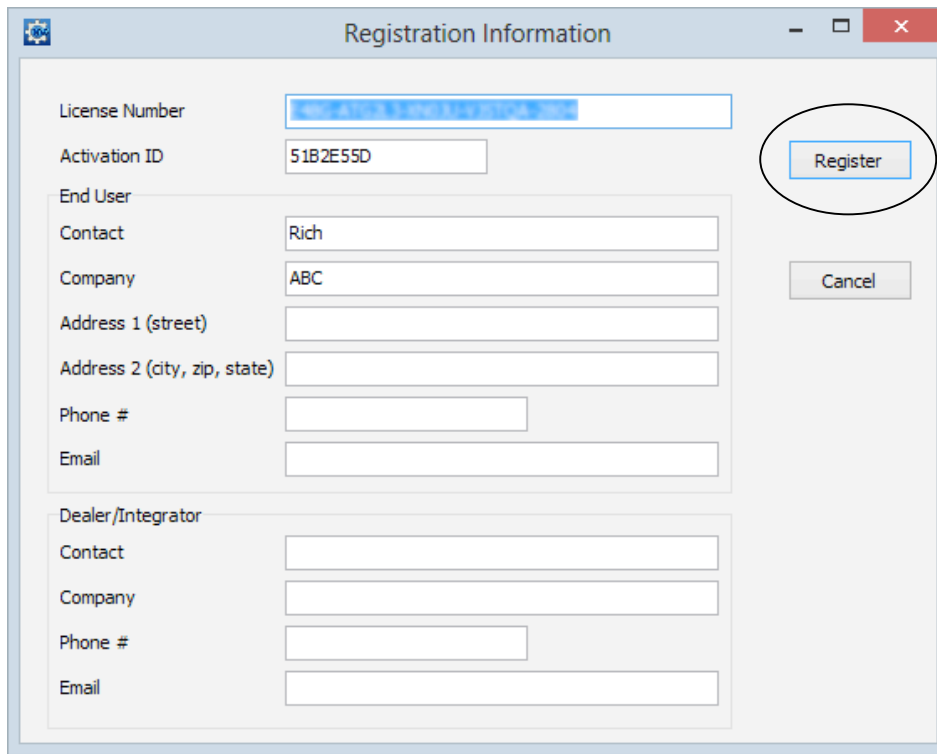
### 5.2.1 Registering via the Internet.

**NOTE:** An Internet connection is required to complete the Registration process. Should an Internet connection not be available, please see Section 5.2.2.

1. Open the PCSC Configuration window.
2. In the lower right hand corner press on the **Register** button.

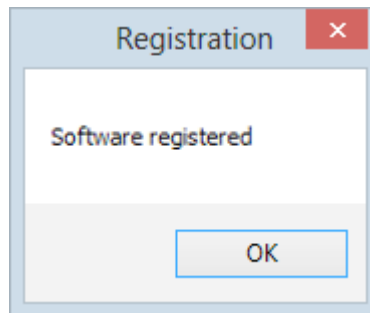


3. The **Registration Information** window will appear. Fill in each text box within the window.



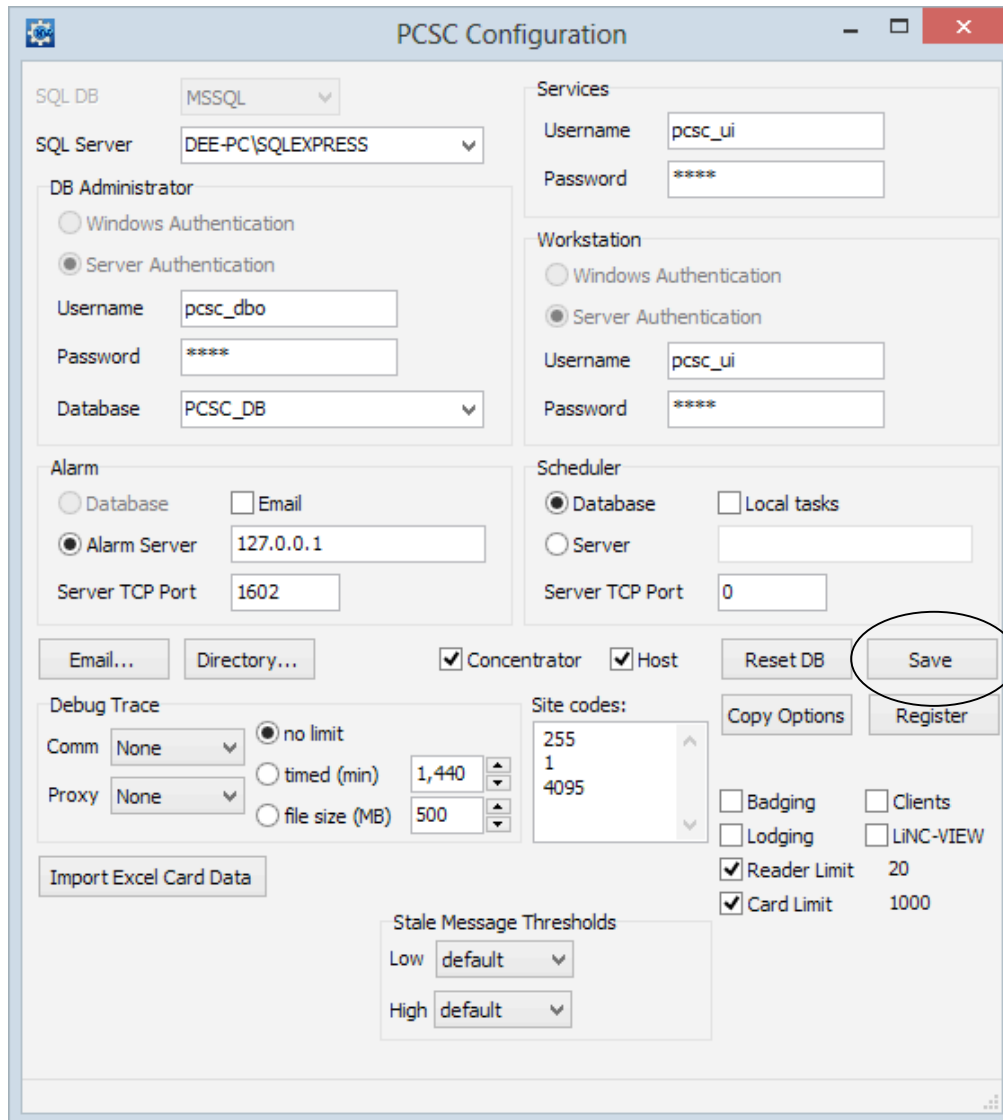
The screenshot shows a dialog box titled "Registration Information". It contains several text input fields for user information. The "License Number" field is highlighted with a blue selection bar. The "Activation ID" field contains the text "51B2E55D". The "End User" section includes fields for "Contact" (containing "Rich"), "Company" (containing "ABC"), "Address 1 (street)", "Address 2 (city, zip, state)", "Phone #", and "Email". Below this is a "Dealer/Integrator" section with fields for "Contact", "Company", "Phone #", and "Email". On the right side of the dialog, there are two buttons: "Register" and "Cancel". The "Register" button is circled in black.

4. Press the **Register** button. A connection to the PCSC registration server will commence.
5. The **Registration Information** window will confirm a valid registration.



**NOTE:** Please see section 5.2.2 if no Internet connection is available.

**NOTE:** The network configuration may "block" the port (socket port error) that is necessary to register over the Internet.



6. Confirm the completion of the registration through the **Site codes** window, which should no longer see the (DEMO) text, but rather the updated site codes.
7. Press the **Save** button to complete the registration.

## 5.2.2 Registering NXG without an Internet Connection.

If an Internet connection is not available; the NXG software can be registered in the following way:

1. Fill in the Registration form completely.
2. Take a screen shot of the completed Registration form and save in a word processor program such as Microsoft Word or WordPad.
3. Transfer the save Registration form to a computer with Internet access.
4. Email the form to: techsupportdl@1pcsc.com for registering.
5. PCSC Technical Support will process the registration request and send a return email when the registration is complete.

**NOTE:** Each installation of LiNC-NXG will require registration. Send a screen shot for each computer on which LiNC-NXG is installed.

The screenshot shows a Windows-style dialog box titled "Registration Information". It contains the following fields and controls:

- License Number:
- Activation ID:
- End User:
- Contact:
- Company:
- Address 1 (street):
- Address 2 (city, zip, state):
- Phone #:
- Email:
- Dealer/Integrator Contact:
- Company:
- Phone #:
- Email:

Buttons: Register, Cancel

**NOTE:** Once the registration files have been received from PCSC, proceed to Section 5.3 to complete the registration process.

## 5.3 Finalizing the Install with Copy Options

Each copy of LINC-NXG will have options for additional items such as badging, clients, photo trace, and LINC-VIEW which will not be active during a normal installation.

Once the standard installation is complete, any additional options can be activated from a client's unique **pcscopt.bin** file. To do so, the client **pcscopt.bin** and **pcscopy** is required to be copied to the local PC.

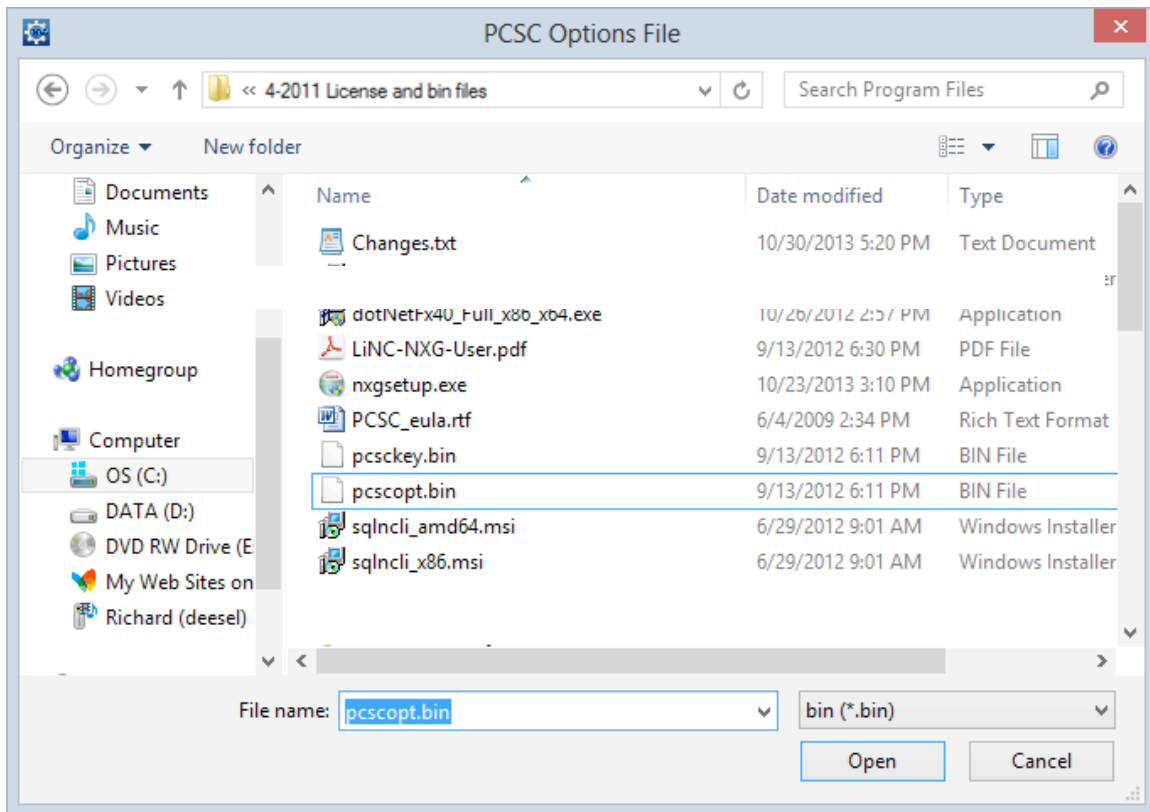
Procedure:

1. The **pcscopt.bin** file will be provided either on a flash drive, CD, within an email to the administrator or during the software registration process.
2. Once the **pcscopt.bin** file has been identified, open the **PCSC Configuration** window.
3. Press the **Copy Options** button.

The screenshot shows the PCSC Configuration window with the following settings:

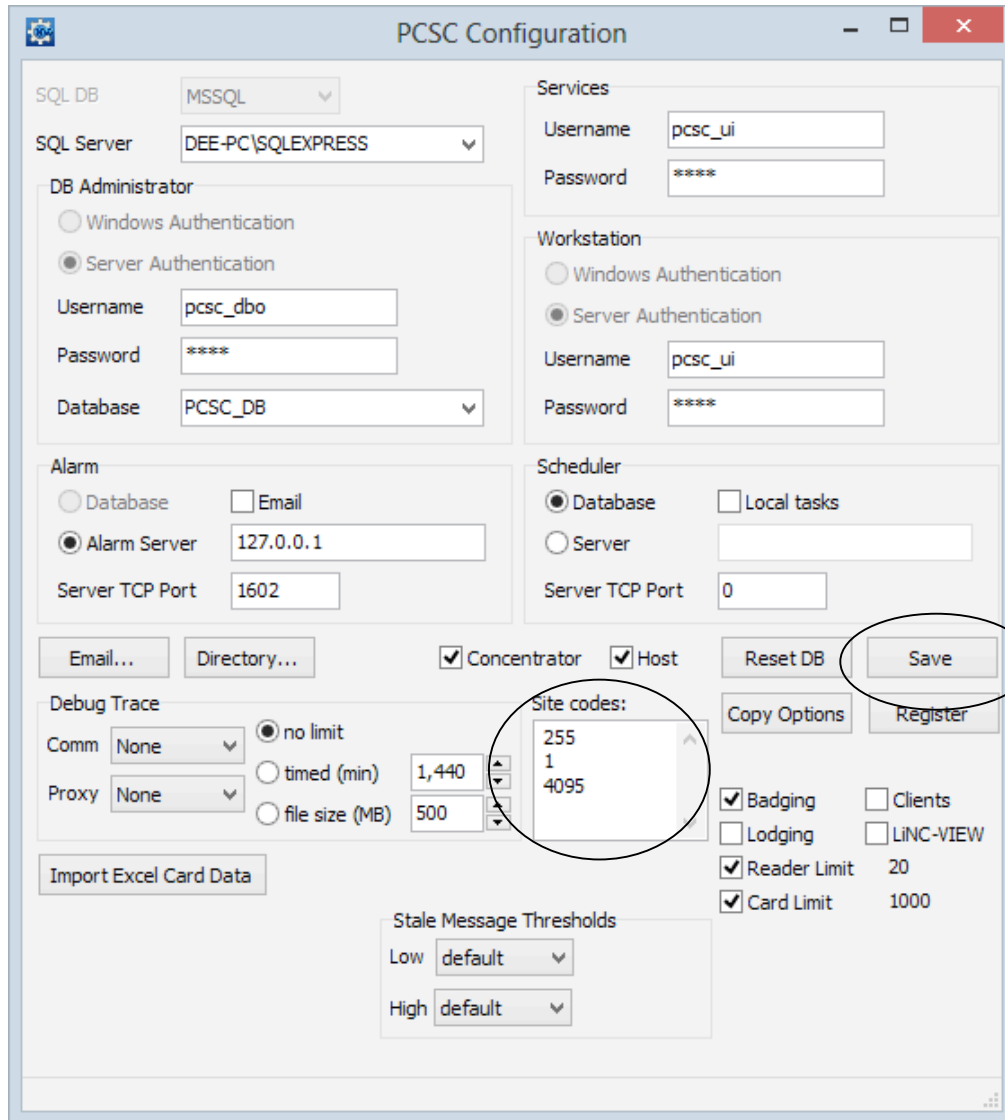
- SQL DB:** MSSQL
- SQL Server:** DEE-PC\SQLEXPRESS
- DB Administrator:** Server Authentication, Username: pcsc\_dbo, Password: \*\*\*\*\*, Database: PCSC\_DB
- Services:** Username: pcsc\_ui, Password: \*\*\*\*\*
- Workstation:** Server Authentication, Username: pcsc\_ui, Password: \*\*\*\*\*
- Alarm:** Alarm Server: 127.0.0.1, Server TCP Port: 1602
- Scheduler:** Database, Server TCP Port: 0
- Buttons:** Email..., Directory..., Concentrator (checked), Host (checked), Reset DB, Save
- Debug Trace:** Comm: None, Proxy: None, no limit (selected), timed (min): 1,440, file size (MB): 500
- Site codes:** 255, 1, 4095
- Copy Options:** (Circled button)
- Register:** (Button)
- Options:** Badging (unchecked), Clients (unchecked), Lodging (unchecked), LINC-VIEW (unchecked), Reader Limit: 20 (checked), Card Limit: 1000 (checked)
- Stale Message Thresholds:** Low: default, High: default

4. The **PCSC Options File** window will appear. Browse the installation DVD or installation directory to locate the **pcscopt.bin** file.



5. Select the file.
6. Press the **Open** button.

7. The PCSC Options file window will automatically close. The additional purchased features of LiNC-NXG will appear with checks in the checkboxes. The site facility code should also now show in the **Site Code** area. Press the **Save** button to complete the Registration.



## 5.4 Upgrading LiNC-NXG

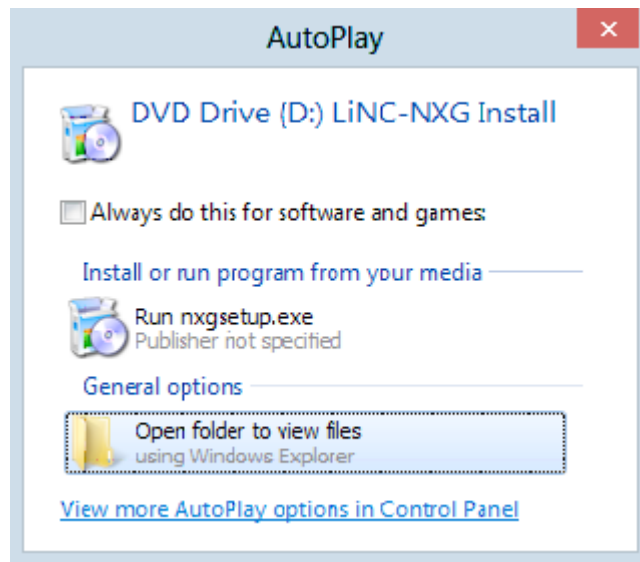
To upgrade to the most recent version of LiNC-NXG, it is not necessary to uninstall the current version of LiNC-NXG. Insert the new LiNC-NXG DVD and run the **Setup** procedure. Follow the steps in **Section 5.0** to install the new version.



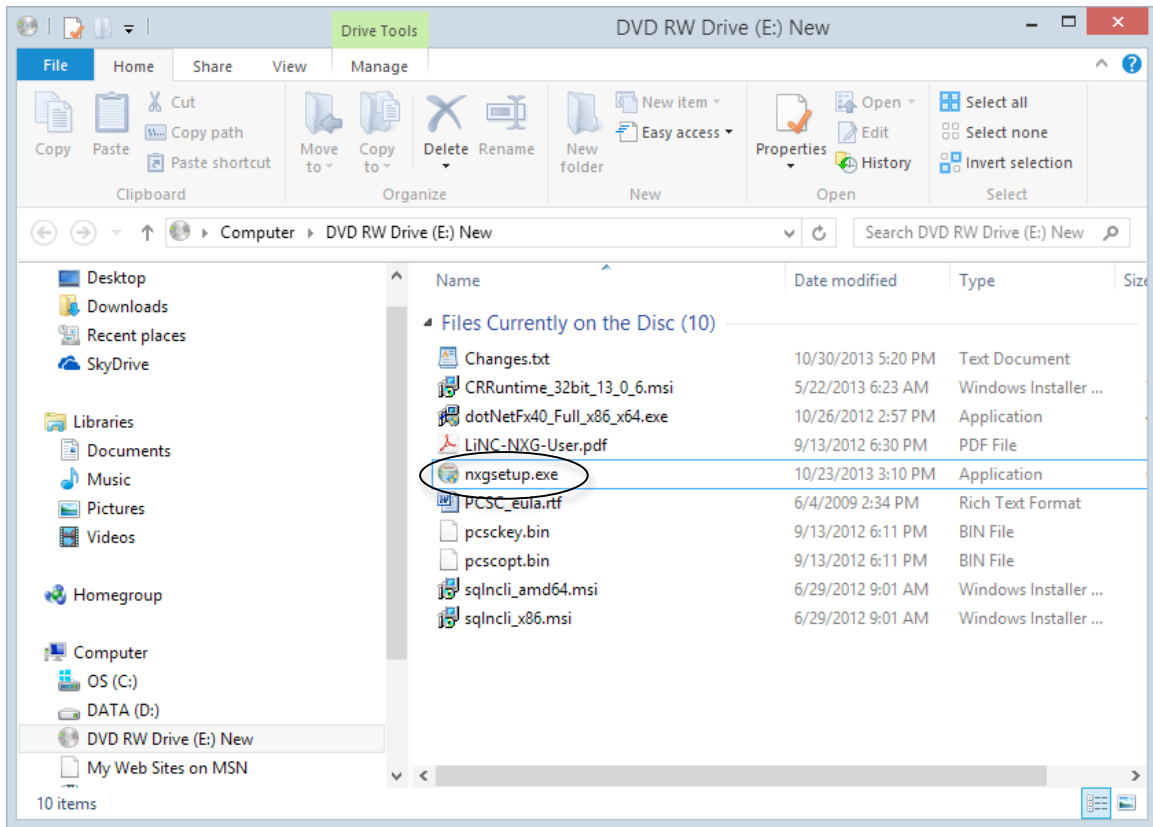
## 6.0 Installing LiNC-NXG Workstation

**NOTE:** A workstation will require the same hardware specifications as a standard installation. Please see the Hardware Specifications at Section 2.2 for more information.

1. Insert the **LiNC-NXG** DVD into the CD-ROM drive or download the appropriate files from the PCSC Server.
2. If using a DVD, LiNC-NXG will activate an AutoPlay of the LiNC-NXG Installer. If you choose, you can instead press the **Open folder to view files** icon.



3. When you open the LiNC-NXG files, you will see multiple folders and files.

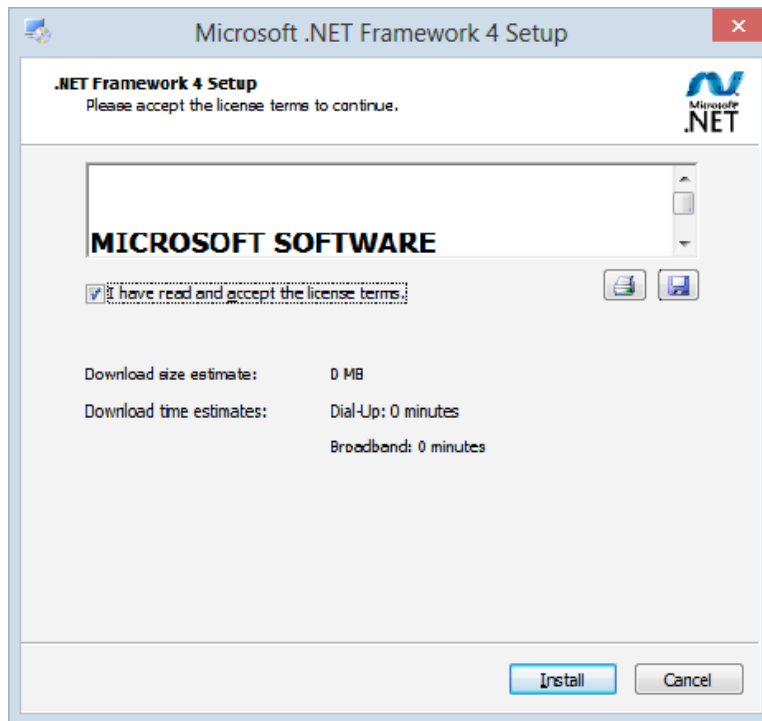


4. In the LiNC-NXG window, double-click the **NXG Setup** application.

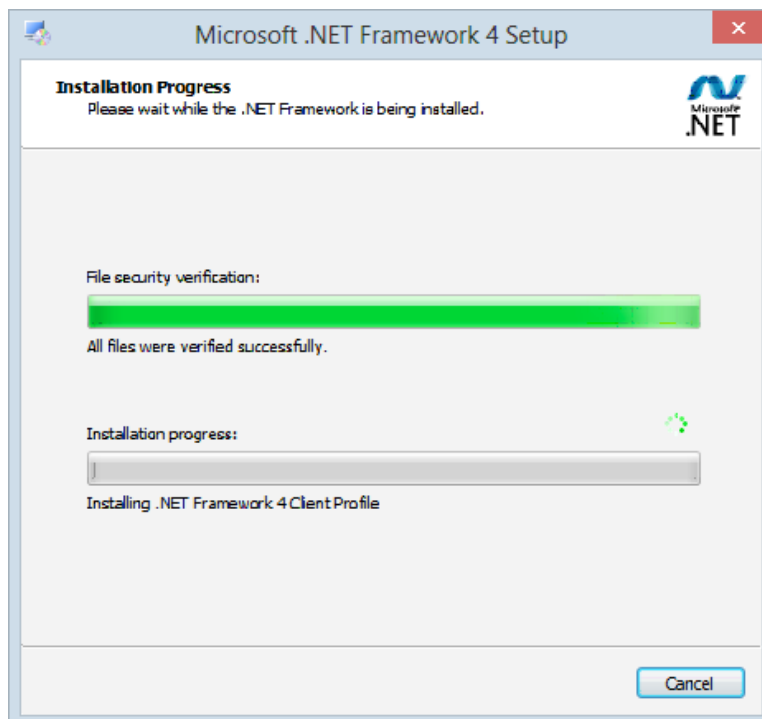
**NOTE:** For Vista Business Edition Users, the SQL Server 2012 Express application must be **Run as administrator**:

- d) Select the **LiNC-NXG** icon
- e) Right-click on the application
- f) Select **Run as administrator**

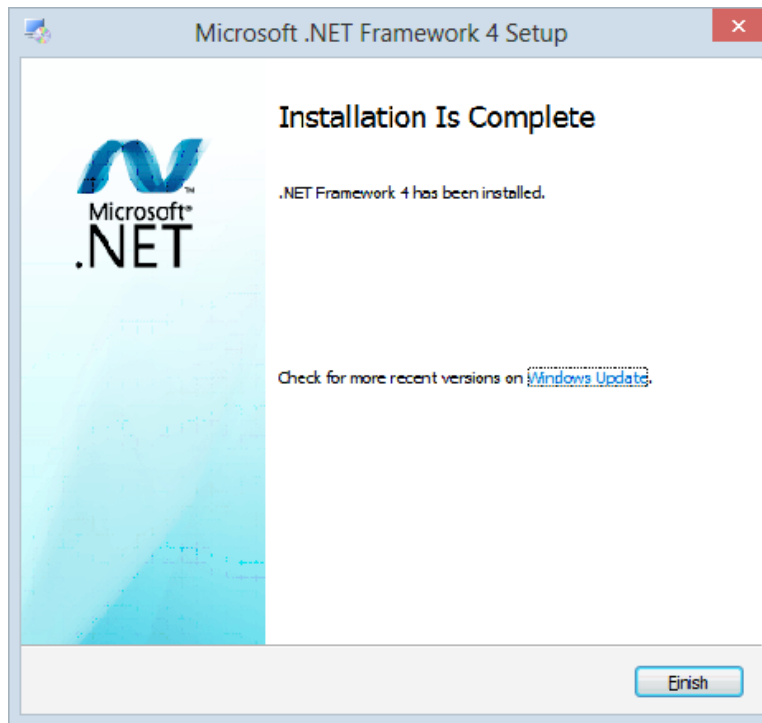
5. If the computer does not have Microsoft .NET Framework 4 installed, it will automatically start the installation with that software. Press the **Install** button to continue.



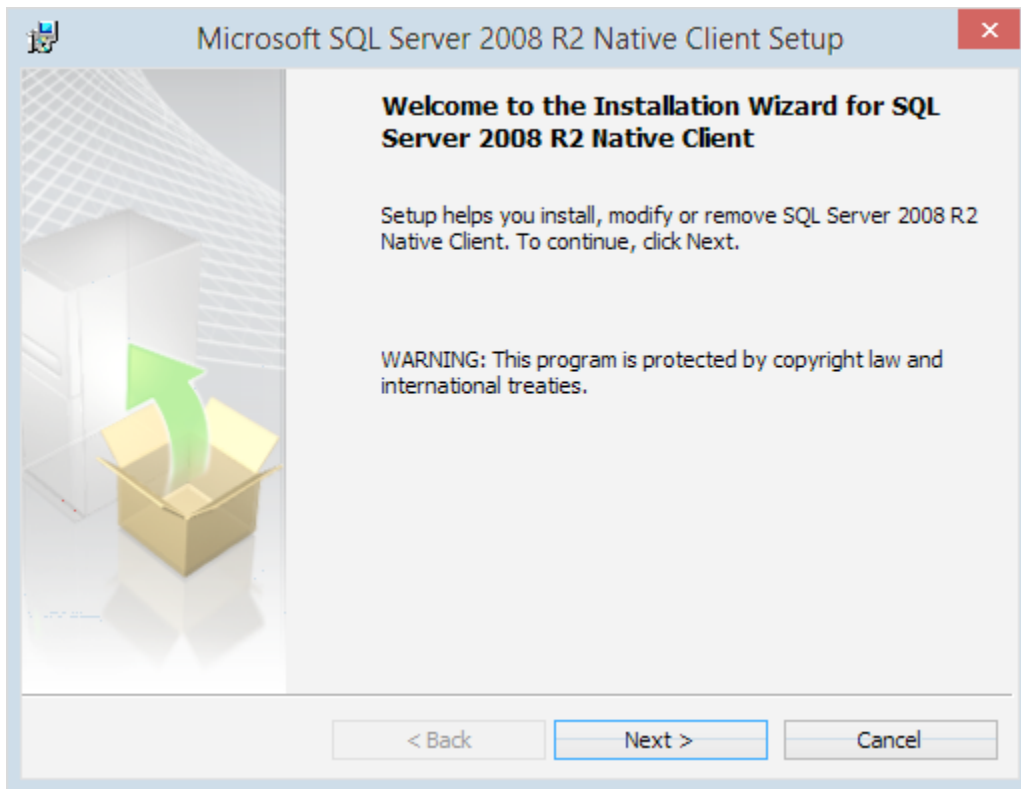
6. This will bring you to the **Microsoft .NET Framework 4 – Installation Progress** window.



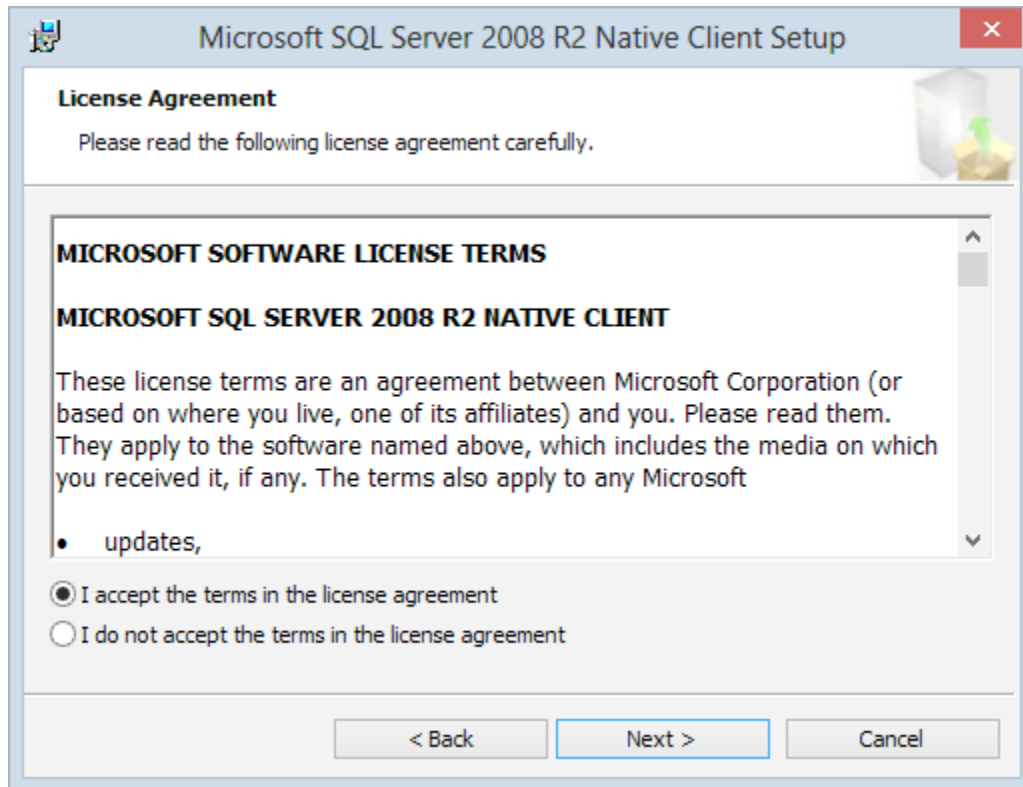
7. Once complete, the **Installation is Complete** window will appear. Press the Finish button.



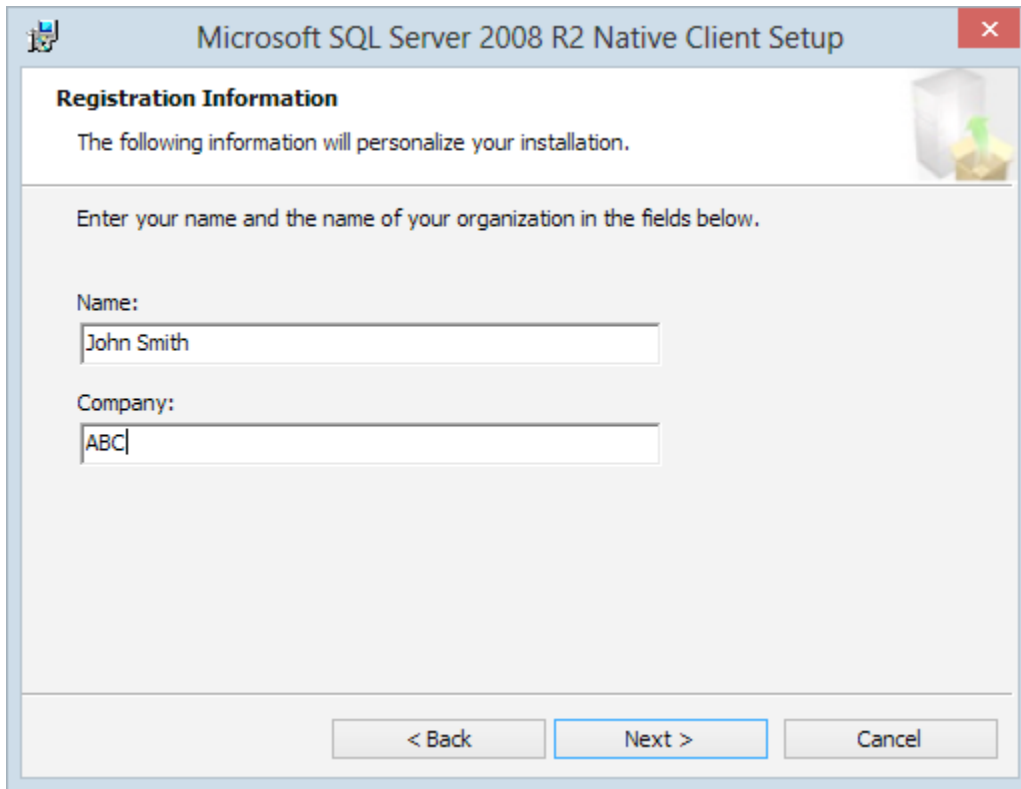
8. If the computer does not have Microsoft .SQL Server Native Client installed, it will automatically start the installation with that software. Press the **Next** button to continue.



9. The License Agreement window loads. Select the "I accept the terms of the license agreement" radio button and click **Next** to continue.

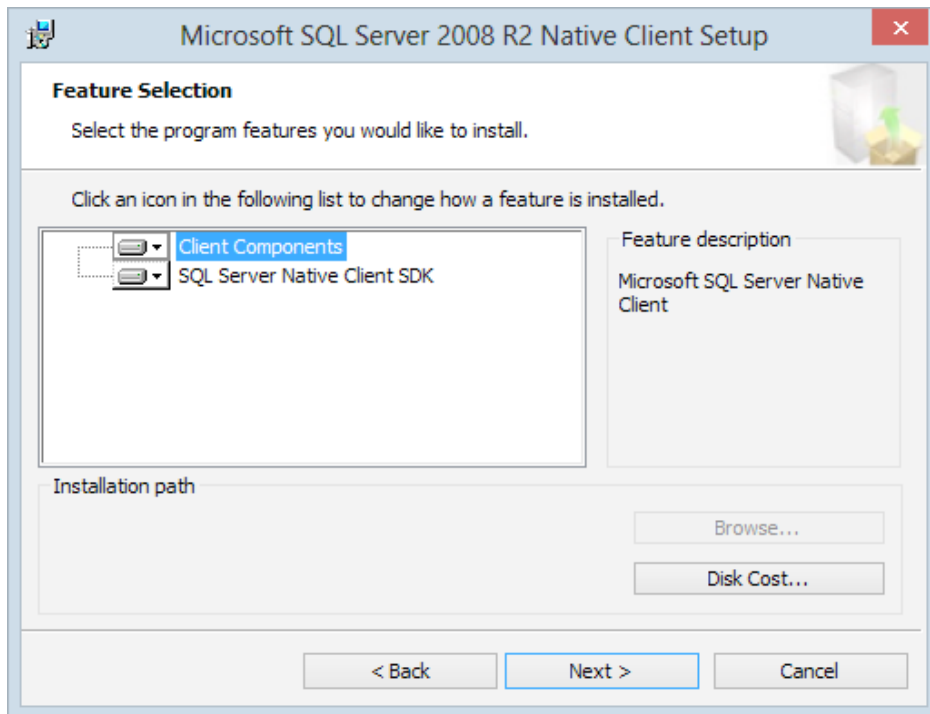


10. You are asked for registration information. Type in the appropriate name and company and click **Next**.

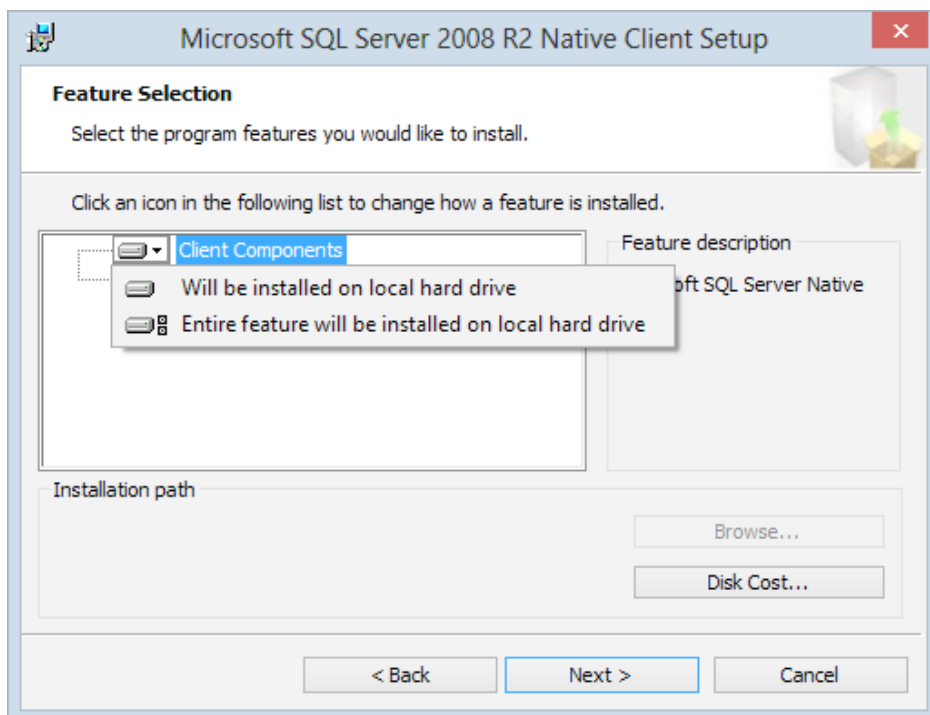


The screenshot shows a Windows dialog box titled "Microsoft SQL Server 2008 R2 Native Client Setup". The dialog has a standard Windows title bar with a minimize button, a maximize button, and a close button (red 'X'). The main content area is titled "Registration Information" and contains the text: "The following information will personalize your installation." Below this, there is a sub-instruction: "Enter your name and the name of your organization in the fields below." There are two text input fields: the first is labeled "Name:" and contains the text "John Smith"; the second is labeled "Company:" and contains the text "ABC". At the bottom of the dialog, there are three buttons: "< Back", "Next >" (which is highlighted with a blue border), and "Cancel".

11. Select the feature sets you need. **Client Components** is required for LiNC-NXG installation.

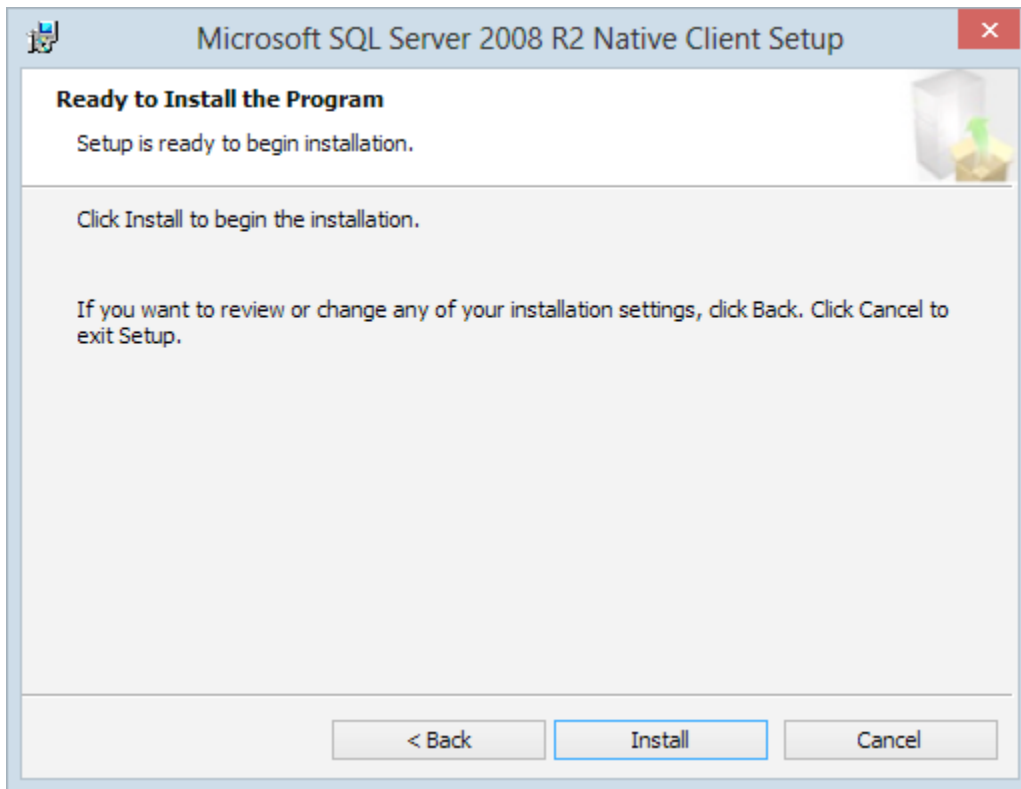


12. Right-click **Client Components** and select, "Will be installed on local hard drive." SQL Server Native Client SDK is optional and does not require installation. Click **Next**.

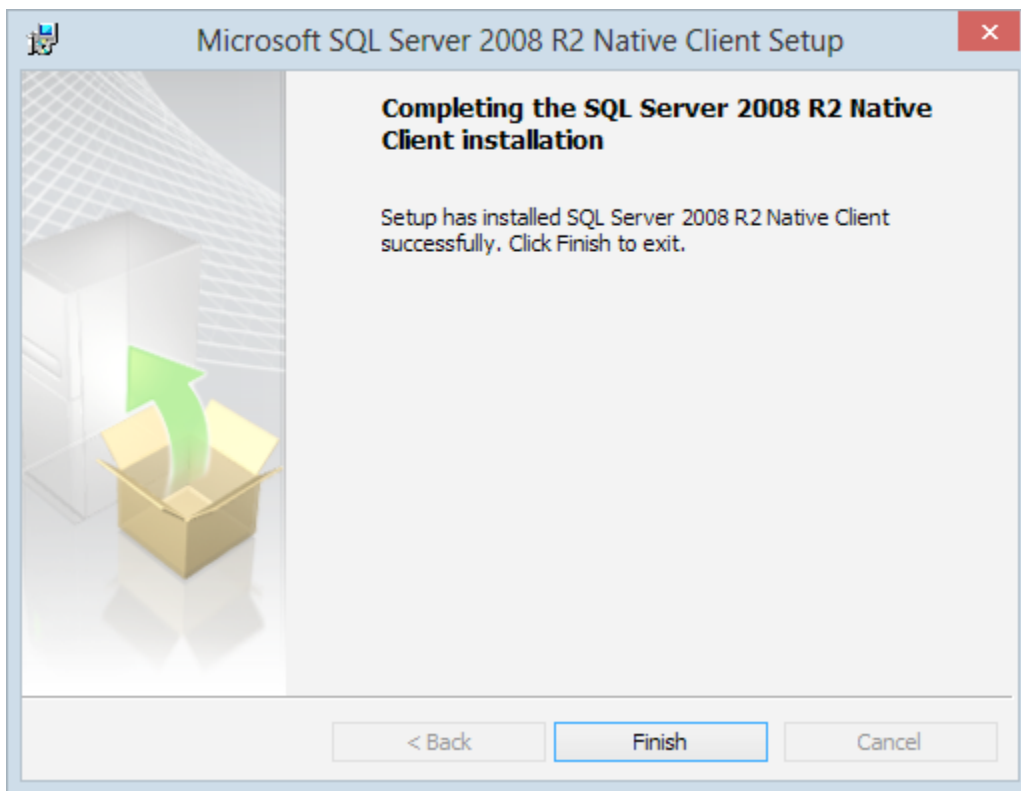




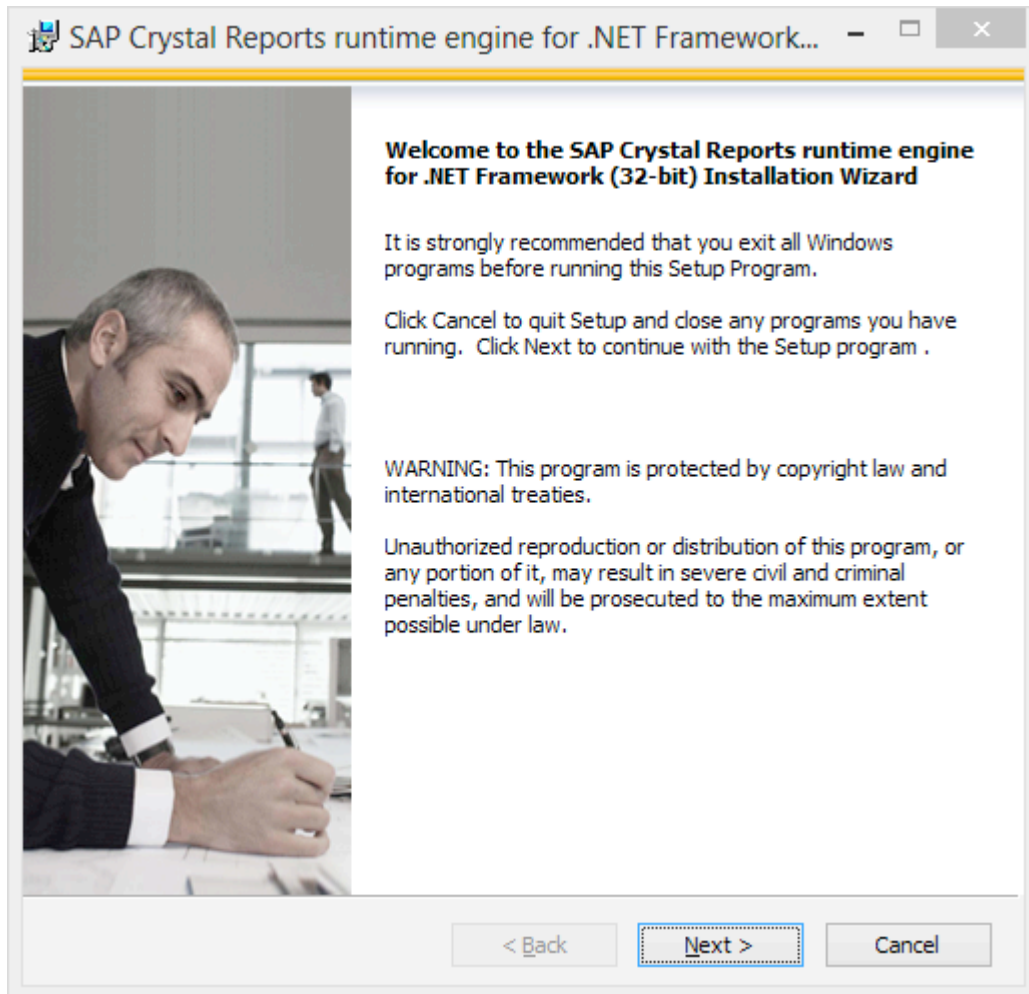
13. Click **Install** to begin the installation.



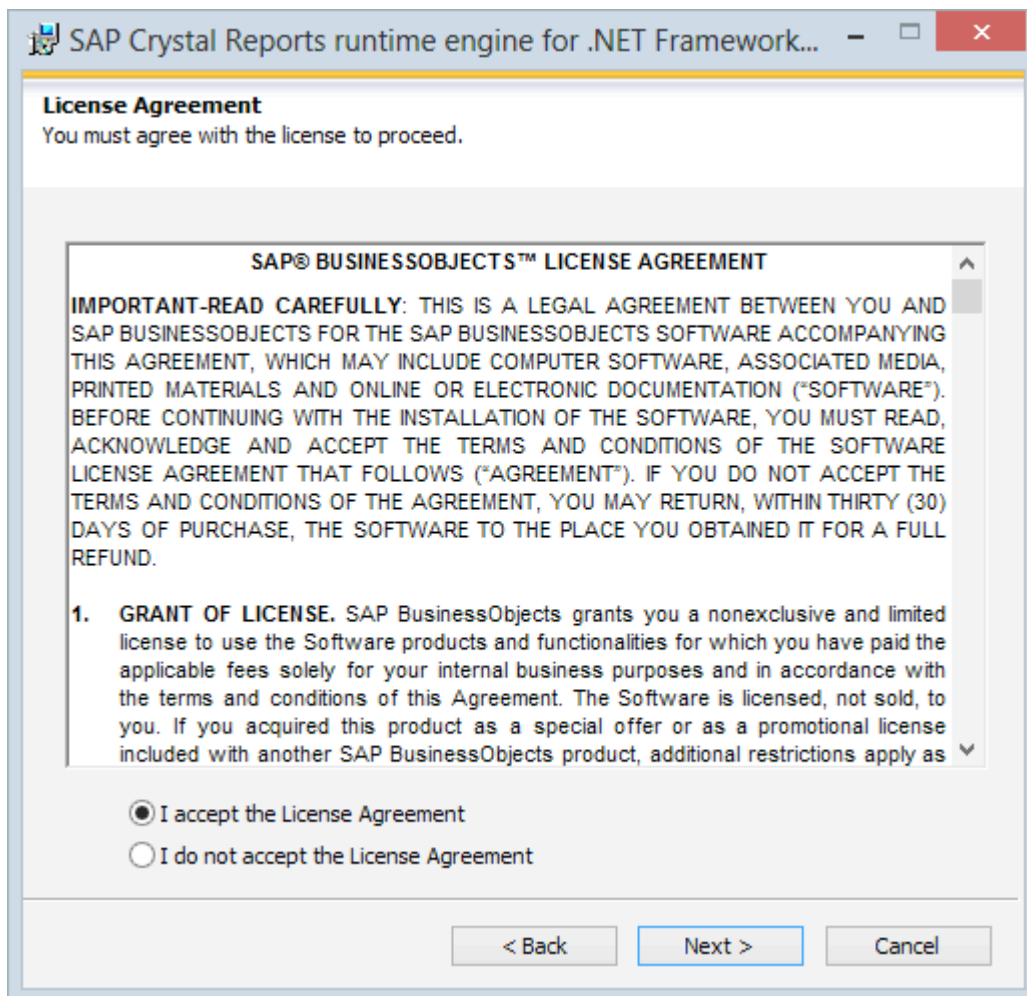
14. When the installation is complete, click **Finish** to proceed to the next step in LiNC-NXG installation.



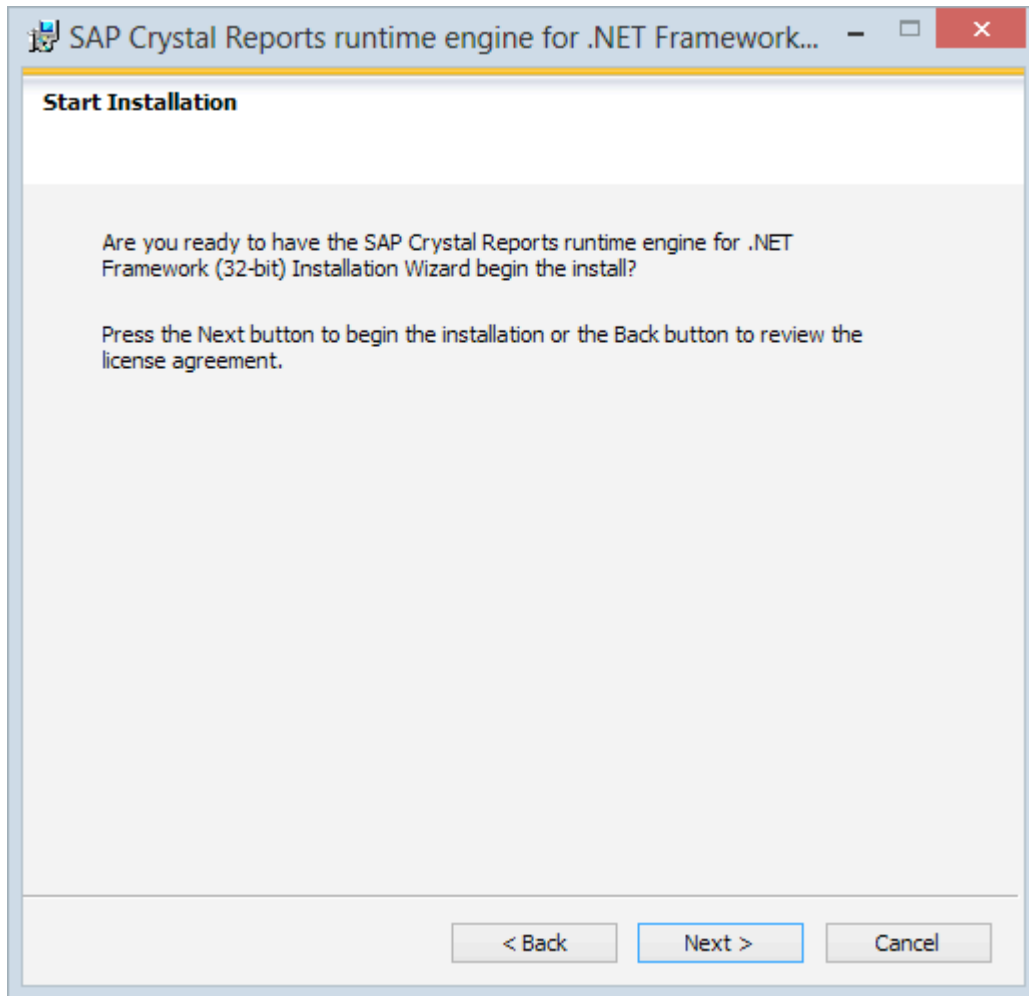
15. Once the .NET installation is complete, the system will install the latest version of SAP Crystal Reports. Press the **Next** button.



16. The SAP Crystal Reports – License Agreement will appear. Select the “I accept the License Agreement” radio button and press the **Next** button.



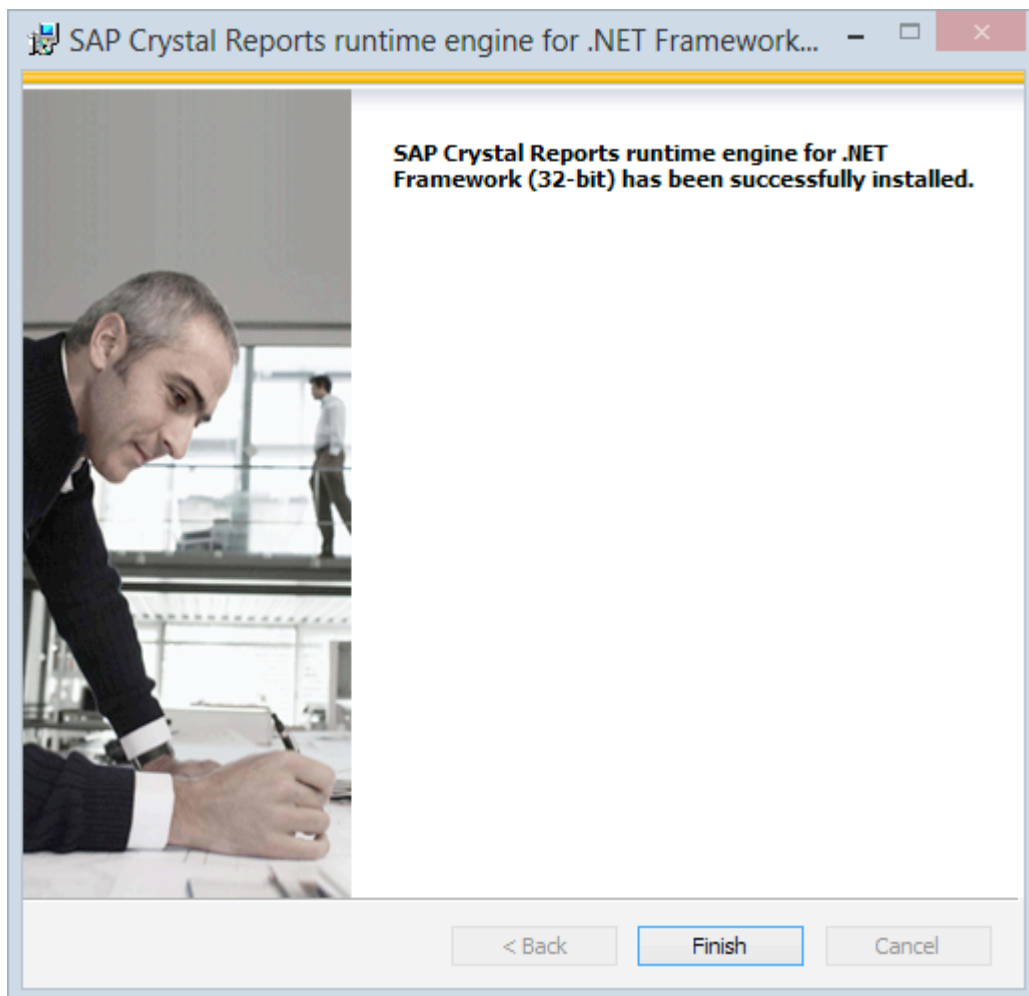
17. The SAP Crystal Reports – Start Installation window will appear. Press the **Next** button.



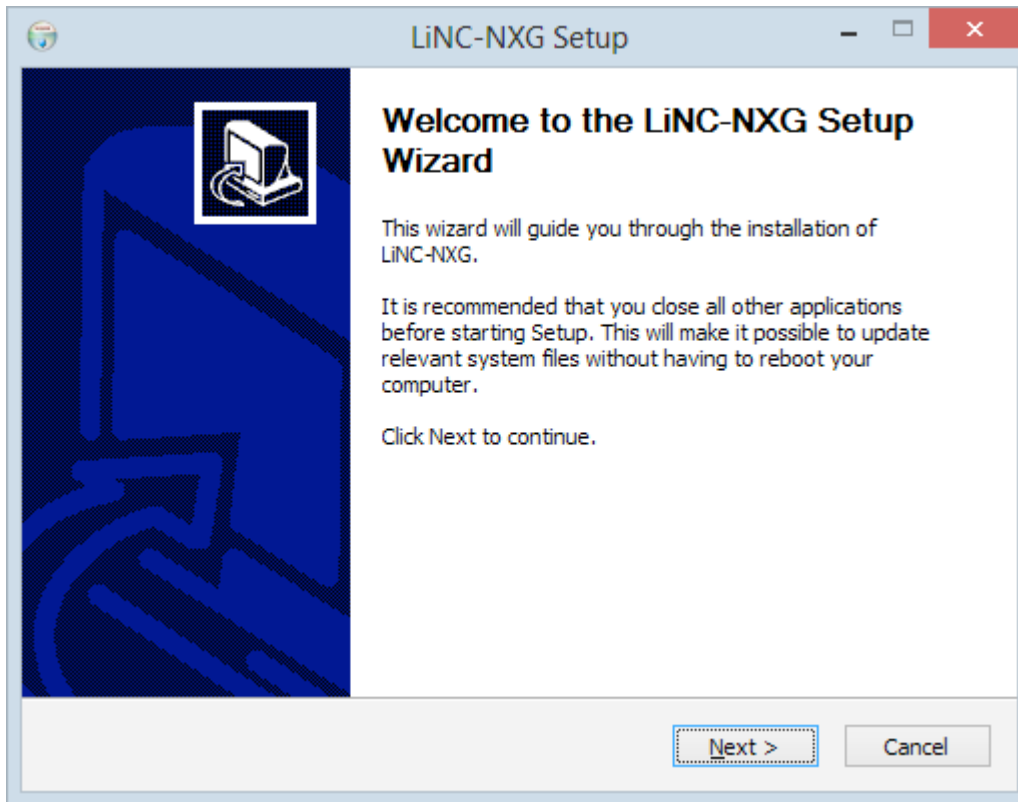
18. The installer will now install SAP Crystal Reports and all its components.



19. When SAP Crystal Reports installation is complete, click **Finish** to launch the LiNC-NXG Installation Wizard.

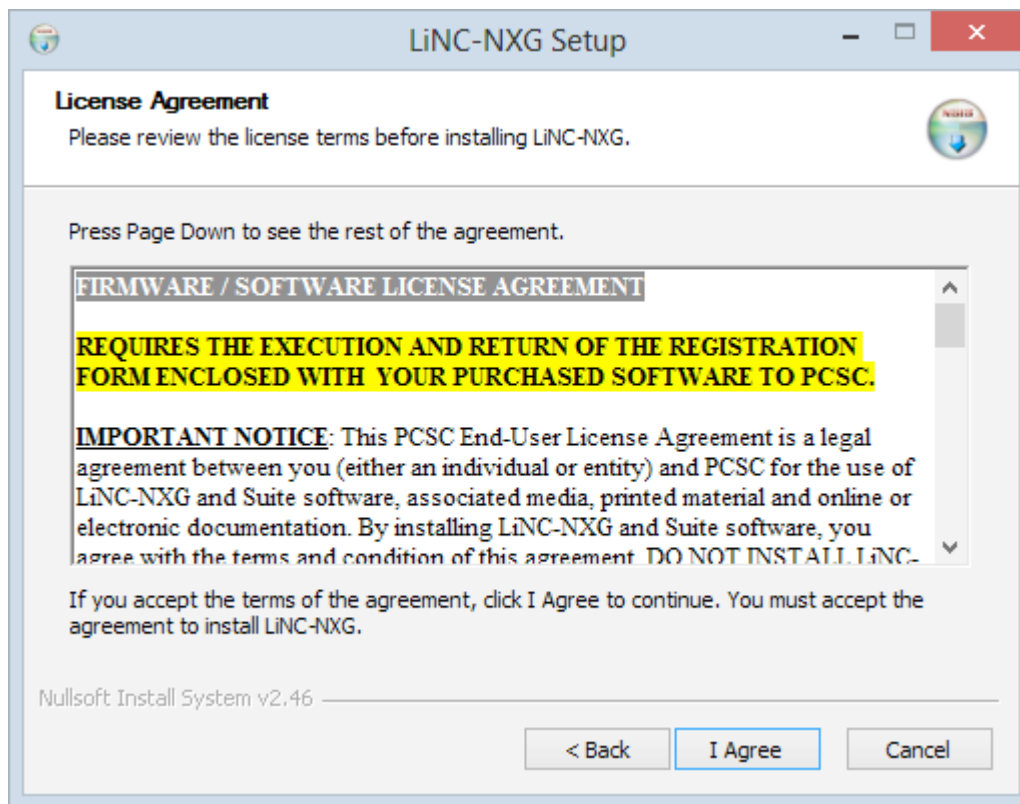


20. The LiNC-NXG Installation Wizard launches. Click **Next**.





21. The LiNC-NXG License Agreement will appear. Press the **I Agree** button



22. The **Customer Information** window will load. Fill in the **Name** and **Organization** fields. Additionally, fill in the **Serial number** of the program that you received from PCSC or your PCSC-approved dealer.

**NOTE:** Please reference the LiNC-NXG software DVD for the serial number.

**Customer Information**

Enter your name and company or organization in the box below. The installer will use this information for subsequent installations.

Name:  
Richard Hooker

Organization:  
ABC

Enter your serial number below. The installer will use this information for subsequent installations.

Serial number:  
E98C - A7G2LJ - 9H8UJ - Y8Q7A - 2894

Nullsoft Install System v2.46

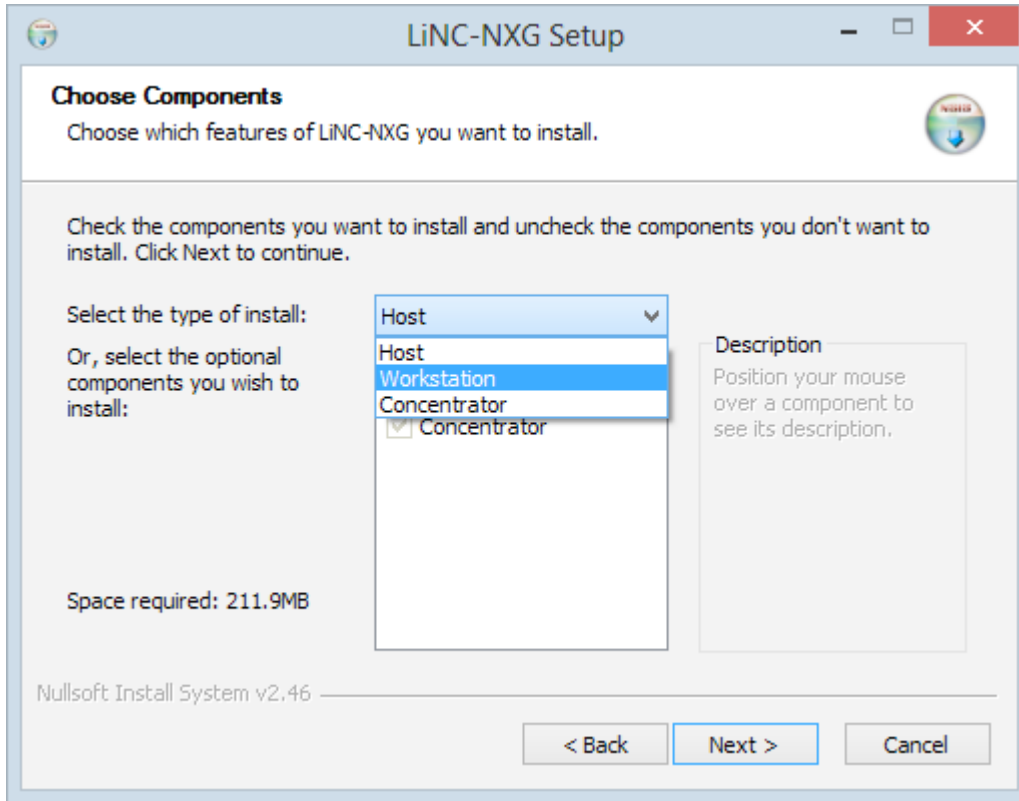
< Back    Next >    Cancel

**NOTE:** PCSC provides a Temporary License number within the LiNC-NXG install disk. The Temporary License will register the PC and will allow LiNC-NXG to be operational for 30 days before the program reverts back to a 48hr. DEMO mode.

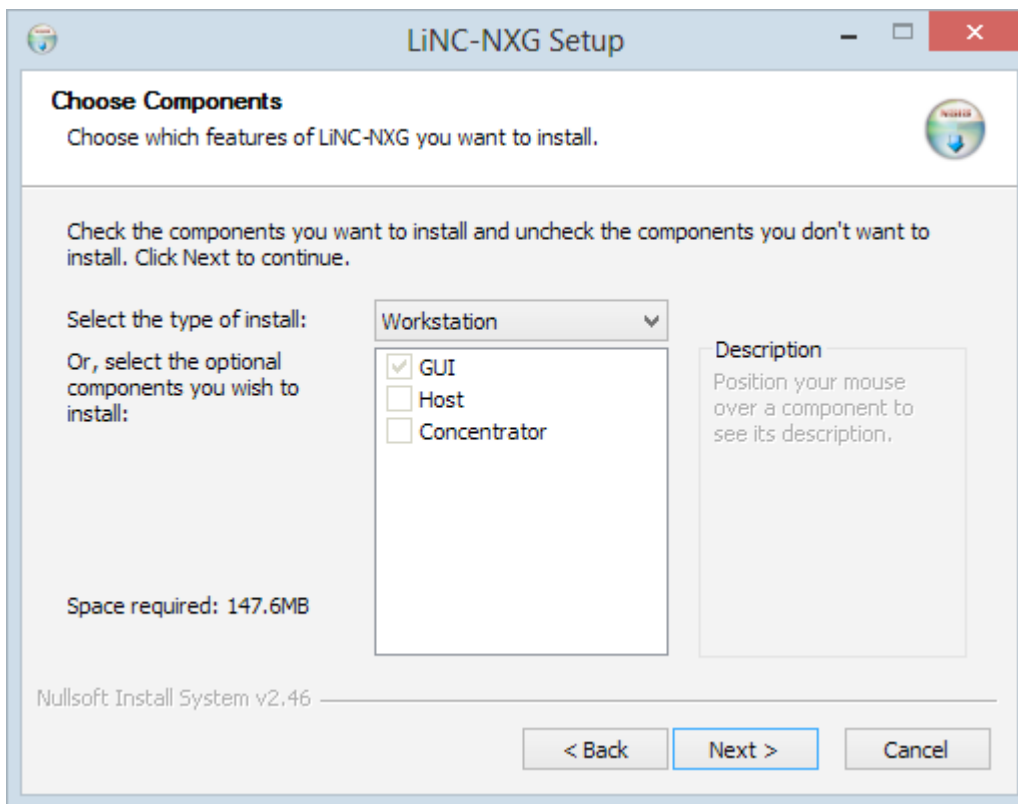
**NOTE:** If you do not have a serial number (or Temporary License number), entering all zeros (0) will allow you to use the system within a 48hr. DEMO mode.

23. Press the **Next** button to continue.

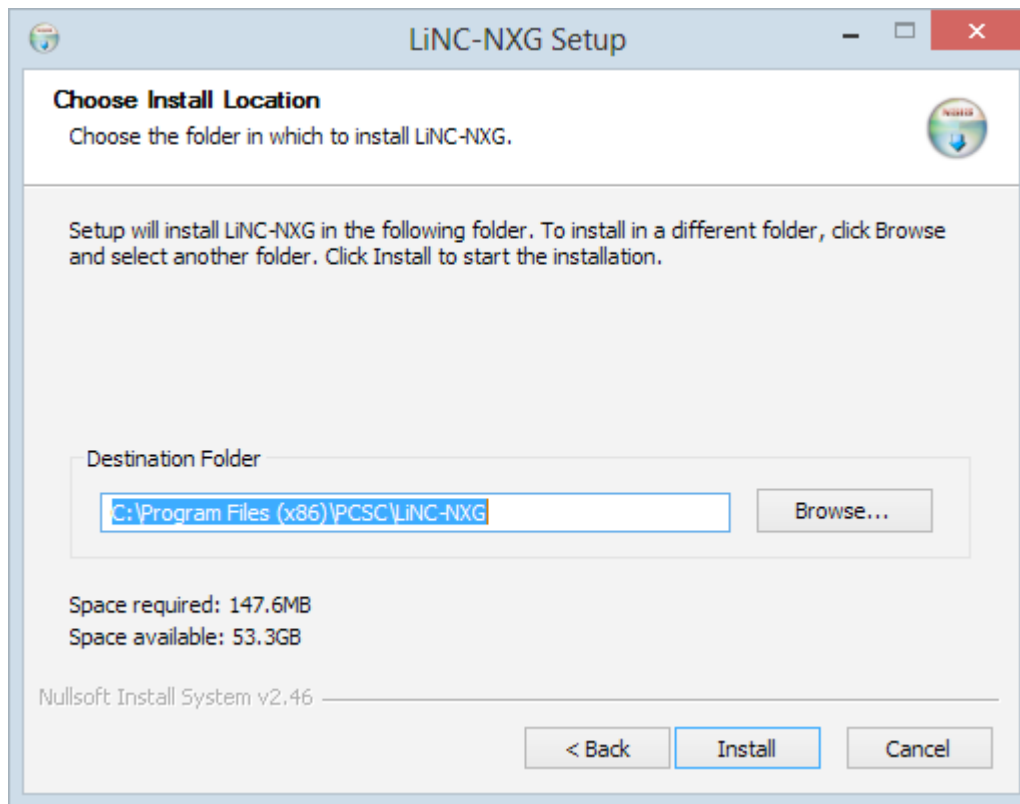
24. You will be asked to choose which components of LiNC-NXG you wish to have installed. Select **Workstation** as the type of install (the other types of install are “Host” and “Concentrator”).



25. The Installation Wizard will automatically choose the necessary component (GUI) for the installation. Click **Next** to continue.

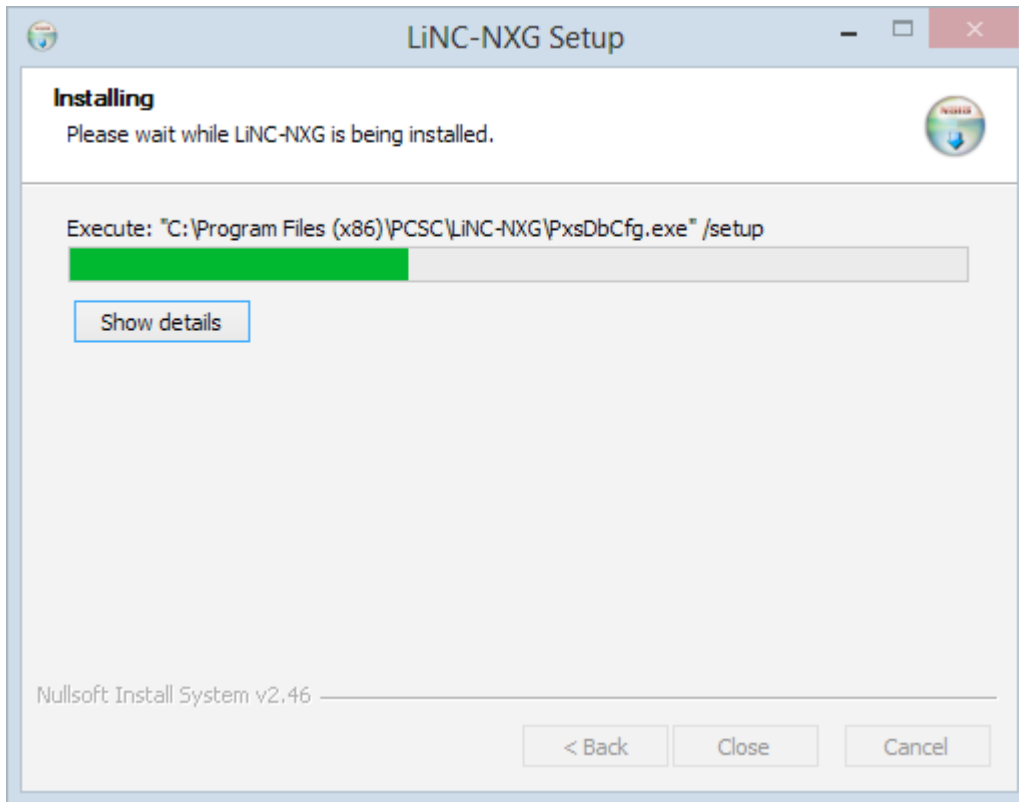


26. You will be brought to the **Select Installation Folder** page. A default folder location on the local computer will be displayed. If a different location is desired, select the **Browse** button and navigate to the folder where LiNC-NXG is to be installed.



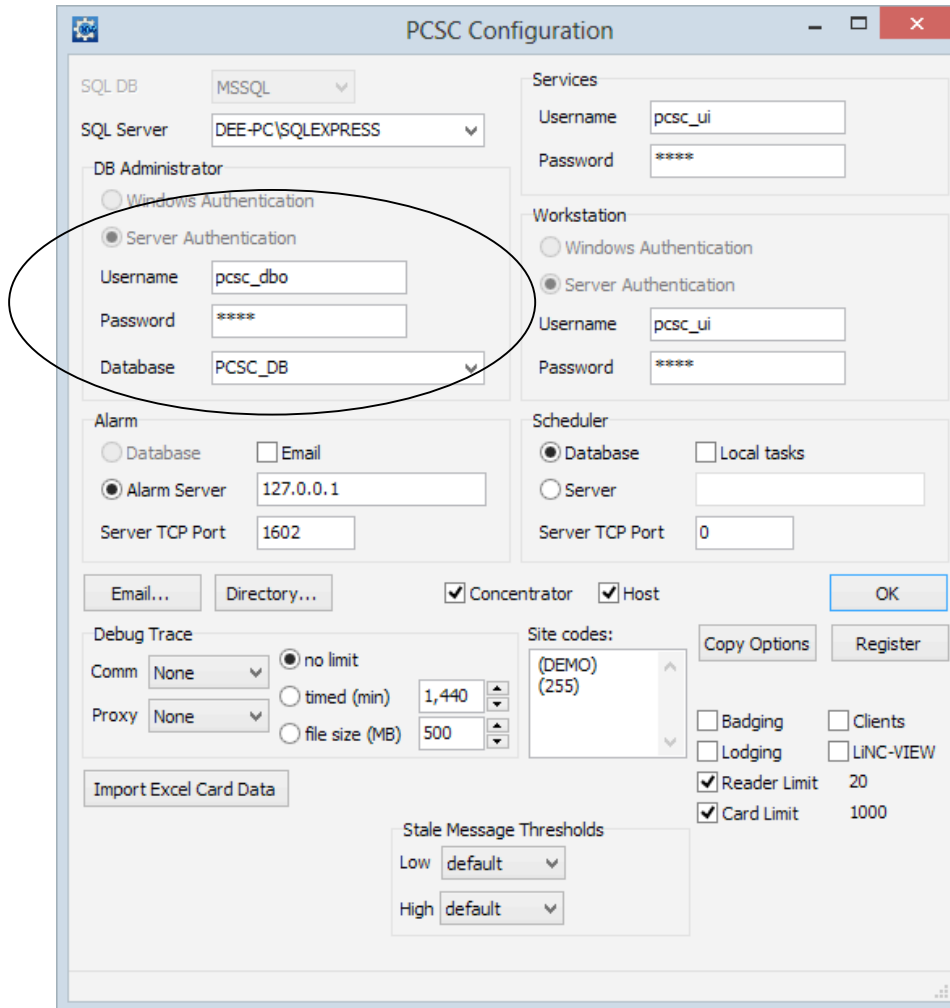
27. Press the **Install** button to continue.

28. **LiNC-NXG** will install on your system.



29. During the installation, a second window will appear, confirming the location of the SQL database. Identify the SQL Server, the DB Administrator (DBO) authentication, and Services (DBRW) authentication to access the appropriate database.
30. In the **DB Administrator** section, add your new **DBO login (pcsc\_dbo)** and password for the **Username** and **Password**.

**NOTE:** You must input the **DBO login** and **password** to **DB Administrator** section of the **PCSC Configuration Utility** each time you update the database or upgrade LiNC-NXG.



**NOTE:** The SQL Server database may need to be identified by **[network location]\SQLEXPRESS** or **[network location]\SQL** in order to locate the proper **Database**.

31. In the **Services** and the **Workstation (UI)** sections, add the **DBRW login (pcsc\_ui)** and password for the **Username** and **Password**.

The screenshot shows the 'PCSC Configuration' dialog box. The 'Services' and 'Workstation' sections are circled in black. The 'Services' section has 'Username' set to 'pcsc\_ui' and 'Password' set to '\*\*\*\*'. The 'Workstation' section has 'Username' set to 'pcsc\_ui' and 'Password' set to '\*\*\*\*'. Other sections include 'DB Administrator', 'Alarm', 'Scheduler', 'Debug Trace', 'Site codes', and 'Stale Message Thresholds'.

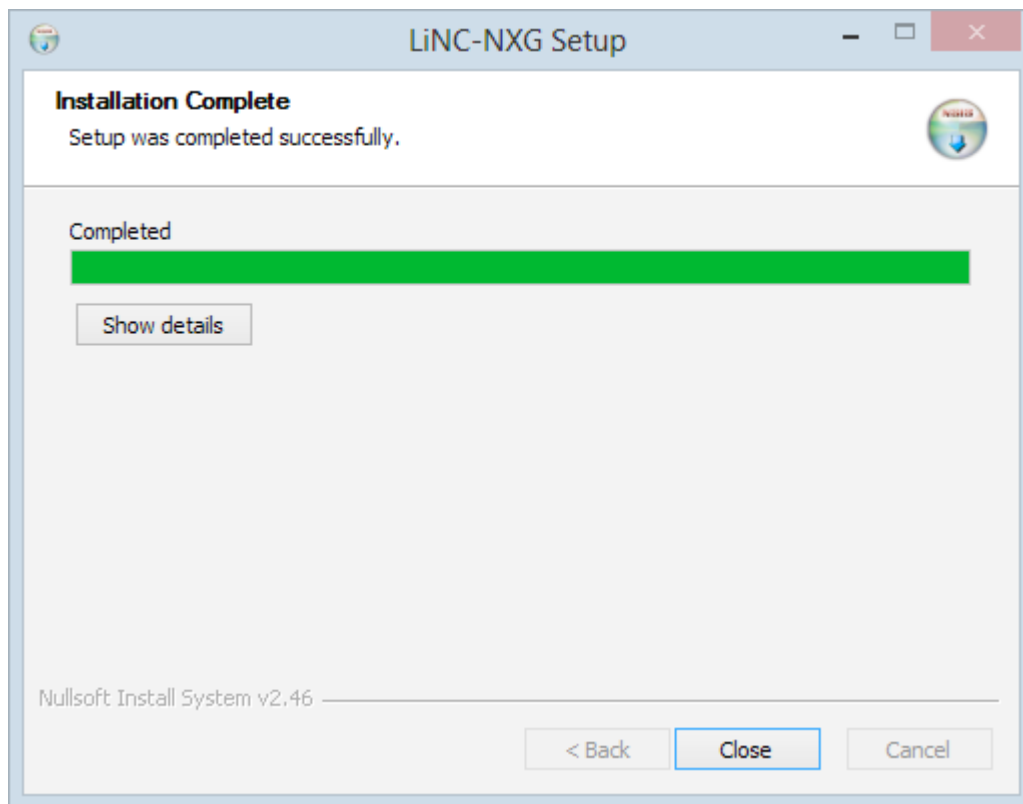
**NOTE:** Within the **Alarm** section, the **Alarm Server** will have the IP Address of the Host Computer. All Workstations should have the Host Computer IP Address also. Check with your IT Administrator for the correct settings.

**NOTE:** To learn about how to set up alarm notifications via email, see PCSC technical bulletin, **Setting up an Alarm Notification Email within LiNC-NXG** (P/N 39-40011-001)..

32. Press the **OK** button.

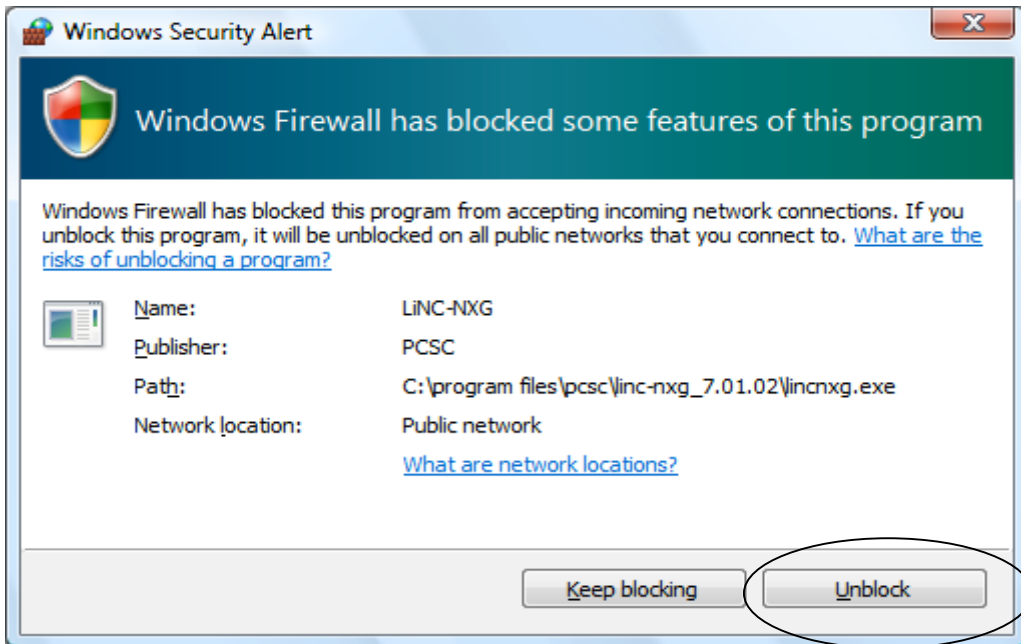


33. When the Installation is finished, the **Installation Complete** page will display. Press the **Close** button. You will be brought back to your Windows™ desktop.



## 6.1 Starting PCSC Configuration

1. Start **PCSC Configuration** accessing the Windows **Start** menu: **Start/ PCSC Config** (Windows 8) or **Start/ All Programs/ PCSC/ LINC-NXG / PCSC Config** (Windows 7, Vista, XP).
2. A Windows Security Alert window may display while **PCSC Configuration** is starting. Press the **Unblock** button to allow the program to start correctly.



**NOTE:** The Path may look different than the one shown.

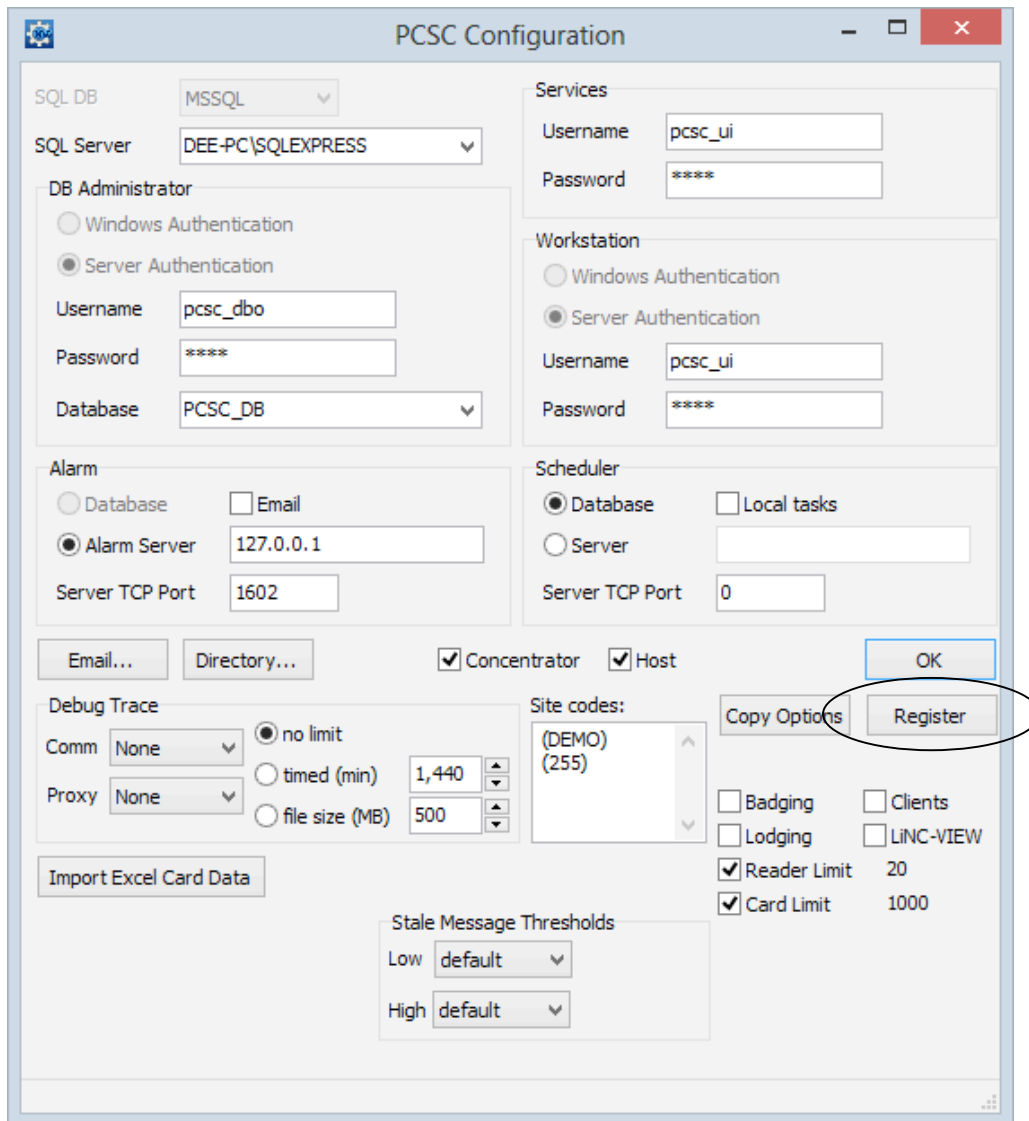
## 6.2 Registering the LiNC-NXG Software

Each copy of LiNC-NXG needs to be registered with PCSC prior to its proper use with the system.

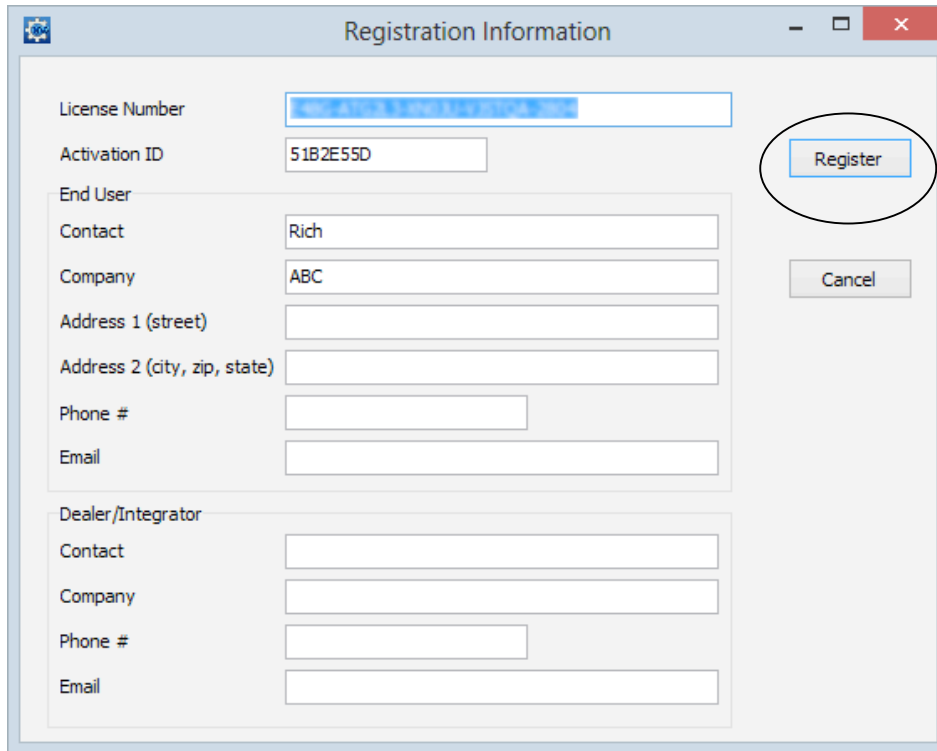
### 6.2.1 Registering via the Internet.

**NOTE:** An Internet connection is required to complete the Registration process. Should an Internet connection not be available, please see Section 6.2.2.

1. Open the PCSC Configuration window.
2. In the lower right hand corner press on the **Register** button.

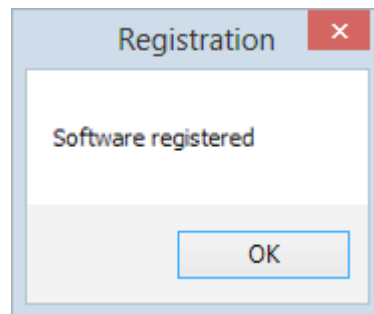


3. The **Registration Information** window will appear. Fill in each text box within the window.



4. Press the **Register** button. A connection to the PCSC registration server will commence.

5. The **Registration Information** window will confirm a valid registration.



**NOTE:** Please see section 6.2.2 if no Internet connection is available.

**NOTE:** The network configuration may “block” the port (socket port error) that is necessary to register over the Internet.

6. The updated PCSC Configuration screen will appear with a “WS” in the “site codes:” text box.

The screenshot shows the PCSC Configuration window with the following settings:

- SQL DB:** MSSQL
- SQL Server:** DEE-PC\SQLEXPRESS
- DB Administrator:** Server Authentication, Username: pcsc\_dbo, Password: \*\*\*\*\*, Database: PCSC\_DB
- Services:** Username: pcsc\_ui, Password: \*\*\*\*\*
- Workstation:** Server Authentication, Username: pcsc\_ui, Password: \*\*\*\*\*
- Alarm:** Alarm Server (selected), 127.0.0.1, Server TCP Port: 1602
- Scheduler:** Database (selected), Local tasks (unchecked), Server TCP Port: 0
- Buttons:** Email..., Directory..., Concentrator (unchecked), Host (unchecked), Reset DB, Save, Copy Options, Register
- Debug Trace:** Comm: None, Proxy: None, no limit (selected), timed (min): 1,440, file size (MB): 500
- Site codes:** (WS)
- Options:** Badging (unchecked), Clients (unchecked), Lodging (unchecked), LINC-VIEW (unchecked), Reader Limit: 20 (checked), Card Limit: 1000 (checked)
- Stale Message Thresholds:** Low: default, High: default
- Import Excel Card Data:** (button)

7. Press the **Save** button to complete the registration.

## 6.2.2 Registering NXG without an Internet Connection.

If an Internet connection is not available; the NXG software can be registered in the following way:

1. Fill in the Registration form completely.
2. Take a screen shot of the completed Registration form and save in a word processor program such as Microsoft Word or WordPad.
3. Transfer the save Registration form to a computer with Internet access.
4. Email the form to: [techsupportdl@1pcsc.com](mailto:techsupportdl@1pcsc.com) for registering.
5. PCSC Technical Support will process the registration request and send a return email when the registration is complete.

**NOTE:** Each installation of LiNC-NXG will require registration. Send a screen shot for each computer on which LiNC-NXG is installed.

The screenshot shows a Windows-style dialog box titled "Registration Information". It contains two main sections for data entry: "End User" and "Dealer/Integrator".

**End User Section:**

- License Number: [Redacted]
- Activation ID: 51B2E55D
- Contact: Rich
- Company: ABC
- Address 1 (street): [Empty]
- Address 2 (city, zip, state): [Empty]
- Phone #: [Empty]
- Email: [Empty]

**Dealer/Integrator Section:**

- Contact: [Empty]
- Company: [Empty]
- Phone #: [Empty]
- Email: [Empty]

On the right side of the dialog, there are two buttons: "Register" and "Cancel".

**NOTE:** Once the registration files have been received from PCSC, proceed to Section 6.3 to complete the registration process.

## 6.3 Finalizing the Install with Copy Options

Each copy of LiNC-NXG will have options for additional items such as badging, clients, photo trace, and LiNC-VIEW which will not be active during a normal installation.

Once the standard installation is complete, any additional options can be activated from a client's unique **pcscopt.bin** file. To do so, the client **pcscopt.bin** and **pcscopy** is required to be copied to the local PC.

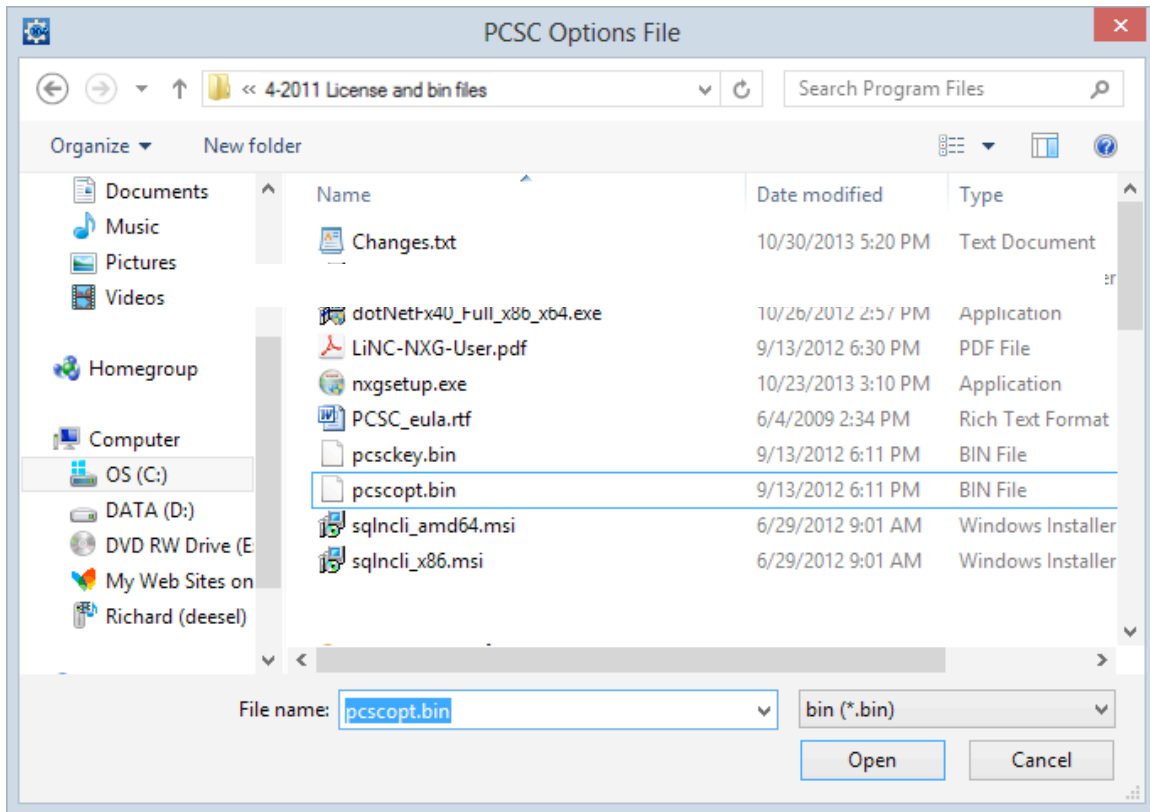
Procedure:

1. The **pcscopt.bin** file will be provided either on a flash drive, CD, within an email to the administrator or during the software registration process.
2. Once the **pcscopt.bin** file has been identified, open the **PCSC Configuration** window.
3. Press the **Copy Options** button.

The screenshot shows the PCSC Configuration window with the following settings:

- SQL DB:** MSSQL
- SQL Server:** DEE-PC\SQLEXPRESS
- DB Administrator:** Server Authentication, Username: pcsc\_dbo, Password: \*\*\*\*\*, Database: PCSC\_DB
- Services:** Username: pcsc\_ui, Password: \*\*\*\*\*
- Workstation:** Server Authentication, Username: pcsc\_ui, Password: \*\*\*\*\*
- Alarm:** Alarm Server: 127.0.0.1, Server TCP Port: 1602
- Scheduler:** Database, Server TCP Port: 0
- Buttons:** Email..., Directory..., Concentrator, Host, Reset DB, Save, Copy Options (circled), Register
- Debug Trace:** Comm: None, Proxy: None, no limit, timed (min): 1,440, file size (MB): 500
- Site codes:** (WS)
- Options:** Badging, Clients, Lodging, LINC-VIEW, Reader Limit: 20, Card Limit: 1000
- Stale Message Thresholds:** Low: default, High: default

4. The **PCSC Options File** window will appear. Browse to locate the **pcscopt.bin** file.



5. Select the file.
6. Press the **Open** button.



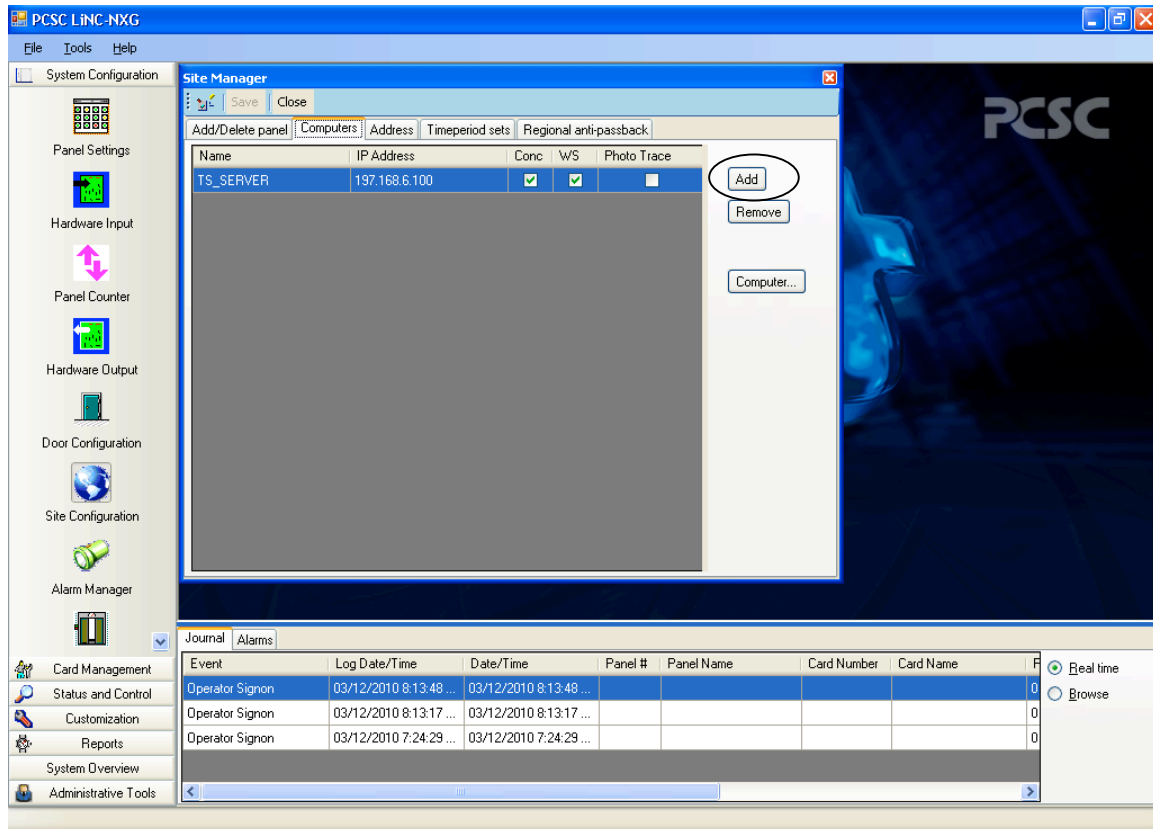
- The PCSC Options file window will automatically close. The additional purchased features of LiNC-NXG will appear with checks in the checkboxes. The site code should still show (WS) in the **Site Code** area. Press the **Save** button to complete the Registration.

The screenshot shows the 'PCSC Configuration' window with the following settings:

- SQL DB:** MSSQL
- SQL Server:** DEE-PC\SQLEXPRESS
- DB Administrator:** Server Authentication (selected), Username: pcsc\_dbo, Password: \*\*\*\*\*, Database: PCSC\_DB
- Services:** Username: pcsc\_ui, Password: \*\*\*\*\*
- Workstation:** Server Authentication (selected), Username: pcsc\_ui, Password: \*\*\*\*\*
- Alarm:** Alarm Server (selected), IP: 127.0.0.1, Server TCP Port: 1602
- Scheduler:** Database (selected), Server TCP Port: 0
- Buttons:** Email..., Directory..., Concentrator, Host, Reset DB, Save (circled in red), Copy Options, Register
- Debug Trace:** Comm: None, Proxy: None, no limit (selected), timed (min): 1,440, file size (MB): 500
- Site codes:** (WS) (circled in red)
- Stale Message Thresholds:** Low: default, High: default
- Checkboxes:** Badging (checked), Clients (unchecked), Lodging (unchecked), LINC-VIEW (unchecked), Reader Limit: 20 (checked), Card Limit: 1000 (checked)

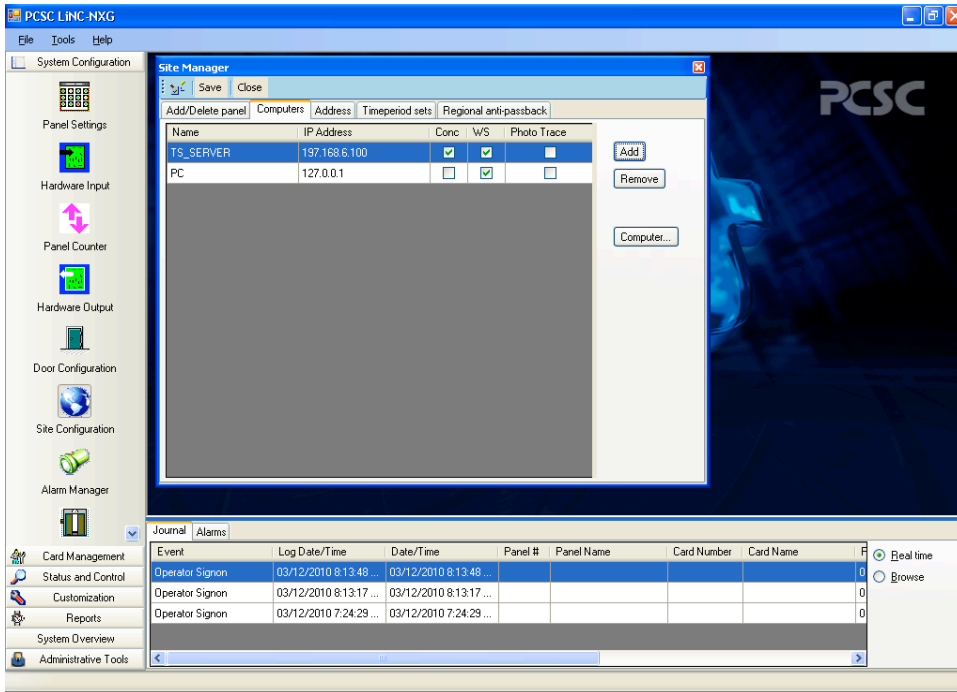
## 6.4 Updating the LiNC-NXG for a New Workstation

1. On the Host computer, Start LiNC-NXG.
2. Select the **System Configuration** menu.
3. Select **Site Configuration** icon. The **Site Manager** window will appear.
4. Select the **Computers** tab.
5. Press the **Add** button.

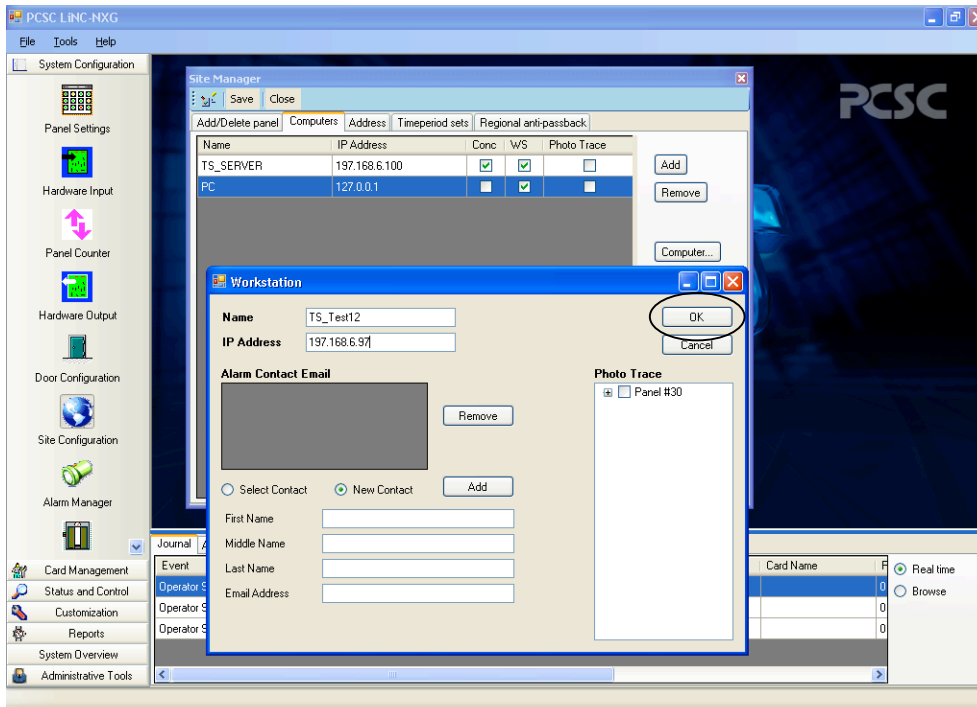


6. A second computer will be added to the list.

7. Double-click on the new computer (it will appear as a PC) in the list.



8. The **Workstation** window will appear. Within the window, enter the exact name of the workstation computer in the **Name** text box.
9. Enter the IP address of the workstation computer in the **IP Address** window.
10. Press the **OK** button to close the window.



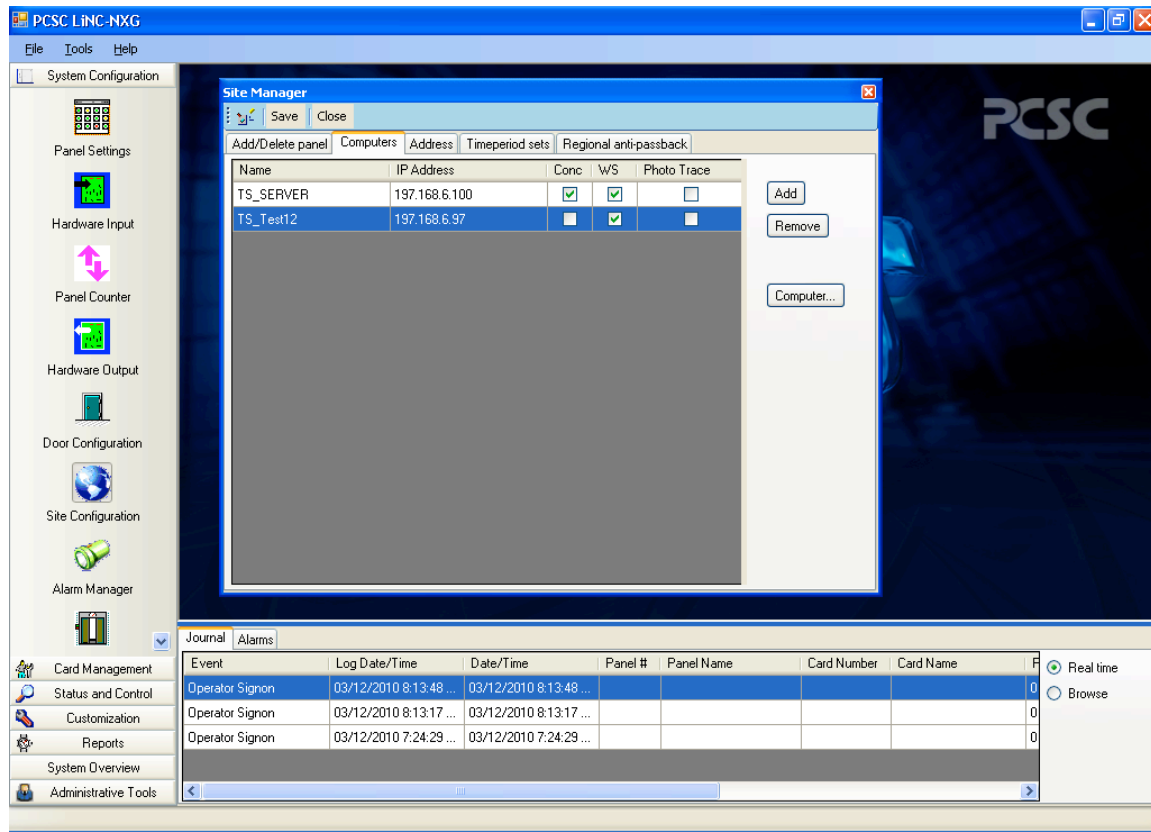
11. The workstation with its correct computer name and IP address will appear in the computer list.

**NOTE:** Please note the newly added computer will only show if the 'WS' checkbox selected.

12. Press the **Save** button to save the settings.  
13. Press the **Close** button to close the window.

The LiNC-NXG workstation is now ready.

14. Start LiNC-NXG on the workstation and verify proper operation.



## 7.0 Importing a Database

Currently all existing database transfers from LiNC-NET to LiNC-NXG are imported for clients by PCSC or authorized personnel.

If you have any questions regarding database importing, please call PCSC Engineering at (310) 303-3600.

**End of Manual  
June 2014**