



# Emergency Numbering System of Missouri

<http://www.ensofmo.org>

## ENS.Subscriber Installation Instructions

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## 1. Pre-Installation Planning

The Windows application used to search ENS locations is called ENS.Subscriber. This manual focuses only on the installation of ENS.Subscriber. Another manual will contain details on how to use the features in ENS.Subscriber.

A bit of planning and preparation is necessary before ENS.Subscriber begins installation. A designated ENS Administrator (or administrators) should be selected to be the contact point between your group/division and ENS.

### 1.1 ENS Administrators

Determine who will be the local ENS.Subscriber administrator. This person will be responsible for collecting the information outlined below, contacting the ENS central office, and overseeing the installation and usage of ENS.Subscriber. It is advisable that this person have an intermediate to advanced degree of computer knowledge and experience.

ENS Administrator responsibilities and requirements:

- Have a Windows Live Messenger account for remote assistance sessions.
- Have a LinkedIn account for participation in ENS of MO group forums.
- Have a basic understanding of computers, Windows, and Internet.
- The contact point of the entire group/district for interfacing with ENS Central for registrations and providing information for the types of licenses and number of installations needed.
- The contact point of the entire group/district for interfacing with ENS Tier-2 support.
- Responsible for overseeing the installation of ENS.Subscriber on all computers within a group/district.
- Responsible for collecting details on ENS issues and reporting them to tier-2 support.

### 1.2 Number of Installations

Determine the number of devices (computers) you want to install ENS.Subscriber on. Please include a few extra for new computers, replacement computers, and reinstalls.

- Devices must run Windows XP or Windows 7.
- Devices can be a desktop computer or a laptop. ENS.Subscriber has not yet been tested on Windows tablet. Due to data storage requirements and high density of displayed data it is very unlikely that ENS.Subscriber will ever be available on phones.

### 1.3 Types of Licenses

Of the devices planned, identify the number of devices that will be dispatch usage and the number of devices that will be field usage. Please review **Appendix C– Dispatch Usage vs. Field Usage** for more information on this determination.

Of the devices planned, identify if any of these devices are without Internet connectivity. It is possible to install and use ENS.Subscriber on a computer completely disconnected from the Internet; however, additional steps will be required for the installation and subsequent database updates. **Note:** Under normal usage ENS.Subscriber only needs be connected to the Internet for the initial registration and then for database updates. ENS.Subscriber does

not need to be connected to the Internet for normal operation because each device has its own copy of the ENS database.

#### **1.4 Obtaining Registration Tokens or License Keys**

To obtain an ENS.Subscriber registration token and login credentials you must contact the ENS central office and provide them with your contact information, the organization that will be using the application, and the number of devices that will have ENS.Subscriber installed. In response ENS will create a license with the number of requested devices and provide you with the registration token to be used against that license. ENS will also provide you with the ENS.Subscriber administration login and password that will allow you to create additional users.

Obtain the download link for the ENS.Subscriber. At the time of this writing it is:

<http://www.ensofmo.org/web/subscriberdownload.aspx>

Note: it could change as new features are added to the web site.

## 2. Installation

### 2.1 Windows 32-bit or 64-bit

Determine if the destination computer is running a 32 bit or 64 bit version of Windows.

You will need to know this during a subsequent installation step. Refer to **Appendix A – How to determine if a Windows version is 32-bit or 64-bit.**

### 2.2 Microsoft Components

ENS.Subscriber requires two Microsoft components to be installed prior to ENS.Subscriber being installed.

### 2.3 Download and Install

Follow the detailed instructions contained in **Appendix B – Downloading and Installing the Software.**

## 3. Support

A user manual for ENS.Subscriber is in the works and the production of a series of videos on YouTube is under discussion. Links to both will be on the ENS of MO web site when they become available.

An ENS of MO group was created on the LinkedIn web site for the purpose of posting issues and exchanging experiences. You will need a LinkedIn account (they are free).

URL: <http://www.linkedin.com>

Group name: [Emergency Numbering System of Missouri](#)

The first tier of support is with the ENS Administrator of the group or district. The ENS Administrator will escalate an issue to the second tier if it cannot be resolved by referring to installation instructions, reviewing the knowledgebase, or posting on the ENS of MO group at LinkedIn.

The second tier of support is provided by the developer of the software. In some cases tier-2 may need to schedule a “remote assistance” session to investigate an issue. “Remote assistance” requires a reliable Internet connection and the user needs to have access to a Windows Live Messenger account.

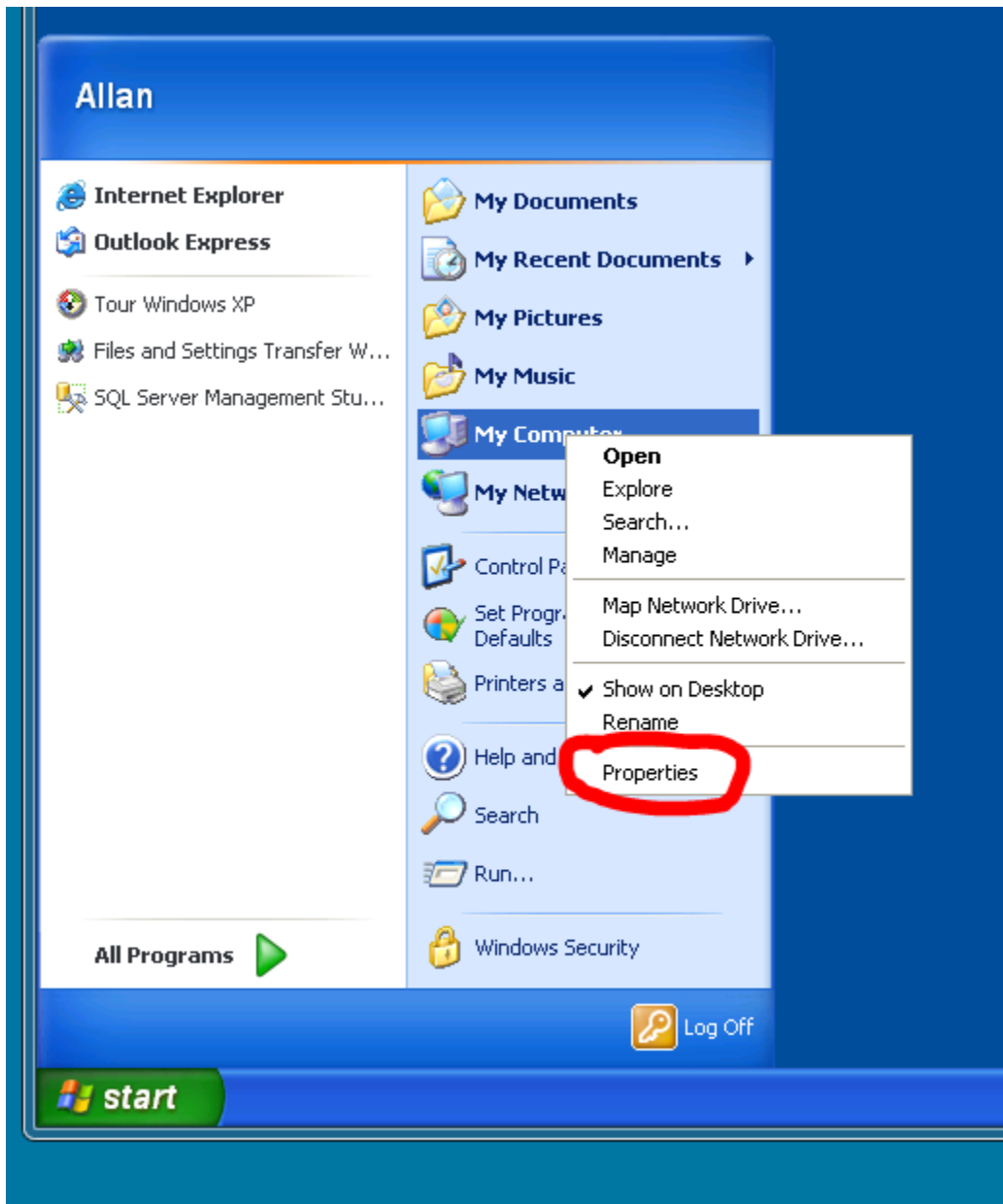
Please refer to the **Appendix D– Trouble-Shooting** section if you have any problems installing ENS.Subscriber. Please report other problems to your ENS Administrator.

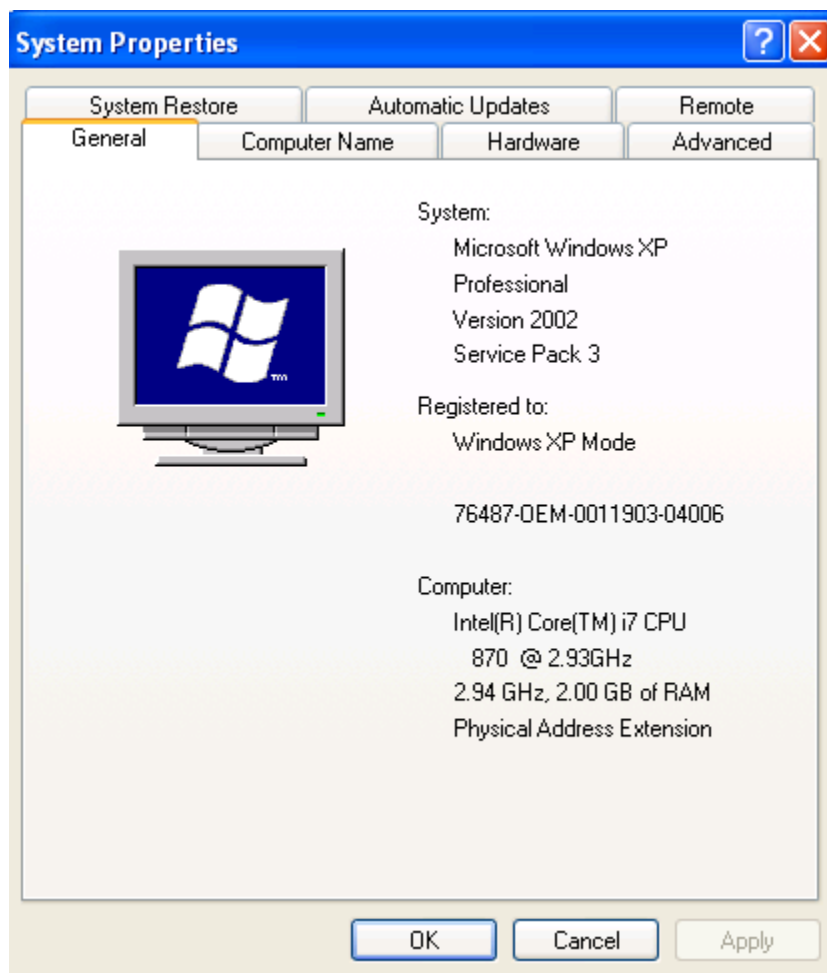
**Note: ENS Support is only for the ENS System. General computer problems, non-ENS application software problems, networking problems, Internet problems, or general usage problems should be handled by a local technical support person having access to the physical equipment and environment.**

#### 4. Appendix A – How to determine if a Windows version is 32-bit or 64-bit.

##### 4.1 Windows XP

Start button → My Computer → Right mouse click on My Computer → select Properties



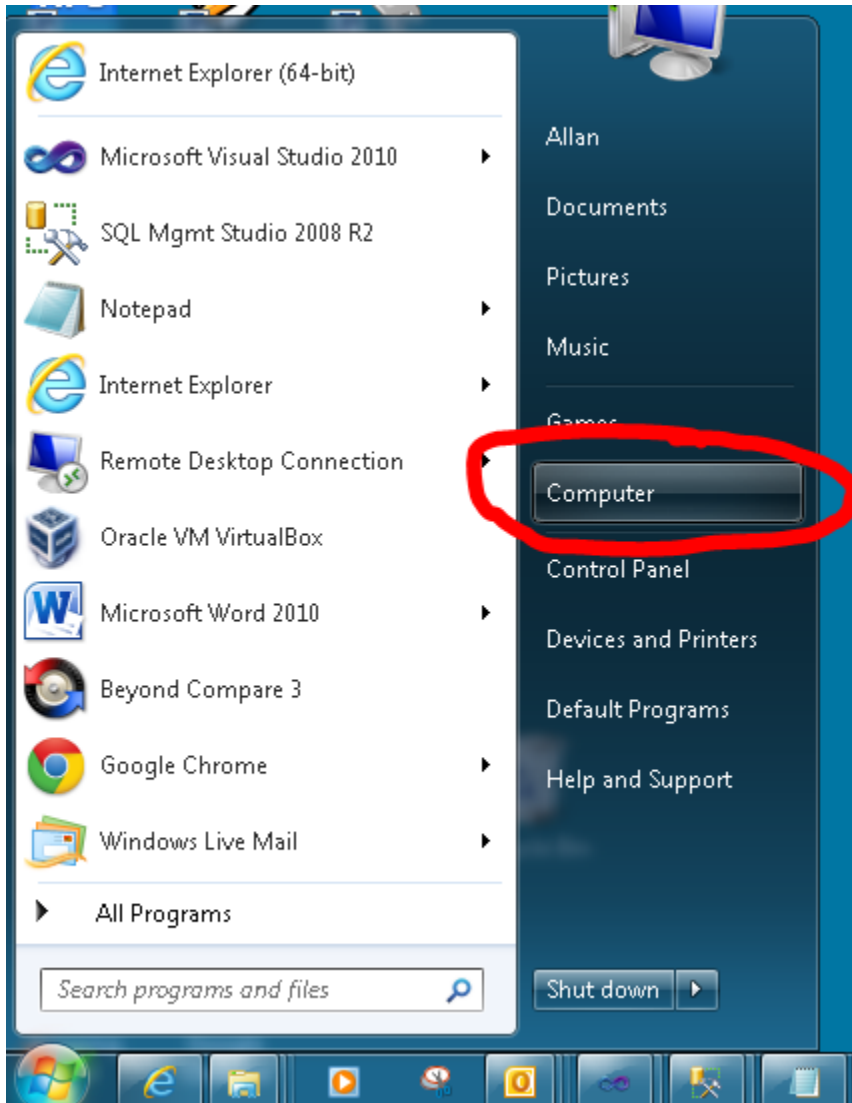


For a **64-bit** version operating system: Windows XP Professional x64 Edition Version <Year> appears under System.

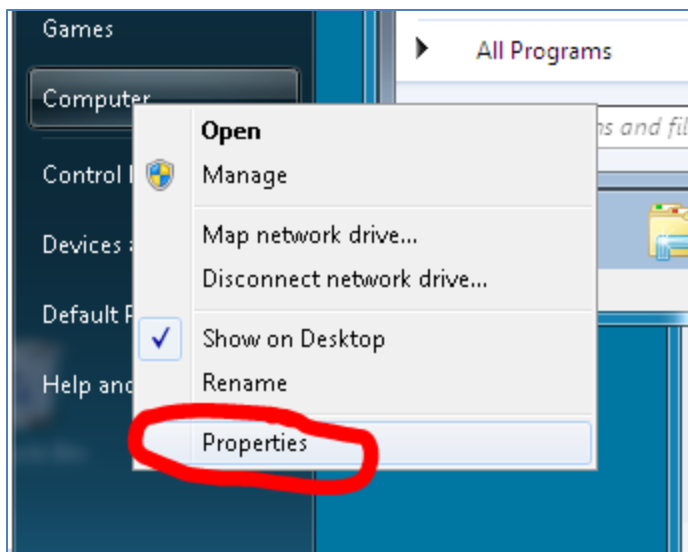
For a **32-bit** version operating system: Windows XP Professional Version <Year> appears under System.

## 4.2 Windows 7

Start button → Computer → Right mouse click on Computer → select Properties







A form will show that contains basic information about your computer. The second group down has the System Type which will indicate either 32-bit or 64-bit.

System	
Rating:	System rating is not available
Processor:	Intel(R) Core(TM) i7 CPU 870 @ 2.93GHz 11.65 GHz
Installed memory (RAM):	2.00 GB
System type:	32-bit Operating System

System	
Rating:	5.9 Windows Experience Index
Processor:	Intel(R) Core(TM) i7 CPU 870 @ 2.93GHz 2.93 GHz
Installed memory (RAM):	16.0 GB
System type:	64-bit Operating System

## 5. Appendix B – Downloading and Installing the Software

### 5.1 Download Launch Page

The ENS of MO download launch page contains links for all three software downloads. Perform each download and install in the order they appear. Detailed instructions are included below.



ENS.Subscriber is a Windows application for searching and viewing ENS locations information.

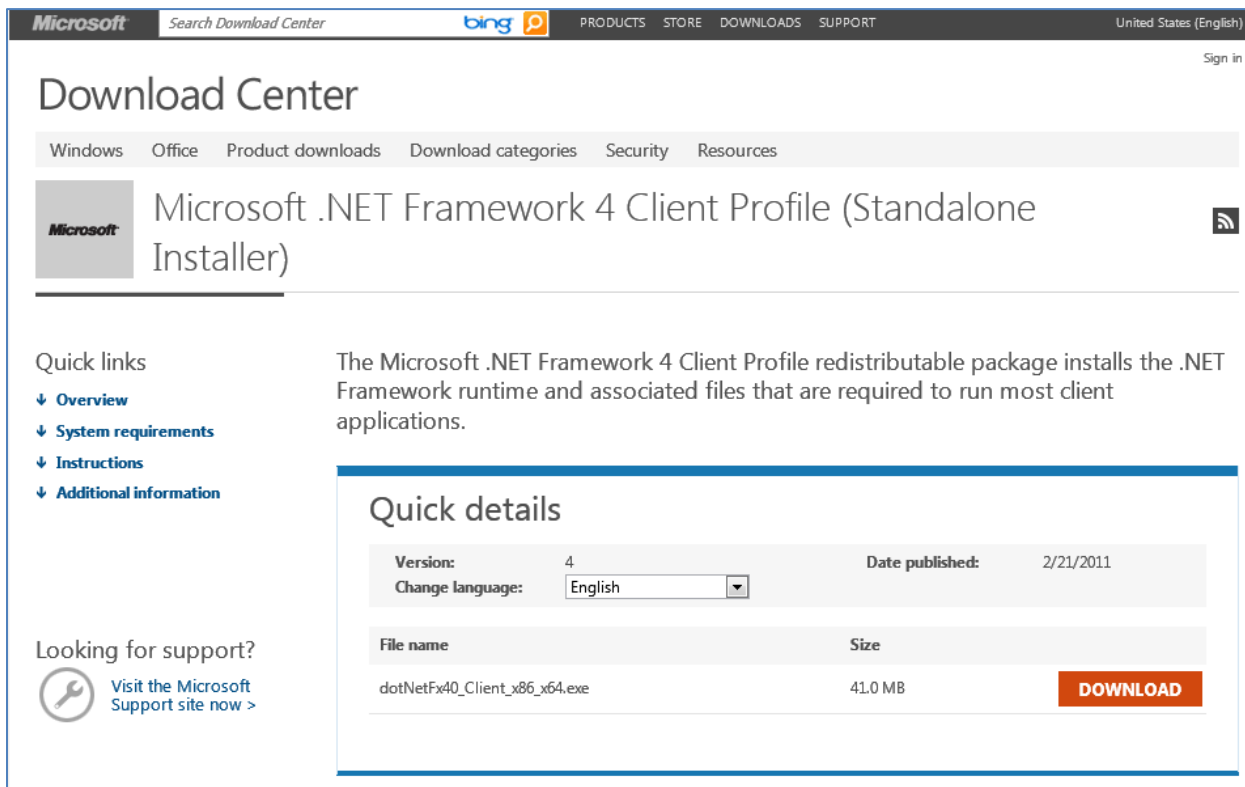
Instructions for installing and registering ENS.Subscriber are below.

1. Download and install Microsoft .NET Framework 4.0 directly from Microsoft using this link:  
<http://www.microsoft.com/download/en/details.aspx?id=24872>
2. Download and install Microsoft SQL Server Compact 3.5 directly from Microsoft using this link:  
<http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=5783>
3. Download and install ENS.Subscriber using this link:  
[ENS.Subscriber](#)
4. Request and receive a registration token from ENS Central either by phone or email.
5. Run ENS.Subscriber and enter the registration token when prompted. The registration process will download the correct county ENS database.

**Note:** Depending on the version of Windows and your user security settings, Windows could display a “Do you want to allow the following program to install software” confirmation prompt during stages of an installation. Please click “Yes” if you get this prompt.

## 5.2 Download and Install Microsoft .NET Framework 4(FW4)

Navigating to the first link on the download launch page will take you to this Microsoft download web site.

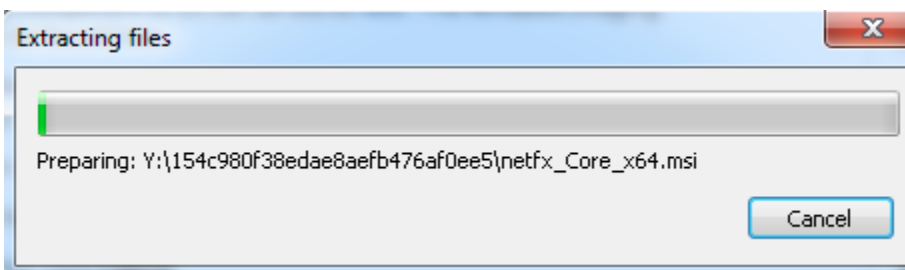


The screenshot shows the Microsoft Download Center page for the .NET Framework 4 Client Profile (Standalone Installer). The page includes a search bar, navigation links (Windows, Office, Product downloads, Download categories, Security, Resources), and a sign-in link. The main content area features a Microsoft logo, the product name, and a description: "The Microsoft .NET Framework 4 Client Profile redistributable package installs the .NET Framework runtime and associated files that are required to run most client applications." Below this is a "Quick details" section with a table showing the version (4), date published (2/21/2011), and file name (dotNetFx40\_Client\_x86\_x64.exe) with a size of 41.0 MB. A "DOWNLOAD" button is visible next to the file name. On the left, there are "Quick links" for Overview, System requirements, Instructions, and Additional information. At the bottom left, there is a "Looking for support?" section with a link to "Visit the Microsoft Support site now >".

Click on the Download button.

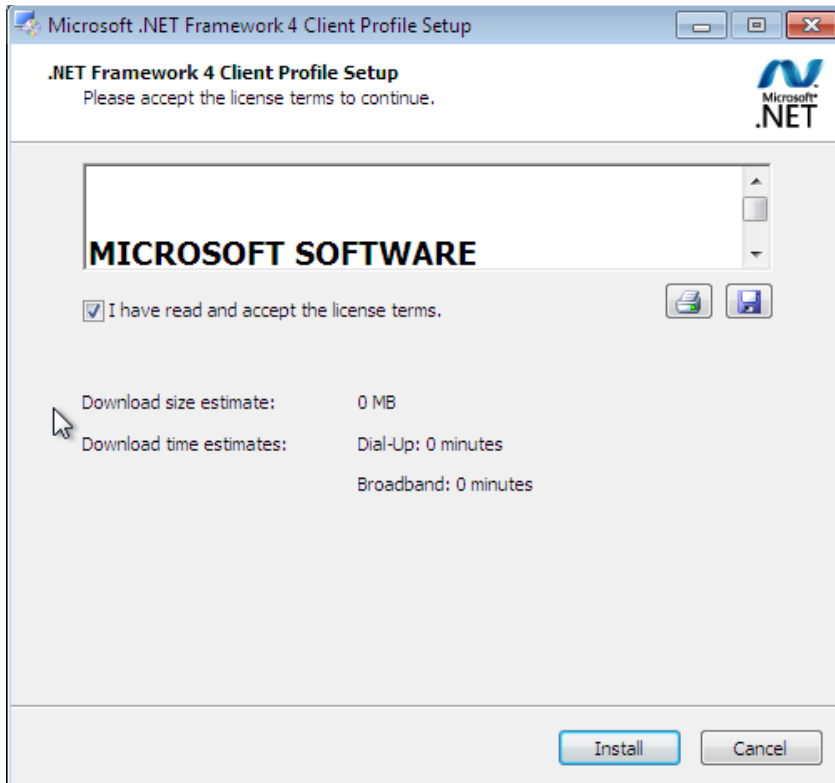
Depending on your browser version you will be prompted to either save or run the downloaded file. Since you only need to do this one time, selecting "run" is the easiest option; however, you may choose to save the downloaded file and then run it later.

After the file is downloaded it will be extracted.

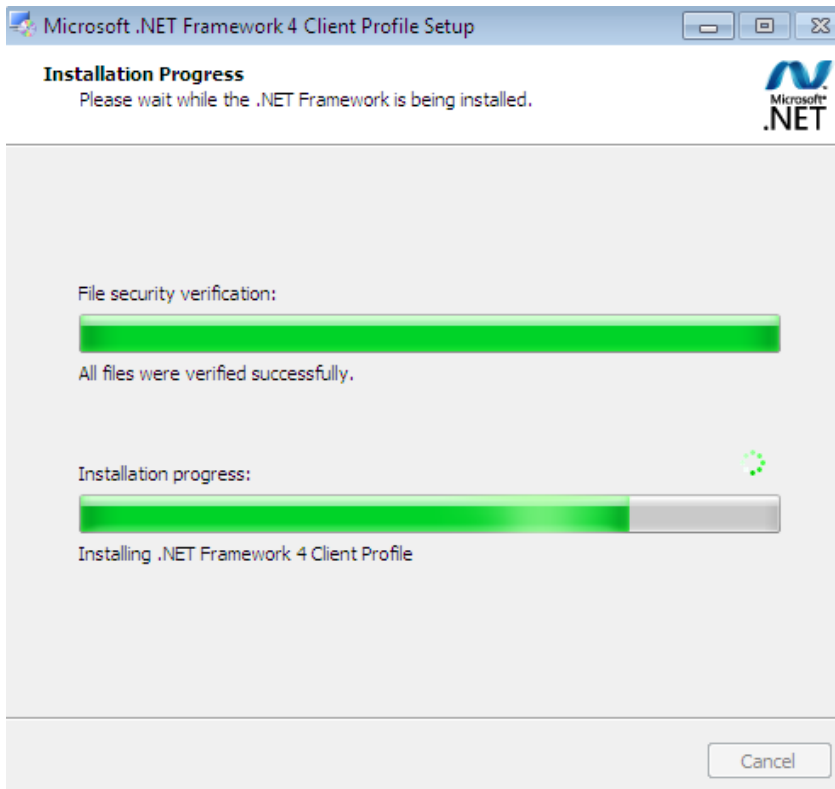


If FW4 was previously installed on the computer you will be prompted to either repair or remove the program. Just click the Cancel button instead of doing a repair or remove.

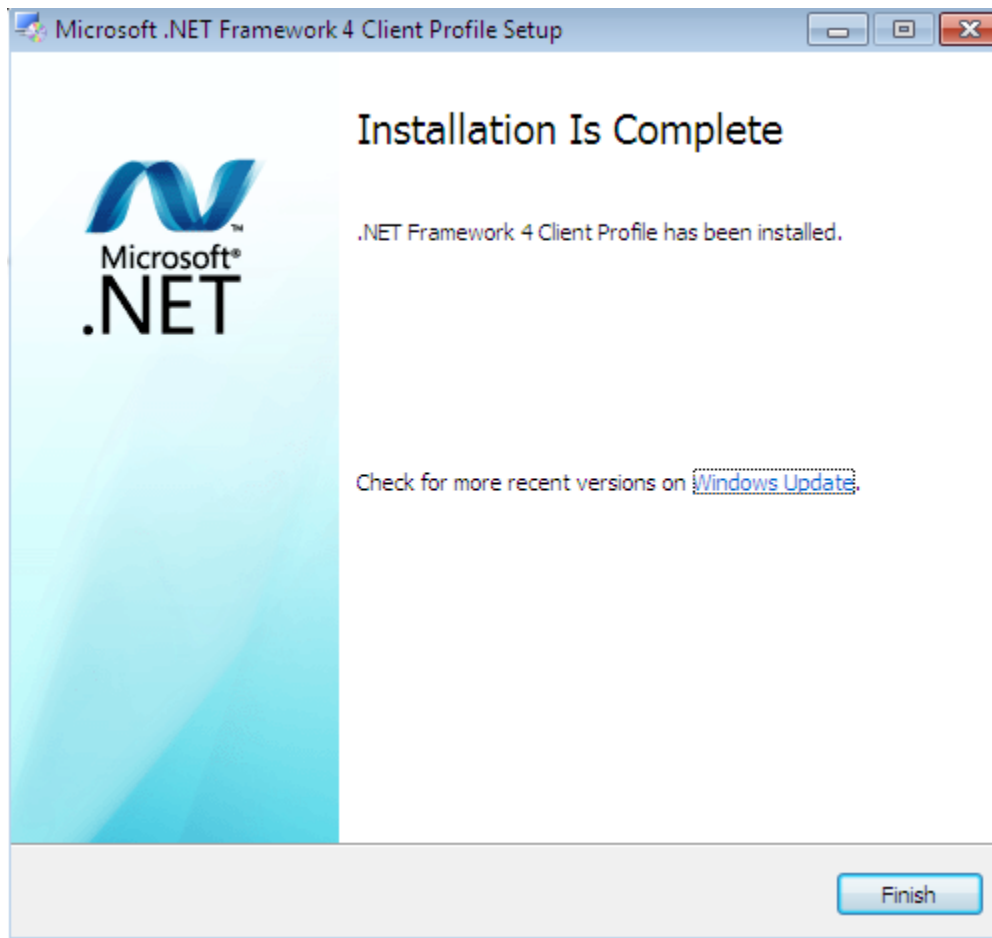
You will get this dialog if FW4 is not installed.



Check the terms box and click the Install button. You will then get this progress dialog:



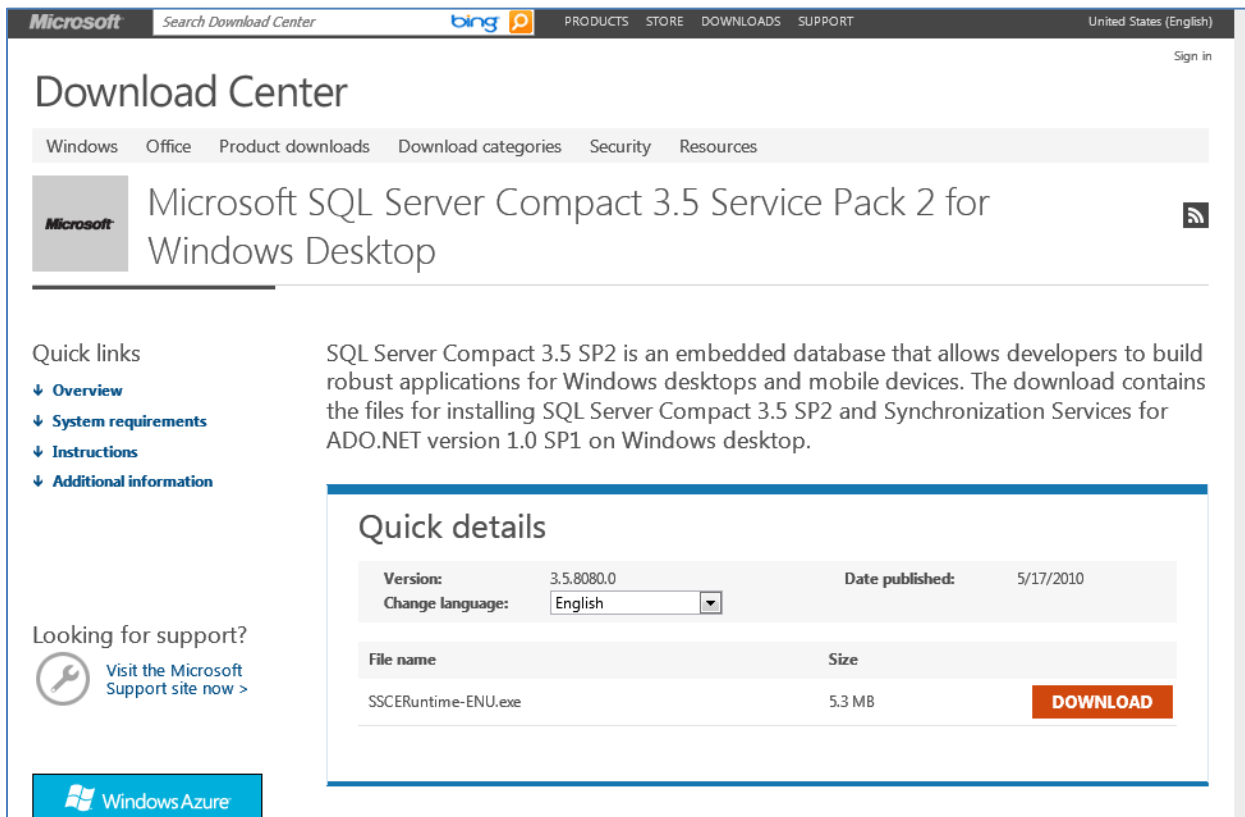
The installation can take a few minutes.



Ok. We're done. Click Finish.

### 5.3 Download and Install Microsoft SQL Server Compact 3.5 (SSCE)

Navigating to the second link on the download launch page will take you to this Microsoft download web site.



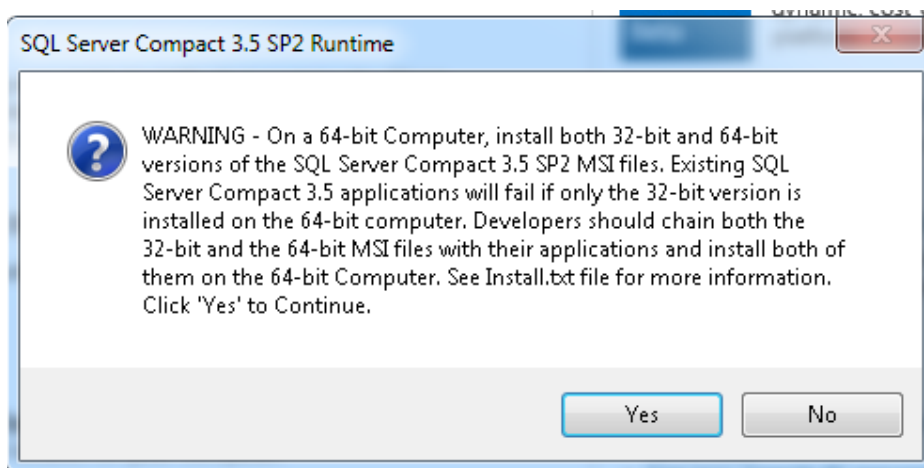
The screenshot shows the Microsoft Download Center page for "Microsoft SQL Server Compact 3.5 Service Pack 2 for Windows Desktop". The page includes a search bar, navigation links (Windows, Office, Product downloads, Download categories, Security, Resources), and a "Sign in" link. The main content area features a "Quick links" section with links to Overview, System requirements, Instructions, and Additional information. A "Looking for support?" section with a wrench icon and a link to the Microsoft Support site is also present. The "Quick details" section displays the version (3.5.8080.0), date published (5/17/2010), and a table with the file name "SSCERuntime-ENU.exe" and size "5.3 MB". A prominent orange "DOWNLOAD" button is located next to the file information.

File name	Size
SSCERuntime-ENU.exe	5.3 MB

**DOWNLOAD**

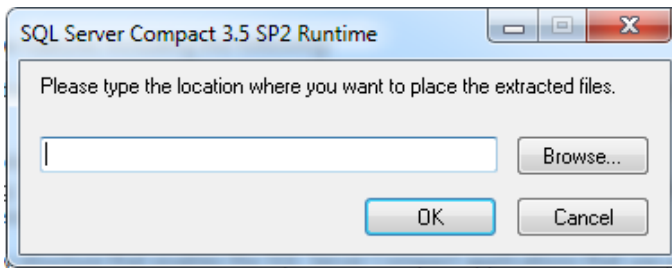
Click on the Download button.

Depending on your browser version you will be prompted to either save or run the downloaded file. Since you only need to do this one time, selecting "run" is the easiest option; however, you may choose to save the downloaded file and then run it later. Either way you will get the following prompts. This is where the 32 bit vs. 64 bit information comes in.



Click Yes.

The downloaded file, SSCERuntime-ENU.exe, contains two installation files. Executing the download will extract these two files to a **folder of your choice**. On Windows 7 you might want to select your user downloads folder to avoid folder permission issues. Please be sure to remember which folder you used because you will need to open that folder in the next step.



You should now have the following files in the folder you selected:

- SSCERuntime\_x64-ENU.msi
- SSCERuntime\_x86-ENS.msi

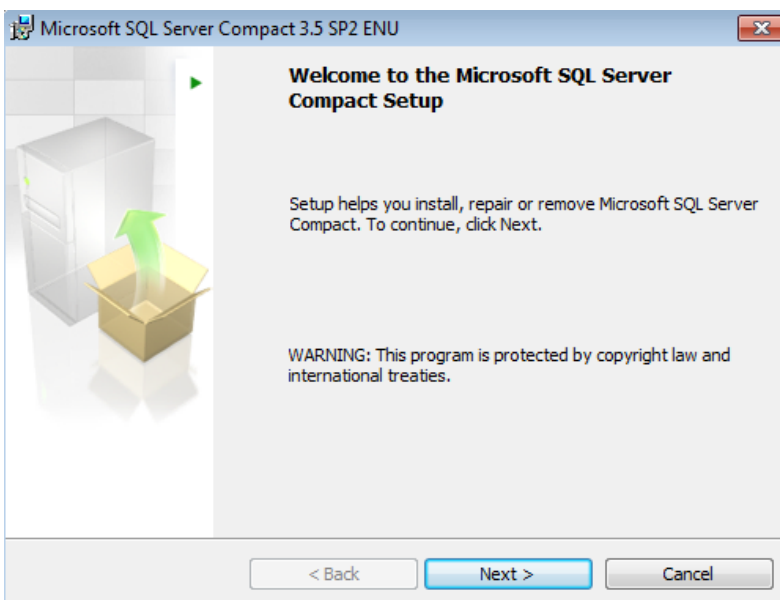
Note: At this point SSCE has not yet been installed.

If you are installing on a **32-bit version of Windows** you need to only run SSCERuntime\_x86-ENS.msi.

If you are installing on a **64-bit version of Windows** you need to run SSCERuntime\_x86-ENS.msi **followed by** SSCERuntime\_x64-ENS.msi.

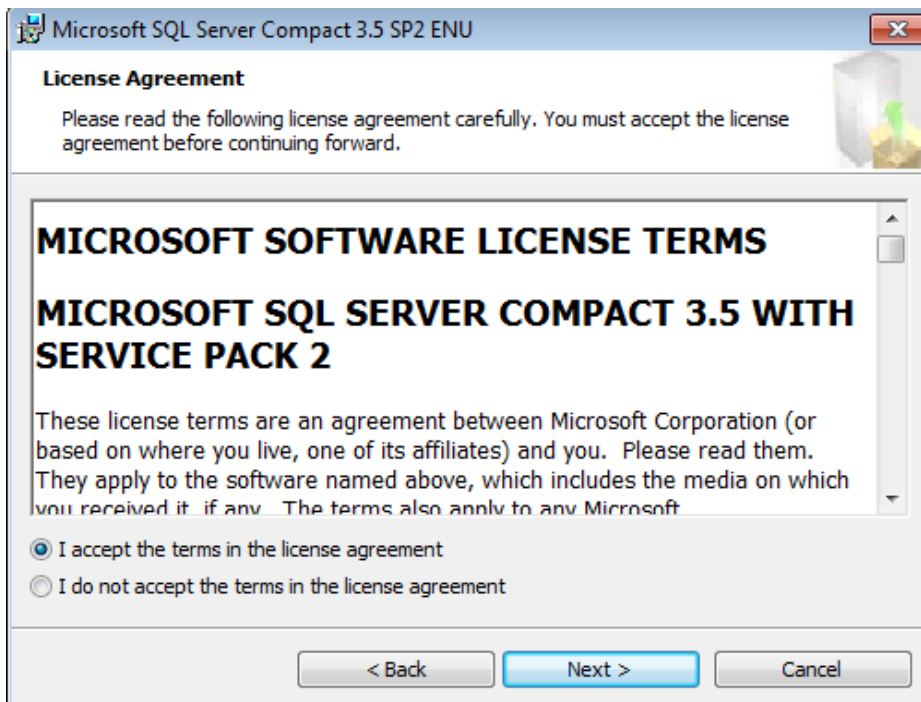
If SSCE was previously installed on the computer you will be prompted to either repair or remove the program. Just click the Cancel button instead of doing a repair or remove.

The first dialog of the installation should look like this:

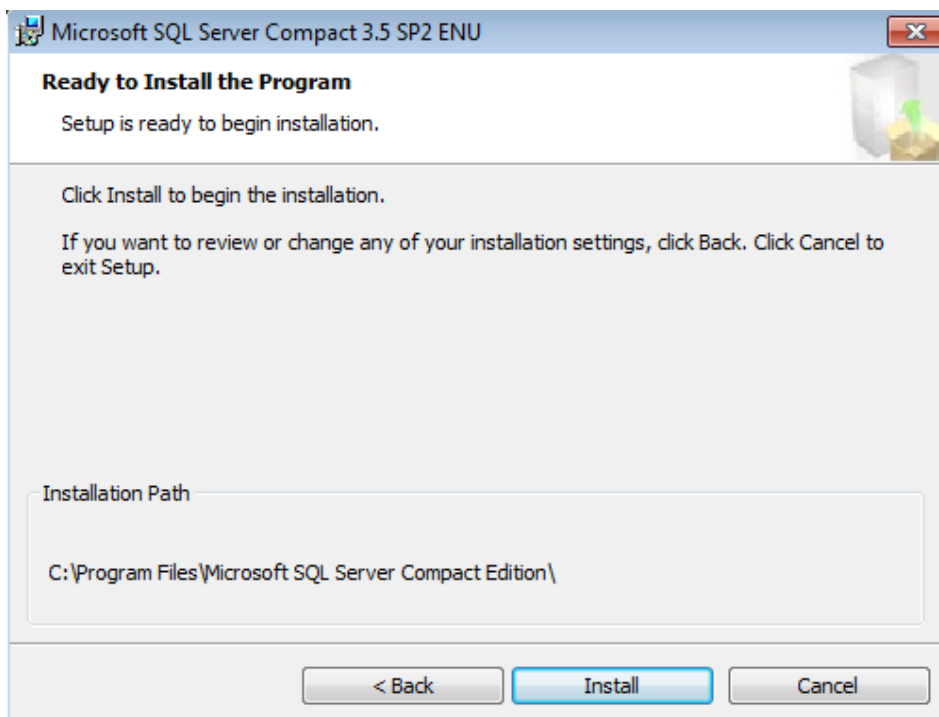


Click Next.

The Microsoft license agreement is next.



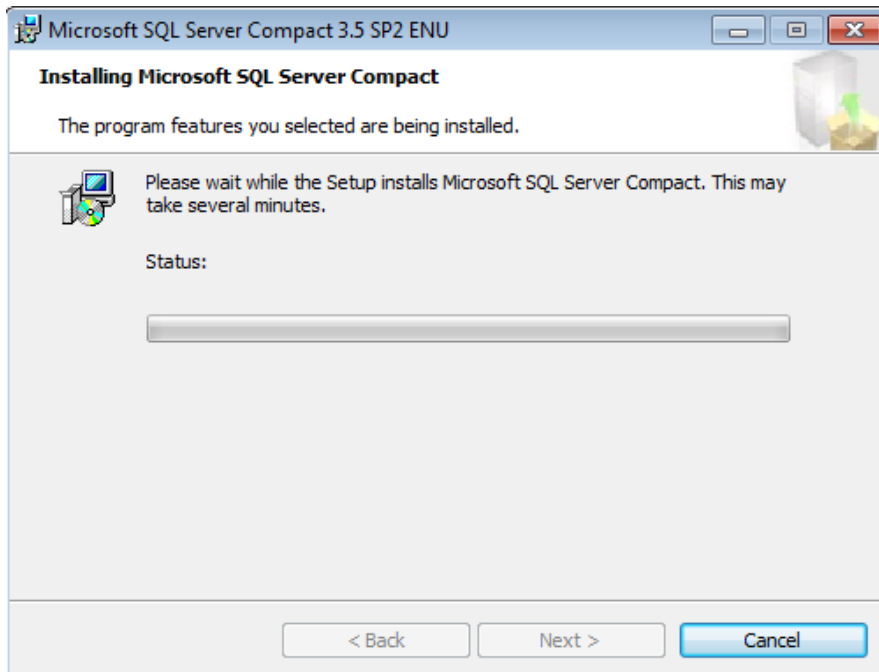
Check the "accept" box and click Next.



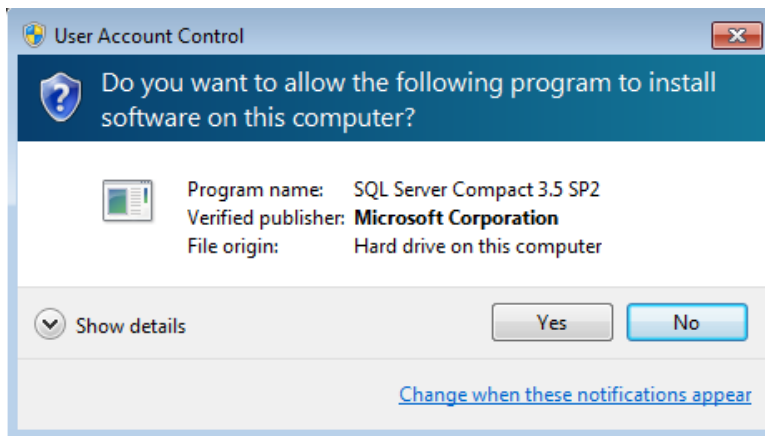
Click Install.



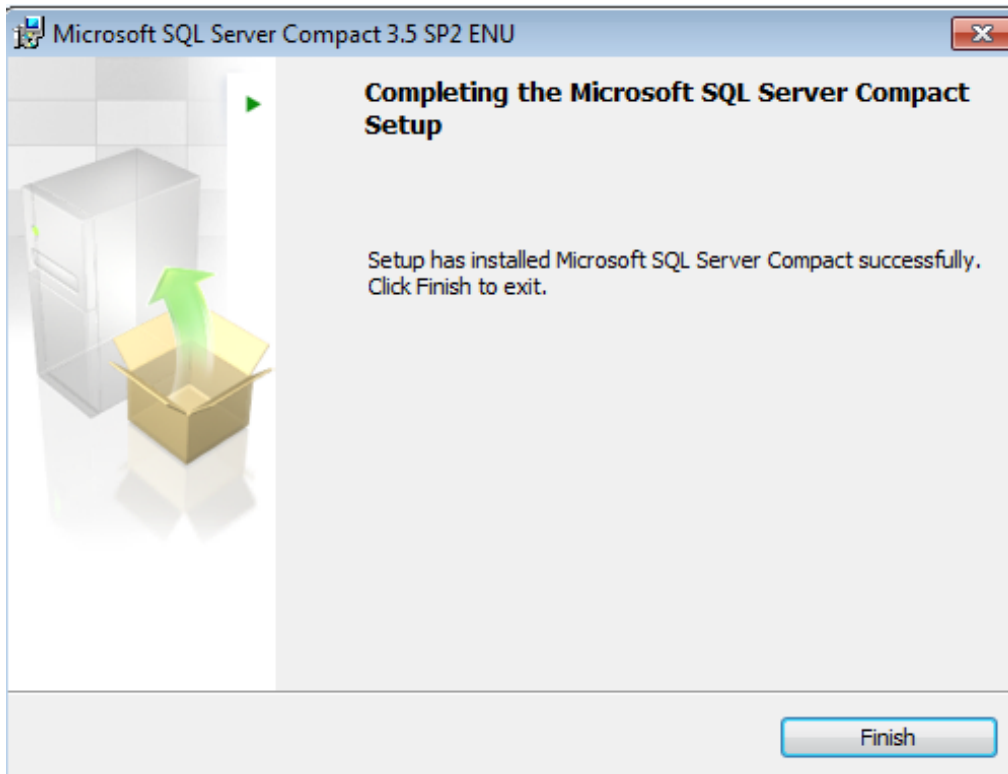
A progress dialog is displayed.



If you get this confirmation prompt (below), just click Yes.

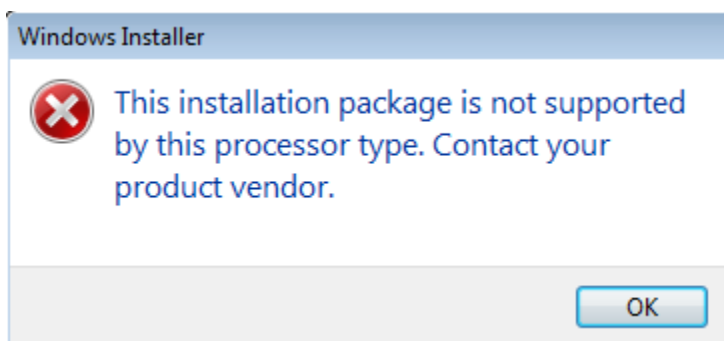


Then the final dialog.



Click Finish.

Note: If you try to install the 64 bit program on a 32 bit version of Windows you will get this nasty message:

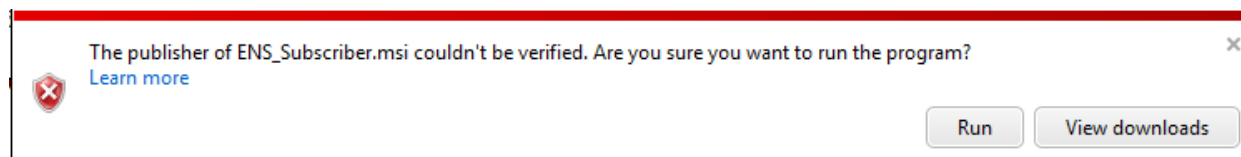


#### 5.4 Download and Install ENS.Subscriber

Clicking on the third link on the download launch page will download the ENS.Subscriber installer file.

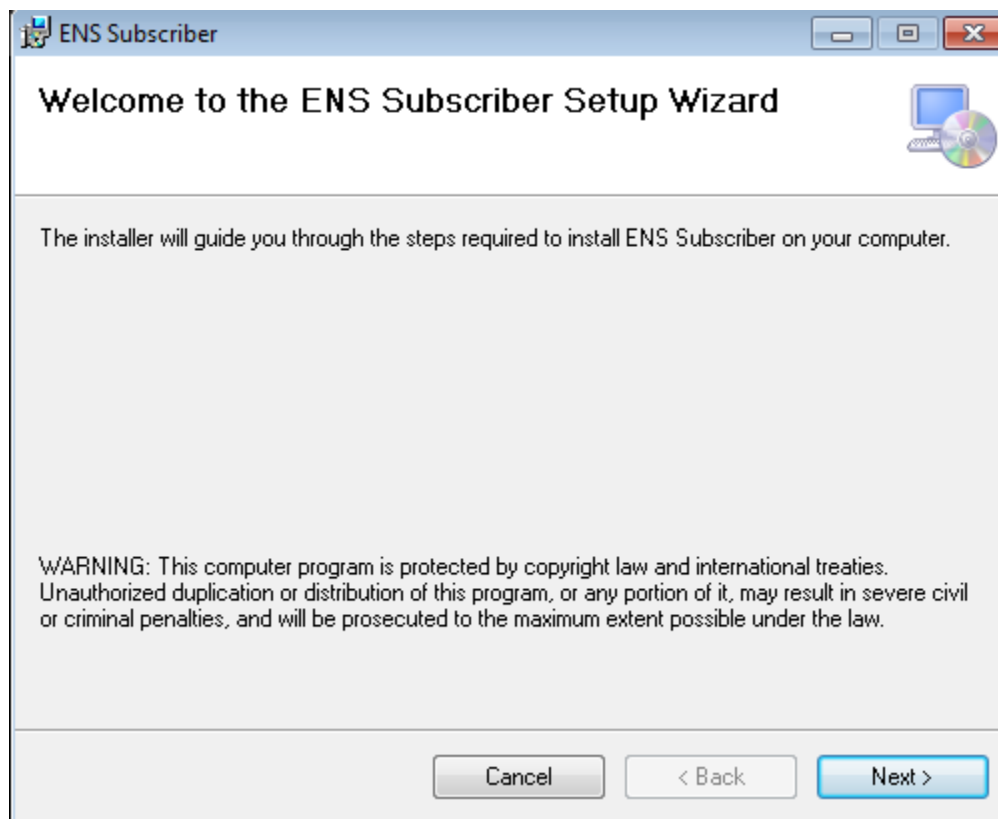
Depending on your browser version you will be prompted to either save or run the downloaded file. Since you only need to do this one time, selecting “run” is the easiest option; however, you may choose to save the downloaded file and then run it later.

Also, depending on your browser version, you may get this additional security prompt.



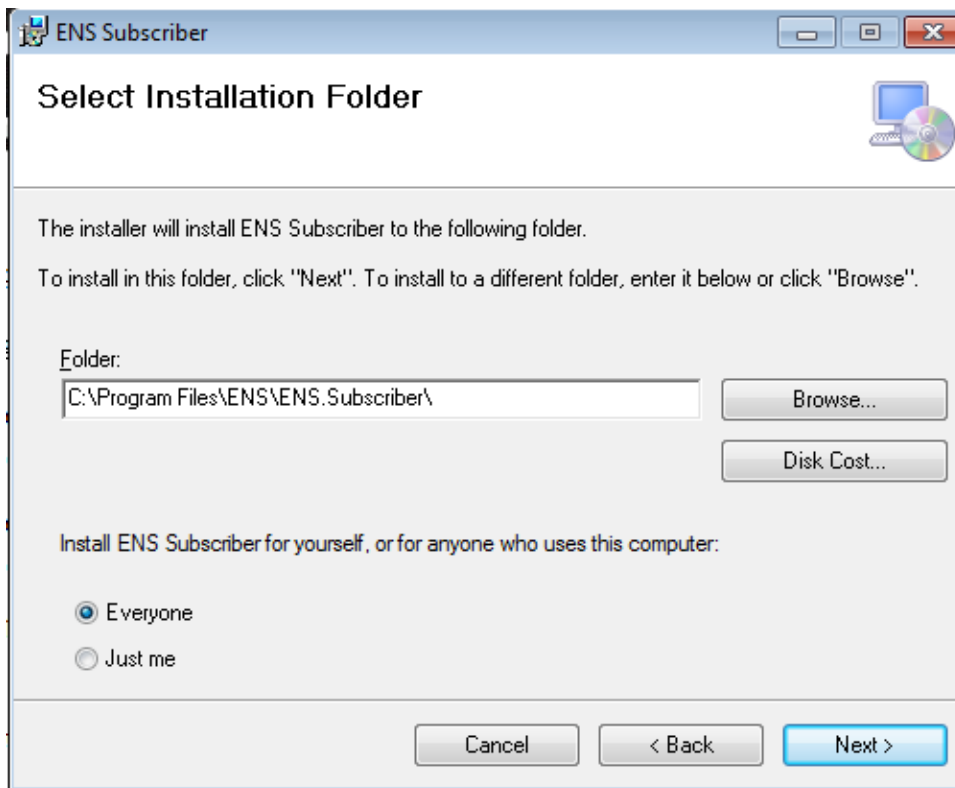
If you get the above dialog, please click Run.

When the installer runs you should see this dialog:

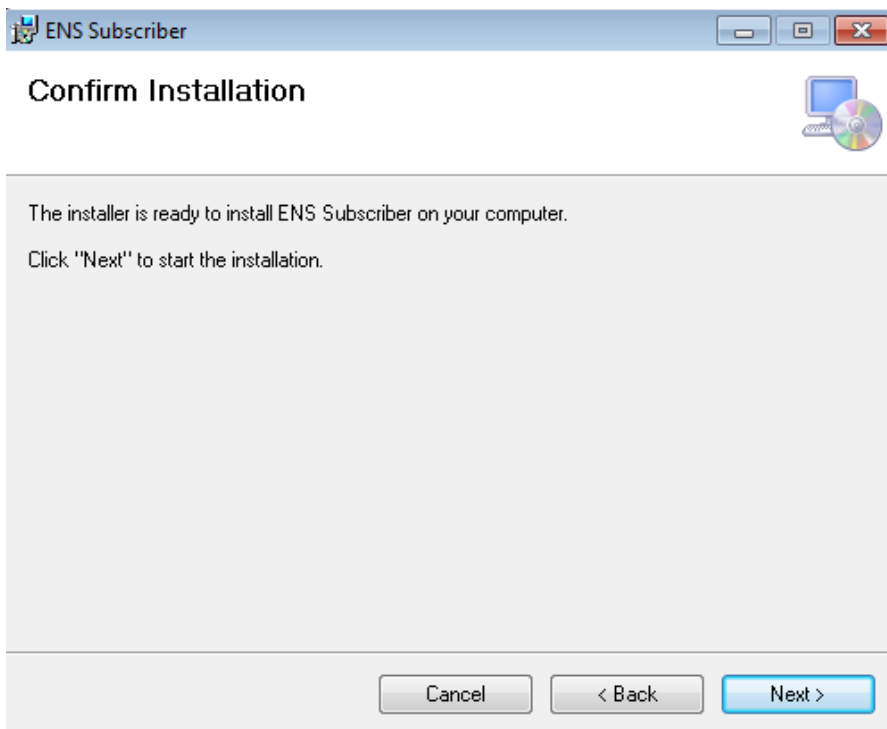


Click Next.

The next dialog is for selecting the folder where the program will be installed to. Please use the default folder as shown in the dialog below.

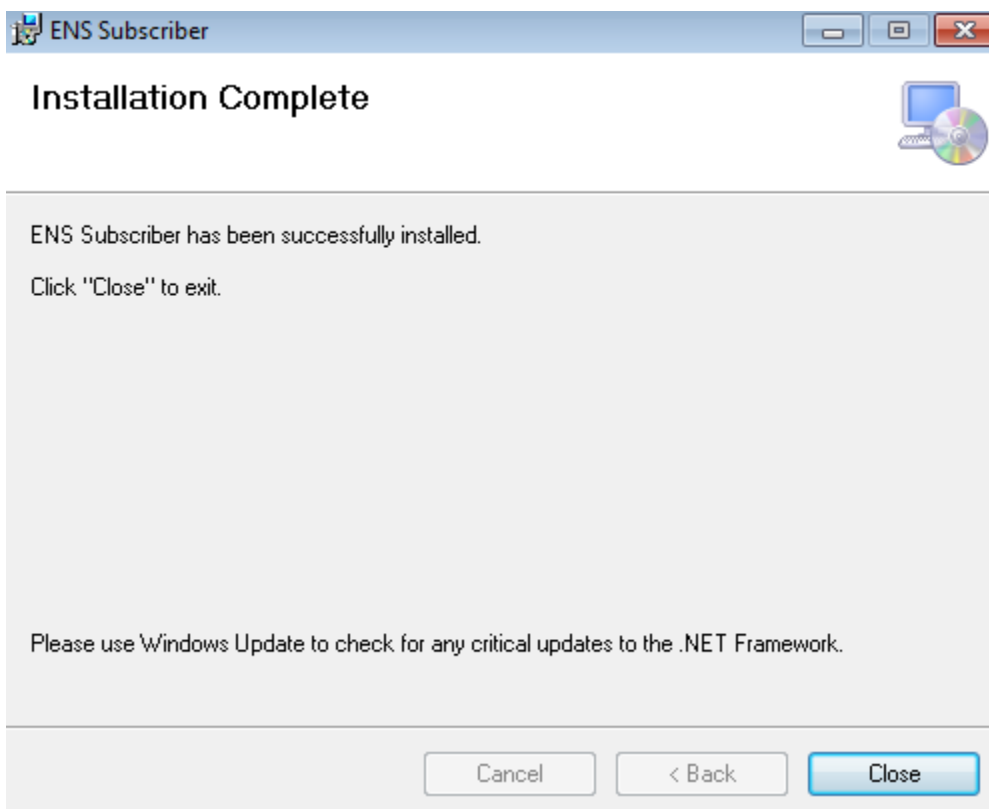
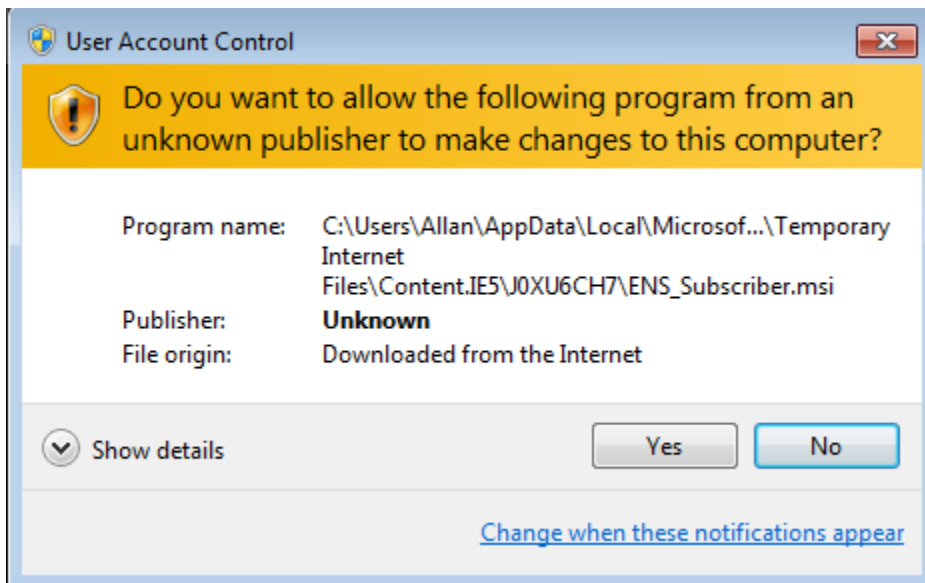


Check Everyone and click Next.



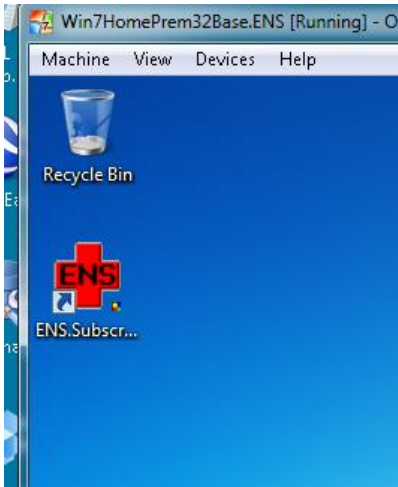
Click Next.

If you get this confirmation prompt (below), just click Yes.



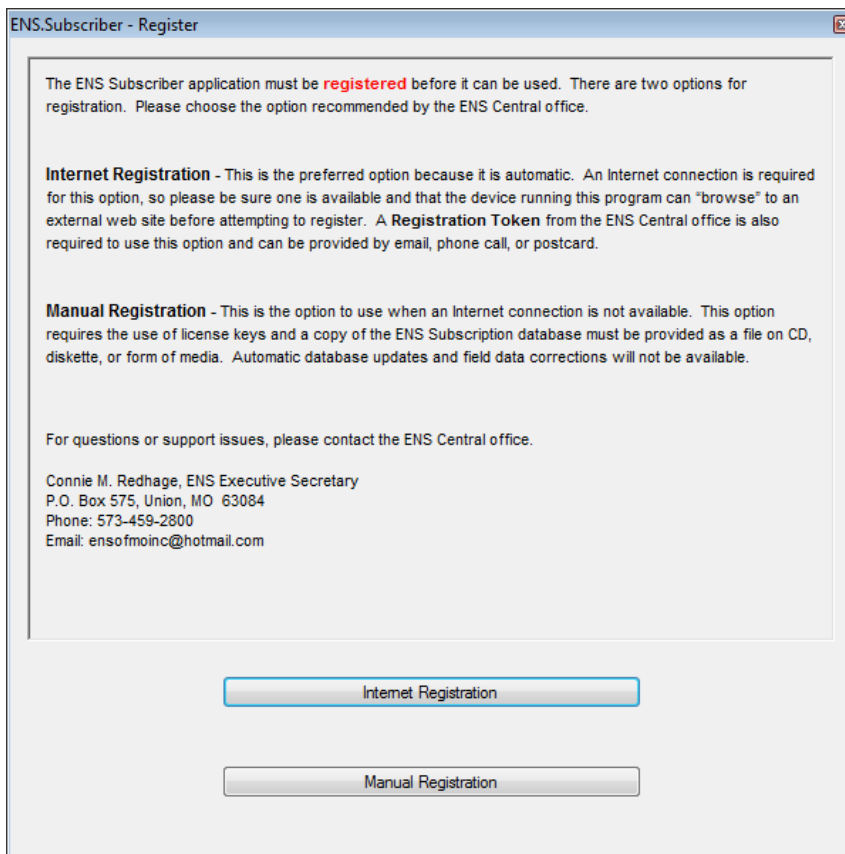
Click Close.

ENS.Subscriber is now installed and you should see a shortcut for it on your desktop and in your start menu. If you like, you can also drag it to your taskbar.



Double click on the shortcut to launch.

When ENS.Subscriber runs for the first time there will be a registration dialog.

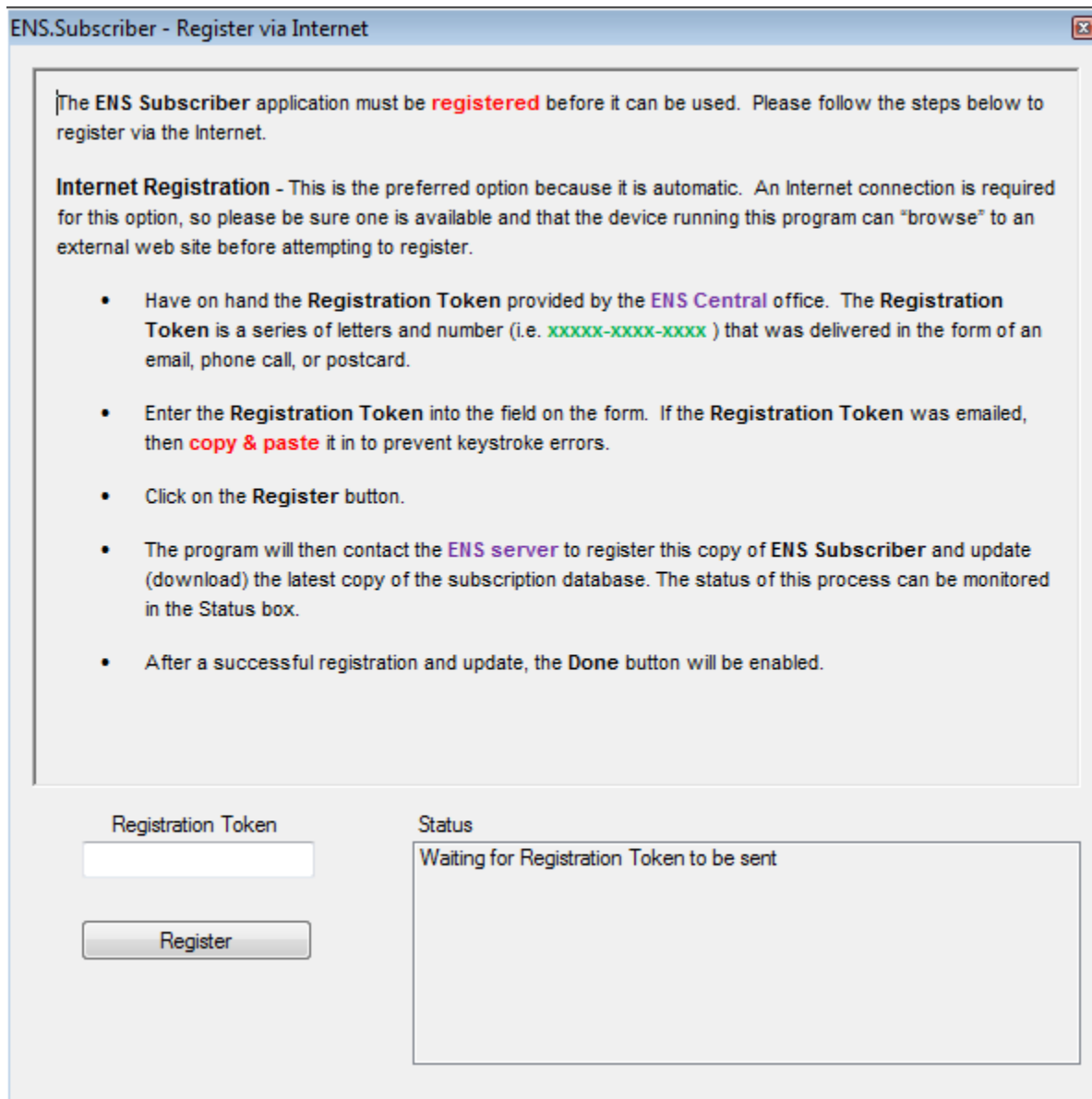


In almost all cases you will click on the Internet Registration button.

The exception is when you are installing to a computer not connected to the Internet and, in which case, all of the installation files would have been on a CD or thumb drive instead of being downloaded from the Internet. The manual registration process is covered in another document.

### 5.5 Internet Registration

The Internet Registration dialog requires you to enter the registration token you received from ENS Central.



The screenshot shows a window titled "ENS.Subscriber - Register via Internet". Inside, there is a text area with instructions: "The ENS Subscriber application must be **registered** before it can be used. Please follow the steps below to register via the Internet." Below this, a section titled "Internet Registration" explains that this is the preferred option because it is automatic and requires an Internet connection. It lists six steps: 1. Have on hand the Registration Token provided by the ENS Central office. 2. Enter the Registration Token into the field on the form. 3. Click on the Register button. 4. The program will then contact the ENS server to register this copy of ENS Subscriber and update (download) the latest copy of the subscription database. 5. After a successful registration and update, the Done button will be enabled. At the bottom, there is a text input field labeled "Registration Token" and a "Register" button. To the right of the input field is a "Status" box that currently displays "Waiting for Registration Token to be sent".

ENS.Subscriber - Register via Internet

The ENS Subscriber application must be **registered** before it can be used. Please follow the steps below to register via the Internet.

**Internet Registration** - This is the preferred option because it is automatic. An Internet connection is required for this option, so please be sure one is available and that the device running this program can "browse" to an external web site before attempting to register.

- Have on hand the **Registration Token** provided by the **ENS Central** office. The **Registration Token** is a series of letters and number (i.e. **xxxxx-xxxx-xxxx** ) that was delivered in the form of an email, phone call, or postcard.
- Enter the **Registration Token** into the field on the form. If the **Registration Token** was emailed, then **copy & paste** it in to prevent keystroke errors.
- Click on the **Register** button.
- The program will then contact the **ENS server** to register this copy of **ENS Subscriber** and update (download) the latest copy of the subscription database. The status of this process can be monitored in the Status box.
- After a successful registration and update, the **Done** button will be enabled.

Registration Token

Status

Waiting for Registration Token to be sent

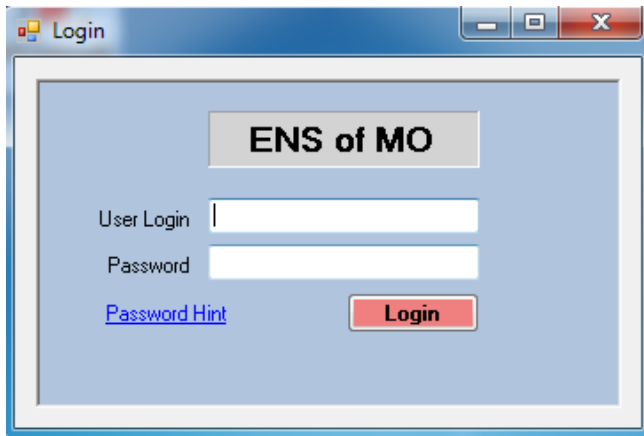
Register

Enter the registration token and click Register.

The status box on the right will show what is going on.

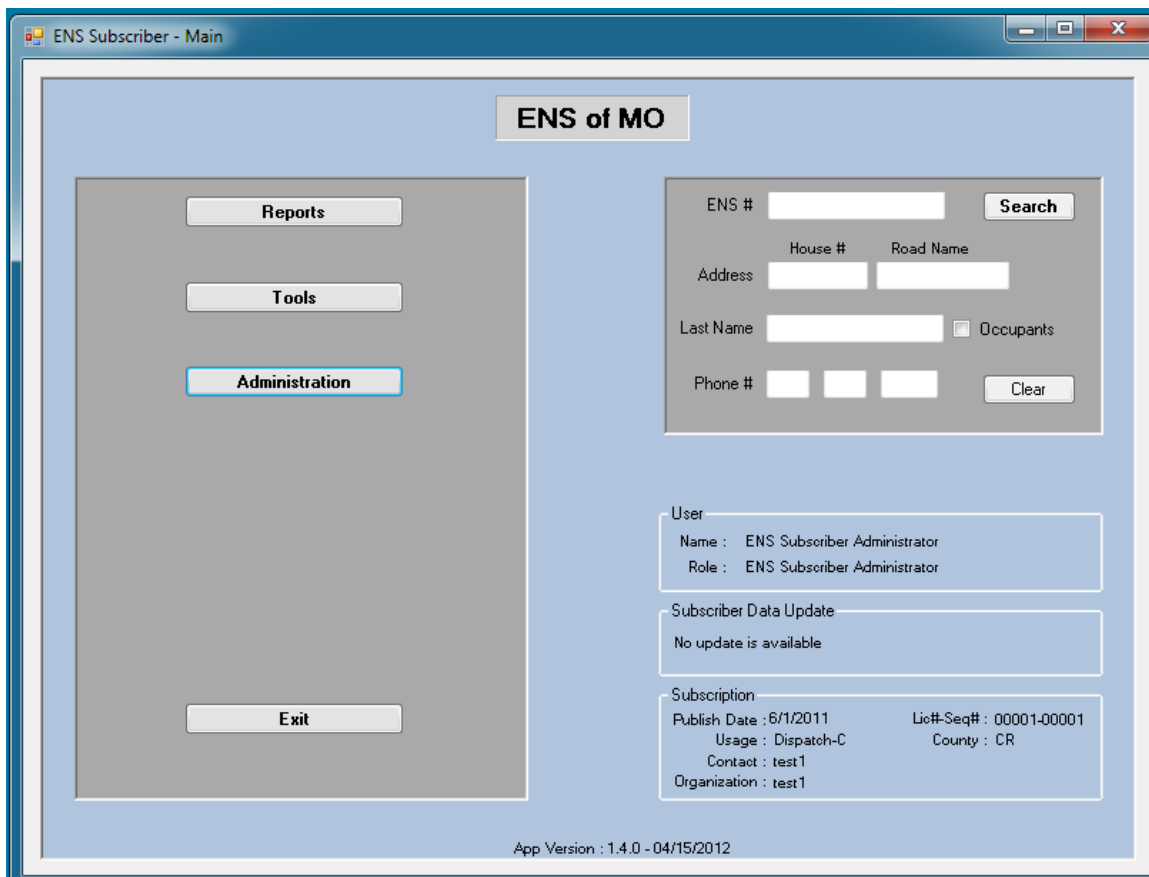
The latest county database will be downloaded immediately following a successful registration. The program will then shut down and you are ready to use ENS.Subscriber by clicking on the desktop shortcut.

After a successful registration ENS.Subscriber will display a login dialog.



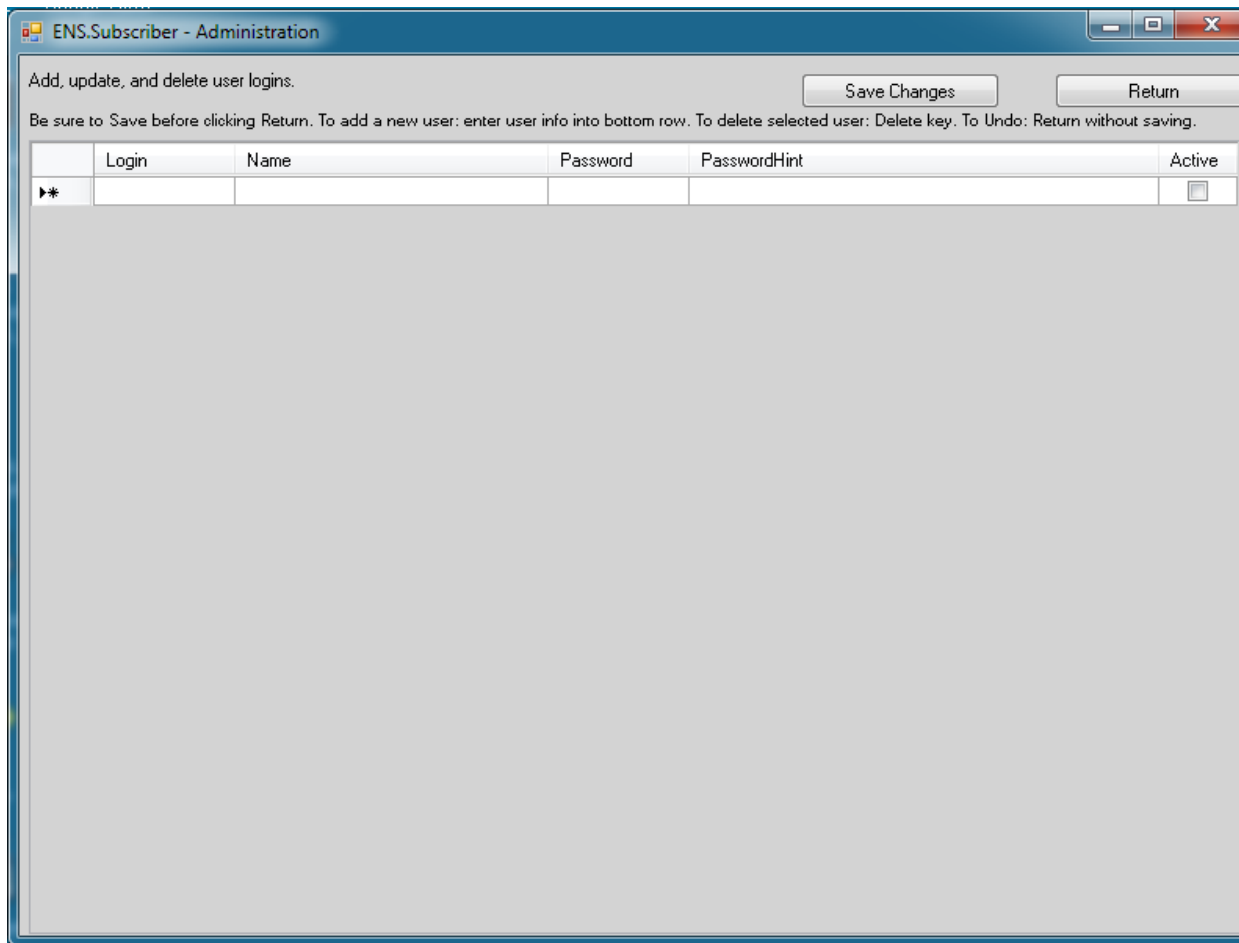
Enter the ENS administrator login and password provided by ENS Central.

Note: Password Hit is currently not available and will be implemented in a future release.



Click on Administration to add users.





The screenshot shows a Windows-style application window titled "ENS.Subscriber - Administration". The window has a standard title bar with minimize, maximize, and close buttons. The main content area is divided into two sections. The top section contains the text "Add, update, and delete user logins." followed by two buttons: "Save Changes" and "Return". Below this is a warning message: "Be sure to Save before clicking Return. To add a new user: enter user info into bottom row. To delete selected user: Delete key. To Undo: Return without saving." The bottom section is a table with five columns: "Login", "Name", "Password", "PasswordHint", and "Active". The first row of the table is highlighted in light blue and contains a right-pointing arrow followed by an asterisk in the "Login" column, and an unchecked checkbox in the "Active" column. The rest of the table is empty.

	Login	Name	Password	PasswordHint	Active
➡*					<input type="checkbox"/>

Note: Be sure to check the Active box on new users.

## 5.6 Manual Registration

The manual registration process is for registering computers that are not connected to the Internet due to security reasons. A good example would be computers used by dispatch.

Manual registration requires more interaction with the ENS central office.

The screenshot shows a window titled "ENS.Subscriber - Register". Inside, there is a text box with instructions and a form for registration details.

The instructions text reads: "The ENS Subscriber application must be **registered** before it can be used. Please follow the instructions below:"

- Contact ENS Central and provide the information displayed in the panel below.
- Click **Next** after ENS Central confirms that the registration has been completed and registration information is ready for entry into the next panel.
- Enter the information provided by the ENS Central into the registration panel and click the **Register** button.
- The final panel will appear after validation of the entered information. If validation fails because of a keystroke error, then a message will be displayed to correct the information and retry.

Note: Manual registration the option to use when a computer does not have Internet access. Because of this, the initial database download must also be performed manually.

The form section is titled "Provide the following information to ENS Central:" and contains the following fields:

Computer Name	VBOX-WIN7-002
Domain Name	
User Name	VBOX-WIN7-002\Allan
Primary IP Address	10.0.2.15
Primary MAC Address	0800272D80A1

Below the form is a "Next" button.

Basically, you send ENS central the information contained in the dark gray section then click Next.

The ENS Subscriber application must be **registered** before it can be used. Please follow the instructions below:

- Contact ENS Central and provide the information displayed in the panel below.
- Click **Next** after ENS Central confirms that the registration has been completed and registration information is ready for entry into the next panel.
- Enter the information provided by the ENS Central into the registration panel and click the **Register** button.
- The final panel will appear after validation of the entered information. If validation fails because of a keystroke error, then a message will be displayed to correct the information and retry.

Note: Manual registration the option to use when a computer does not have Internet access. Because of this, the initial database download must also be performed manually.

Enter the information provided by ENS Central:

License Key

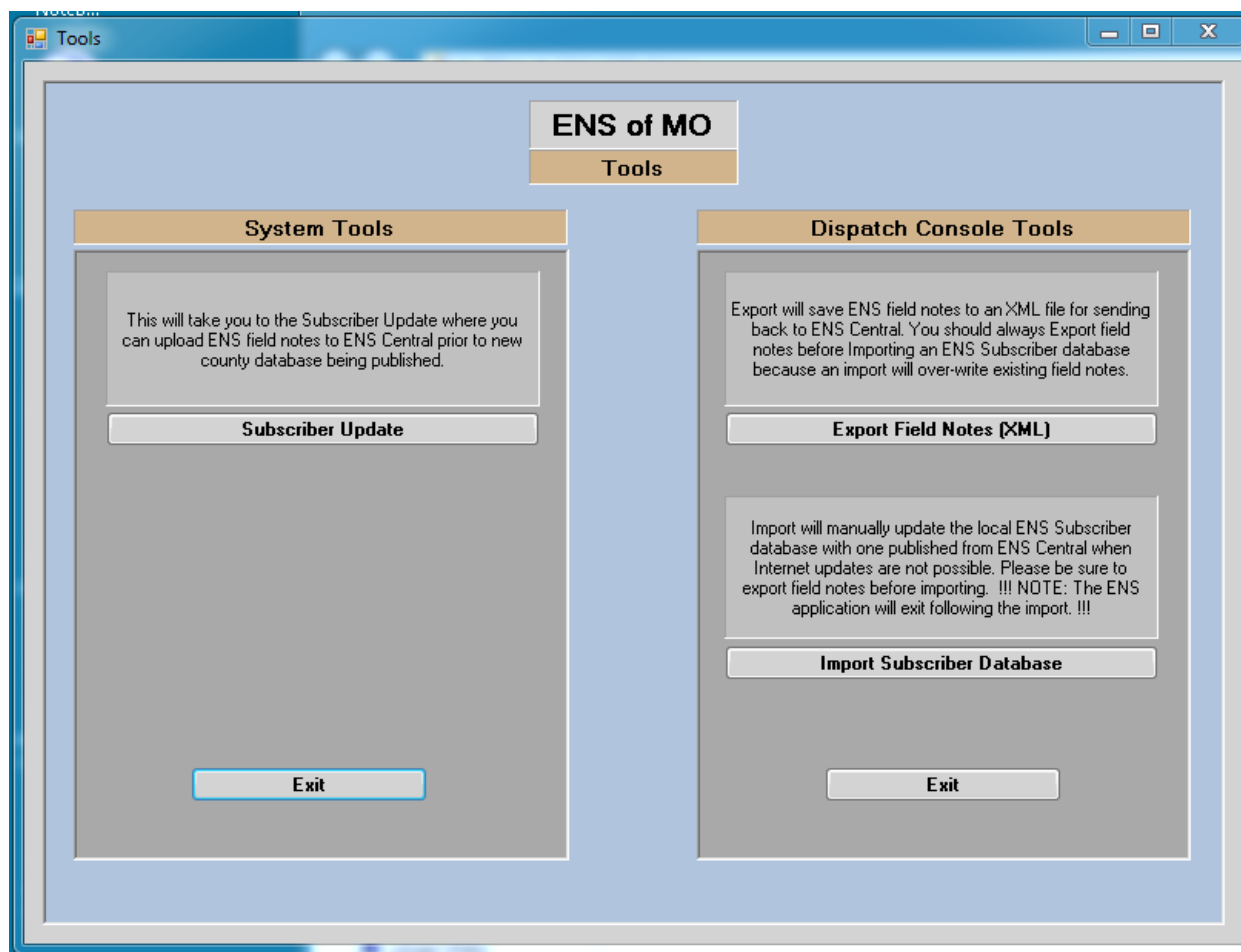
SeqNbr

Contact

Organization

You then enter information from ENS central into the dark gray section above and click Register.

Note: The county ENS database will need to be manually imported by using the import feature under the Tools section on the main form.



Click on Import Subscriber Database and use the file explorer dialog to select the county ENS database file from a CD or thumb drive.

Please contact ENS Central to receive a distribution of the county ENS database. The file size for a copy of the ENS database for a specific county can range from 10 MB to over 30 MB, depending on the county.

A planned addition to ENS is a toolkit for the ENS administrator that will run on a computer with Internet connectivity and help handle the extra steps in supporting ENS installation and support on devices without Internet connectivity.

## 6. Appendix C– Dispatch Usage vs. Field Usage

When planning your county ENS installations you need to notify ENS Central for an ENS.Subscriber license. Currently, there are two types of licenses:

1. Dispatch Usage
2. Field Usage

The type of license used when registering ENS.Subscriber will determine the type of behavior the software has when running.

### 6.1 Dispatch Usage (aka Secured Usage)

- A. The application will be running on a secured computer (i.e. a dispatch console) and does not need to have an inactivity timeout when left unattended. Security is trusted in that the computer should be in a physically secure environment.
- B. Tools are provided to support installation and updating without an Internet connection if an Internet connection is not available on the secured computer.

### 6.2 Field Usage

- A. The application will timeout and close after 5 minutes of inactivity. This is a security feature to help prevent unauthorized access if a computer is accidentally left unattended in an unsecured location.
- B. An Internet connection is used for registration and for receiving database updates.

## 7. Appendix D– Trouble-Shooting

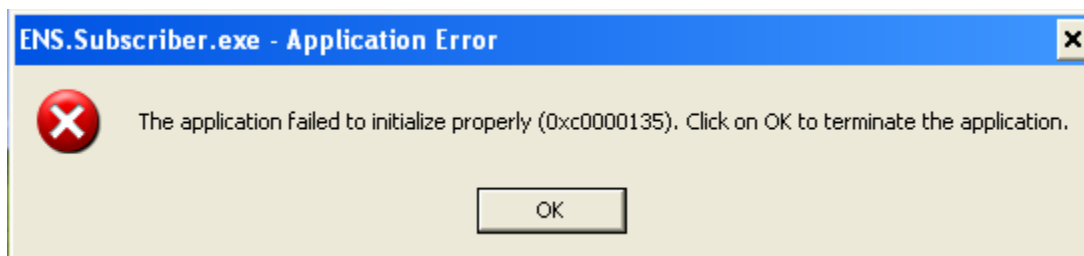
On all errors the first thing you should do is completely power down the computer for a couple of minutes and then power it back up. Some installs and updates require a reboot. Some issues are caused by drivers for hardware devices that might require a power-cycle event to clear out a hardware related issue.

The second thing you should do is make sure that Windows updates are current. The Microsoft components may not install or function correctly if a computer is way behind on the updates, patches, and fixes.

The most common installation errors are due to one or both of the critical Microsoft components not being installed or not installed correctly. These screen shots of specific error messages will indicate which component is missing or what steps to take to remedy the issue.

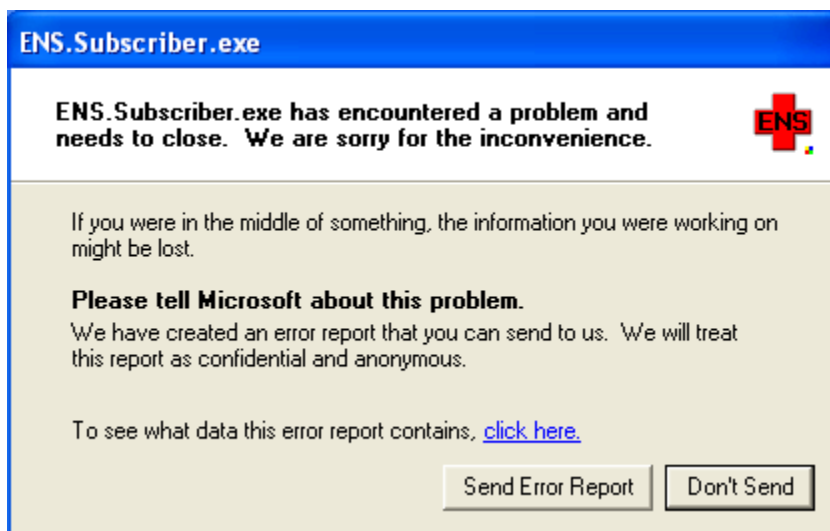
### 7.1 Microsoft .NET Framework 4 Not Installed

Windows XP:



### 7.2 Microsoft SQL Server Compact Edition Not Installed

Windows XP:



8. Appendix E– Technical Information

8.1 Context Diagram

