Installing and Licensing
MPLAB® XC C Compilers

Note the following details of the code protection feature on Microchip devices:

- Microchip products meet the specification contained in their particular Microchip Data Sheet.

- Microchip believes that its family of products is one of the most secure families of its kind on the market today, when used in the intended manner and under normal conditions.

- There are dishonest and possibly illegal methods used to breach the code protection feature. All of these methods, to our knowledge, require using the Microchip products in a manner outside the operating specifications contained in Microchip's Data Sheets. Most likely, the person doing so is engaged in theft of intellectual property.

- Microchip is willing to work with the customer who is concerned about the integrity of their code.

- Neither Microchip nor any other semiconductor manufacturer can guarantee the security of their code. Code protection does not mean that we are guaranteeing the product as "unbreakable."

Code protection is constantly evolving. We at Microchip are committed to continuously improving the code protection features of our products. Attempts to break Microchip's code protection feature may be a violation of the Digital Millennium Copyright Act. If such acts allow unauthorized access to your software or other copyrighted work, you may have a right to sue for relief under that Act.

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XC Installer & License Manager

NOTES:

Chapter 1. About the Installer and License Manager

This chapter introduces the installers and license managers used in conjunction with MPLAB® XC C Compilers. The next chapter discusses how to install your MPLAB XC C Compiler.

• MPLAB XC C Compilers
• XC Installer
• FAQs

1.1 MPLAB XC C COMPILERS

Please see the MPLAB XC C compiler webpage on the Microchip website for downloads and documentation concerning these compilers. Each compiler license gives you increased levels of code optimization.

http://www.microchip.com/mplab/compilers

1.2 XC INSTALLER

The GUI installer will install a compiler on your PC or network license server. After the installation, you can license the compiler for use to enable advanced optimizations.

The installer is supported by the operating systems supported by the compilers. See your compiler documentation (release notes/readme) for supported operating systems.

Considerations for installing on certain operating systems are listed below.

Windows 8 Customers

If you have trouble running the installer, you can try running in Windows 7 Compatibility mode. To set this mode:

1. Right click on the installer executable.
2. In the File Properties window, click on the Compatibility tab.
3. Under "Compatibility mode", check the "Run the program in compatibility mode for" box and select "Windows 7".

Linux Customers

Run the installer as root (sudo).

1.3 FAQs

For a list of frequently asked questions (FAQs) concerning compiler installation and licensing, please see the following links:

http://microchip.wikidot.com/xc8:start - FAQs section of page

http://www.microchip.com/mplab/compilers - Compiler FAQs tab

NOTES:

Chapter 2. Installing Your Compiler

When you install an MPLAB® XC C compiler, you are installing an unlicensed compiler. This means that you are running under a FREE license and you have access to the minimum amount of code optimization and support. For greater optimization and support, jump to the licensing sites that are listed near the end of the installation. Acquire a regular or evaluation license, and activate the license.

The following topics describe compiler installation procedures:

- Basic Compiler Installation
- Workstation Installation
- Network Client Installation
  - Network Server/Client Overview
  - Install a Compiler and Connect to the Network Client
- Upgrading the Compiler
- Uninstalling the Compiler
- Dongle Installation

XC Installer & License Manager

2.1   BASIC COMPILER INSTALLATION

The basic flow of compiler installation is described below. Specific installs are referenced to other sections.

Windows OS Warning

If you are running on a Windows operating system (OS), you may receive a security warning. Click **Run** to continue.

FIGURE 2-1:   WINDOWS OS WARNING SCREEN

© 2012-2016 Microchip Technology Inc.
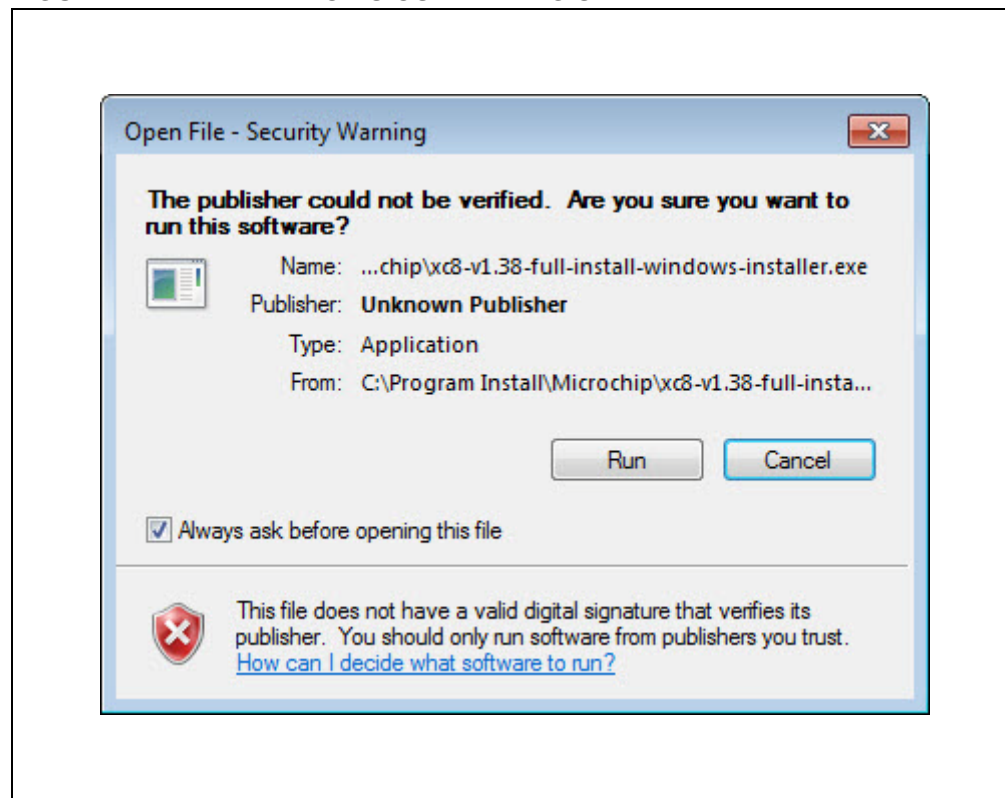
Welcome

Launch the compiler installation executable. A compiler splash screen will appear and then disappear. Then, the Welcome screen will appear. Click **Next** to continue.

FIGURE 2-2:   WELCOME SCREEN
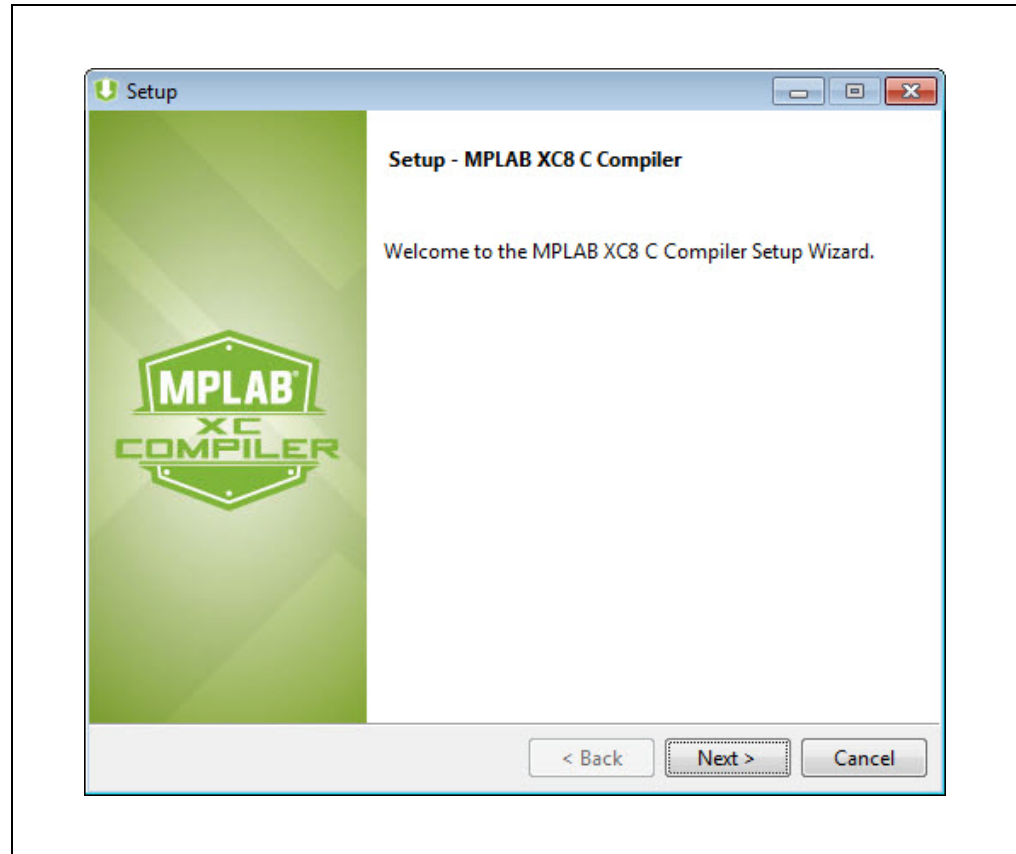
XC Installer & License Manager

License Agreement

Read the license agreement, and accept the agreement, to proceed. When you accept, **Next** becomes available. Click it to continue.

If you do not agree, the installation terminates.

FIGURE 2-3:   LICENSE AGREEMENT SCREEN

© 2012-2016 Microchip Technology Inc.
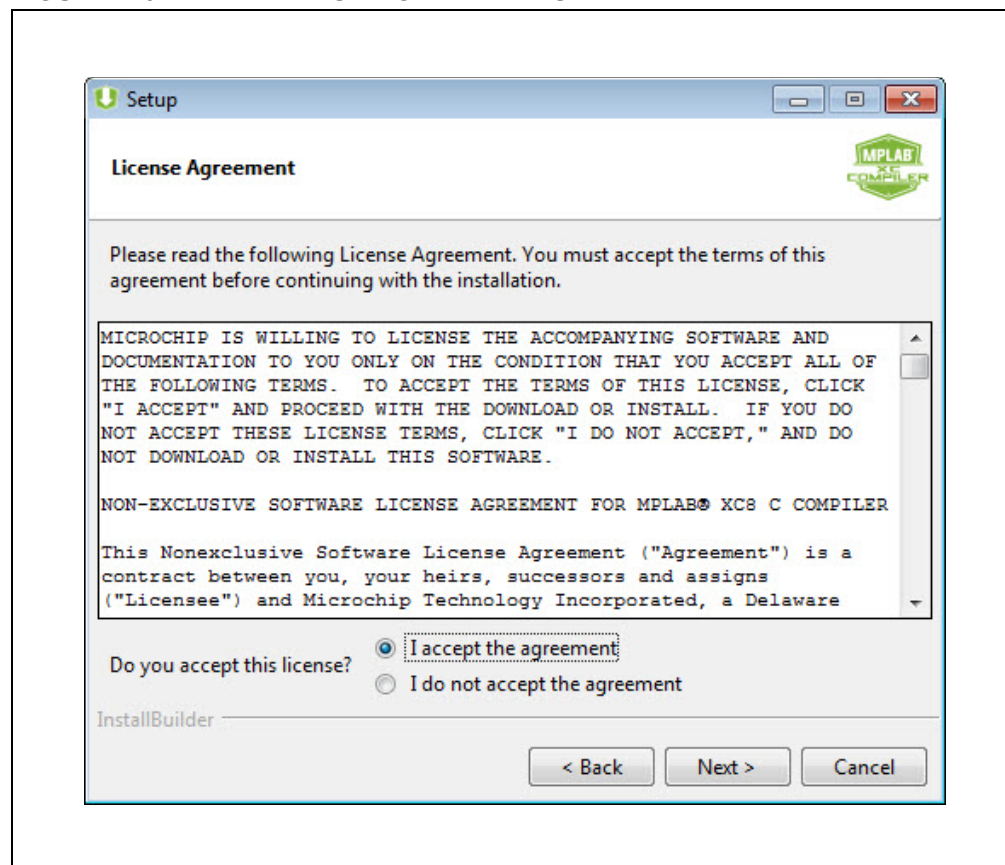
License Type

This screen will dictate how your compiler is installed.

> **Note:** License types are grayed out until you click the radio button next to that type.

FIGURE 2-4: **LICENSE TYPE SCREEN**
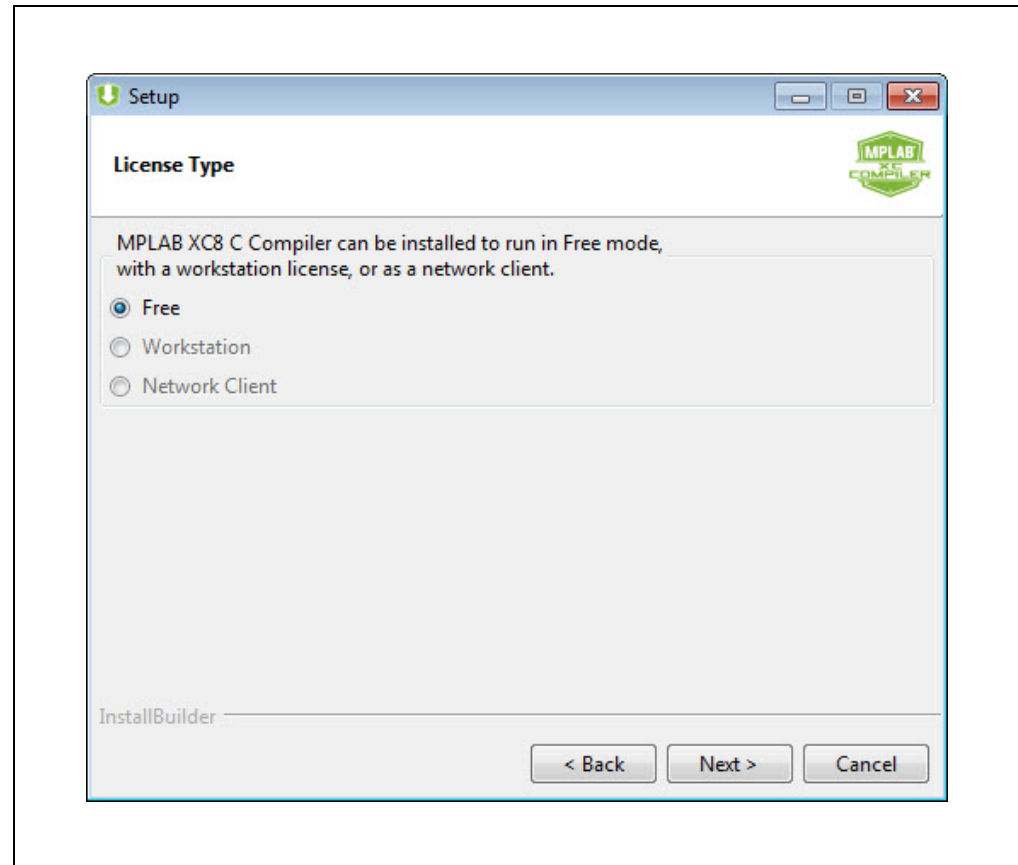
For each type of license:

- Free - No license required. Continue to the next section.
- Workstation - License required. See Section 2.2 "Workstation Installation". Then return to the next section in this flow when you have finished.
- Network Client - License required. See Section 2.3 "Network Client Installation". Then return to the next section in this flow when you have finished.

Installation Directory

Enter or browse to a location to install your compiler. It is recommended that you use the default location displayed in the dialog. Click **Next** to continue.

FIGURE 2-5:   **INSTALLATION DIRECTORY SCREEN**
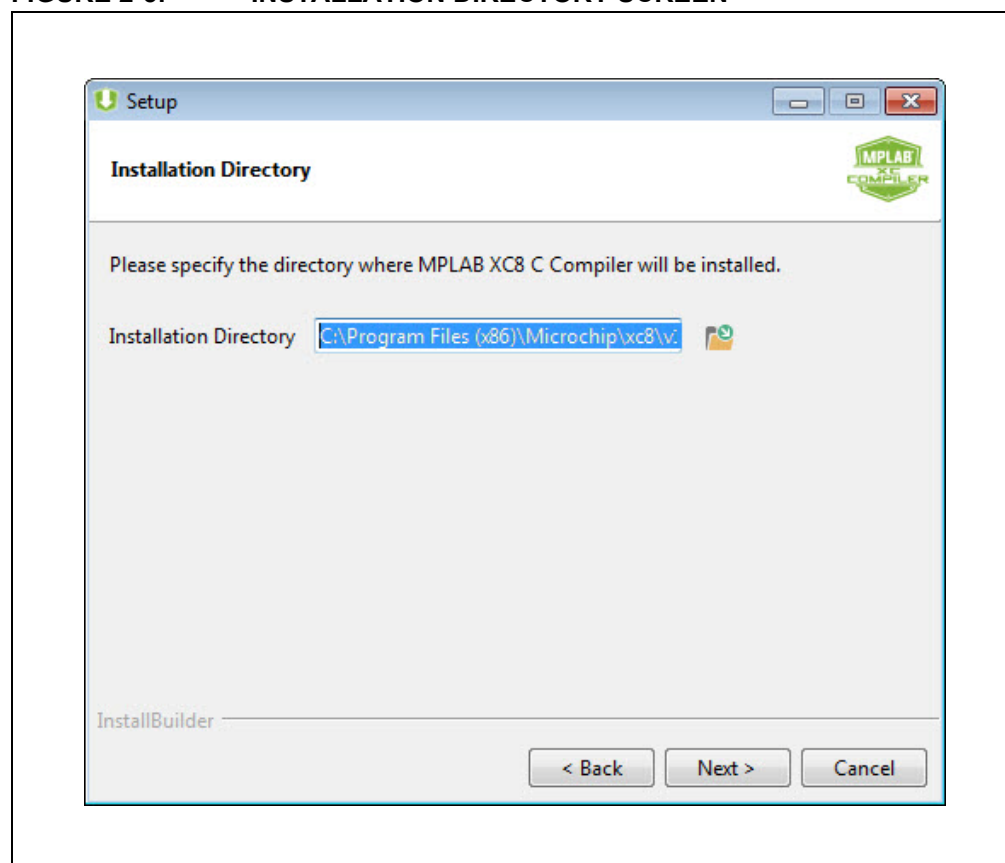
Compiler Settings

You now have the opportunity to select compiler settings. Check any options you need.

In general, if this is the first time you are installing this compiler on your machine, you should let the installer modify any path or environmental variables to ensure correct compiler operation.

Click **Next** to continue.

FIGURE 2-6:   COMPILER SETTINGS SCREEN
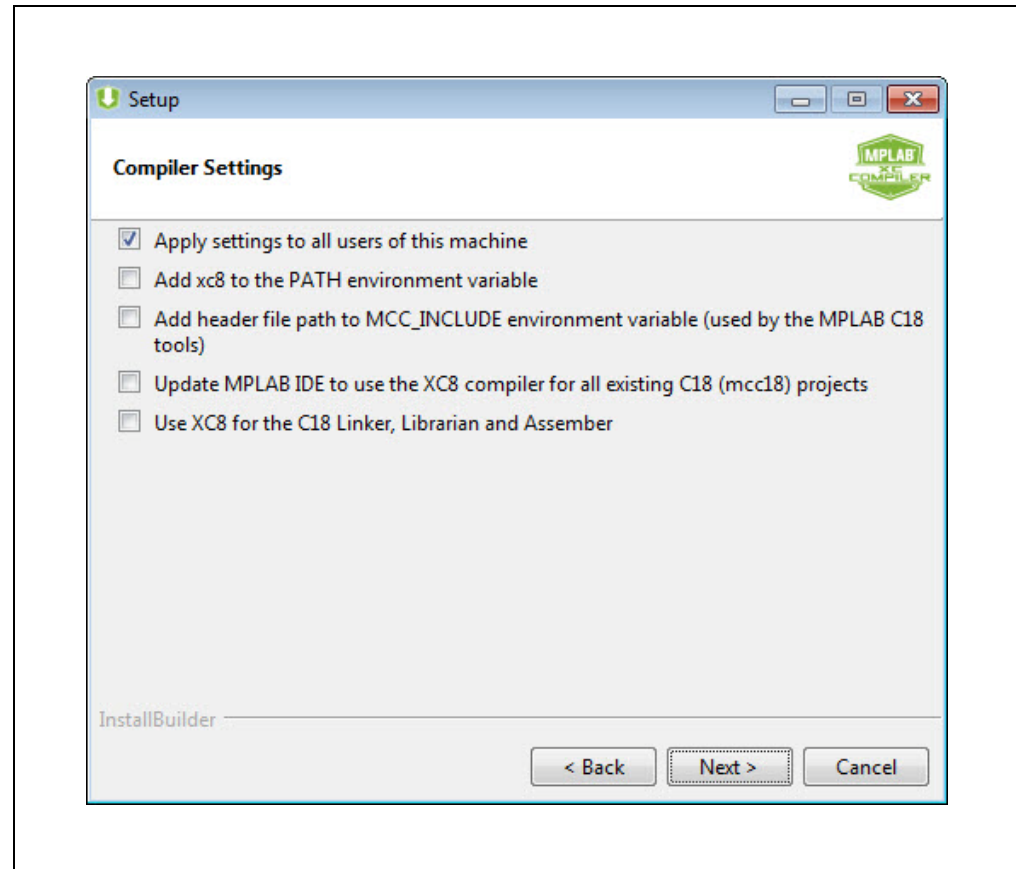
Ready to Install and Installing

You are now set up to install the compiler. This is your chance to make changes to the compiler settings by using the **Back** button. If you are ready to install, click **Next** to continue.

The next dialog shows the progress of the install. When it is complete, click **Next** to continue.

FIGURE 2-7:   **READY TO INSTALL SCREEN**
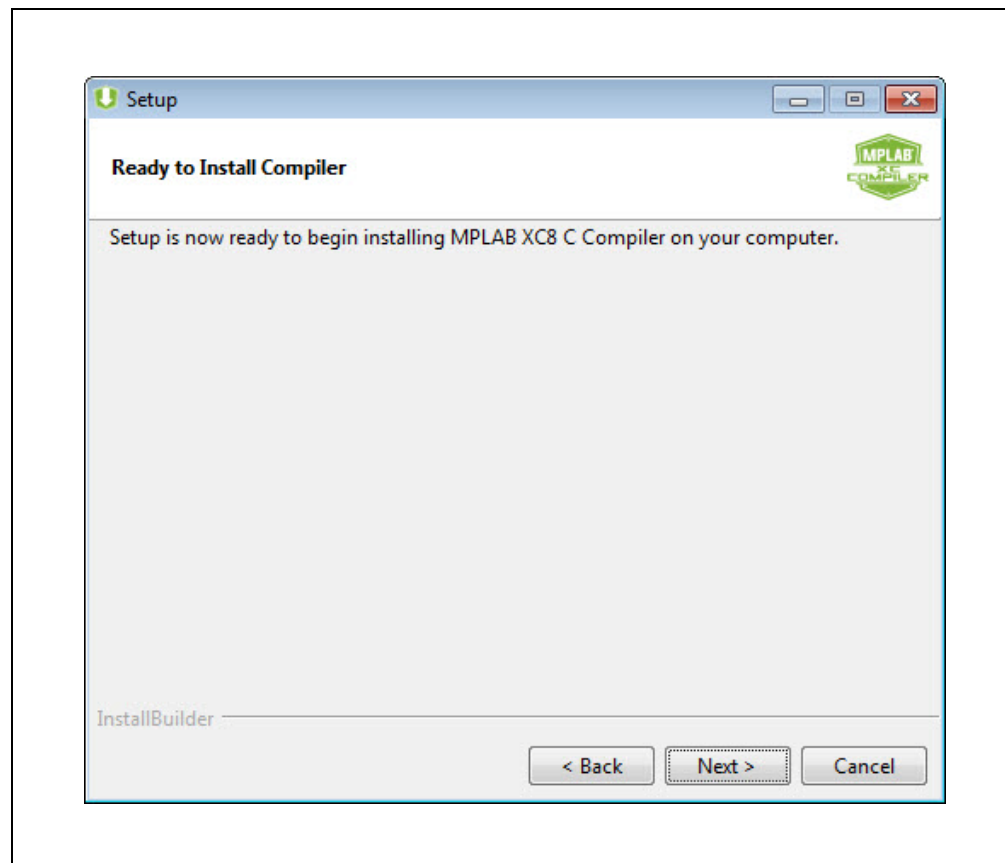
FIGURE 2-8: **INSTALLING SCREEN**
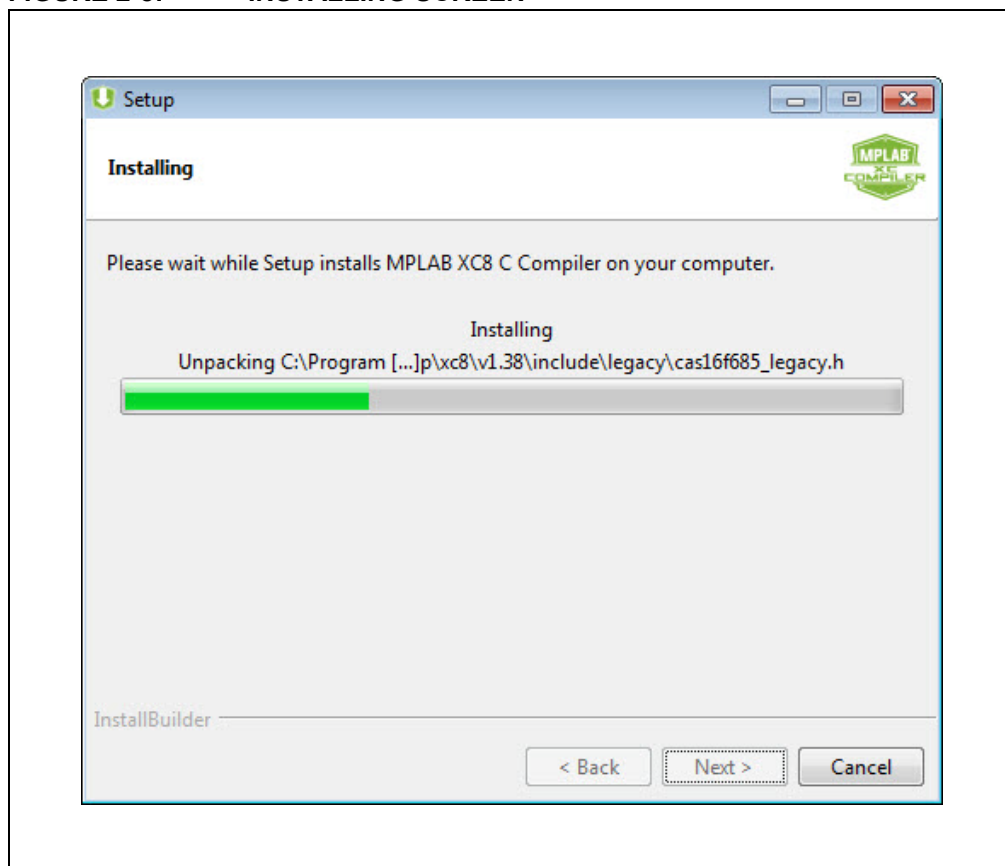
Licensing Information

The compiler has now been installed. If you want more code optimizations, you need to license your compiler. You may click one of the links on this screen to:

- Purchase a PRO or Standard License
- Acquire a Free 60-day Evaluation of PRO
- Activate Your License

Click **Next** to continue.

FIGURE 2-9:   **LICENSING INFORMATION SCREEN**
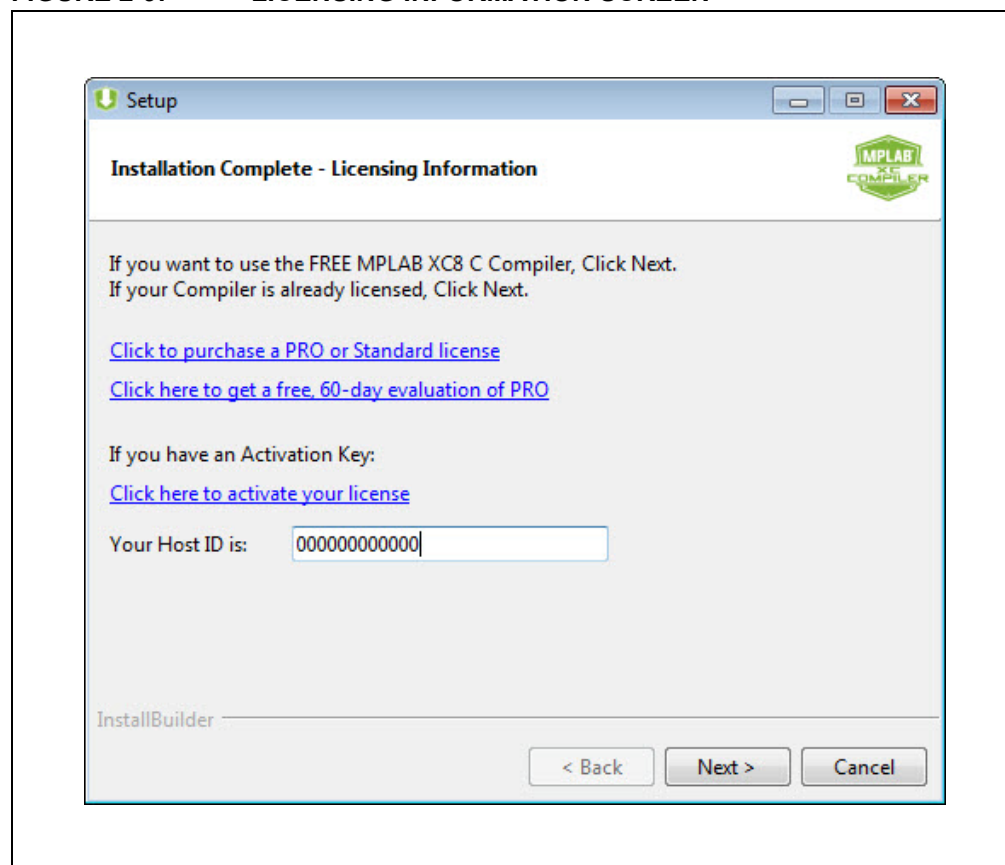
Completing Setup

The compiler has now been installed. Click **Finish** to complete the install.

If you wish to make changes, you can run the installer again and update your install.

FIGURE 2-10:   COMPLETING SETUP SCREEN

XC Installer & License Manager

2.2 WORKSTATION INSTALLATION

Install an MPLAB XC C compiler on a local PC. When the compiler is installed, you can proceed to get a license. The license can be used for compiler installations on up-to-three workstations.

There are several kinds of workstation licenses: PRO, standard, subscription or dongle. For details, see Chapter 3. "Licensing Your Compiler".

To install, follow the instructions in Section 2.1 "Basic Compiler Installation" until you encounter the License Type screen. Select the radio button next to Workstation. Click **Next** to continue. Return to Installation Directory to complete the installation.

FIGURE 2-11:   LICENSE TYPE SCREEN

© 2012-2016 Microchip Technology Inc.
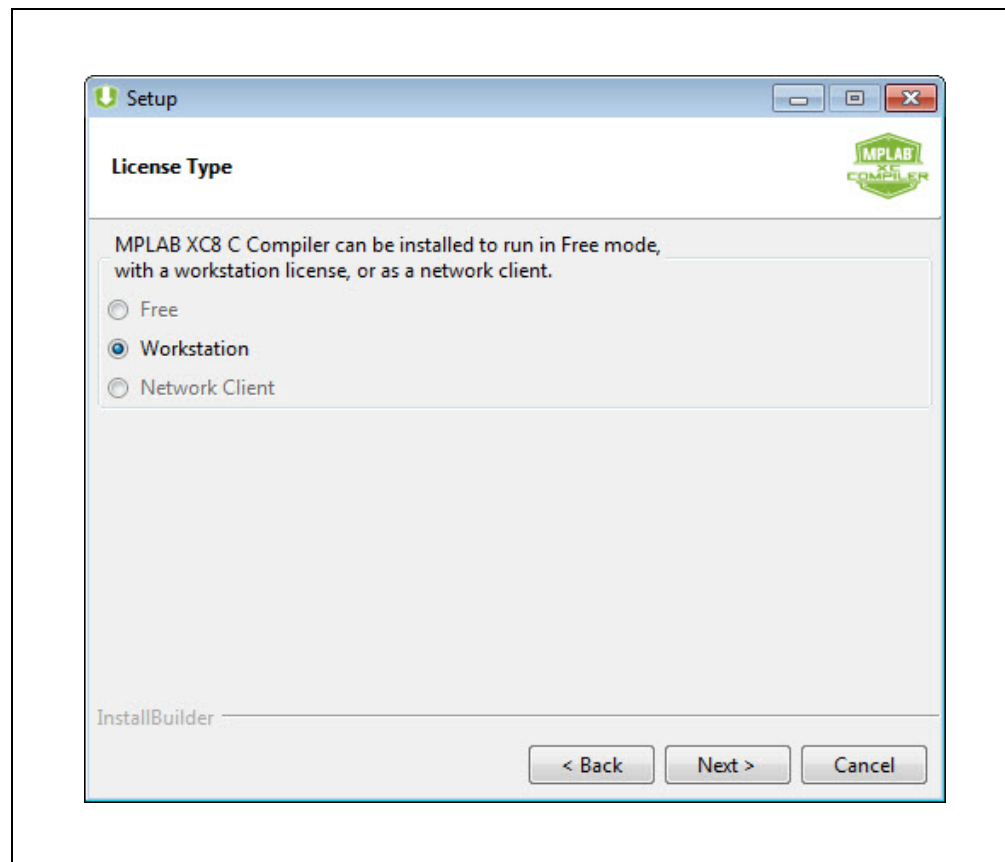
2.3   NETWORK CLIENT INSTALLATION

The installation of a network client is covered in this section. For details on installing a network server, see the *MPLAB© XC License Server Manual* (DS50002334).

2.3.1   Network Server/Client Overview

You may use a computer network to set up a license server and client(s). To do this, use one computer to host the license server and license files. Then, other network computers can contain compilers and license managers that are configured to acquire licenses from the license server.

To install the license server, install the network license and start the server. For details, see the *MPLAB© XC License Server Manual*.

To install a license client, follow the steps in the next section. This installation process will ask for details about the network license server. The operating system for the client does not have be the same one used for the server, but it must be supported.

Once configured, compiler executions on the network license client will connect to the network license server to check out a license. This license will be available for immediate use. However, when the compiler is exited, there is a 60-minute delay before that server license can be used by other clients.

FIGURE 2-12:   NETWORK LICENSE CLIENT/SERVER MODEL
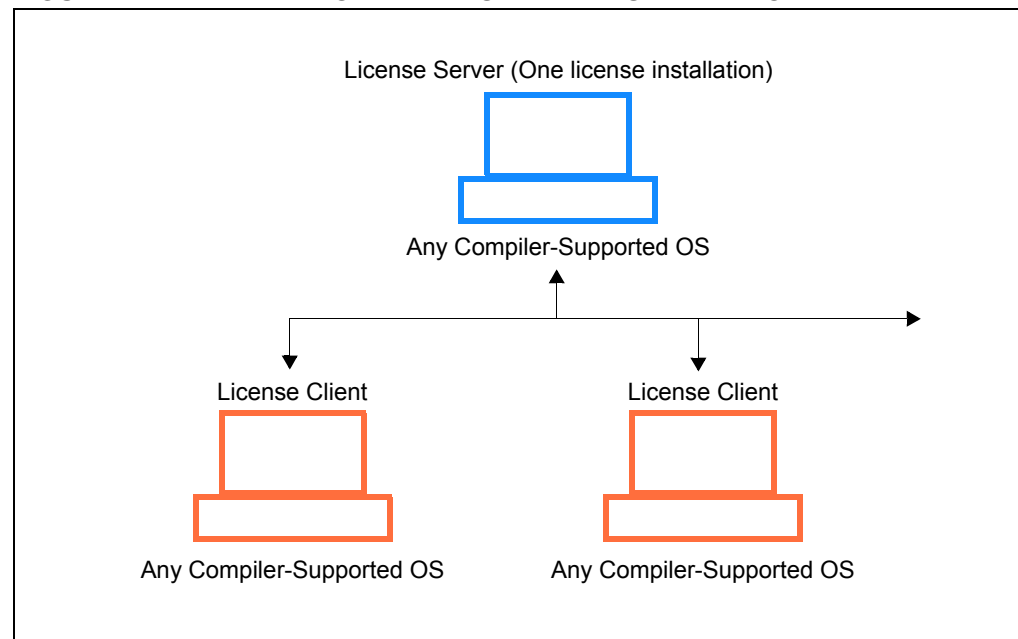
2.3.2   Install a Compiler and Connect to the Network Client

When the compiler runs on the network license client, the license manager will check out licenses from the network license server. There are two kinds of network client licenses: shared and site. For details see Chapter 3. "Licensing Your Compiler".

License Type

To install, follow the instructions in Section 2.1 "Basic Compiler Installation" until you encounter the License Type screen. Select the radio button next to Network Client. Click **Next** to continue.

FIGURE 2-13:   LICENSE TYPE SCREEN
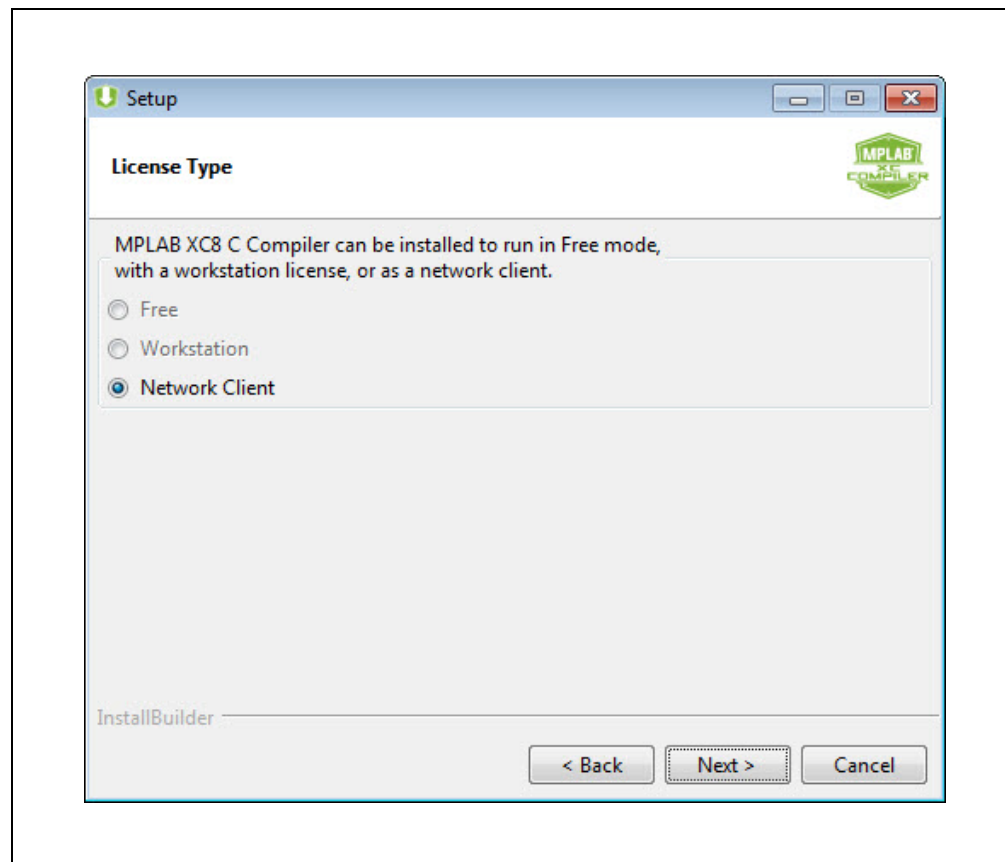
Network License Server Information

Enter information about the network license server here. This information should be provided by your local network administrator.

"Server Name" refers to the IP address or host name of the network license server from which licenses are hosted.

"Port Number" is the port that the network server will use to distribute licenses. The default port number is 5053. The network license server will always run on this port, unless otherwise specified.

Click **Next** to continue. Network configuration will commence. A dialog will pop up when complete. Click **OK**.

Return to Installation Directory to complete the installation.

FIGURE 2-14: **NETWORK LICENSE SERVER SCREEN**

XC Installer & License Manager
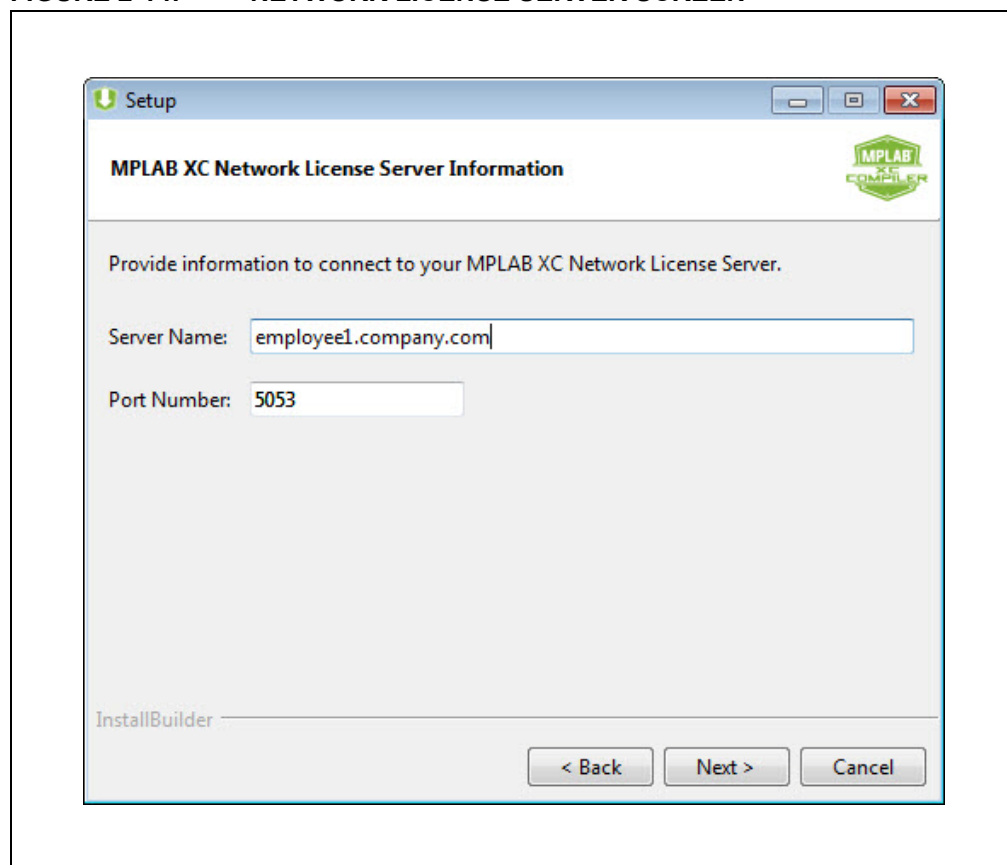
2.4   UPGRADING THE COMPILER

To upgrade your compiler, simply install the new compiler (as you installed the previous one) but skip over the "Installation Complete - Licensing Information" screen by clicking "Next". Since you already have a license, there is no need to activate or obtain a new license.

2.5   UNINSTALLING THE COMPILER

To uninstall the compiler, follow the instructions below.

Launch Uninstaller

Go to the compiler installation directory and click "Uninstall MPLAB XC C Compiler". You are asked if you want to uninstall. Click **Yes**.

Uninstalling

The uninstaller removes all the compiler-related files from your system.

Uninstall Complete

When the uninstall is done, an "Uninstallation Complete" message is displayed. Click **OK** to finish.

> **Note:**   The uninstaller does not remove directory structure or path references.

2.6   DONGLE INSTALLATION

To install an MPLAB XC C compiler on a dongle, simply plug the dongle into any USB port (2.0 or higher). No licensing is required. No HPA is available.

Registration is required for replacement of lost or damaged dongles.

To upgrade your compiler you must purchase a new dongle.

Uninstall the compiler by simply unplugging the dongle from the USB port.

Chapter 3. Licensing Your Compiler

After you have installed your compiler, you will be presented with the following licensing options:

- Purchase a PRO or Standard License
- Acquire a Free 60-day Evaluation of PRO
- Activate Your License

Additionally, you can:

- Purchase and Activate Your License via Distribution
- Renew or Apply Your HPA

3.1   PURCHASE A PRO OR STANDARD LICENSE

To license your installed compiler, go to the installer Licensing Information screen and click on the link "Click to purchase a PRO or Standard license". The link will direct you to a microchipDIRECT web page where you can select a compiler license to purchase.

There are several types of licenses available. For details on available types and configurations, see the MPLAB XC C compilers web page, **Additional Information** tab, "PRO and Standard License Types":

http://www.microchip.com/mplab/compilers

3.2   ACQUIRE A FREE 60-DAY EVALUATION OF PRO

To acquire a license for a 60-day evaluation of the PRO license (maximum optimizations and support), go to the installer Licensing Information screen and click on the link "Click here to get a free 60-day evaluation of PRO". The link will direct you to a web page where you can acquire a 60-day PRO license.

For details on the evaluation license, see the MPLAB XC C compilers web page, **Additional Information** tab, "PRO and Standard License Types":

http://www.microchip.com/mplab/compilers

XC Installer & License Manager

3.3 ACTIVATE YOUR LICENSE

After you have purchased or acquired a compiler license, you need to activate it. Do this from your MySoftware account. If you do not have an account, you can register in the same area as the login.

3.3.1 Access MySoftware Account

If you click on the link "Click here to activate your license" on the installer Licensing Information screen, you will be sent to the MySoftware page. Otherwise, you can access your MySoftware account:

• From the MPLAB X IDE desktop, **My MPLAB X IDE** tab, "Microchip Login". When logged in, click on "View mySoftware Account".

• From microchipDirect, select My Account>My Software Products. Log into your account.

• From the MySoftware URL: https://www.microchip.com/mysoftware.

FIGURE 1-1: MPLAB X IDE LOGIN OR REGISTER SECTION
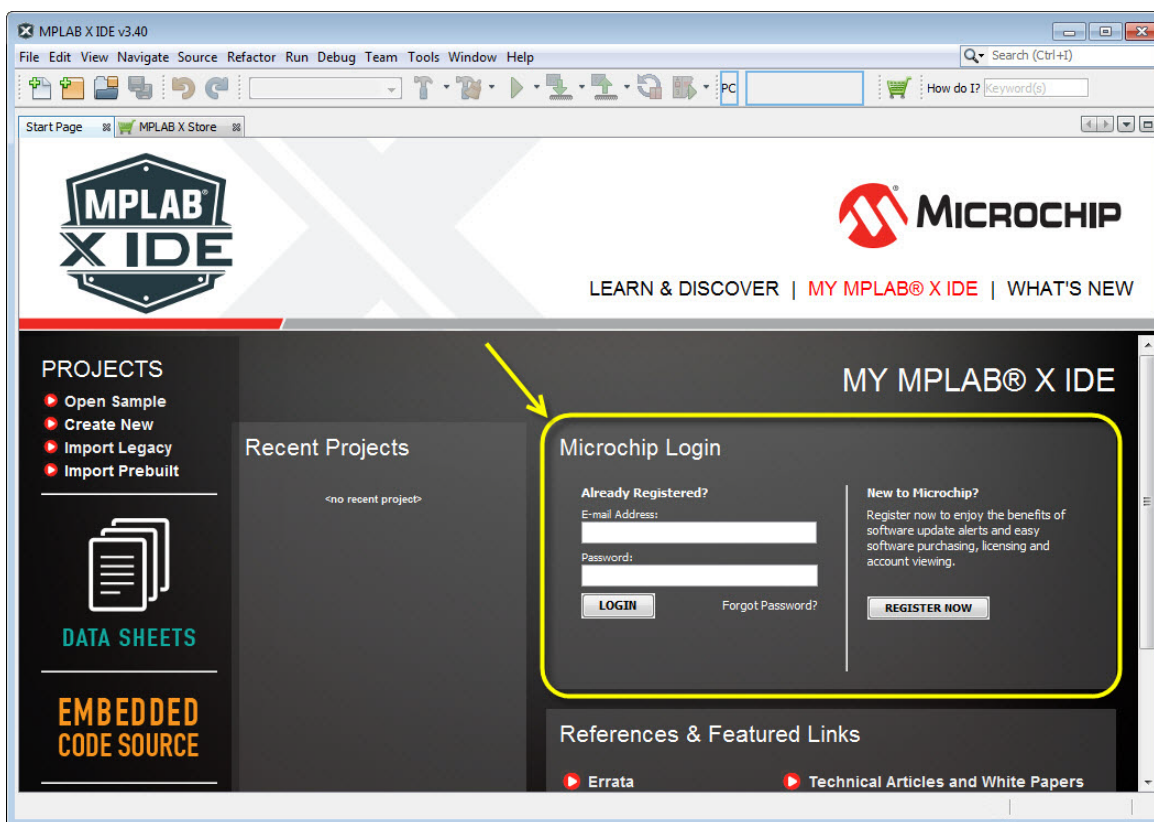
3.3.2   Download Compiler and Begin License Download

On the mySoftware page:

1. Find the MPLAB XC C Compiler that you have recently purchased (Figure 1-2).
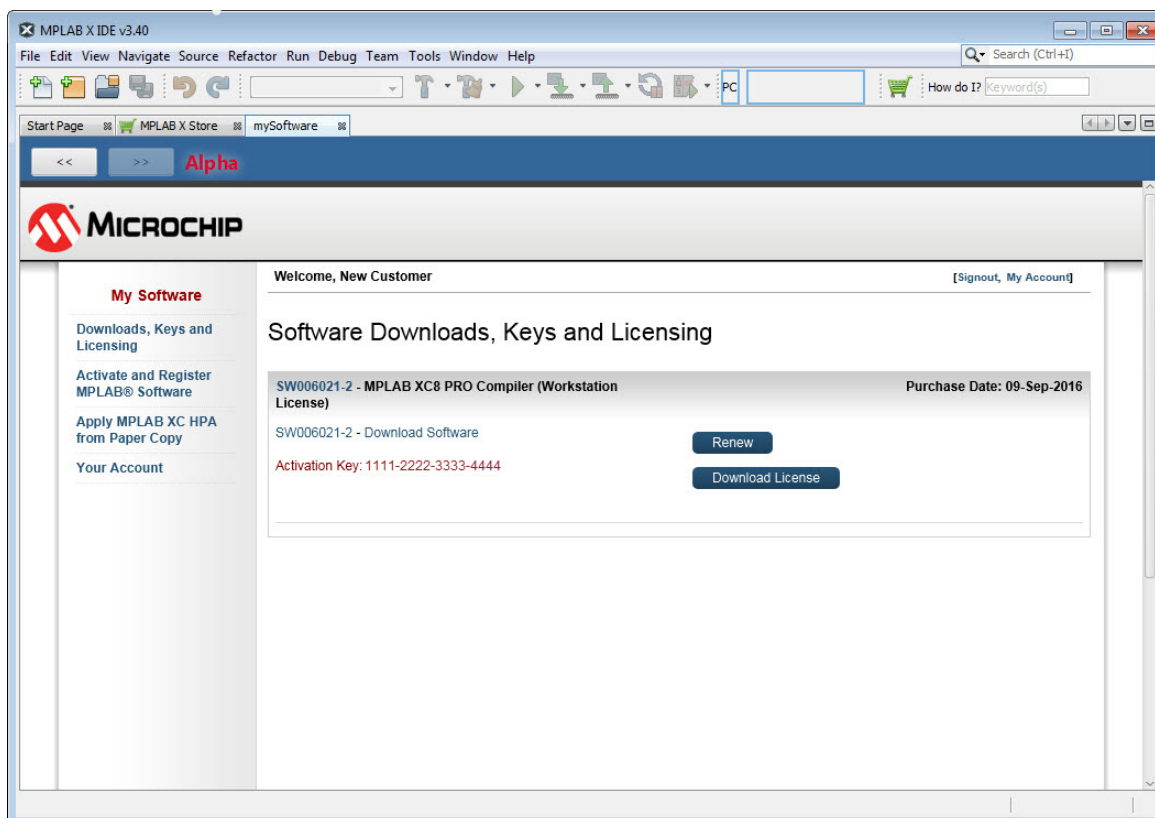2. Click on "Download Software" if you have not already downloaded the compiler.
3. Click on "Download License".

FIGURE 1-2:   MYSOFTWARE WEB PAGE

3.3.3 Activate License and Download License File

On the Activation and Registration page:

1. You will need your host ID (on the Setup Installation Complete dialog) and your Activation Key. Enter this information where specified. Some fields may be populated for you. See Figure 1-3.
2. Click **Get License**. Your system OS will be detected and the location of the license Zip file will be displayed (Figure 1-4). Click **OK**.

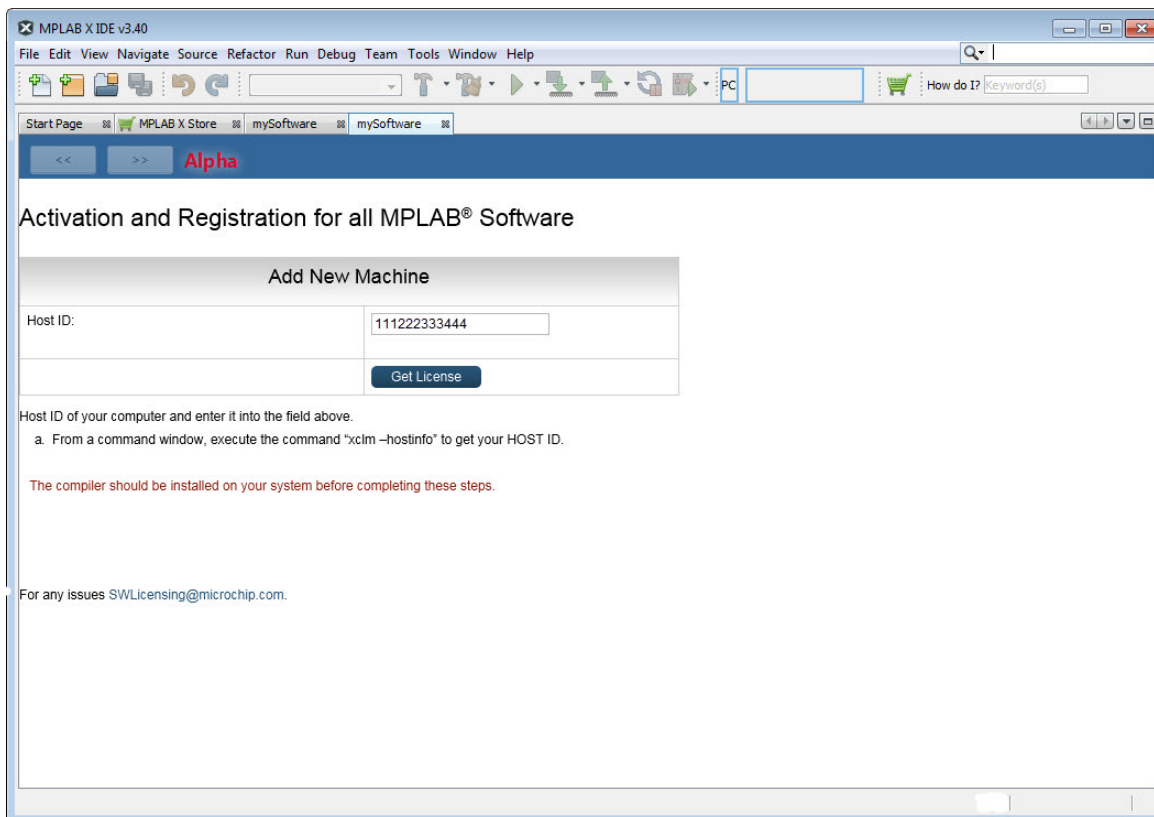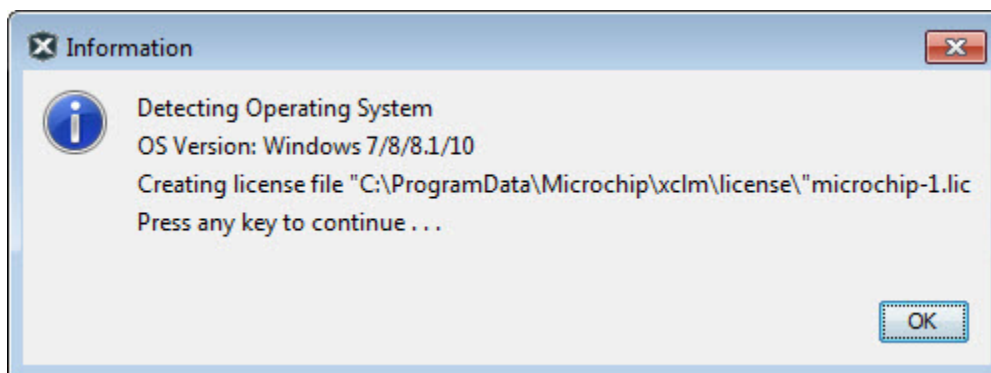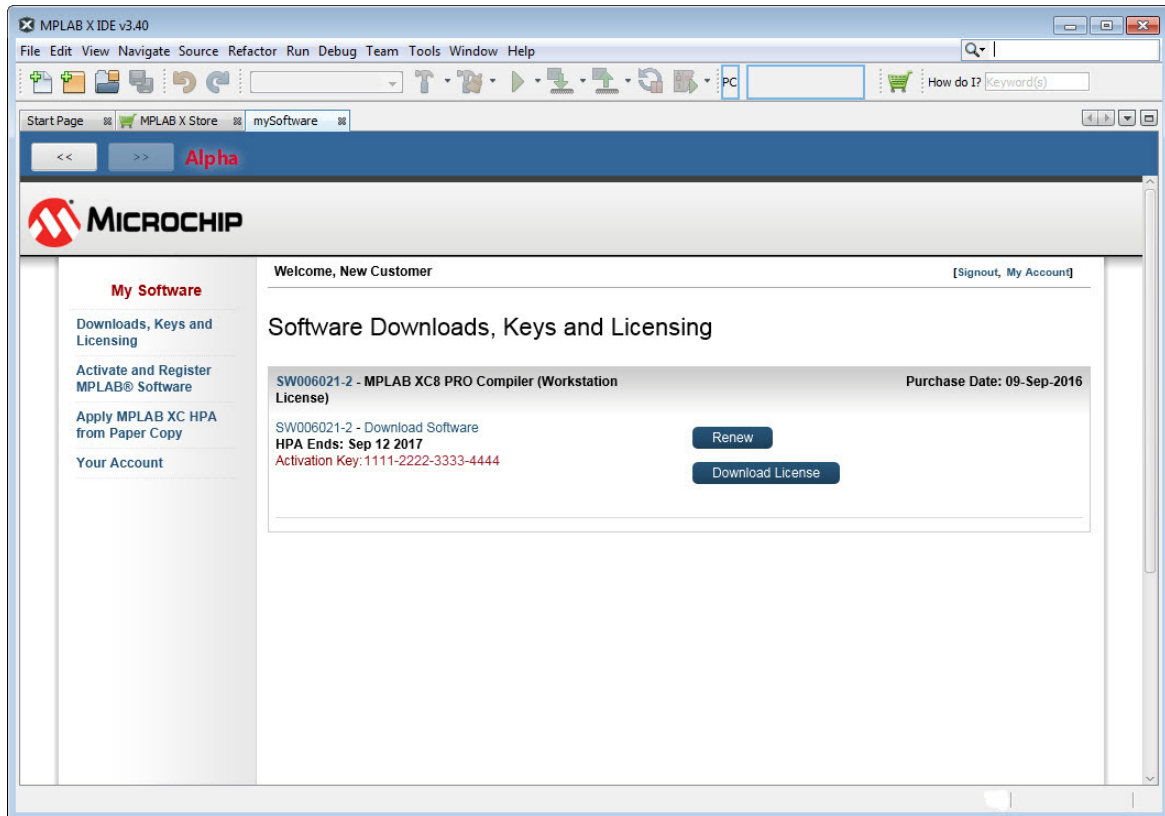**FIGURE 1-3:** **ACTIVATION AND REGISTRATION**

FIGURE 1-4: **LICENSE FILE**

On the mySoftware page:

1. The Activation and Registration page will close and you will be returned to the mySoftware page.
2. You should now see HPA information in the compiler section (Figure 1-5). For more on HPA, see Section 3.5 "Renew or Apply Your HPA".

FIGURE 1-5: **ACTIVATION COMPLETE**

3.4   PURCHASE AND ACTIVATE YOUR LICENSE VIA DISTRIBUTION

Instead of purchasing your compiler license from Microchip, you can purchase a license through a distributor. You will then receive either:

• An email with your activation key.
• A hard copy of the compiler and an insert with an activation key on it.

To active the compiler:

1. Access MySoftware Account. Then click on "Activate and Register MPLAB Software".
2. Activate License and Download License File.

3.5   RENEW OR APPLY YOUR HPA

To purchase/renew your HPA from MySoftware:

1. On the MySoftware page, find your compiler.
2. Click **Renew** to purchase HPA for another year.

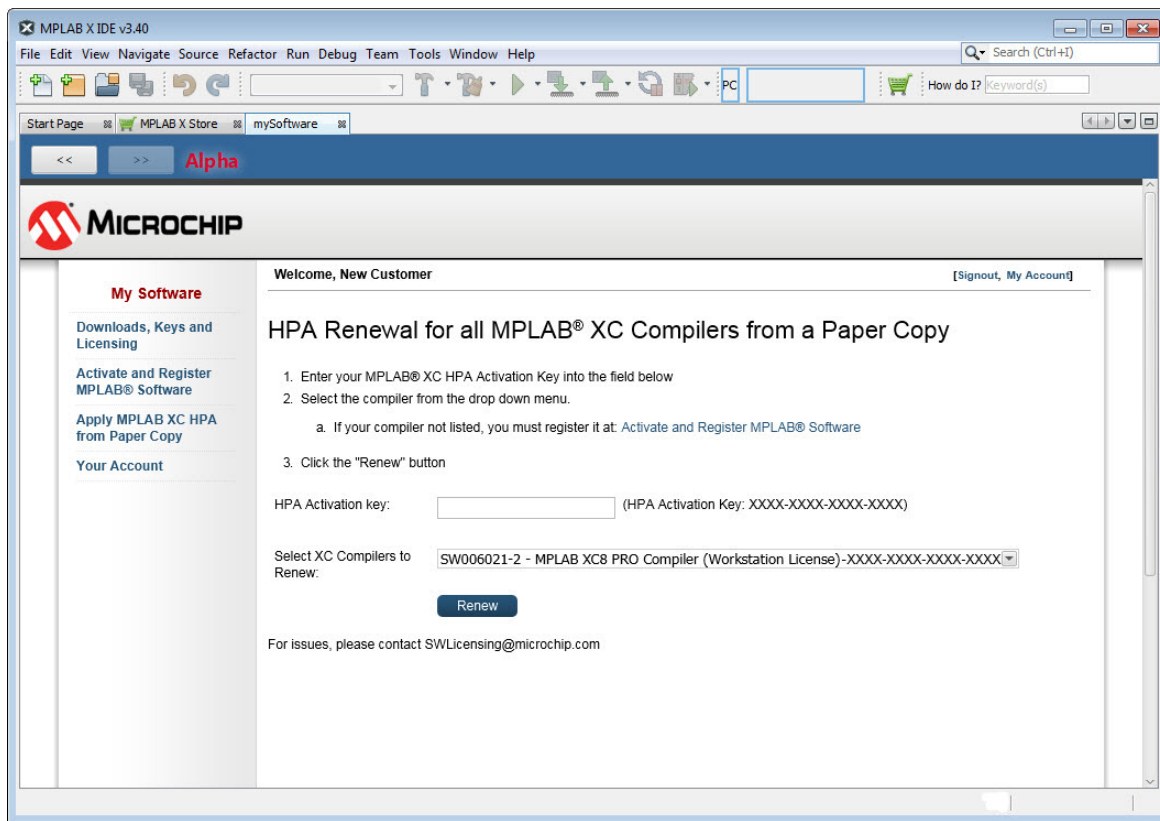To purchase/renew your HPA from a paper copy:

1. Purchase HPA through distribution or microchipDirect
2. Receive an activation key.

To apply your HPA to a compiler from a paper copy:

1. On the MySoftware page, find your compiler.
2. Click "Apply MPLAB XC HPA from a Paper Copy". Enter your HPA Activation Key and click **Renew**.

FIGURE 1-6:   **ACTIVATION COMPLETE**

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Worldwide Sales and Service

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www.microchip.com

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Tel: 317-536-2380

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Tel: 631-435-6000

San Jose, CA
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Tel: 408-436-4270

Canada - Toronto
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Fax: 905-695-2078

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Fax: 852-2401-3431

Australia - Sydney
Tel: 61-2-9868-6733
Fax: 61-2-9868-6755

China - Beijing
Tel: 86-10-8569-7000
Fax: 86-10-8528-2104

China - Chengdu
Tel: 86-28-8665-5511
Fax: 86-28-8665-7889

China - Chongqing
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Fax: 86-23-8980-9500

China - Dongguan
Tel: 86-769-8702-9880

China - Guangzhou
Tel: 86-20-8755-8029

China - Hangzhou
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Fax: 86-571-8792-8116

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Fax: 852-2401-3431

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Fax: 86-25-8473-2470

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Tel: 86-532-8502-7355
Fax: 86-532-8502-7205

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Fax: 86-21-3326-8021

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Tel: 86-24-2334-2829
Fax: 86-24-2334-2393

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Tel: 86-755-8864-2200
Fax: 86-755-8203-1760

China - Wuhan
Tel: 86-27-5980-5300
Fax: 86-27-5980-5118

China - Xian
Tel: 86-29-8833-7252
Fax: 86-29-8833-7256

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China - Xiamen
Tel: 86-592-2388138
Fax: 86-592-2388130

China - Zhuhai
Tel: 86-756-3210040
Fax: 86-756-3210049

India - Bangalore
Tel: 91-80-3090-4444
Fax: 91-80-3090-4123

India - New Delhi
Tel: 91-11-4160-8631
Fax: 91-11-4160-8632

India - Pune
Tel: 91-20-3019-1500

Japan - Osaka
Tel: 81-6-6152-7160
Fax: 81-6-6152-9310

Japan - Tokyo
Tel: 81-3-6880- 3770
Fax: 81-3-6880-3771

Korea - Daegu
Tel: 82-53-744-4301
Fax: 82-53-744-4302

Korea - Seoul
Tel: 82-2-554-7200
Fax: 82-2-558-5932 or
82-2-558-5934

Malaysia - Kuala Lumpur
Tel: 60-3-6201-9857
Fax: 60-3-6201-9859

Malaysia - Penang
Tel: 60-4-227-8870
Fax: 60-4-227-4068

Philippines - Manila
Tel: 63-2-634-9065
Fax: 63-2-634-9069

Singapore
Tel: 65-6334-8870
Fax: 65-6334-8850

Taiwan - Hsin Chu
Tel: 886-3-5778-366
Fax: 886-3-5770-955

Taiwan - Kaohsiung
Tel: 886-7-213-7830

Taiwan - Taipei
Tel: 886-2-2508-8600
Fax: 886-2-2508-0102

Thailand - Bangkok
Tel: 66-2-694-1351
Fax: 66-2-694-1350

EUROPE

Austria - Wels
Tel: 43-7242-2244-39
Fax: 43-7242-2244-393

Denmark - Copenhagen
Tel: 45-4450-2828
Fax: 45-4485-2829

Finland - Espoo
Tel: 358-9-4520-820

France - Paris
Tel: 33-1-69-53-63-20
Fax: 33-1-69-30-90-79

France - Saint Cloud
Tel: 33-1-30-60-70-00

Germany - Garching
Tel: 49-8931-9700

Germany - Haan
Tel: 49-2129-3766400

Germany - Heilbronn
Tel: 49-7131-67-3636

Germany - Karlsruhe
Tel: 49-721-625370

Germany - Munich
Tel: 49-89-627-144-0
Fax: 49-89-627-144-44

Germany - Rosenheim
Tel: 49-8031-354-560

Israel - Ra'anana
Tel: 972-9-744-7705

Italy - Milan
Tel: 39-0331-742611
Fax: 39-0331-466781

Italy - Padova
Tel: 39-049-7625286

Netherlands - Drunen
Tel: 31-416-690399
Fax: 31-416-690340

Norway - Trondheim
Tel: 47-7289-7561

Poland - Warsaw
Tel: 48-22-3325737

Romania - Bucharest
Tel: 40-21-407-87-50

Spain - Madrid
Tel: 34-91-708-08-90
Fax: 34-91-708-08-91

Sweden - Gothenberg
Tel: 46-31-704-60-40

Sweden - Stockholm
Tel: 46-8-5090-4654

UK - Wokingham
Tel: 44-118-921-5800
Fax: 44-118-921-5820