

Volume

1

A-WIT TECHNOLOGIES INC.

... a passion for execution ...

Using the Code Module Library

Version 1.0

A-WIT TECHNOLOGIES INC.

Using the Code Module Library

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Introduction

The Code Module Library is a tool that can be used to organize snippets of code for future use. In addition to being able to become a repository for code, the Code Module Library also facilitates easier customization of code to make code more meaningful and in turn make the C Stamp an even more powerful learning experience.

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Getting Support

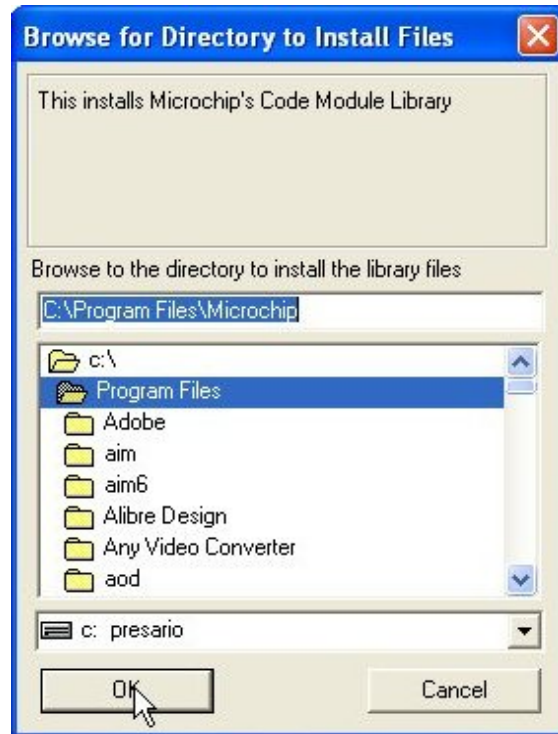
If possible, please check the C Stamp website www.c-stamp.com under SUPPORT for any updates to documentation, changes, or notices that may have become available since your Installation CD was produced. If you continue to have any issues for which a solution is not found in the aforementioned website, please e-mail tech_support@awit.com for help.

Code Module Library Installation

To install the CML the file “CML.exe” must be run. Upon running CML.exe a notification window might pop up that looks like the image below.

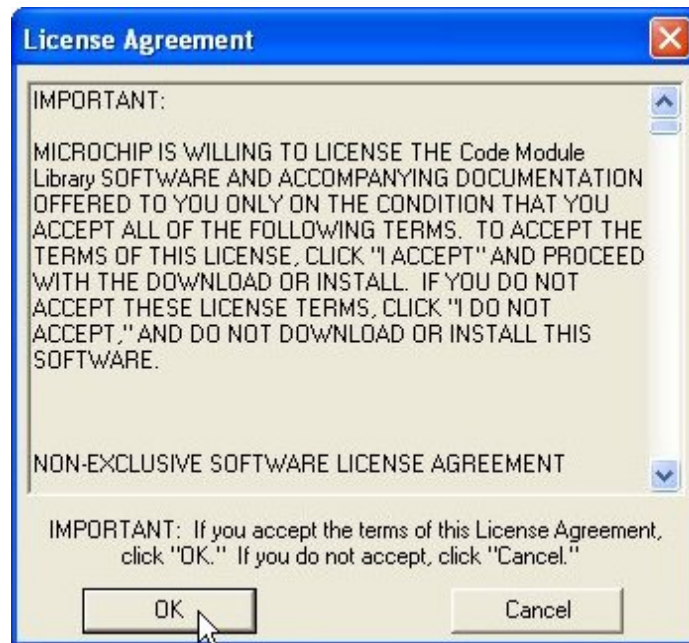


After clicking on Run, the CML Installation Wizard will begin to initialize. When the Installation Wizard has finished initializing, another window will appear like the image below.

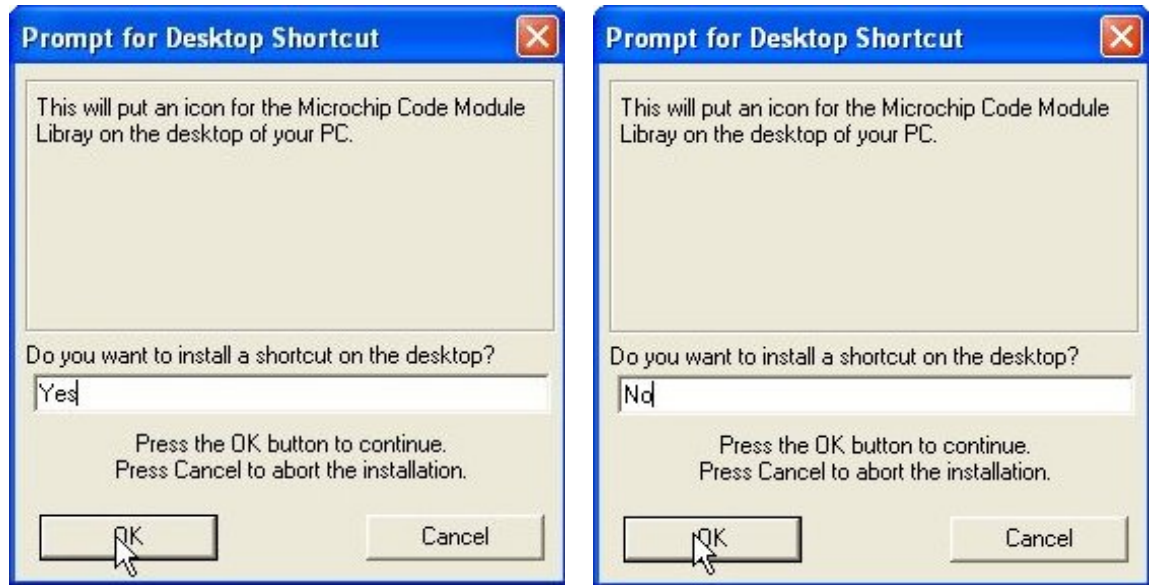


Leaving the default directory as the directory where the CML will be installed, click OK.

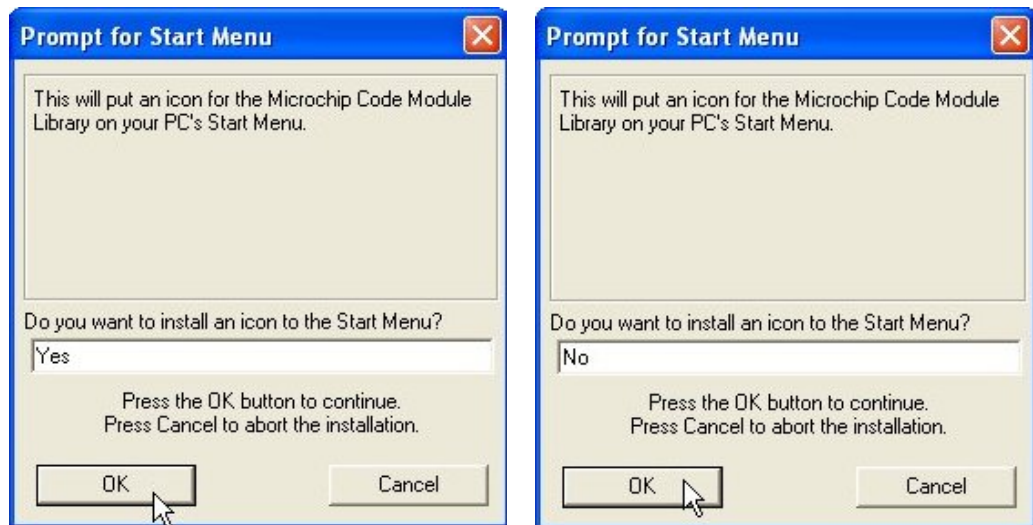
After selecting the CML installation directory, a license agreement will appear like in the image below. After reading it, click on OK.



After clicking on OK you will be given a choice as to whether or not you will want to place a shortcut to the CML on your desktop. If you would like a CML shortcut to be placed on your desktop, type in Yes as shown in the image on the left. If you would not like a CML shortcut to be placed on your desktop, type in No as shown in the image on the right.



After deciding on whether or not you would like a CML shortcut on you desktop you will then have another choice as to whether or not you would like a start menu icon for the CML. If you would like a CML icon to be placed on your start menu, type in Yes as shown in the image on the left. If you would not like a CML icon to be placed on your start menu, type in No as shown in the image on the right.



After all the previous steps have been completed the installation will have been completed successfully and you will see a window such as the one in the image below.



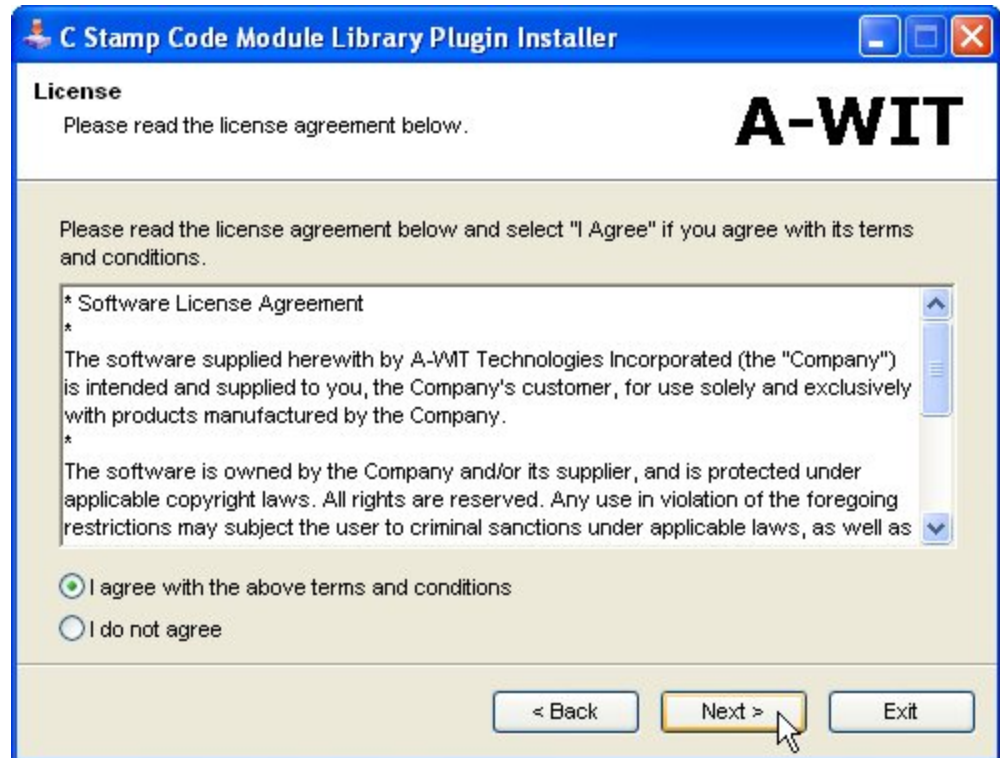
Installing the C Stamp Code Module Library Plugin

After installing the Code Module Library, the next step is to install the C Stamp Code Module Library Plugin. The C Stamp Code Module Library Plugin links the CML to the A-WIT provided code snippets so that the user does not have to manually input them.

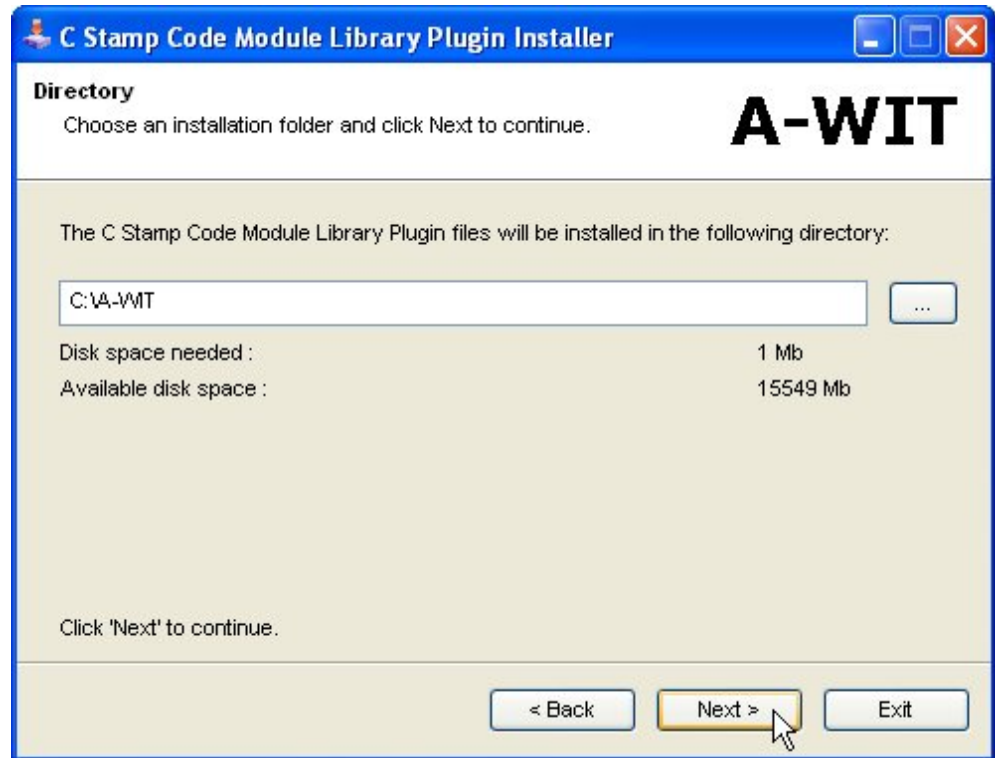
To install the C Stamp Code Module Library Plugin, open the file CSTAMP_CML_Installer. Upon opening the CSTAMP_CML_Installer file, a window will appear like the one below. Click on Next to proceed with the installation of the C Stamp Code Module Library Plugin.



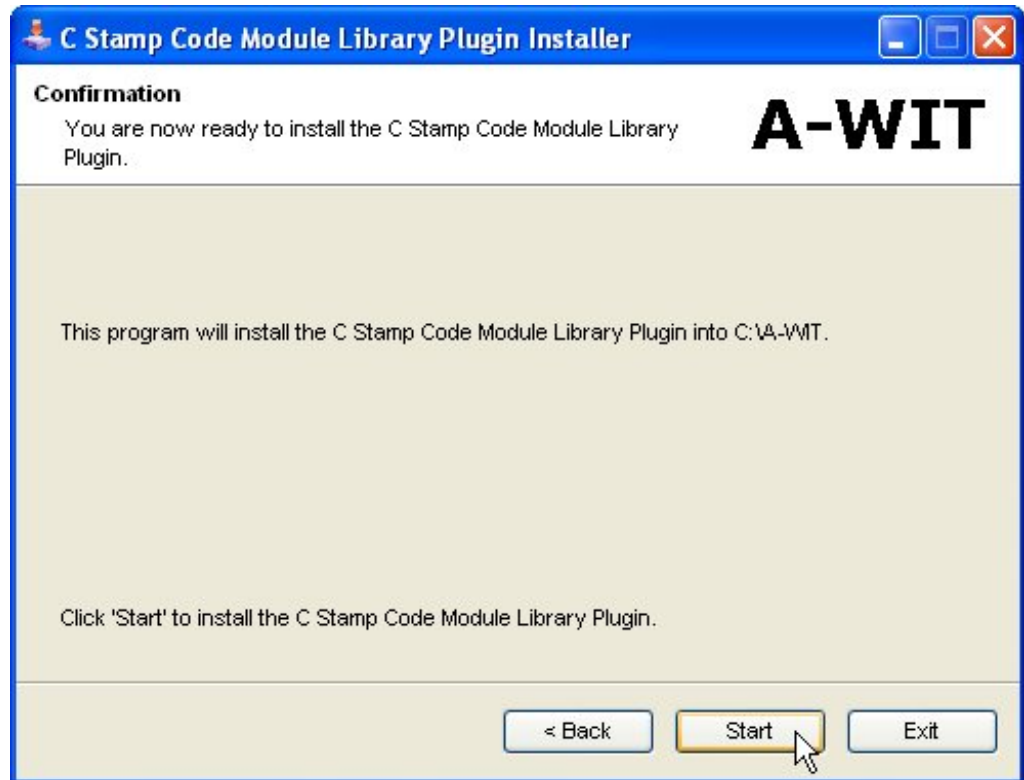
After beginning the installation of the C Stamp Code Module Library Plugin, you will be prompted with a license agreement. After reading the license agreement, click on “I agree with the above terms and conditions” and then click on next.



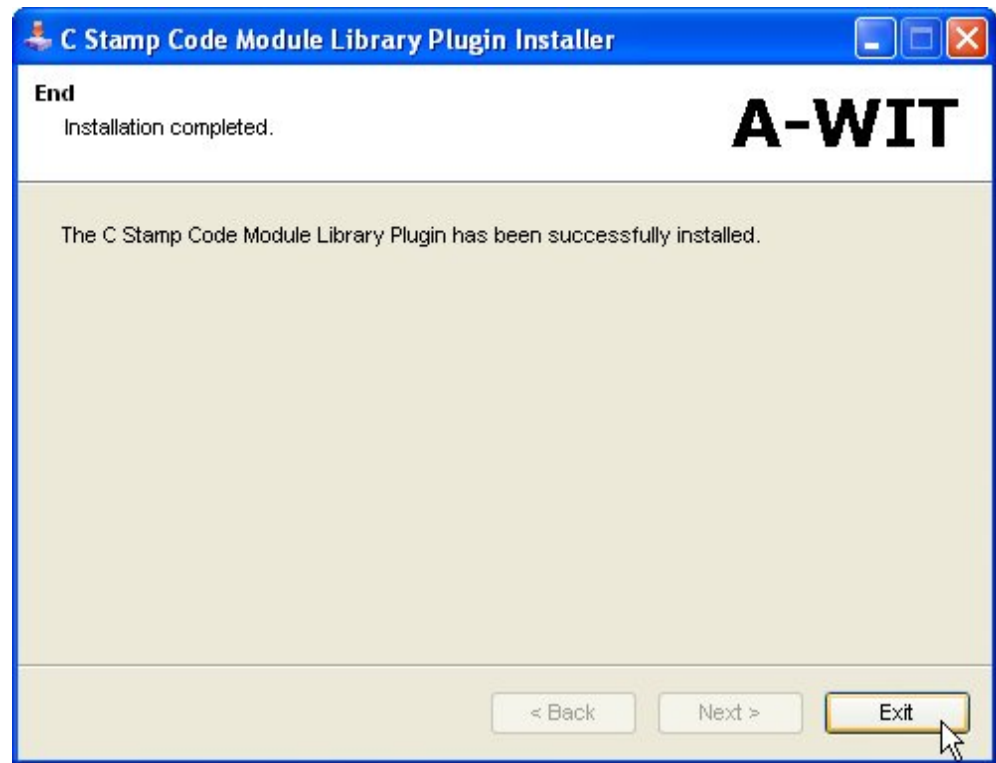
After agreeing to the terms and conditions of the license agreement, the installation window will look like the one below. Click Next to proceed with the installation process. Make sure that the default installation directory is used or the C Stamp Code Module Library Plugin may not work.



After all the previous steps have been completed successfully, the C Stamp Code Module Library Plugin is now ready to be installed. Click on Start to begin the installation of the C Stamp Code Module Library Plugin.



After clicking Start, the C Stamp Code Module Library Plugin will be installed and you will be presented with the following window that notifies you of a successful installation of the C Stamp Code Module Library.



After the C Stamp Code Module Library Plugin has been successfully installed, click on Exit.

The Code Module Library and all its necessary plugins have been installed successfully.

Using the C Stamp Code Module Library

The C Stamp Code Module Library has many features that make it an ideal solution for organizing snippets of code that can be used in the future.

Below are the various parts of the Code Module Library Window. The five main parts are:

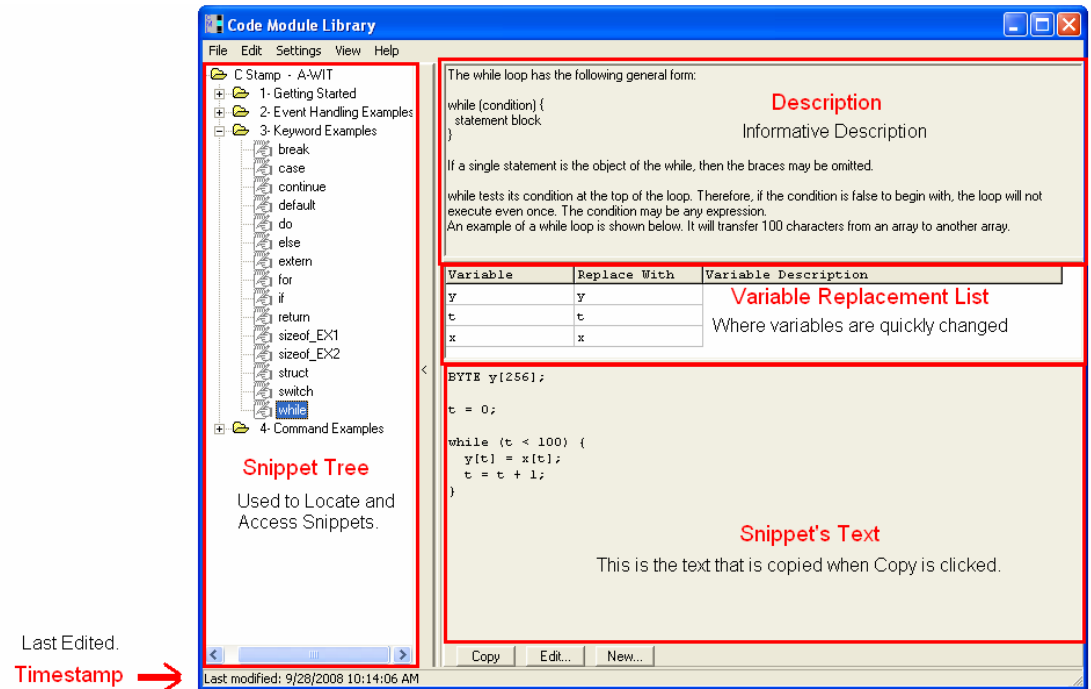
Description – Here, there is an informative description of the snippet that you are currently viewing

Snippet Tree – Here is the hierarchy of all the snippets. Both A-WIT provided snippets and user generated snippets will appear here.

Snippet's Text – Here, the code that makes up the snippet is displayed.

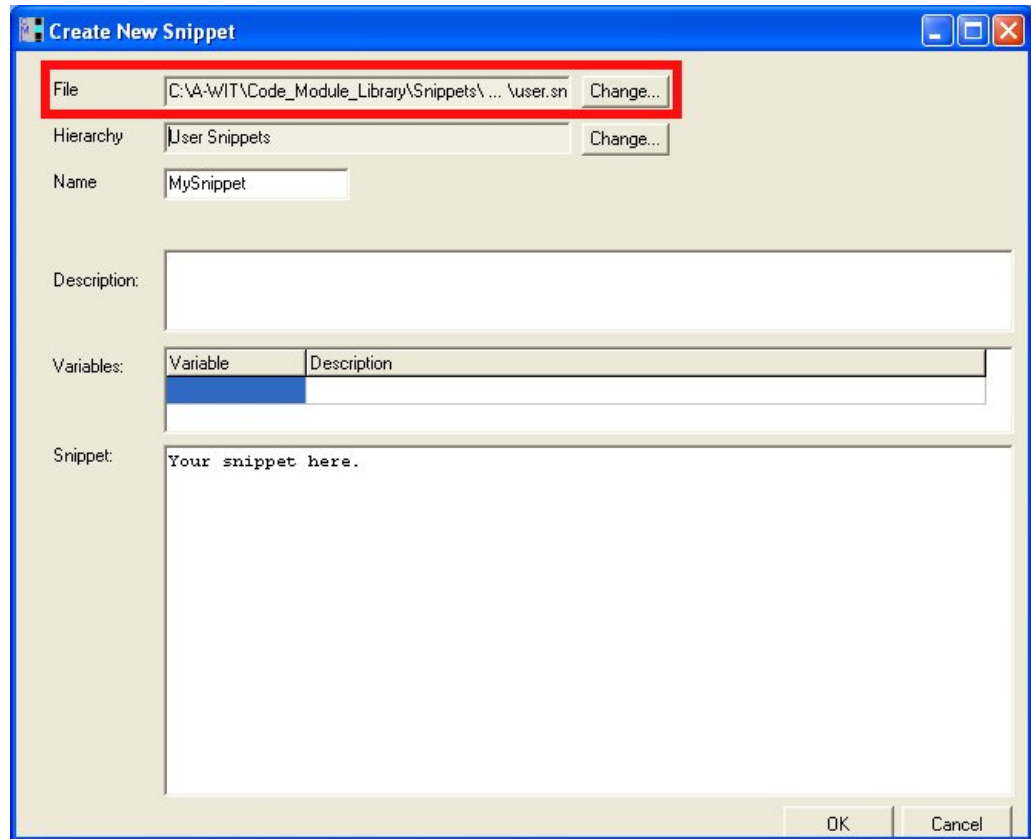
Timestamp – Here, the time that the current snippet was last edited is displayed.

Variable Replacement List – Here, the variables in the snippet’s text are displayed and can be replaced here.



Create a New Snippet

To create a snippet, go to File->New... in the menu bar. Clicking New... will bring up the window shown below. When you are making a new snippet, you must make sure that the file that is being changed is user.snip. If user.snip is not being changed, your snippets might be erased when the A-WIT provided snapshot file is updated with more snippets. Using user.snip ensures that your snippets remain unchanged from future updates.



There are three key fields to be concerned with when creating a snippet. Where it will be placed on the tree is the Hierarchy field, its name, and the snippet's text at the bottom. All fields are detailed below.

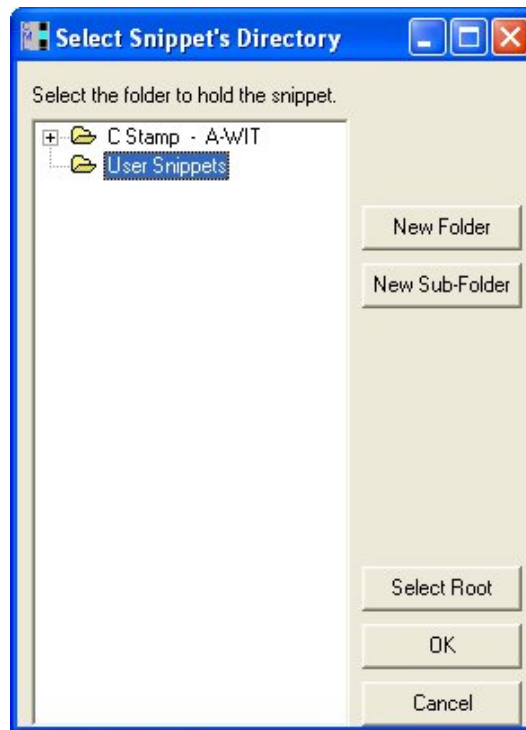
Once satisfied with what file the snippet will be located in, where in the tree it will be located, and the snippet information itself, hit OK, and the New Window will close, create your snippet, and show it in the Main Window.

Filename Field

At the top, the first grayed out box is the filename text box. This is the file where your snippet will be stored. If a snippet or directory was selected on the Snippet Tree of the main window when you opened the New Window, the New Window will automatically load the file associated with the selected item. This can help keep similar snippets together in files, but to change the file, select either of the Browse... or New... buttons.

Hierarchy Field

This field specifies where in the Snippet Tree your snippet will be located. The Code Module Library tries to associate it where you would likely want it to go when you create a new snippet based on your selection in the Main Window. To change this, and to see a more user friendly appearance, select the Change button. Doing so brings up the following window.



As seen above in, if the OK button is clicked, the new snippet would be located under the folder If Statements, which is located under ASM, which is on the root level. The text in the hierarchy field will appear as "ASM;If Statements".

Name

Your snippet needs a name. This text entry box is where to provide the name of your snippet. Snippets in the same folder may not have the same name.

Description

Lastly the description box accompanies the snippet as seen in the Main Window, and is present for a quick summary of what the snippet does or how to use it.

Variables

Variables may be declared which when used on the main application window will be replaced with text the user types under Replace With. Type in labels which will need to be changed, and other variables. Even if the variable names do not need to be changed, listing them here will help identify what variables need to be declared in the user application.

Text

Here the text of the snippet should be typed. This text will be your code snippet, or other piece of text.

Copy a Snippet

Copying the snippet to the clipboard.

First, a snippet item must be selected in the Snippet Tree. Snippet items display a notepad image to their left, and when selected will cause the description and text to appear on their respective displays of the main window.

Hot-keys to Copy

Once a snippet is selected, there are several ways to copy a snippet to provide convenience for many users. The three most common means to copy a snippet are provided by accessing Edit->Copy from the menu bar, hitting Ctrl+C, or clicking the Copy button on the right pane.

In addition to these common ways of copying, you can also double-click a snippet to copy it, or hit enter twice while selected in the tree.

Optional Step - Replace Variables

A snippet may be used without replacing any words, but to quickly change instances of text under Variable, type beside it under Replace With. As shown here mulcnd and mulplr will be replaced with user application variables Sensor1Value and ScaleValue, while Prod_H will be left unchanged.

Variable	Replace With	Variable Description
mulcnd	Sensor1Value	Multiplicand
mulplr	ScaleValue	Multiplier
Prod_H	Prod_H	High byte of product.

Putting the snippet into your application.

Once the snippet is copied to the clipboard, it is as simple as pasting it into the code of your application.

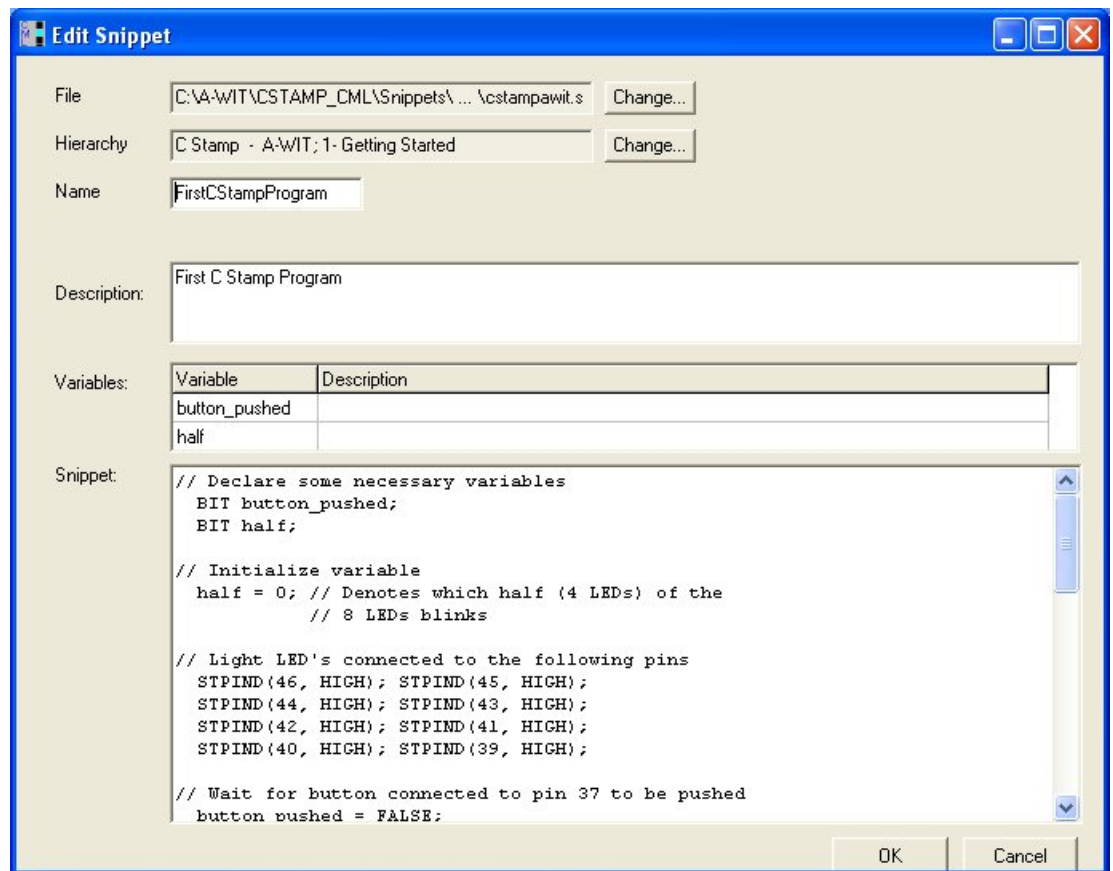
Have MPLAB open, or another editor you prefer, and paste the snippet where you want it to go in your editor.

Edit a Snippet

Editing a snippet is a very similar process to creating a new snippet.

First, a snippet must be selected in the tree, and then click Edit->Edit Snippet, or use another means to bring up the Edit Window.

The image below shows the Edit Window. It is styled just like the New Window, but it will replace the snippet you are editing instead of making a new one.



From here, all the information that you want to edit can be edited here.

Terms and Conditions

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A-WIT Technologies, Inc warrants its products against defects in materials and workmanship for a period of 90 days. If you discover a defect, A-WIT Technologies, Inc. will, at its option, repair, replace, or refund the purchase price. After 90 days, products can still be sent in for repair or replacement, but there will be a \$10.00USD minimum inspection/labor/repair fee (not including return shipping and handling charges).

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How to Return a Product

When returning, you must first e-mail sales@a-wit.com for a Return Merchandise Authorization number. No packages will be accepted without the RMA number clearly marked on the outside of the package. After inspecting and testing, we will return your product, or its replacement using the same shipping method used to ship the product to A-WIT within 30 days. In your package, please include a daytime telephone number and a brief explanation of the problem.

Please contact our Sales Department at sales@a-wit.com if you have any questions regarding our warranty policy or if you are requesting an RMA number.

