3B Software Installation & Configuration Guide

The purpose of this guide is to install & configure the software used to develop ASM programs and generate executables in CS3B.

To do this you will need to install and configure the software below:

- Textpad the editor for ASM programs
- Debugging Tools for Windows the debugging environment for ASM programs
- MASM615 the assembler for Intel ASM programs
- MASM6.sym the style formatter for ASM programs

The directions for installation and configuration are below.

3B Software Installation

To install Textpad:

- 1) Download [₹] txpeng710.zip
- 2) Unzip the txpeng710.zip
- 3) Run setup.exe

To install Debugging Tools for Windows:

- 1) Download <u>■ dbg x86 6.3.5.exe</u>
- 2) Run/Install dbg_x86_6.3.5.exe

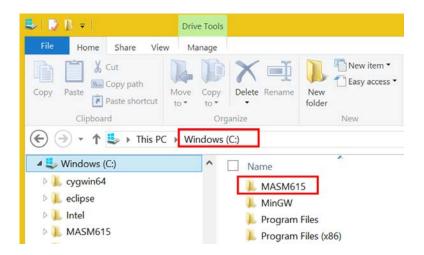
To install MASM615:

There are two parts for installing MASM615:

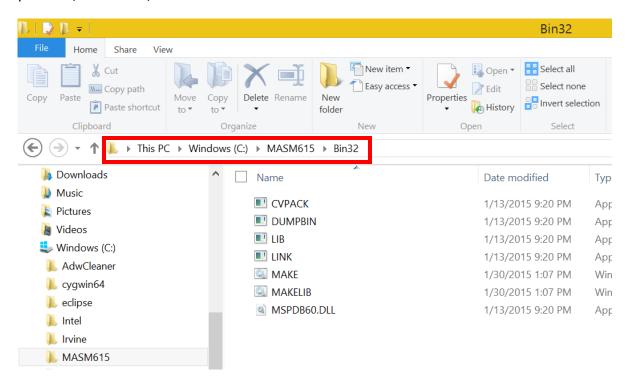
- Part 1: Downloading/installing the software.
- Part 2: Configuring your computer to run the MASM615 assembler by updating the system Path environment variables.

PART 1: Installing MASM 615

- 1) Download MASM615.zip
- 2) Unzip MASM615.zip
- 3) Move the inner MASM615 folder into: C:\

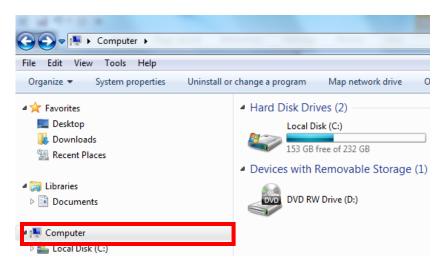


Verify that the MASM615 was installed correctly by trying to go to the following path: C:\MASM615\Bin32

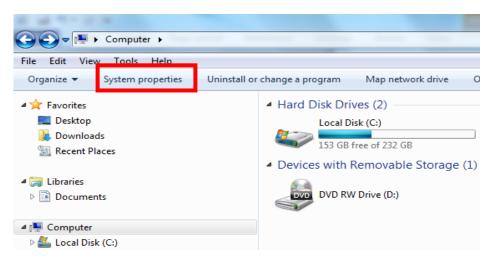


PART 2: Updating the system Path environment variable

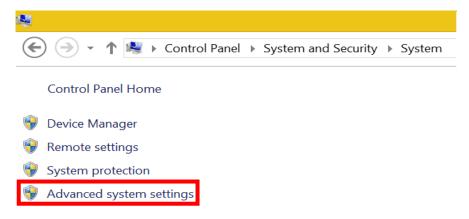
1) In Windows File Explorer, Click on Computer



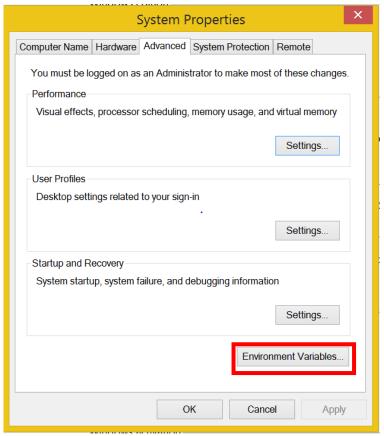
2) Next select System Properties



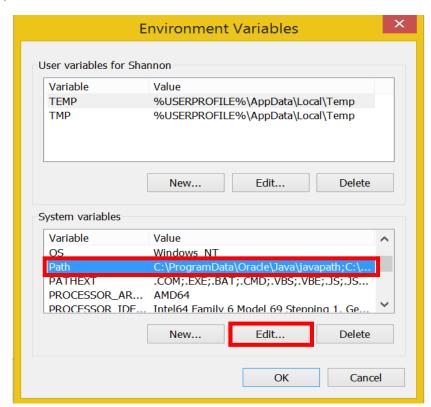
3) Select Advanced System Settings



4) Select Environment Variables

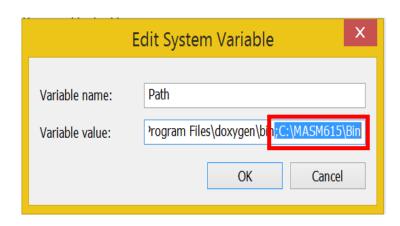


5) Scroll down to find and select the Path variable & click Edit



6) WARNING!!! DELETION OF ANTHING IN THIS BOX MAY CAUSE PREVIOUSLY INSTALLED SOFTWARE NOT TO WORK.

Add the following text to the end of the Variable Value field: ;C:\MASM615\Bin



7) Click OK.

3B Software Configuration

The software configuration process guides you through the process in configuring:

- Part 1: Creating Tool connections between MASM615 & the Windows Debugger with Textpad
- Part 2: Installing ASM text formatting/highlighting in TextPad

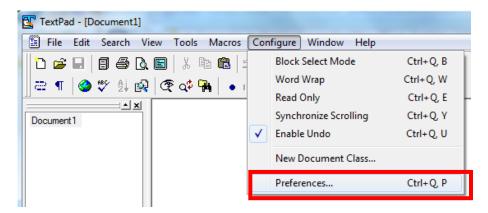
Part 1: Creating Tool Connections Between MASM615/Windows Debugger/TextPad

During this process, you will be creating tools in TextPad to do the following for assembly programs:

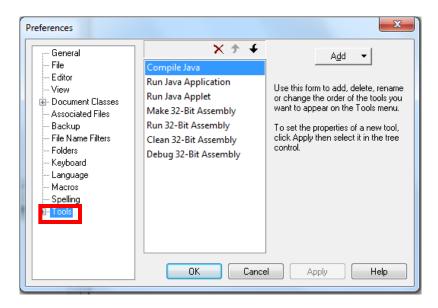
- Compile(Make 32-bit Assembly)
- Run(Run 32-bit Assembly)
- Clean (Clean 32-bit Assembly)
- Debug (Debug 32-bit Assembly)

To create a tool in TextPad:

1. Configure Menu-> Select Preferences

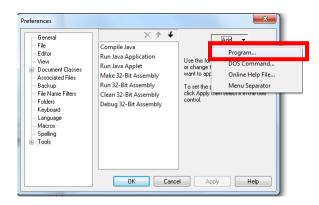


2. Select Tools



3. Tool Name: Make 32-bit Assembly

Select Add->Program



Navigate to C:\ MASM615\Bin32\MAKE.BAT

Tool Name: Make 32-bit Assembly

Command: C:\ MASM615\Bin32\MAKE.BAT

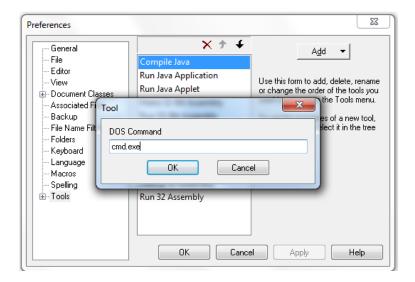
Parameters: \$WspDir\\$WspBaseName.MAK ALL

Initial Folder: \$WspDir

Selected Options: Capture Output, Sound alert when completed

4. Tool Name: Run 32-bit Assembly

Add->DOS Command



Command: cmd.exe

Parameters: "\$WspDir\\$WspBaseName.exe"

Initial Folder: \$WspDir

Selected Options: No options selected

5. Tool Name: Debug 32-bit Assembly

Command: C:\Program Files (x86)\Debugging Tools for Windows\windbg.exe

Parameters: -i \$WspDir -y \$WspDir -srcpath \$WspDir \$WspDir\\$WspBaseName.exe

Initial Folder: \$WspDir

Selected Options: No options selected