ModusToolbox™ Installation Guide

Version 2.0

This document provides instructions for installing the ModusToolbox version 2.0 software – a set of tools that enable you to integrate Cypress devices into your existing development methodology.

System Requirements

The ModusToolbox software consumes approximately 2 GB of disk space. Like most modern software, it requires both free disk space and memory to run effectively. Cypress recommends a system configuration with a PassMark CPU score > 2000 (cpubenchmark.net), at least 25 GB of free disk space, and 8 GB of RAM. The product will operate with fewer resources; however, performance may be degraded.

ModusToolbox software is **not** supported on 32-bit operating systems. It has been tested on the following:

- Windows 7 64-bit / Windows 10 64-bit
- macOS 10.x
- Ubuntu Linux 18 LTS

Note For Linux and macOS, ModusToolbox software requires the following Unix packages (with minimum versions) to work properly:

- make (v3.81)
- mktemp (v8.25)
- perl (v5.18.2)
- cmp (v2.8.1)
- git (2.17.0)

Some versions of Ubuntu Linux do not include 'make' by default. Use the following command to install it:

```
sudo apt-get install make
```

Uninstalling Issues

ModusToolbox version 2.0 installs alongside version 1.0 and 1.1; therefore, all versions can be used independently. Make sure to specify different workspace names if you plan to use all versions. See Step 3: Run the ModusToolbox IDE for more details.

If you installed a version 2.0 Beta release, you need to uninstall it before installing this production release.

- **Windows**: The current release installer will prompt you to uninstall a previous release. You can also use the Windows Control Panel.
- **Linux**: Go to the directory where you extracted the tar.gz installer. Delete the "ModusToolbox" directory and its contents.
- **macOS**: Go to the **Applications** folder to which you installed the previous ModusToolbox software. Move the "ModusToolbox" directory to the Trash.

Note Be aware that uninstalling the ModusToolbox software does not remove any workspaces you may have previously created with the IDE. You should delete these workspaces or move them to another location. When installing the software again, the IDE will prompt you to create a workspace in *<user_home>/mtw* by default. If there is an existing workspace with that name and a ".metadata" folder, there may be an IDE workspace conflict issue.

Step 1: Download the Software

Go to the Cypress ModusToolbox website (www.cypress.com/modustoolbox) and download the appropriate software for your platform:

- **Windows**: *ModusToolbox_2.0.0.<build>-windows-install.exe*
- **Linux**: *ModusToolbox_2.0.0.<build>-linux-install.tar.gz*
- **macOS**: *ModusToolbox_2.0.0.<build>-osx-install.pkg*

Note If you plan to use the SEGGER J-link debugger, you must download and install the appropriate software pack for your OS. It is not included with the ModusToolbox software. Use version 6.35 or later. For Linux, if you install this using the tar.gz file, make sure you install J-Link in a common location. Otherwise, you must configure the ModusToolbox IDE to specify the location, as follows:

Window > Preferences > MCU > Global SEGGER J-Link Path

- **Executable**: *JLinkGDBServerCLExe*
- **Folder**: *<J-Link_extracted_location>*

Step 2: Install ModusToolbox Software

Note Do not use spaces in the installation directory name. Various tools, such as Make, do not support spaces. Also, do not use common illegal characters, such as:

```
* . " ' / \ [ ] : ; | = ,
```

Note If you install ModusToolbox in a non-default location, you will need to set the CY_TOOLS_PATHS environment variable for your system to point to the *ModusToolbox/tools_2.0* folder, or set that variable in each Makefile. You must use forward slashes in the variable's path, even in Windows.

Windows

Run the *ModusToolbox_2.0.0.<build>-windows-install.exe* installer program. By default, it is installed here:

C:\Users\<user_name>\ModusToolbox

Note If your Windows user home directory contains spaces, see https://community.cypress.com/docs/DOC-18910.

Note If you have not installed ModusToolbox software previously, you may be prompted to restart your computer due to installation of Microsoft Visual C++ redistributable files.

Linux

Extract the *ModusToolbox_2.0.0.<build>-linux-install.tar.gz* file to your *<user_home>* directory. The extraction process will create a "ModusToolbox" directory there.

After extracting, you must run the following scripts before running ModusToolbox software on your machine:

- OpenOCD: <user_home>/ModusToolbox/tools_2.0/openocd/udev_rules/install_rules.sh
- WICED Bluetooth Boards: <user_home>/ModusToolbox/tools_2.0/driver_media/install_rules.sh
- Firmware Loader: <user_home>/ModusToolbox/tools_2.0/fw-loader/udev_rules/install_rules.sh
- Post-Install Script: <user_home>/ModusToolbox/tools_2.0/modus-shell/postinstall

In order for ModusToolbox to work correctly, you must install an additional "libusb-0.1-4" package for the Ubuntu 18.xx OS. To do that, run the following command in the Terminal window:

```
$ sudo apt-get install libusb-0.1-4
```

macOS

Double-click the downloaded *ModusToolbox_2.0.0.<build>-osx-install.pkg* file and follow the wizard.

Note On the Catalina version of macOS, you may see a dialog similar to the following:

If this happens, click **OK** to close the dialog. The right-click on the pkg file and select **Open**. When this dialog displays again, it will include an **Open** option.

The ModusToolbox software will be installed under the **Applications** folder in the volume you select in the wizard.

Note The ModusToolbox package installer installs the WICED USB driver for use with future versions of ModusToolbox. It may pop up a "System Extension Blocked" dialog. In this case, go to **Security Preference** and click **Allow** for the driver to be installed.

If installing ModusToolbox on a clean machine, you may see the following error while building a project:

*"The *** command requires the command line developer tools. Would you like to install the tools now?".*

In order for ModusToolbox to work correctly, you must install an additional "xcode" package for the MacOS. To do that, run the following command in the Terminal window:

```
xcode-select -v # check whether installed version
xcode-select –install # command to install
```

Then, run the following command to accept the license agreement:

```
sudo xcodebuild -license
```

Step 3: Run the ModusToolbox IDE

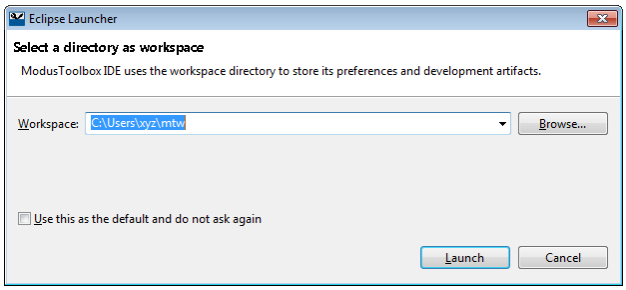
To run the IDE:

- **Windows**: Navigate to *<user_home>/ModusToolbox/ide_2.0/eclipse* and run *ModusToolbox.exe*.

  Note You may be asked to grant access by the Firewall manager.
- **Linux**: Navigate to *<user_home>/ModusToolbox/ide_2.0/eclipse* and run *ModusToolbox*.
- **macOS**: Navigate to the directory where you moved the *ModusToolbox.app* file (for example, */Applications/ModusToolbox/ide_2.0*) and run *ModusToolbox.app*.

When the ModusToolbox IDE runs for the first time, a dialog opens to specify the Workspace location. The default location for the workspace is: *<user_home>/mtw*.

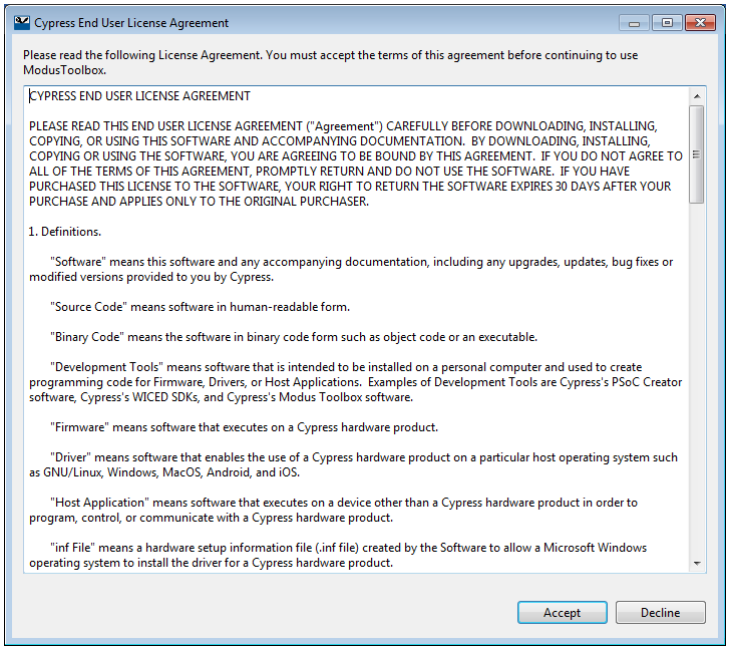
Note ModusToolbox version 2.0 installs alongside previous versions; therefore, each version can be used independently. However, be aware that the default workspace location (*<user_home>/mtw*) is the same in all versions. If you plan to use more than one version, you must specify different workspace names for each installation.



Enter the workspace location and name and click **Launch** to open the IDE.

Note If you change the workspace location or name, do not use spaces or illegal characters anywhere in the path.

After the IDE opens for the first time, the Cypress End User License Agreement (EULA) displays.



Read the EULA and click **Accept** to proceed. If you click **Decline**, the IDE will close.

Next Steps

Refer to the *ModusToolbox IDE Quick Start Guide* for brief instructions to create, build, and program applications. Refer also to the *ModusToolbox IDE User Guide* for more detailed information.

These documents are available from the ModusToolbox IDE **Help** menu and **Quick Panel**.

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