Installation & Build Guide

Tools For GOS2022

Table Of Contents:

1

Git Installation

2

Visual Studio Installation

3

STM32Cube IDE Installation

4

GOSTool Build & Execution

5

GOS2022 Build & Execution

Git Installation (Adapted from https://github.com/git-quides/install-git)

Precheck existing version for Git:

- 1. If you're on a Mac, look for a command prompt application called "Terminal".
- 2. If you're on a Windows machine, open the windows command prompt or "Git Bash".
- 3. Once you've opened your terminal application, type git version. The output will either tell you which version of Git is installed, or it will alert you that git is an unknown command. If it's an unknown command, read further and find out how to install Git.

Install Git on Windows

- 1. Install the latest version: https://gitforwindows.org/ and follow all installation steps on the Wizard
- 2. Open the windows command prompt (or Git Bash if you selected not to use the standard Git Windows Command Prompt during the Git installation)
- 3. Type **git version** to verify Git was installed.

Install Git on Mac

Most versions of MacOS will already have Git installed, and you can activate it through the terminal with git version

- Install the latest version:
 https://sourceforge.net/projects/git-osx-installer/files/git-2.23.0-intel-universal-mavericks.d
 mg/download?use_mirror=autoselect and follow all installation steps on the Wizard
- 2. Open the command prompt "terminal" and type **git version** to verify Git was installed.

Visual Studio Installation (Adapted from https://learn.microsoft.com/en-us/visualstudio/install/install-visual-studio? view=vs-2022)

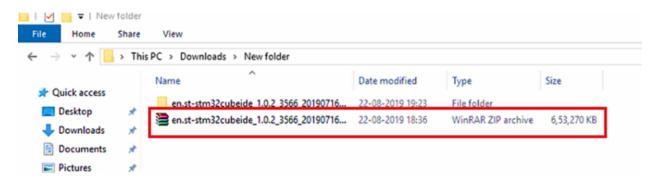
- Download latest version:
 <u>https://visualstudio.microsoft.com/downloads/?cid=learn-onpage-download-install-visual-s</u>
 tudio-page-cta
- 2. From your Downloads folder, double-click the bootstrapper named VisualStudioSetup.exe or named something like vs_community.exe to start the installation
- 3. If you receive a User Account Control notice, choose Yes. We'll ask you to acknowledge the Microsoft License Terms and the Microsoft Privacy Statement. Choose Continue
- 4. After the Visual Studio Installer is installed, you can use it to customize your installation by selecting the feature sets—or workloads—that you want

 a. choose from Desktop & Mobile workloads to develop cross-platform apps with C#, or C++ projects that target C++20.

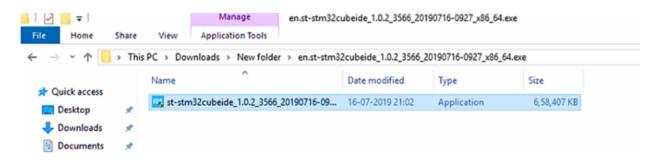
STM32Cube IDE Installation (Adapted from

https://fastbitlab.com/microcontroller-embedded-c-programming-lecture-5-installing-stm32cubeide/)

- Download & Follow the steps from: https://www.st.com/content/st_com/en/stm32cubeide.html
- 2. After downloading, extract the contents of the archive to a suitable location



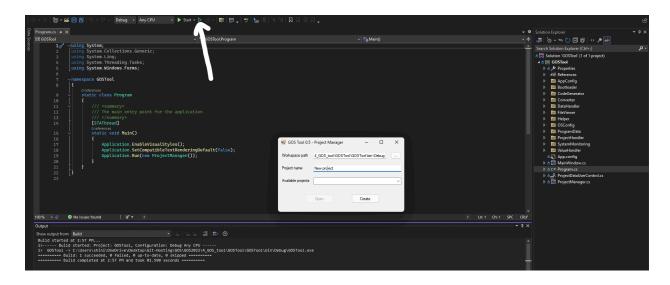
3. Upon extraction, you'll find the STM32CubeIDE software. This is the software you need to install



- 4. Launch the software installation by running the executable
- 5. The installation will include necessary drivers and components shown in Figure 6. It's recommended not to uncheck any options

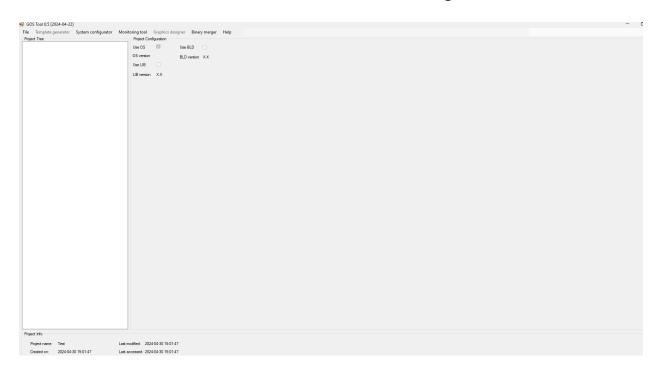
GOSTool Build & Execution

- 1. Clone the repo on git or checkout a specific branch
- 2. Navigate to 4_GOS_tool -> GOSTool.sln
- 3. Open GOSTool.sln with Visual Studio
- 4. Build the project by clicking the build-without-debugging



- 5. Keep workspace path and change the project name or open existing projects
- 6. Project screen will appear once it's created. The .exe will be under:

GOS\GOS2022\4_GOS_tool\GOSTool\GOSTool\bin\Debug

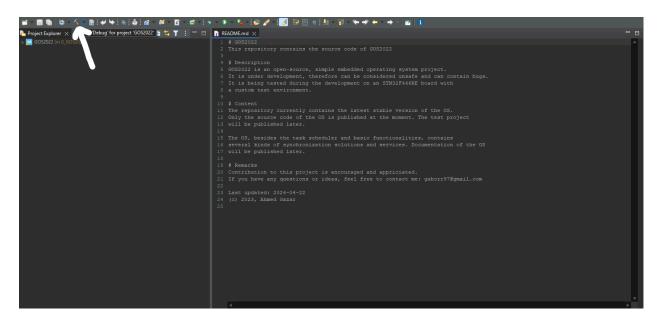


GOS2022 Build & Execution

- 1. Launch your preferred workspace or create a new one to utilize
- 2. File -> Import Projects from File System or Archive
- 3. Import Source -> Choose the directory: **GOS\GOS2022\0_GOS2022** as the parent folder, once you select, this screen will show



- 4. Click Finish to load the project. You will be presented with the README.md
- 5. Build the project by pressing the 'Hammer' build icon



6. If the build is successful you will be presented with 'Build Finished'

```
arm-none-eabi-ar: creating libGOS2022.a
Finished building target: libGOS2022.a

15:46:04 Build Finished. 0 errors, 5 warnings. (took 2s.153ms)
```