Installation Procedure (v2.0)

Workshop: **STM32H5: Ultimate combination of performance, integration, and affordability**

Please follow all the installation steps below before the Workshop.

Workshop – Requirements

Important:

You need to have administration rights to be able to install drivers and software and to do the workshop.

System requirements:

Windows® (10 or later, 64 bits (x64)), macOS® (12 – Monterey, or 13 – Ventura), or Linux® (Ubuntu® LTS 20.04 and 22.04, and Fedora® 36). Please see the STM32CubeIDE installation guide for more details, it can be found at: (https://www.st.com/resource/en/user_manual/um2563-stm32cubeide-installation-guide-stmicroelectronics.pdf)

Minimum Hardware Requirements:

- One USB port (used for the debugger)
- One USB Type-A to Type-C Cable
- 4 GB of system memory (RAM)
- 7 GB of available disk space

STM32H5 Workshop - Installation Procedure – Introduction:

The following Software/Tools/Libraries are needed for the Workshop:
1. STM32CubeIDE: version 1.13.1 minimum required, if you have a previous version you will need to install a new version as explained in this installation procedure.
   o Page 4
2. STM32CubeH5: version 1.1.1 minimum required, if you have a previous version you will need to install a new one as explained in this installation procedure.
   o Page 12
3. STM32CubeProgrammer: version 2.14.0 minimum required, if you have a previous version you will need to install a new version as explained in this installation procedure.
   o Page 17
4. Serial Terminal application: like PuTTY (https://www.putty.org)

Notes:
1- **Some of the versions of the software and libraries on the ST website might have newer versions than the version seen in the document, please use the latest version from the links provided in the installation procedure below.**
2- **The instructions and screenshots are specific to tools versions specified above, the layout and appearance might change with version but the procedural steps for the workshop would remain the same.**
3- **The instructions and screenshots are specific to a Windows® based system.**
4- **The look of the website may change but the links provided in this document remain the same.**

The installation procedure can take several hours for downloading and installing based on the speed of the internet connection and performance of the computer system.

Questions and support ahead of the workshop

1. If you have issues during the software download and install, contact ST by entering an Online Support Request for workshops at https://ols.st.com/s/newcase?o=ws to help resolve the issue.

2. In the Workshop/Event Description field, select:
   "**STM32H5: Ultimate combination of performance, integration, and affordability**"

3. To ensure your request is quickly routed to the correct support team, please indicate the Workshop Request Type, either Technical or Non-Technical, that best describes your question.

STM32H5 Workshop - Installation Procedure

For the Workshop installation please follow the steps below:

1- STM32CubeIDE: STM32Cube initialization code generator
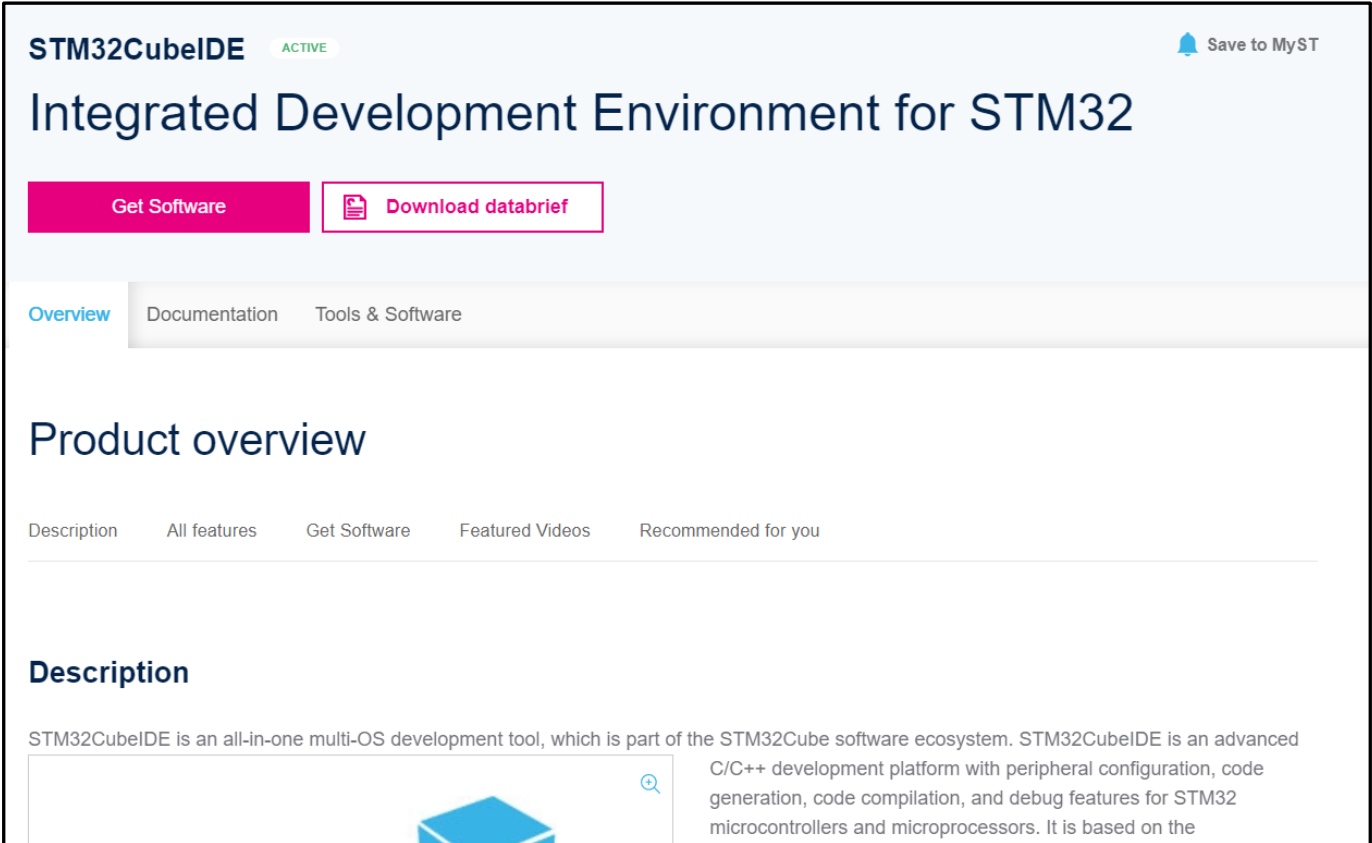
Click Link: STM32CubeIDE
Minimum version to be installed: 1.13.1
Or use Direct Install Link:
https://www.st.com/en/development-tools/stm32cubeide.html

In the web browser, a similar page as follows will come up:

Click on "Get Software" button:

Get Software

Click on "Get Latest" for the target operating system (shown below is for Windows):

+ STM32CubeIDE-Win	STM32CubeIDE Windows Installer	ST	**Get latest**	Select version ∨
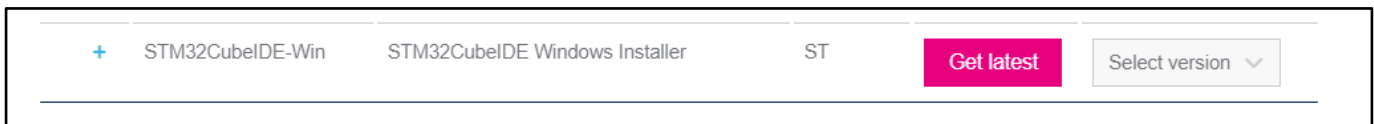
When the following page appears:

code with no impact on the user code

✕

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Last Name:

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First Name:	
Last Name:	
E-mail address:	

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The software will automatically download in your browser.

If not click "Get Software" **Get Software**
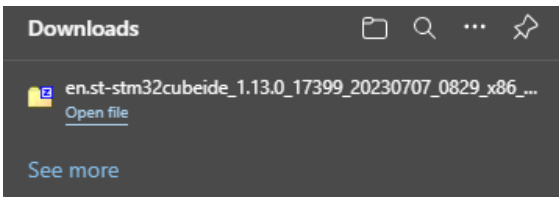
Unzip the file (en.st-stm32cubeide_x.x.x_xxxx.zip) and you will see this:
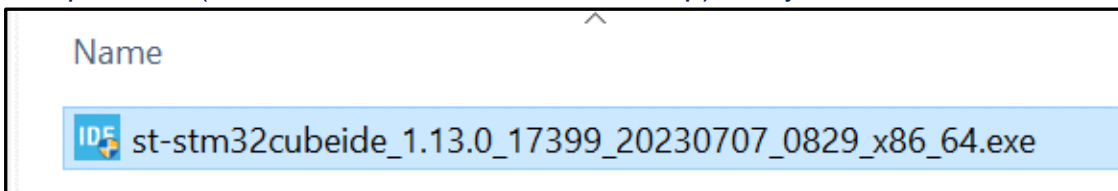
Note: you may see a newer version in your case than the screenshot above.

Right Click on 'st-stm32cubeide_x.x.x_yyy_x86_64.exe' (x.x.x is the version number) and click on 'Run as administrator':
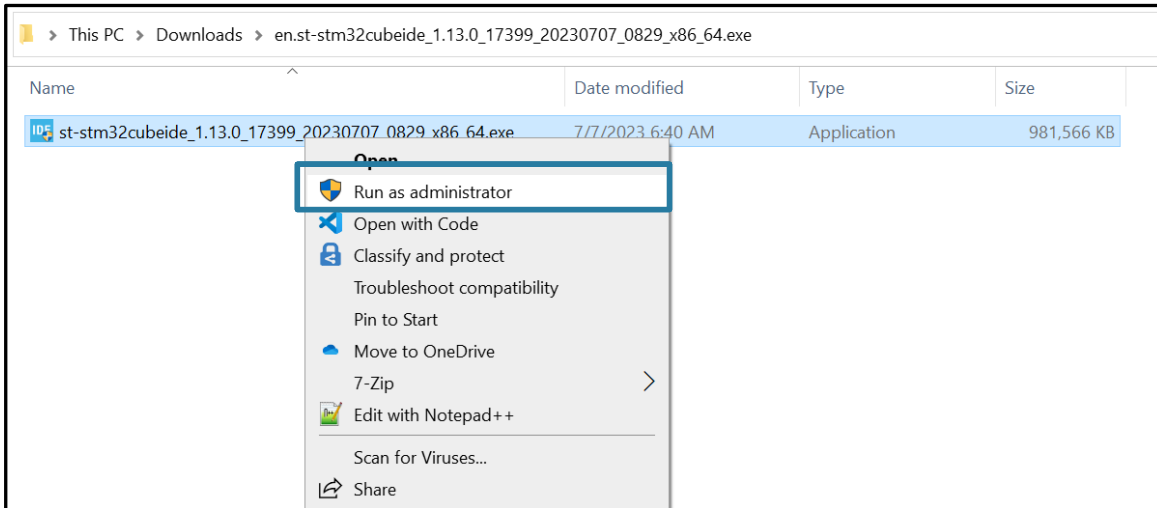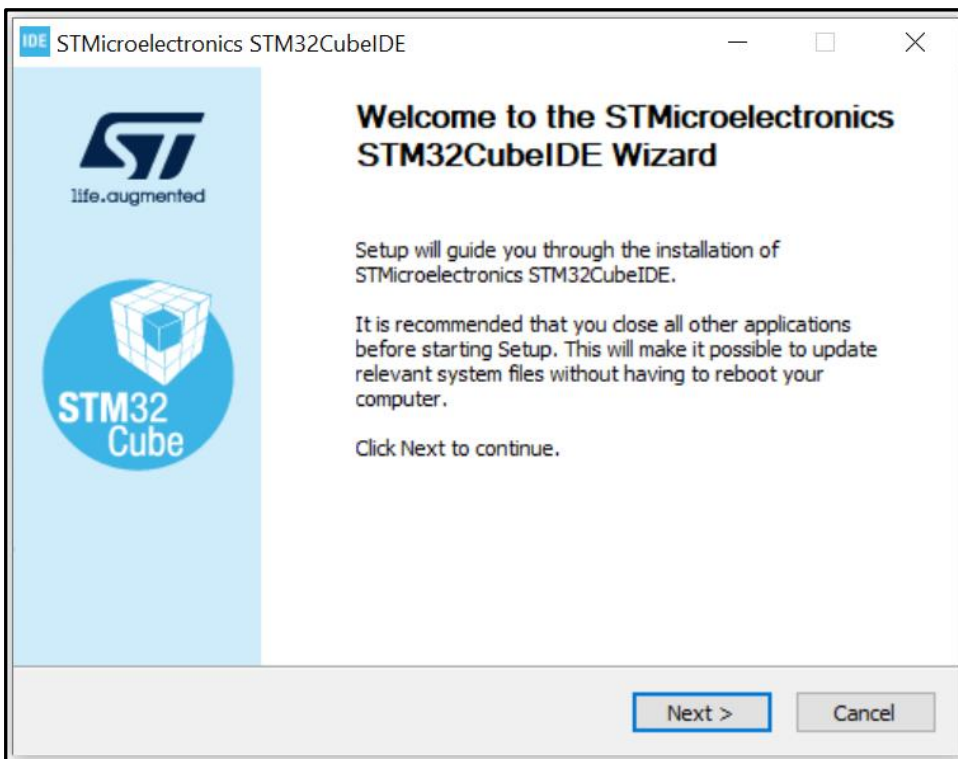
Press "Next":

Press "I agree":
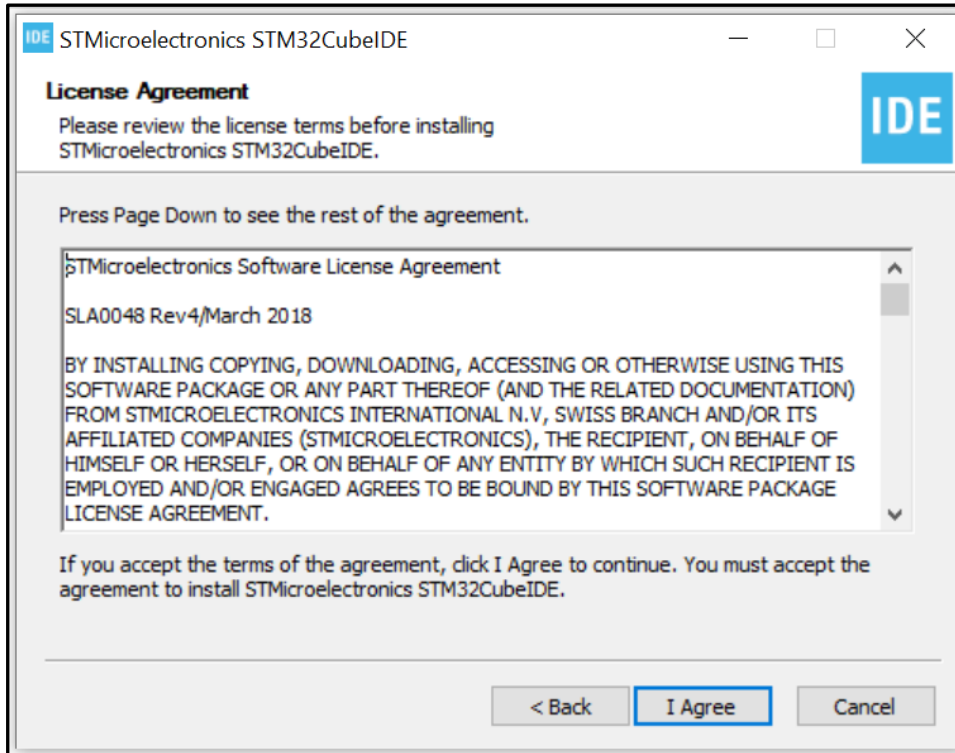
Use the default Destination Folder - press "Next":
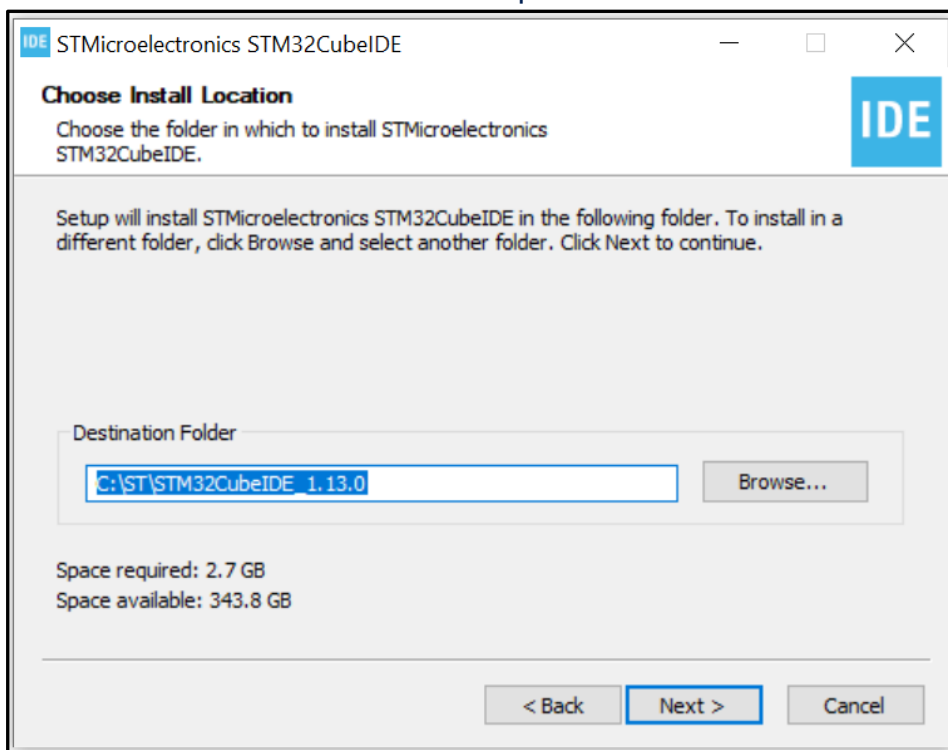
Press: "Install"
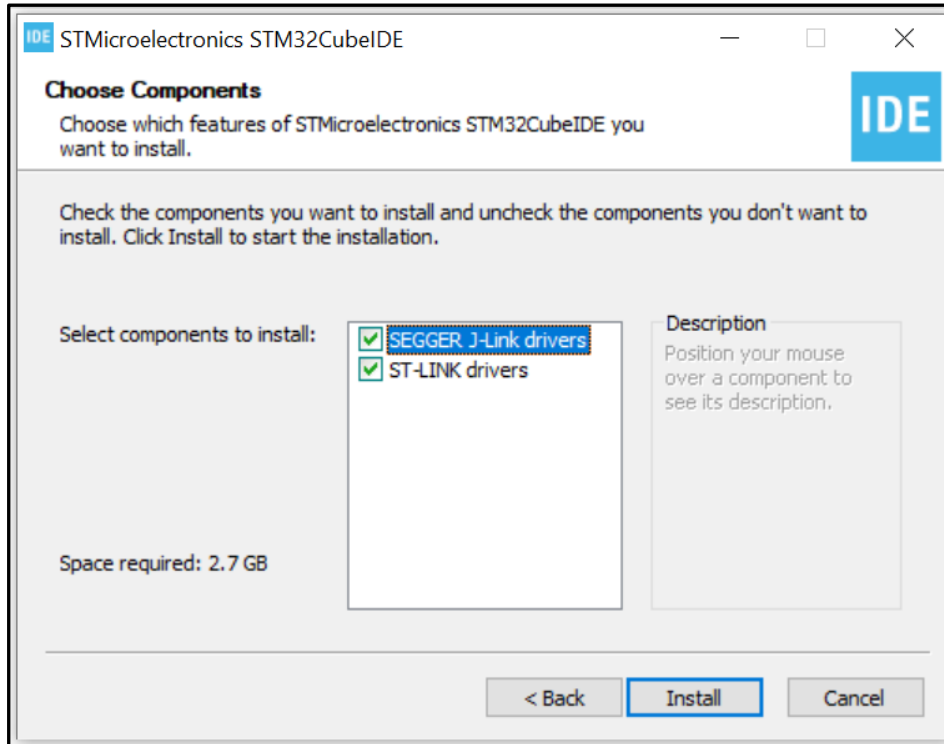
Wait for the install to complete and then press "Next":
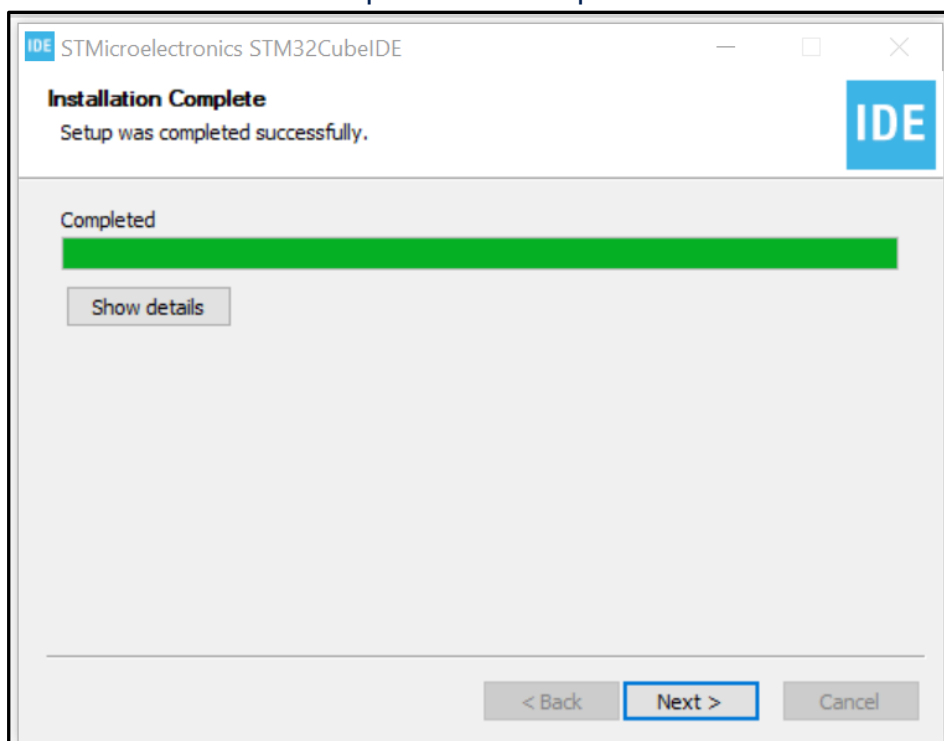
Press "Finish"
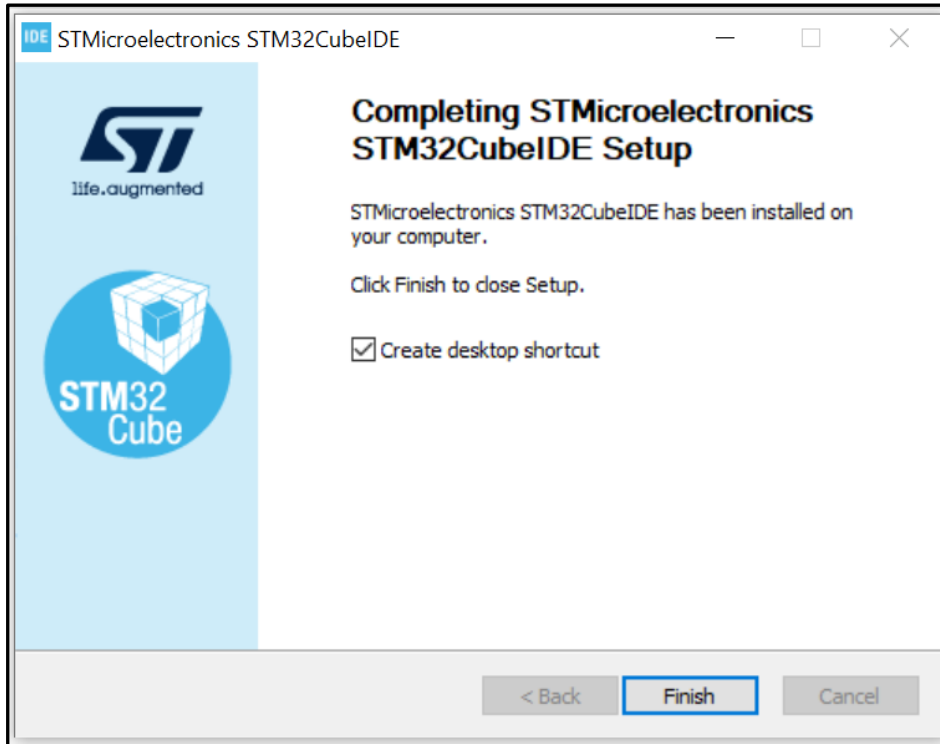
2- STM32CubeH5: Install STM32Cube MCU Package for STM32H5 series

Double click on STM32CubeIDE icon or look for it in your Start Menu:
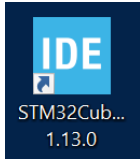
Click Launch:
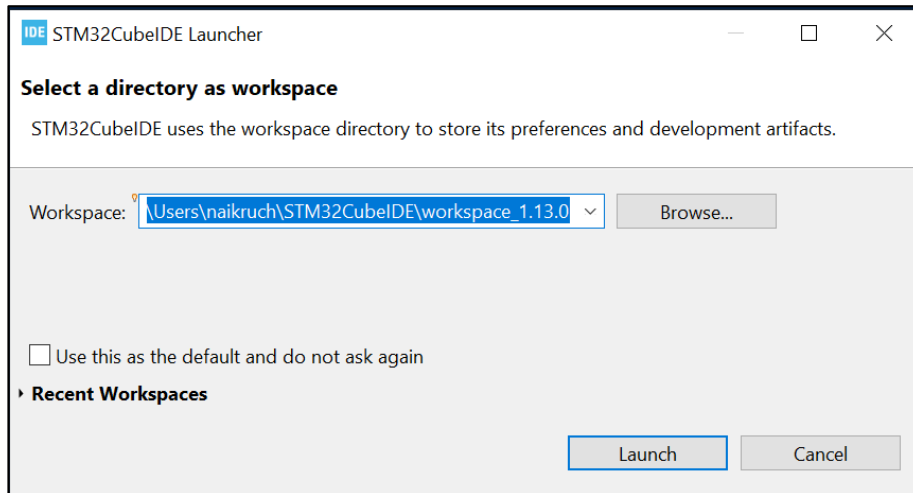
Make your choice for the Usage Statistics Agreement:
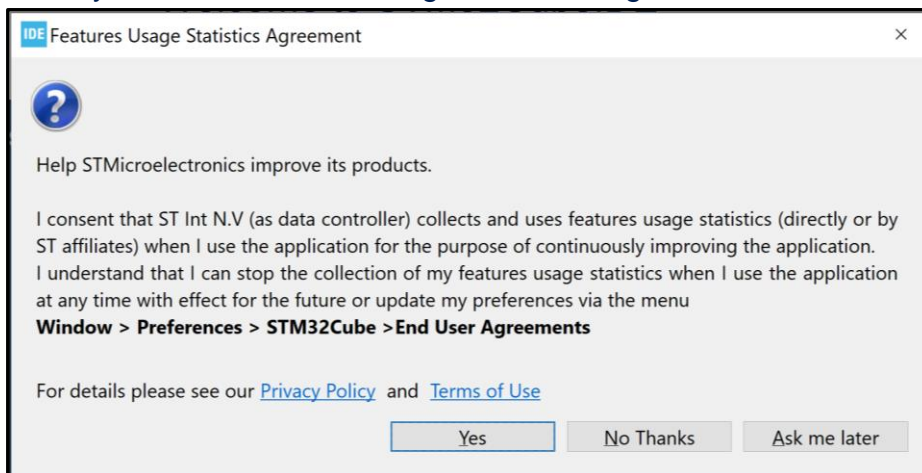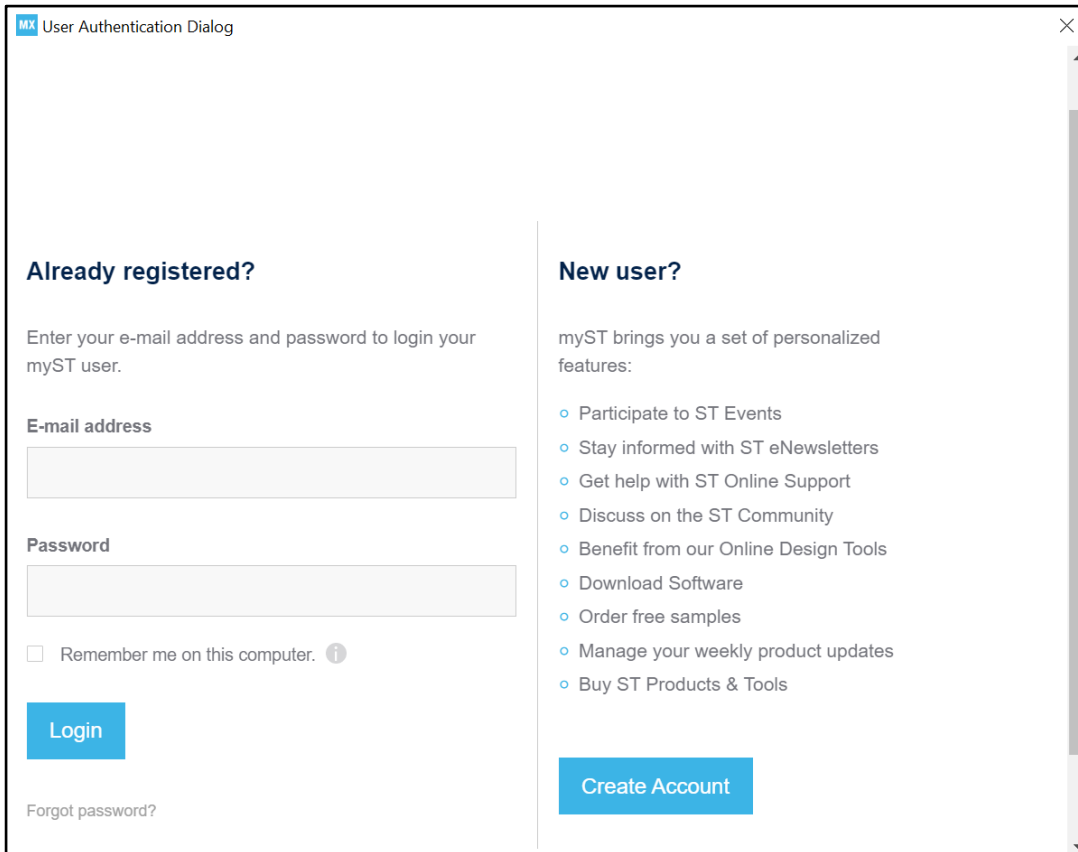
Note: Before installing the package, make sure you are logged-in to the STM32CubeIDE with your "myST" account. Follow the instructions below to log-in correctly.

Click on "myST":

File Edit Source Refactor Navigate Search Project Run Window Help 👤 myST

Follow the instructions in the prompt (shown below) to login to your myST user.

If you do not already have the myST account, click on "Create Account":

Enter the details as instructed by the prompt.
Accept the "Terms of Use" at the end of the prompt and click on "Register".

Follow the instructions above to login with the newly created credentials.

After successfully logging-in, you can see a prompt as shown below:
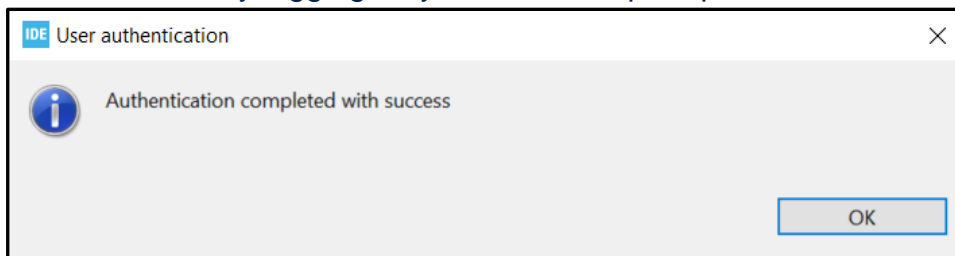
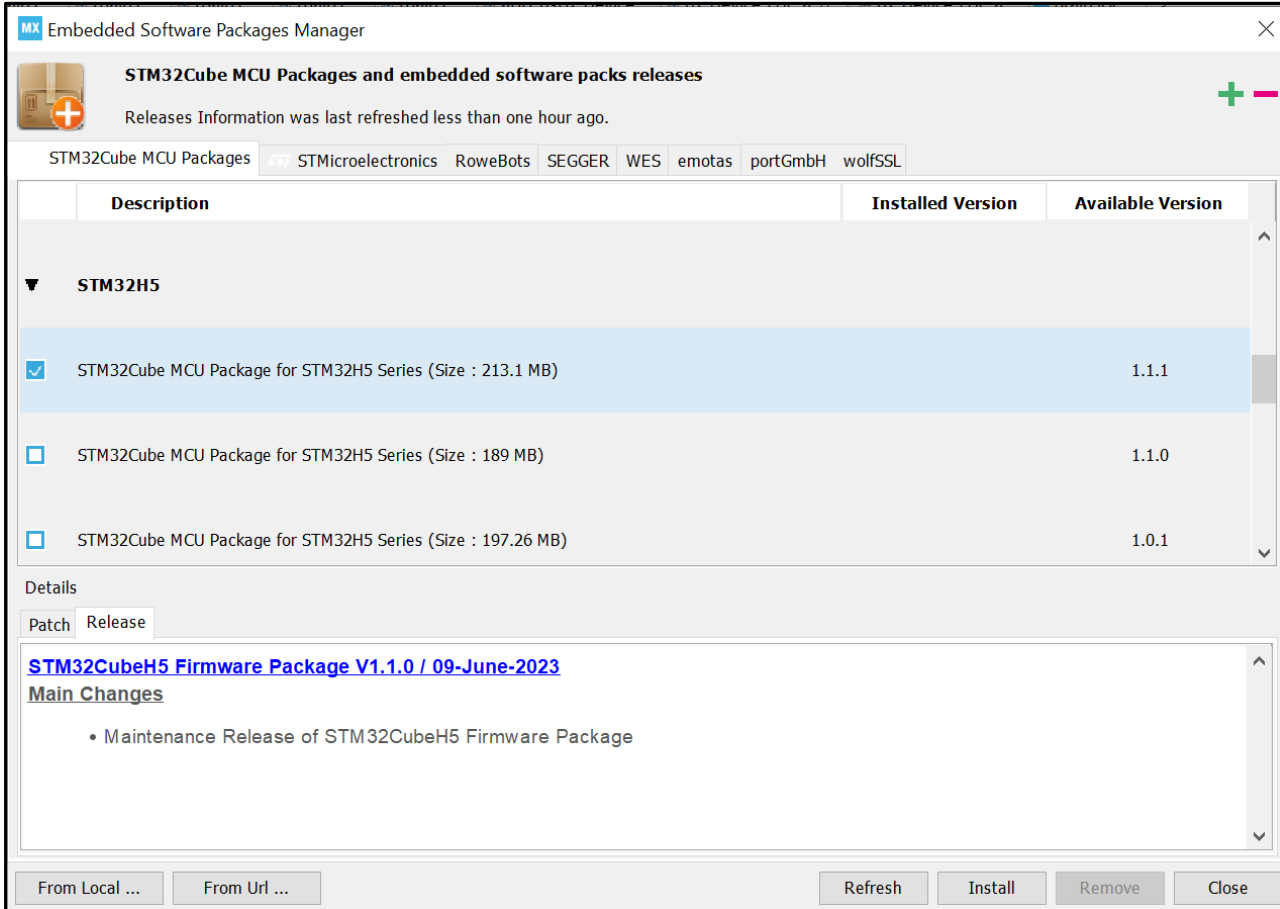Press 'OK' and we are ready to proceed further with the firmware package installation.

Once you are logged in, follow the instructions below to install the STM32CubeH5 Package. From STM32CubeIDE: Help -> Manage embedded software packages:
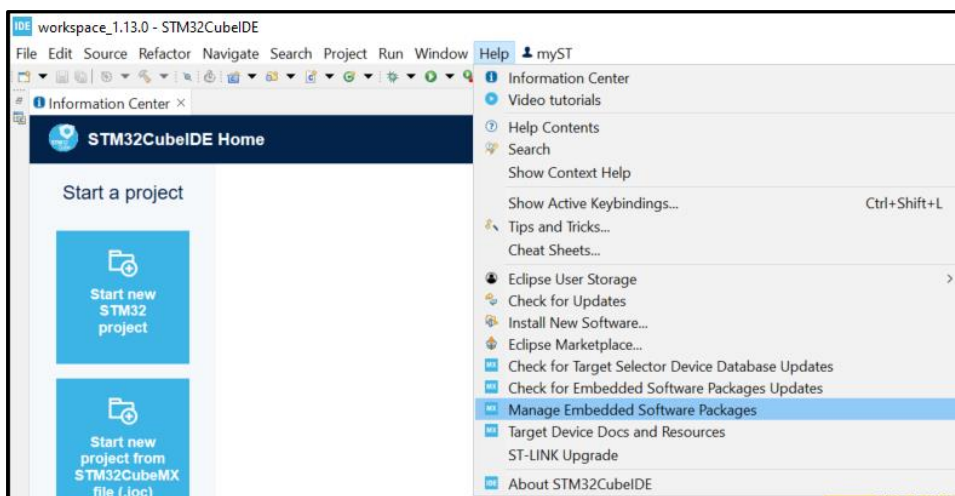
Click on "Refresh":

Under STM32H5, expand then check the **latest** STM32 MCU Package for STM32H5 and click "Install":

Agree on the terms of this license agreement, by selecting "I have read, and I agree to the terms of this license agreement" and then press Finish.
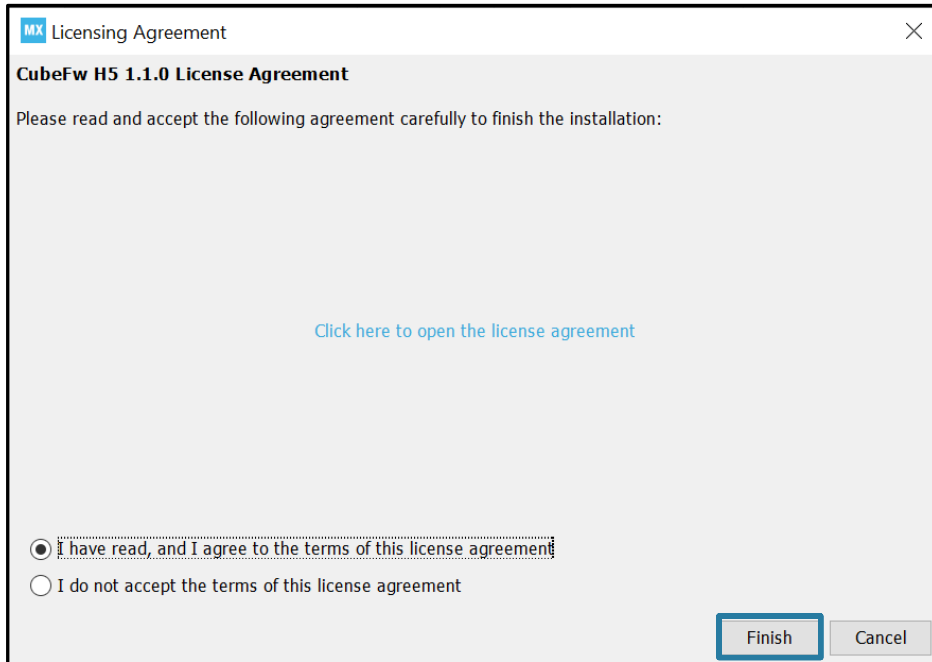
Once installed it should look like this and you can press "Close":
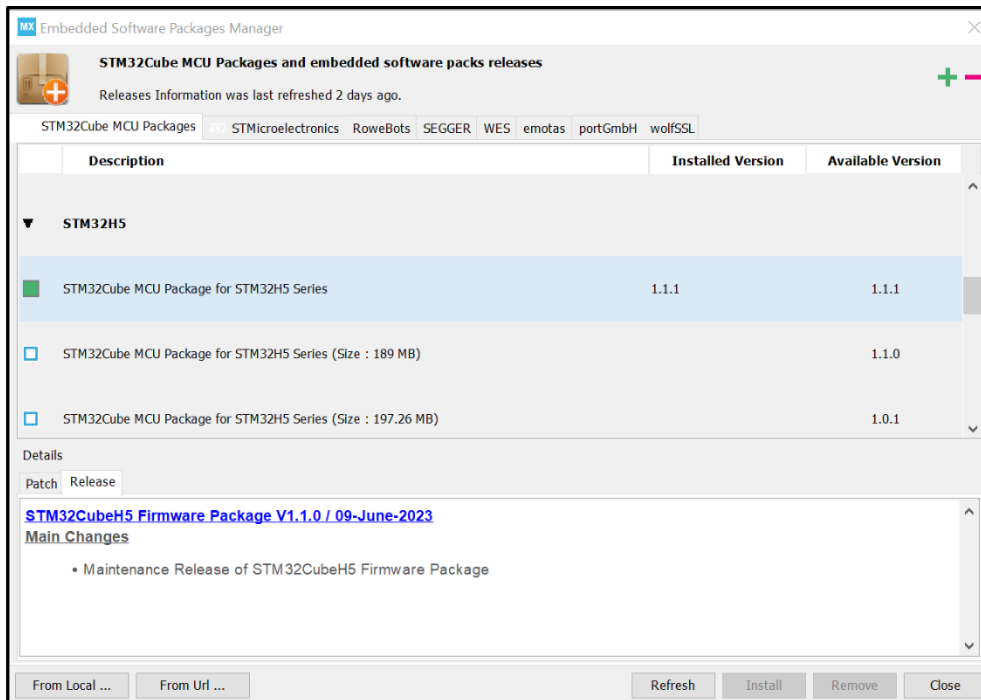
Note: In your system it might show a newer version depending on the latest version available

3 - STM32CubeProg: STM32CubeProgrammer software for programming STM32 products
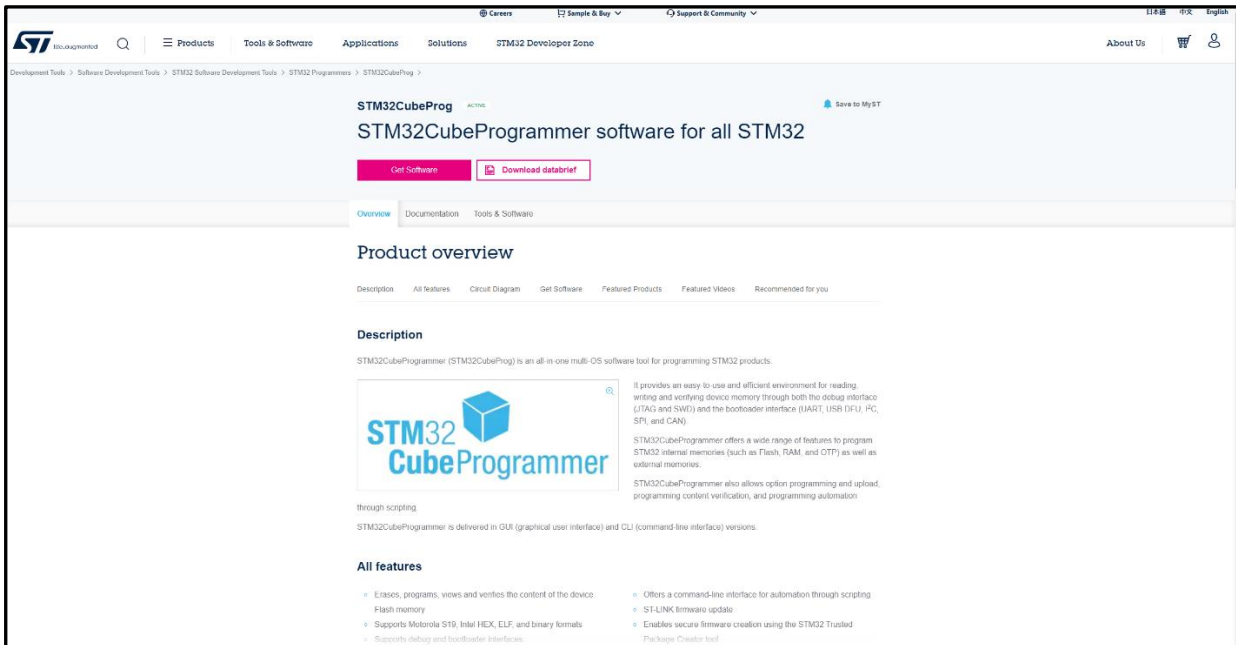
Click Link: STM32CubeProg
Minimum version required: 2.14.0
Direct Install Link:
https://www.st.com/content/st_com/en/products/development-tools/software-development-tools/stm32-software-development-tools/stm32-programmers/stm32cubeprog.html

Note to Mac users, please check Appendix A on page 27.

Click on:

Get Software

	Part Number ▲	General Description	Latest version	Download	All versions
+	STM32CubePrg-Lin	STM32CubeProgrammer software for Linux	2.14.0	Get latest	Select version ∨
+	STM32CubePrg-Mac	STM32CubeProgrammer software for Mac	2.14.0	Get latest	Select version ∨
+	STM32CubePrg-W32	STM32CubeProgrammer software for Win32	2.14.0	Get latest	Select version ∨
+	STM32CubePrg-W64	STM32CubeProgrammer software for Win64	2.14.0	Get latest	Select version ∨

Please get the latest software version available that will be accessible by clicking on:

Get latest

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Last Name:

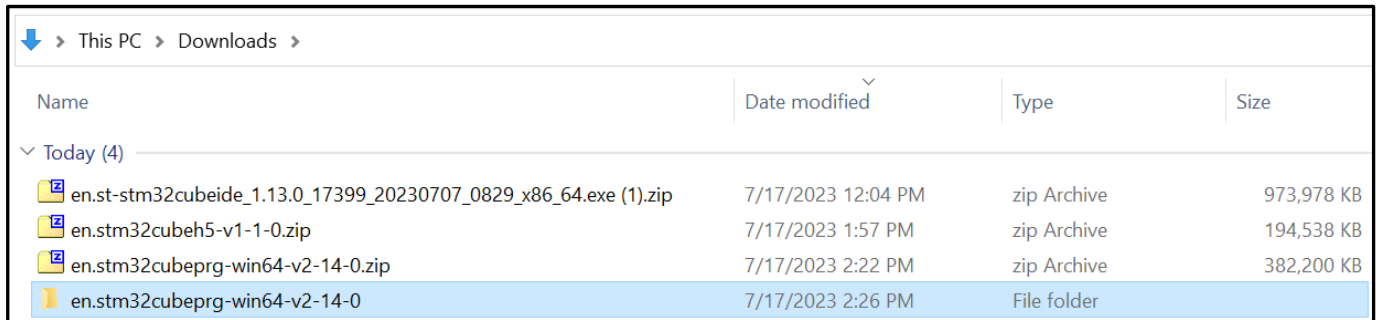E-mail address:

Please review our Privacy Statement that describes how we process your profile information and how to assert your personal data protection rights
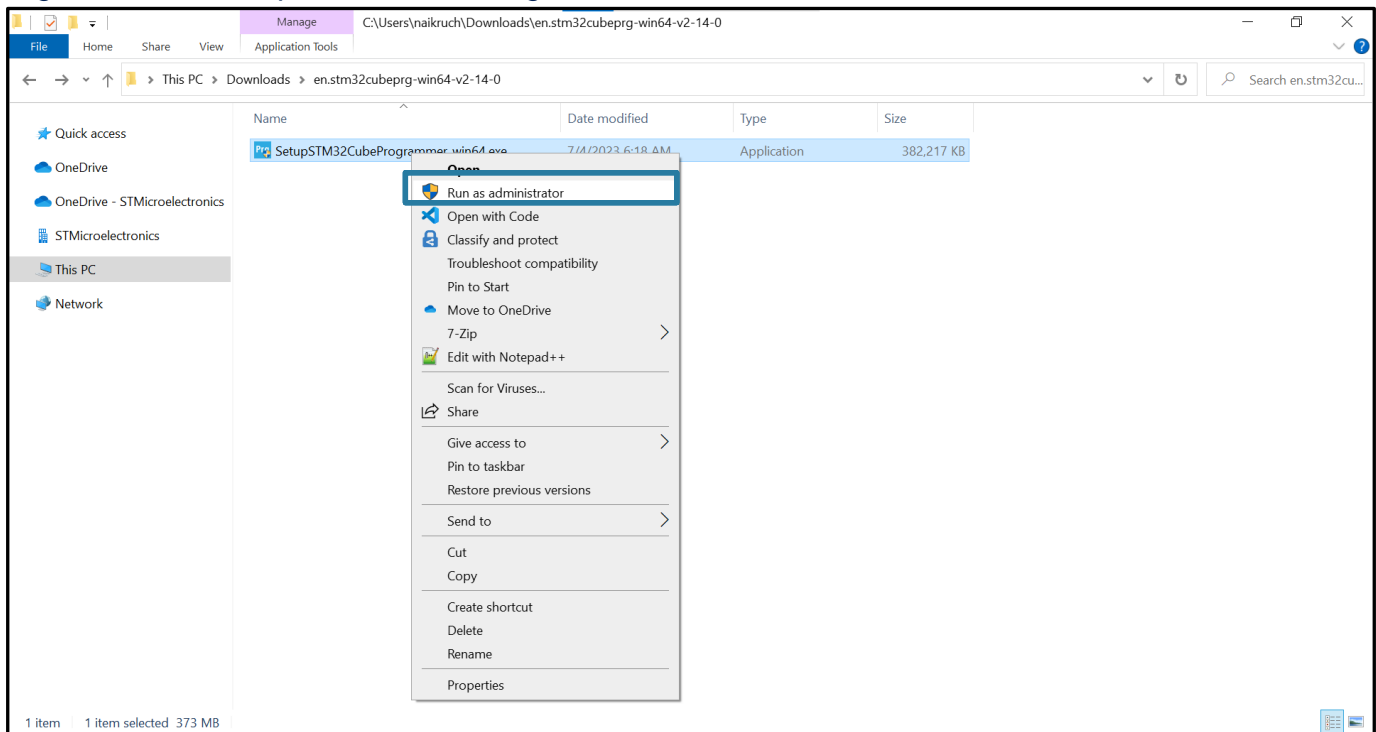
Then click: Download
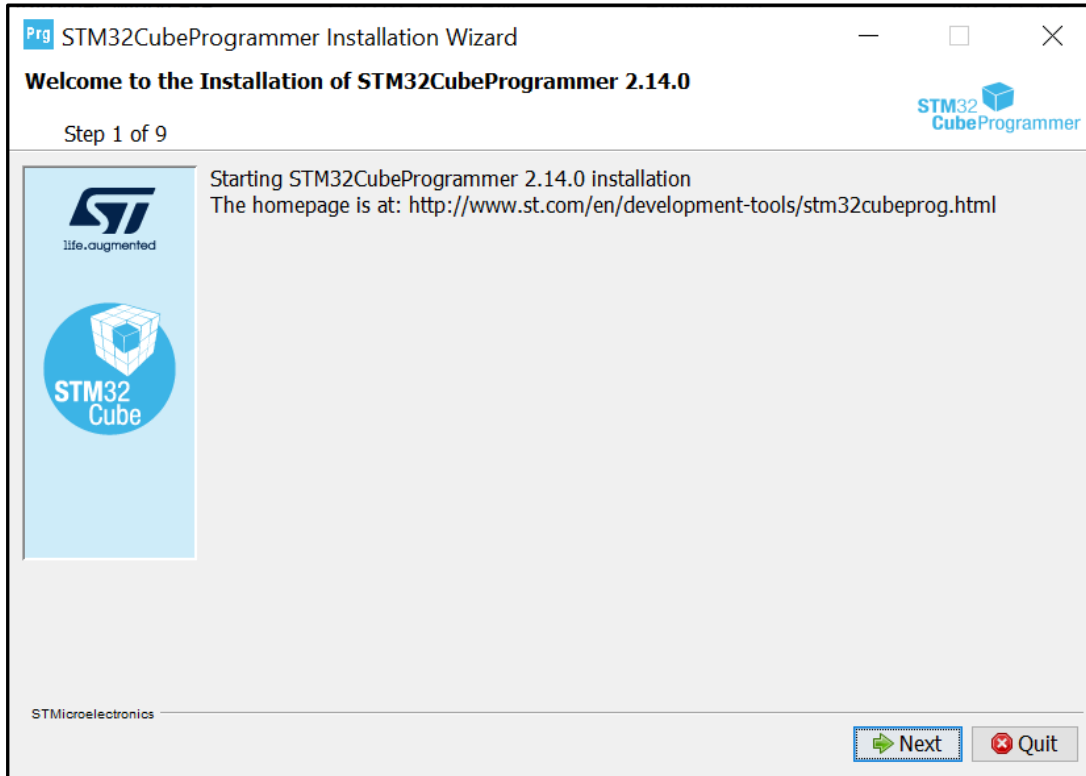
Unzip the file (en.stm32cubeprg-win64-v2-14-0.zip)

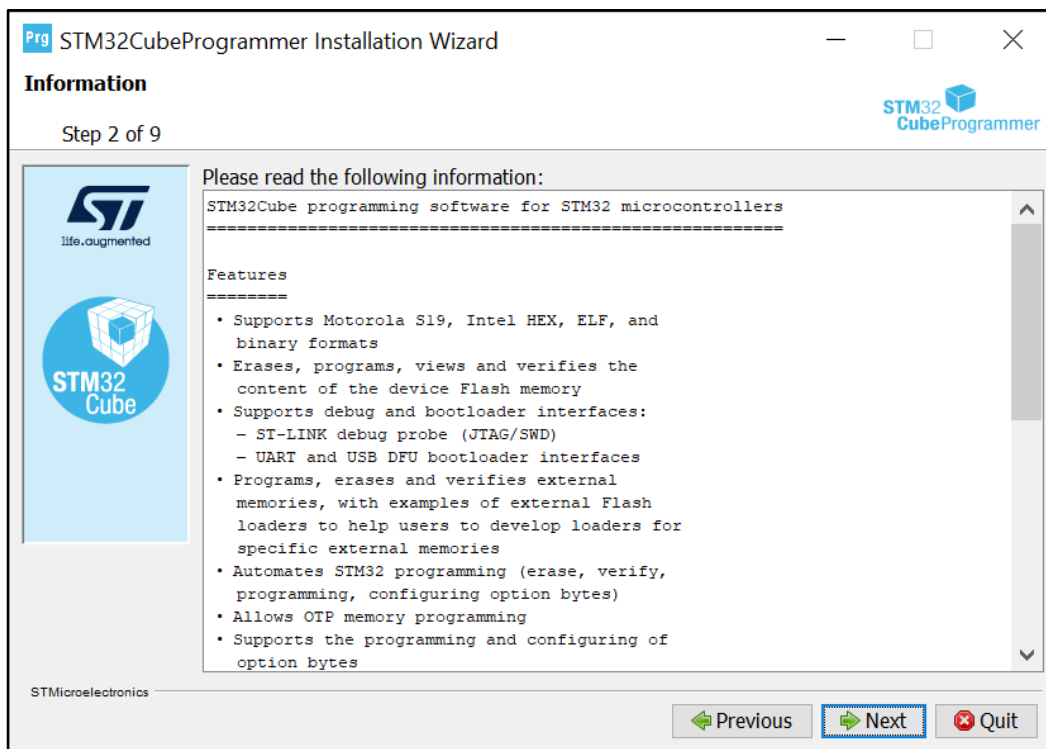Note: you may see a newer version in your case than the screenshot above.

Right Click on SetupSTM32CubeProgrammer-win64.exe and Run as administrator.
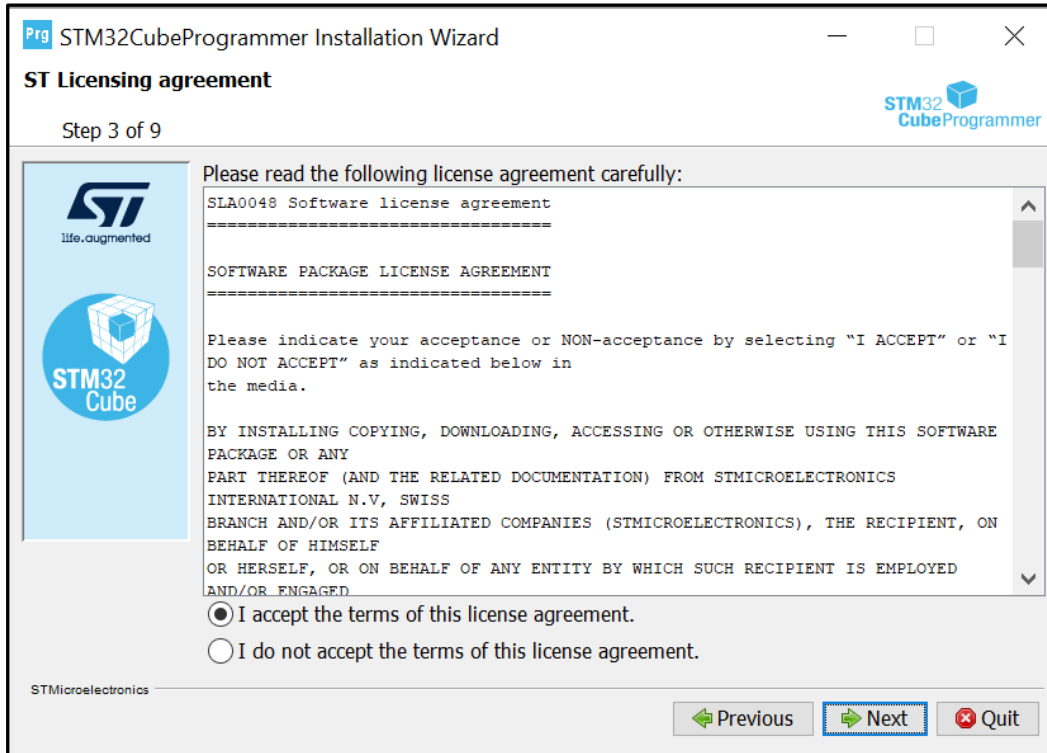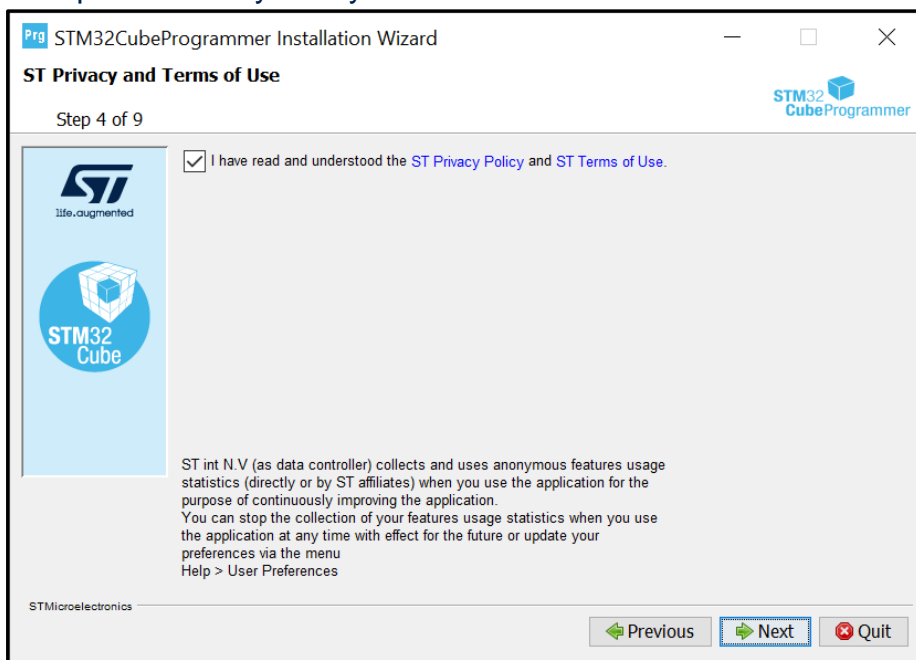
Press Next:

Press Next:

Accept the Terms and then click on Next:

Accept the Privacy Policy and Terms of Use.

Important note: If you have a previous version, it will be overwritten if you keep the default path. So, if you want to keep your previous version you will need to install the new version in a different directory. For the workshop, be sure to use the version that we are installing here or a later one.

Once you have decided on the path then press "Next":
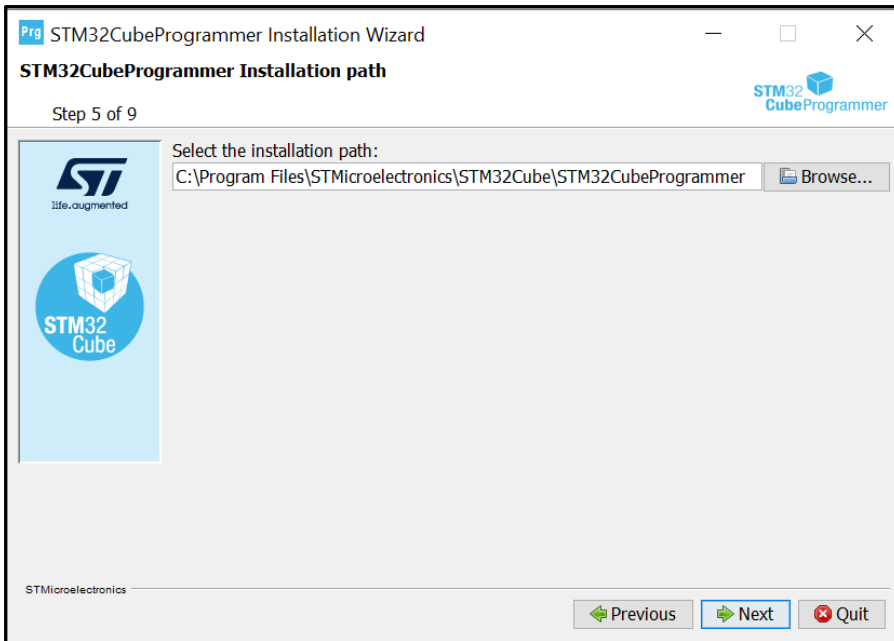
Select the packs that you want to install and press "Next":
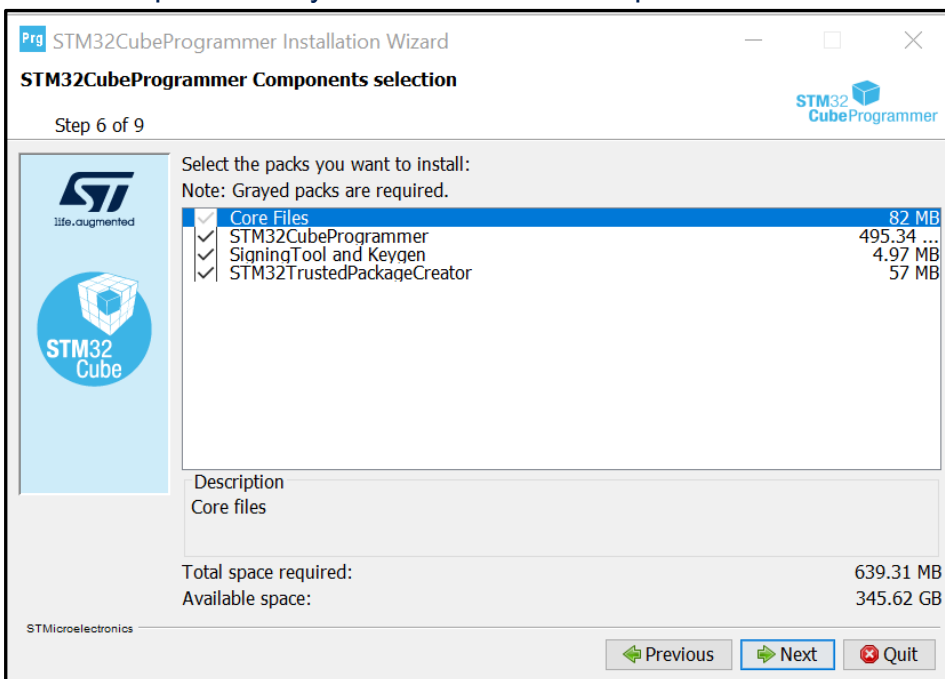
Follow those steps to install the ST-LINK Driver:
Press Next:

Press Finish:

Wait for the install to complete and then press Next:

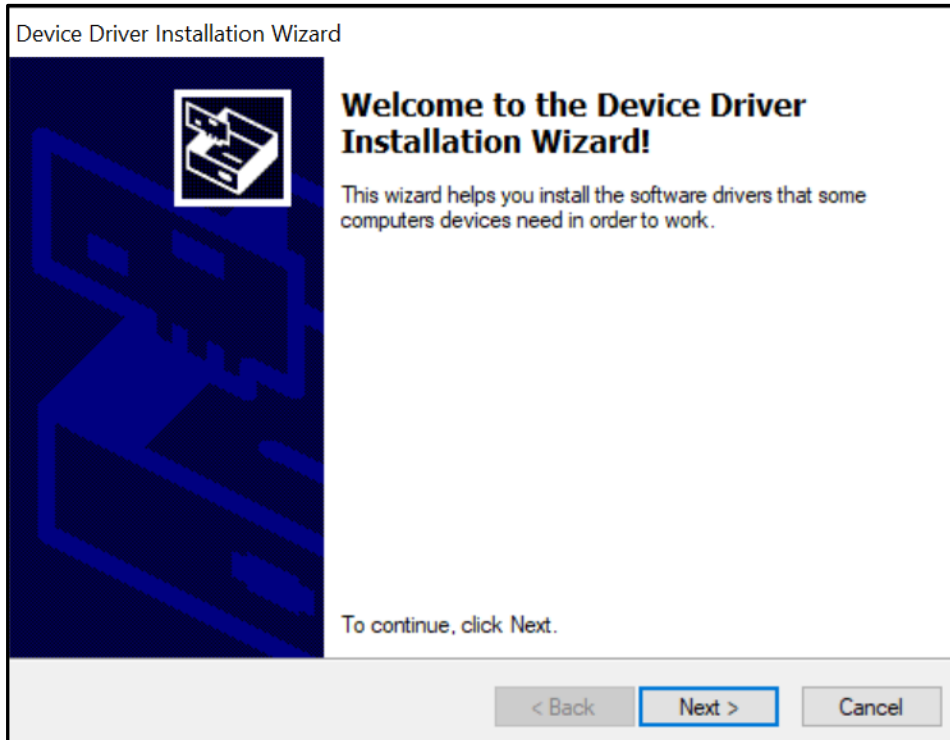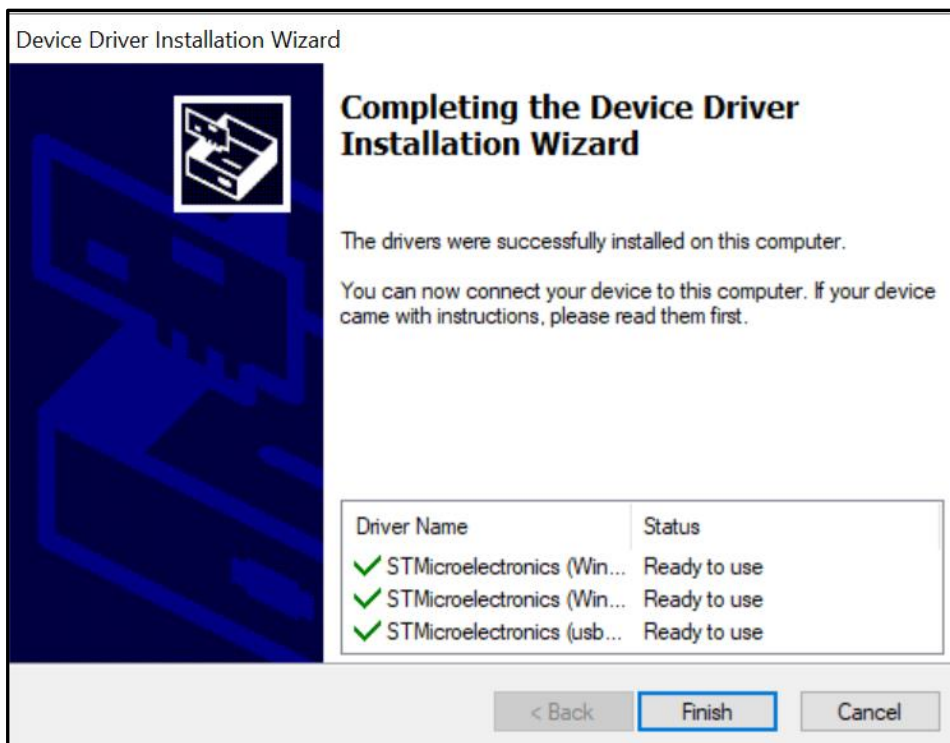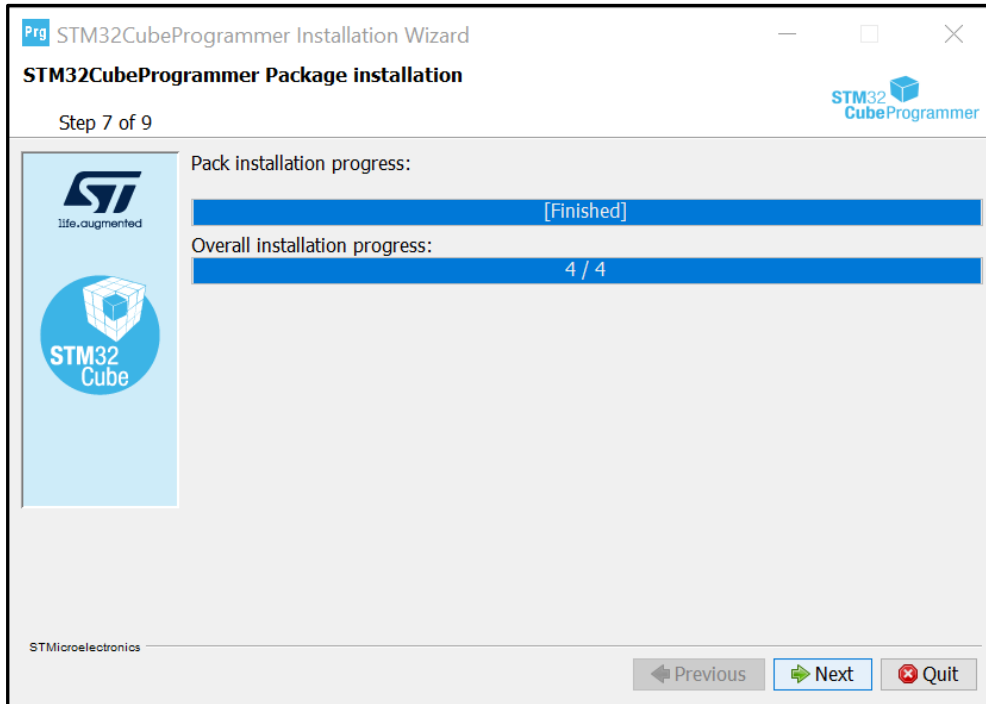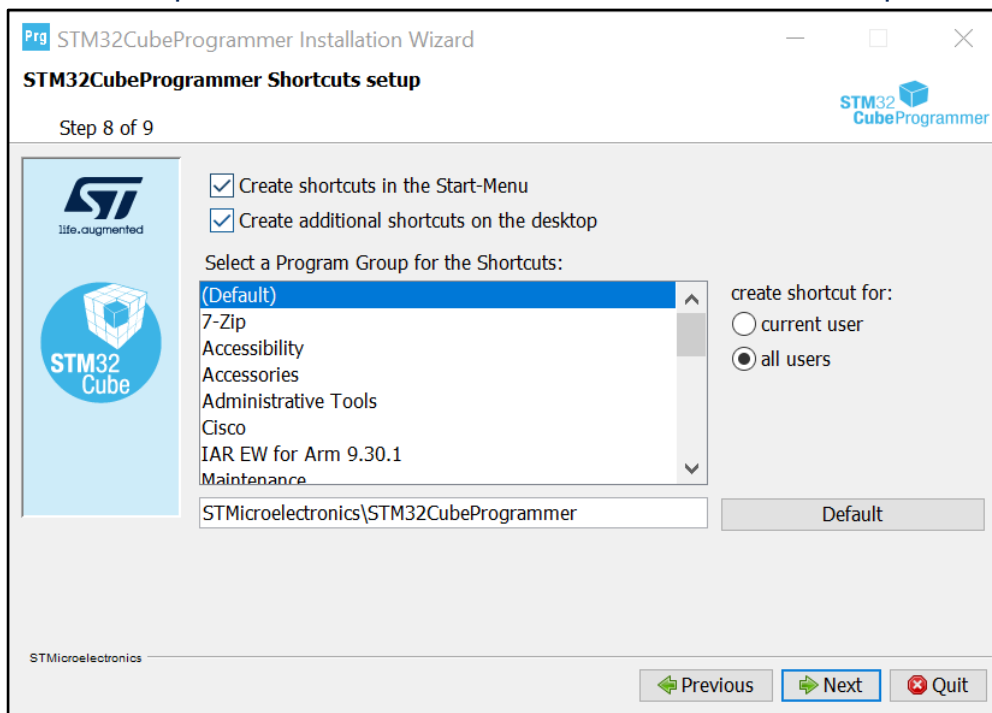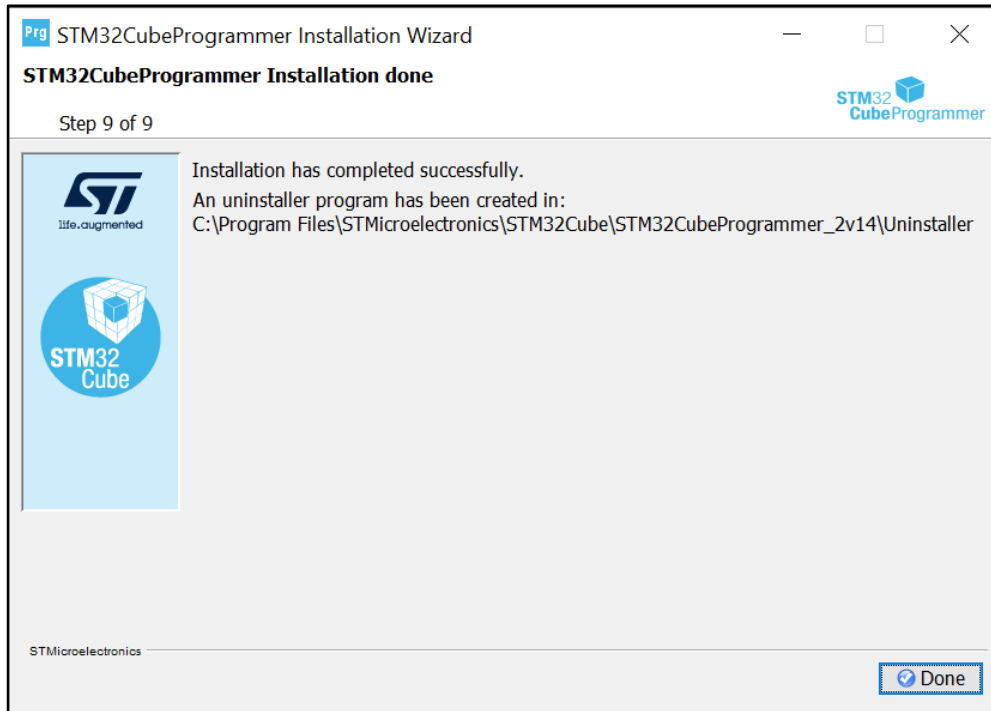Select the options to create the shortcuts as desired and then press next:

Press Done:

Open STM32CubeProgrammer to make sure it was installed properly.

Appendix A: STM32CubeProgrammer Installation and Opening for macOS users

MacOS users might face some issues while installing or opening the already installed application for STM32CubeProgrammer. In such cases, please refer to the ST Community thread explaining the solution for similar issue, linked below:

https://community.st.com/t5/stm32cubeprogrammer-mcu/how-to-download-stm32cubeprogrammer-on-macos-monterey-12-6/m-p/143983

Please refer to the first solution posted by ST Employee.

Problem:
Listed below are some known issues which can be resolved by following the instructions in the linked mentioned above:
- Issue while installing the CubeProgrammer with an error "cannot be opened because the developer cannot be verified".
  - ➢ Follow all the steps in the solution section below.
- Cannot open the installed application. To elaborate, the application tends to pop up in the "Dock" but never open.
  - ➢ Follow from step-3 in the solution section below.

Solution:
1. Install CubeProgrammer using the command:

```
sudo xattr -cr ~/SetupSTM32CubeProgrammer-macos.app
```

2. In case of using the .exe installer use this command:

```
sudo java -jar SetupSTm32CubeProgrammer-2.14.0.exe
```

   Expect a popup during the installation indicating the following:
   ``

   en/../../../jre: No such file or directory

   Continue Installation?
   ``

   Press "Continue" to finish the installation of the tool.

3. Copy the jre folder from the downloaded setup package

4. Open the CubeProgrammer install folder
   "../Applications/STMicroelectronics/STM32Cube/STM32CubeProgrammer"
5. Right click on STM32CubeProgrammer.app and select "Show Package Contents"
6. Paste the copied jre folder here.
7. After following the above installation steps, if CubeProgrammer couldn't be launched via GUI, please try to laund it via CLI as follows,
   a. Navigate to the
      "../Applications/STMicroelectronics/STM32Cube/STM32CubeProgrammer/STM32CubePr ogrammer.app/Contents/MacOs/bin/"
   b. Type the command;

   ```
   java -jar STM32CubeProgrammer
   ```

   c. If the jre folder exists in CubeProgrammer install folder, type the following command:

   ```
   ../../../jre/bin/java -jar STM32CubeProgrammer
   ```