This guide describes how you can create your own new Eclipse project based on the **dorobo32-template**.

1. Download the "ES Lab Project –Docs and Code" zip file from ILIAS and unzip it in a directory of your preference. From here this directory will be referred as <pathToDorobo32> in this guide.

   Hint: On Windows network drives, the toolchain does not work correctly, so do not use the H: drive for your projects, preferably use your users path to unzip: C: /Users/<your_user>/…

2. Open a terminal window and move to the path where the dorobo32 folder was unzipped

   cd <pathToDorobo32>

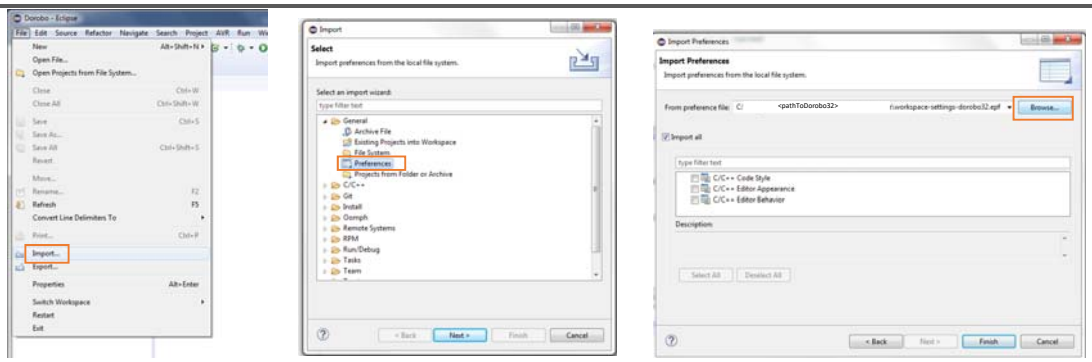
   Hint: You should be able to see these files if the path is the correct.

```
02.10.2018  13:11    <DIR>          .
02.10.2018  13:11    <DIR>          ..
02.10.2018  13:08    <DIR>          advanced_topics
17.10.2017  09:09             1.776 create-project.py
02.10.2018  13:08    <DIR>          dorobo32-library
17.10.2017  09:09           515.862 IoT-Lab-Project.pdf
02.10.2018  13:08    <DIR>          library-doc
17.10.2017  09:09           399.756 project-creation-manual.pdf
02.10.2018  13:11    <DIR>          projectTest
02.10.2018  13:08    <DIR>          template
17.10.2017  09:09            70.342 workspace-settings-dorobo32.epf
               4 Datei(en),        987.736 Bytes
               7 Verzeichnis(se), 1.747.151.872.000 Bytes frei
```

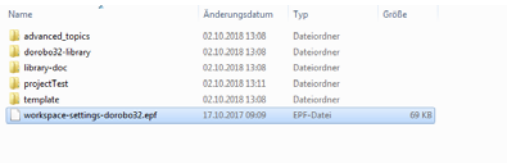
3. Create a new Eclipse project using the Python script **create-project.py**. To do it use the following command:

   python create-project.py <project name> <target folder>

4. Open Eclipse for ARM processors to work with the created project and import the settings for the encoding style and workbench behavior from the file `workspace-settings-dorobo32.epf` using *File / Import General / Preferences.*

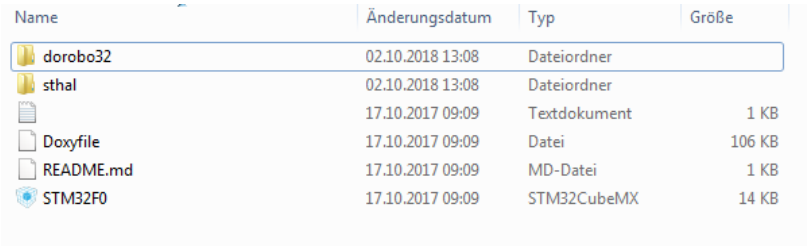


5. Find the workspace-settings-dorobo32.epf

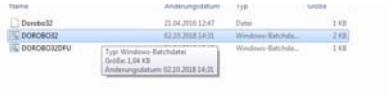


6. Import the created project in step 3 into your Eclipse workspace (*File / Import / General-existing Projects into Workspace*).

7. Additionally import the sthal and the dorobo32 project into your Eclipse workspace (located in <pathToDorobo32>\dorobo32-library).

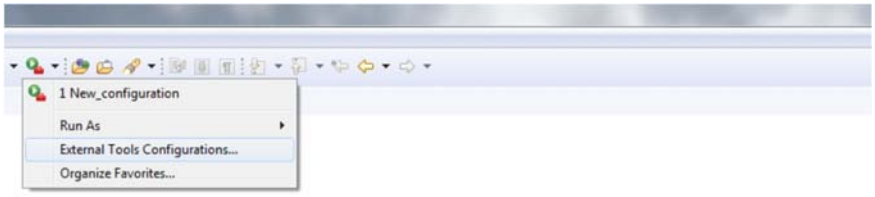


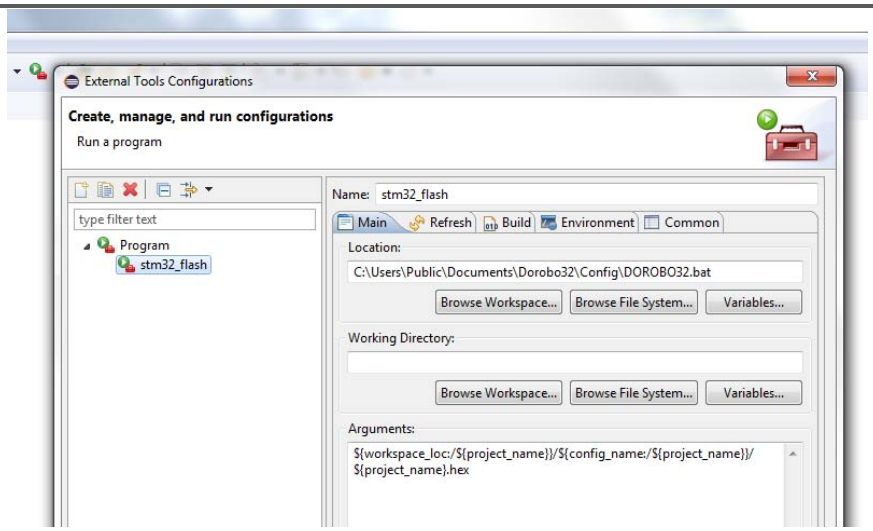
8. Check the COM port which the Dorobo32 is connected, and modify the DOROBO32.bat file accordingly in : <C:\Users\Public\Documents\Dorobo32\Config>



```
@ECHO OFF
REM CLS
REM COM PORT Nummer in Geraetemanager nachschauen und eintragen
SET COMPORT=6

REM Manuelle Uebergabe des Dateinamens
REM SET HEXFILEPATH="C:\Users\Public\Documents\Dorobo32\Installation\Programming Software\DFU\dfu util 0.8\DOF

REM Eclipse Uebergabe des Dateinamens mit "${workspace_loc:/${project_name}}/${config_name:/${project_name}}/$
REM ECHO Argument 1 ist %1
SET HEXFILEPATH=%1

ECHO Flashing DOROBO32 on COM%COMPORT%
ECHO Flashing file %HEXFILEPATH%
ECHO (This may take some 10 seconds)

"C:\Program Files (x86)\STMicroelectronics\Software\Flash Loader Demo\STMFlashLoader.exe" -c --pn %COMPORT% -I
"C:\Program Files (x86)\STMicroelectronics\Software\Flash Loader Demo\STMFlashLoader.exe" -c --pn %COMPORT% --
"C:\Program Files (x86)\STMicroelectronics\Software\Flash Loader Demo\STMFlashLoader.exe" -c --pn %COMPORT% -I
REM PAUSE
```

9. Configure the external tool in Eclipse.





Hint: Be aware of the text written in 'Arguments'.

${workspace_loc:/${project_name}}/${config_name:/${project_name}}/${project_name}.hex

10. Open the main.c file into your project's folder and deploy it. You should notice the Green Led blinking.

11. Open a telnet session to see the messages sent by Dorobo32. In your machine you can use MobaXterm.

    Session→Telnet

    Remote Host: 172.22.218.1xx (change the xx with the number of your WiFi module)

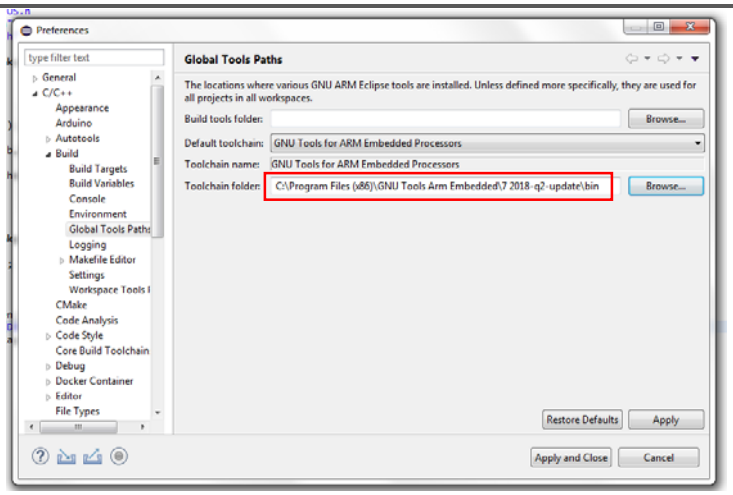
    Port: 2000

12. Now you can start developing your own Dorobo32 application!

Hint: Please use every week the same device and backup your solutions!

TROUBLESHOOTING

In case you get an error about the compiler that has not been found, check if the path is correct. To do it go to Window→Preferences→C/C++→build→Global Tools Paths. See the image below.



Hint: *in this case the bin is located in: C:\Program Files (x86)\GNU Tools Arm Embedded\7 2018-q2-update\bin*