

AUBORPE Virtual Machine User Manual

2023 Version

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1. Downloading AUBORPE


1.1. Go to the google Drive via link. Navigate to the folder for your computer's processor. I will navigate to "For Intel computer" folder for example.


Folders





1.2. Download everything in this folder into a separate folder at your desired destination:


Files Name ↑



Aubo-ORPE_V4.0.x_Relea...


Aubo-ORPE_V4.0.x_Relea...








Aubo-ORPE_V4.0.x_Relea...


Aubo-ORPE_V4.0.x_Relea...


Aubo-ORPE_V4.0.x_Relea...


Aubo-ORPE_V4.0.x_Relea...







> AboVMWare Search AboVM

<input type="checkbox"/> Name	Date modified	Type	Size
 Abo-ORPE_V4.0.x_Release-002.z05	2/6/2023 12:54 PM	Z05 File	2,097,152 KB
 Abo-ORPE_V4.0.x_Release-004.z01	2/6/2023 12:54 PM	Z01 File	2,097,152 KB
 Abo-ORPE_V4.0.x_Release-006.z02	2/6/2023 12:54 PM	Z02 File	2,097,152 KB
 Abo-ORPE_V4.0.x_Release-008.z04	2/6/2023 12:54 PM	Z04 File	2,097,152 KB
 Abo-ORPE_V4.0.x_Release-010.z03	2/6/2023 12:46 PM	Z03 File	2,097,152 KB
 drive-download-20230206T173506Z-011	2/6/2023 12:42 PM	Compressed (zipped)...	613,293 KB

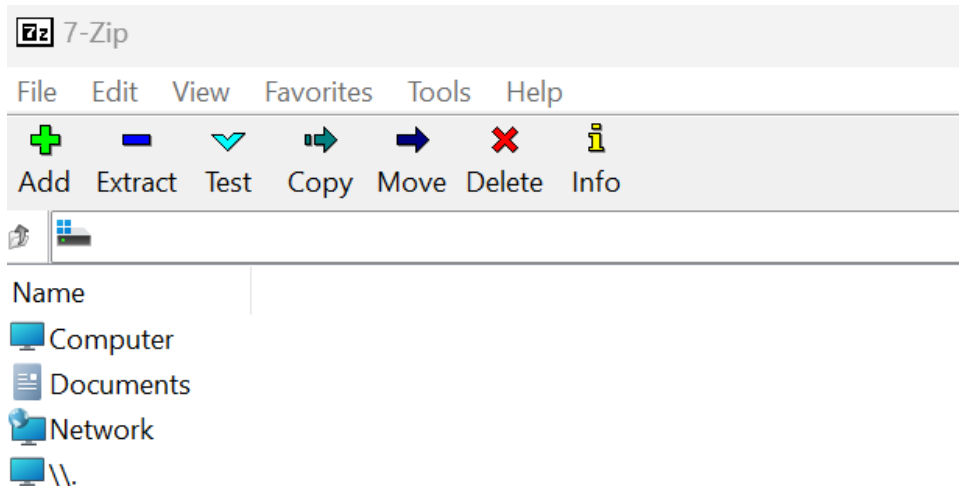
2. Extracting AUBORPE

2.1. In order to extract the files successfully, you need to firstly rename the files and then download 7-zip. Please rename the files so that their names are identical to the one below. Essentially, you need to delete the last four characters in the five files.

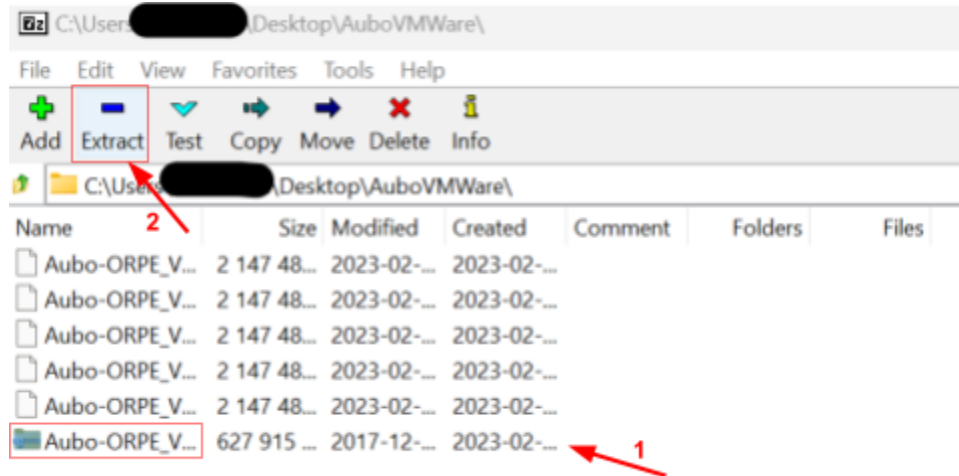
AuboVMWare

<input type="checkbox"/> Name	Date modified	Type	Size
 Aubo-ORPE_V4.0.x_Release.z01	2/6/2023 12:54 PM	Z01 File	2,097,152 KB
 Aubo-ORPE_V4.0.x_Release.z02	2/6/2023 12:54 PM	Z02 File	2,097,152 KB
 Aubo-ORPE_V4.0.x_Release.z03	2/6/2023 12:46 PM	Z03 File	2,097,152 KB
 Aubo-ORPE_V4.0.x_Release.z04	2/6/2023 12:54 PM	Z04 File	2,097,152 KB
 Aubo-ORPE_V4.0.x_Release.z05	2/6/2023 12:54 PM	Z05 File	2,097,152 KB
 Aubo-ORPE_V4.0.x_Release	12/3/2017 9:54 PM	Compressed (zipped)...	613,200 KB

2.2. Then, download, install, and open 7-zip. You should see the below window.



2.3. Then, go to the folder where you kept all the files, select the zip file and click “Extract”. Click on “OK” if there are pop-up windows.

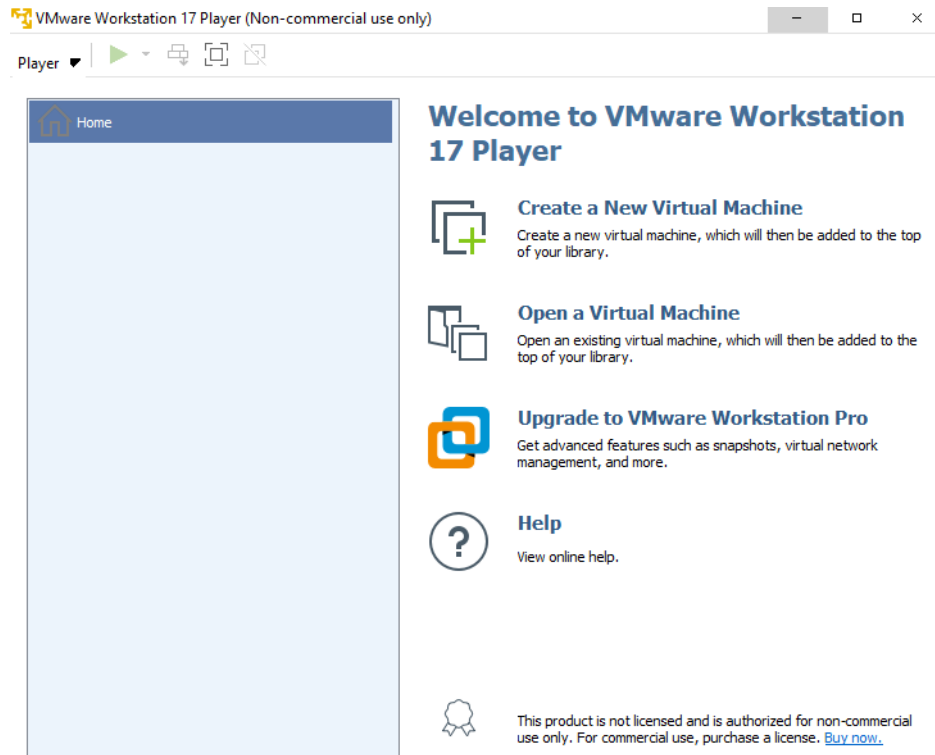


2.4. If you have the same file names with the same sizes as shown below, it means you have successfully extract the AUBORPE. Now you can move on to the next step. If not, please review the previous instructions and see if you have missed some important steps.

AuboVMWare > Aubo-ORPE_V4.0.x_Release > Aubo-ORPE_V4.0.x_Release				
<input type="checkbox"/> Name	Date modified	Type	Size	
aubo.nvram	12/4/2017 12:42 AM	NVRAM File	9 KB	
aubo	12/4/2017 12:37 AM	VMware virtual disk file	1 KB	
aubo.vmsd	8/29/2016 8:15 AM	VMSD File	0 KB	
aubo	12/4/2017 12:42 AM	VMware virtual machine configu...	4 KB	
aubo.vmx	8/29/2016 9:11 AM	VMXF File	4 KB	
aubo-s001	12/4/2017 12:42 AM	VMware virtual disk file	3,864,640 KB	
aubo-s002	12/4/2017 12:42 AM	VMware virtual disk file	3,553,664 KB	
aubo-s003	12/4/2017 12:42 AM	VMware virtual disk file	1,327,808 KB	
aubo-s004	12/4/2017 12:42 AM	VMware virtual disk file	742,784 KB	
aubo-s005	12/4/2017 12:42 AM	VMware virtual disk file	1,525,952 KB	
aubo-s006	9/4/2016 6:20 AM	VMware virtual disk file	82,752 KB	
vmware	12/4/2017 12:42 AM	Text Document	277 KB	
vmware-0	11/20/2017 8:17 PM	Text Document	282 KB	
vmware-1	11/20/2017 7:16 AM	Text Document	505 KB	
vmware-2	11/19/2017 8:30 PM	Text Document	278 KB	

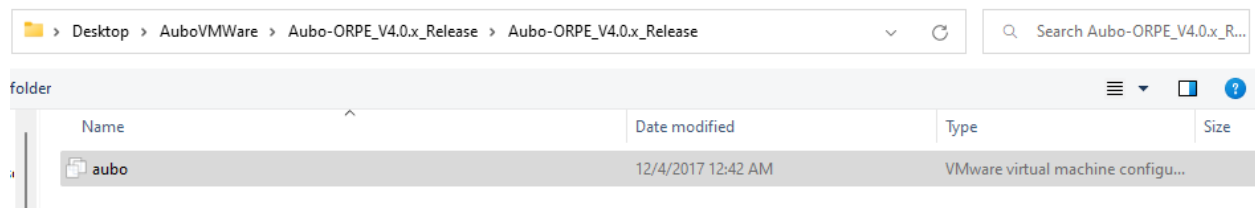
3. Installing VMware Workstation

Download and Install VMware Workstation. You may choose to use “Player” version for free.

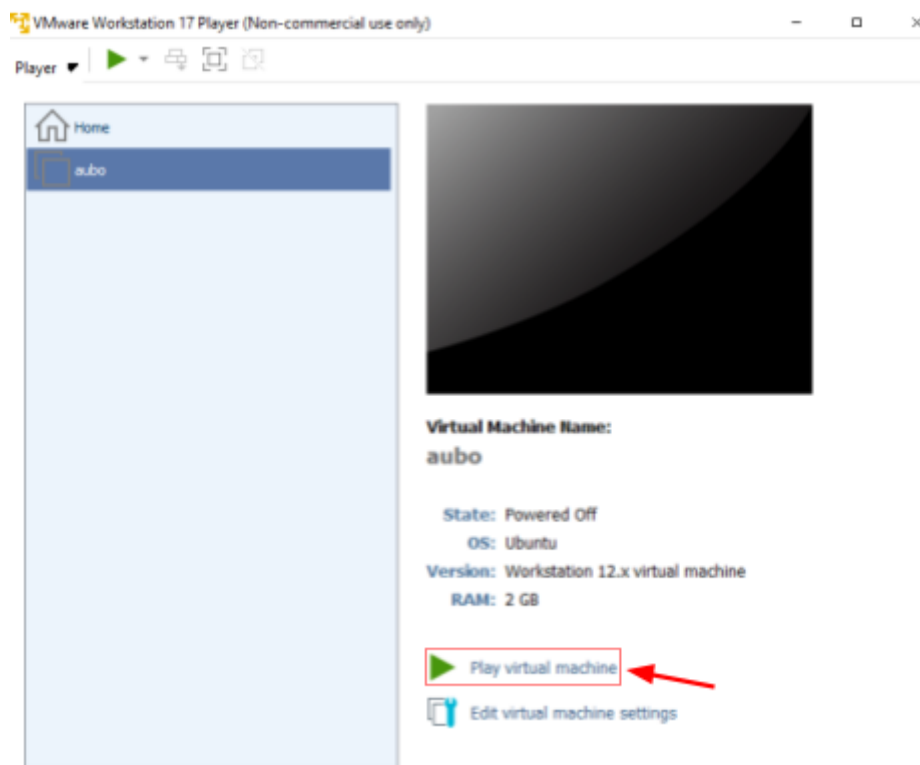


4. Open AUBORPE in VMware Workstation

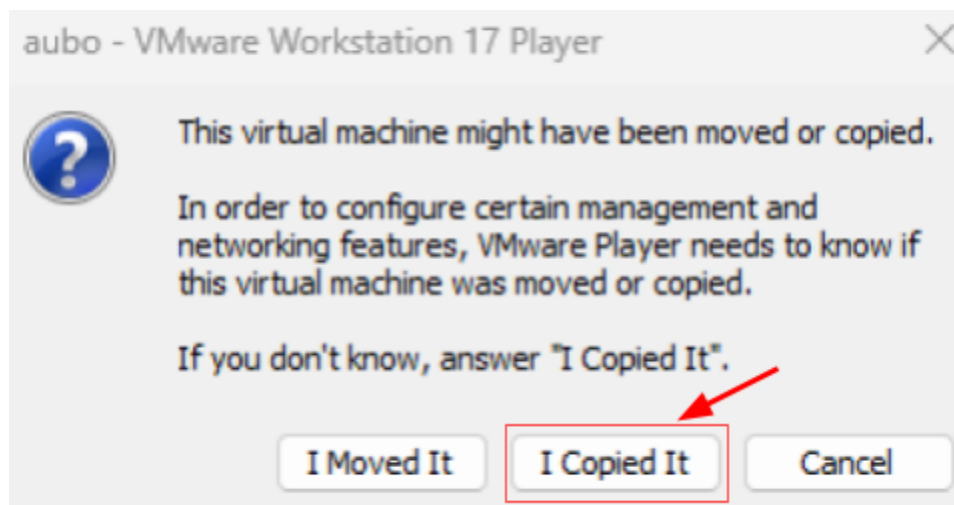
4.1. “Open a virtual Machine” on the VMware workstation and select your “aubo” VMware virtual machine configuration file.



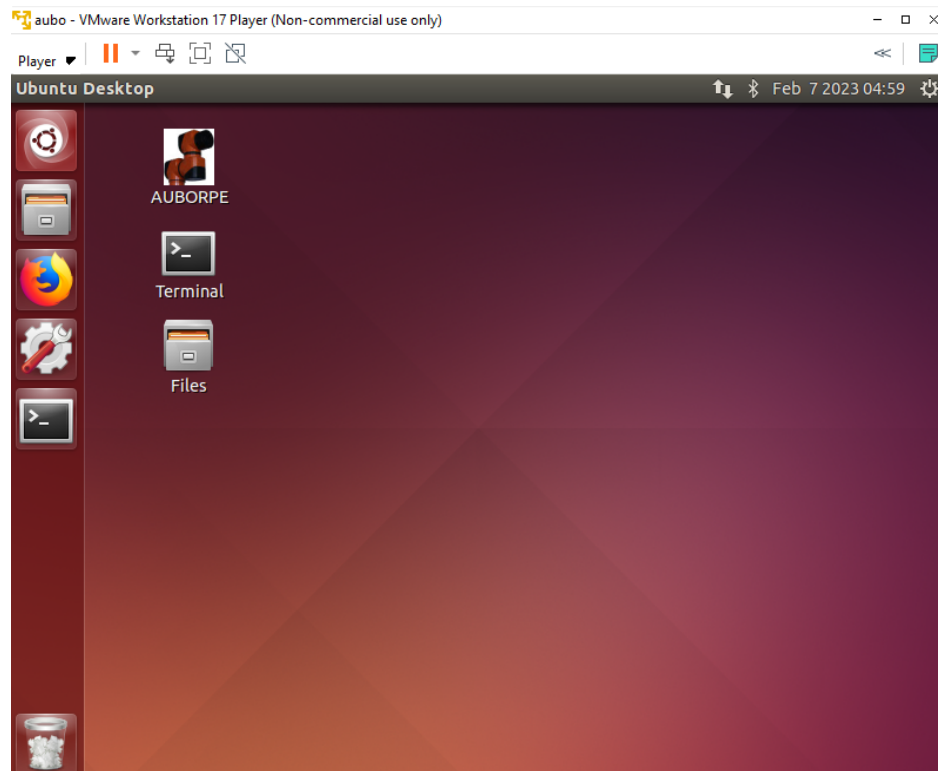
4.2. Then, you can choose to allocate the appropriate amount of RAM for the virtual machine, depending on your needs. If you would like to proceed with the default setting, then run the virtual machine.



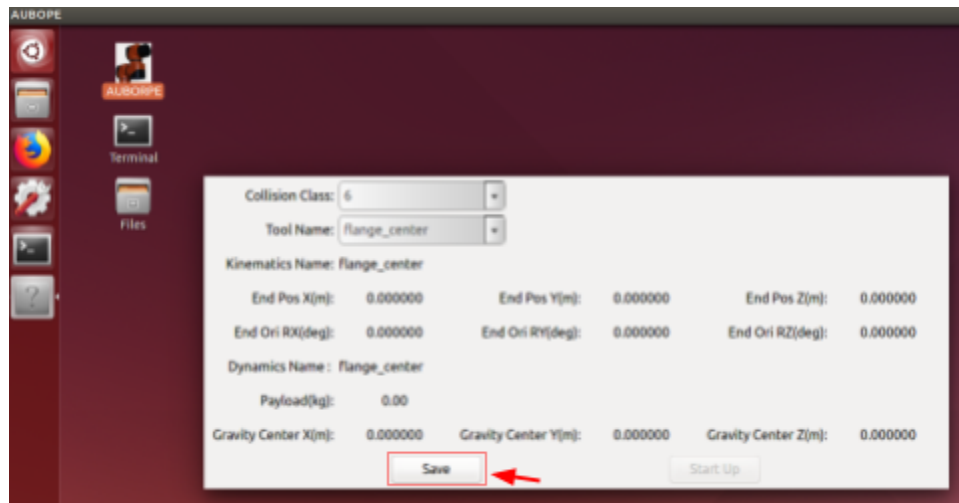
4.3. When the virtual machine is running, if you see the prompt below. You should select "I Copied It".

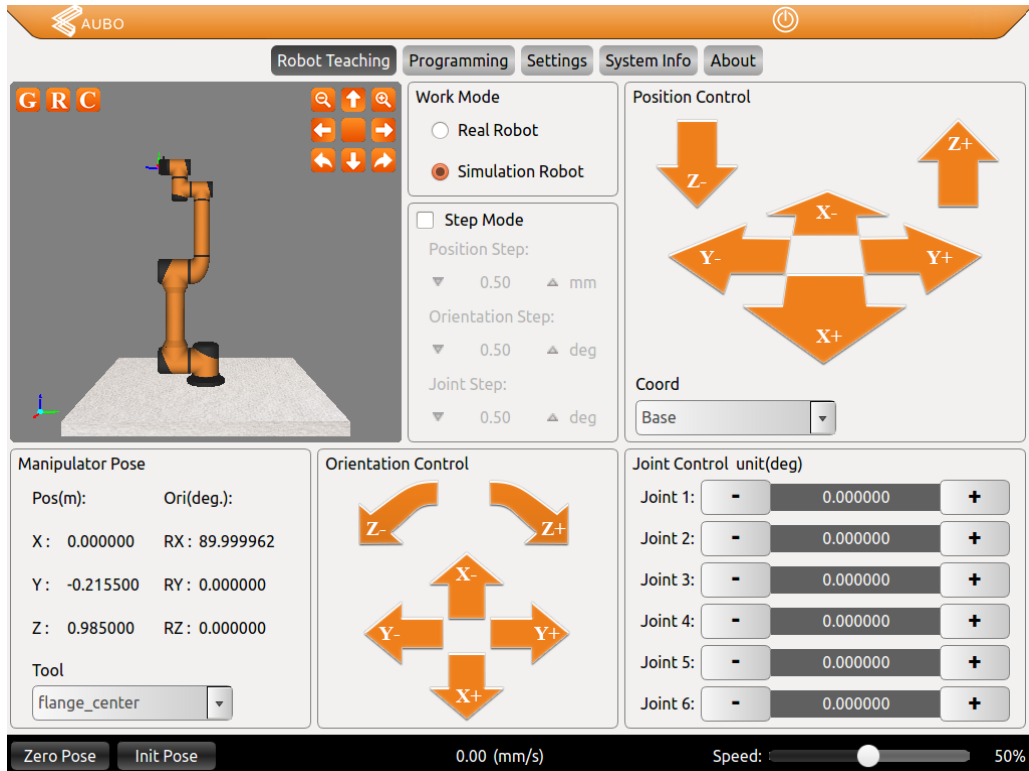


4.4. Wait for the virtual machine to boot. If successful, you have entered the virtual machine.



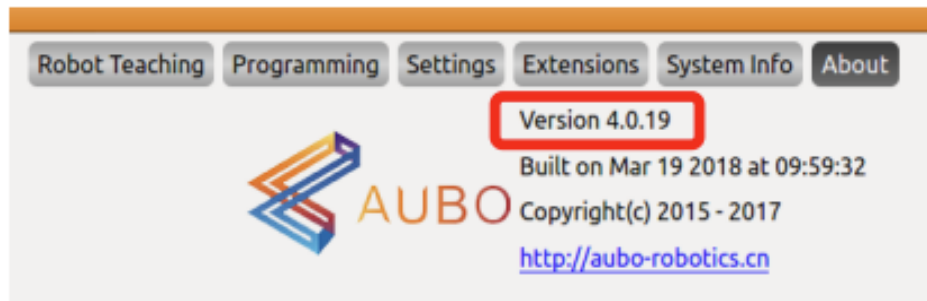
4.5. Double click AUBORPE, follow the steps below and start using AUBORPE.



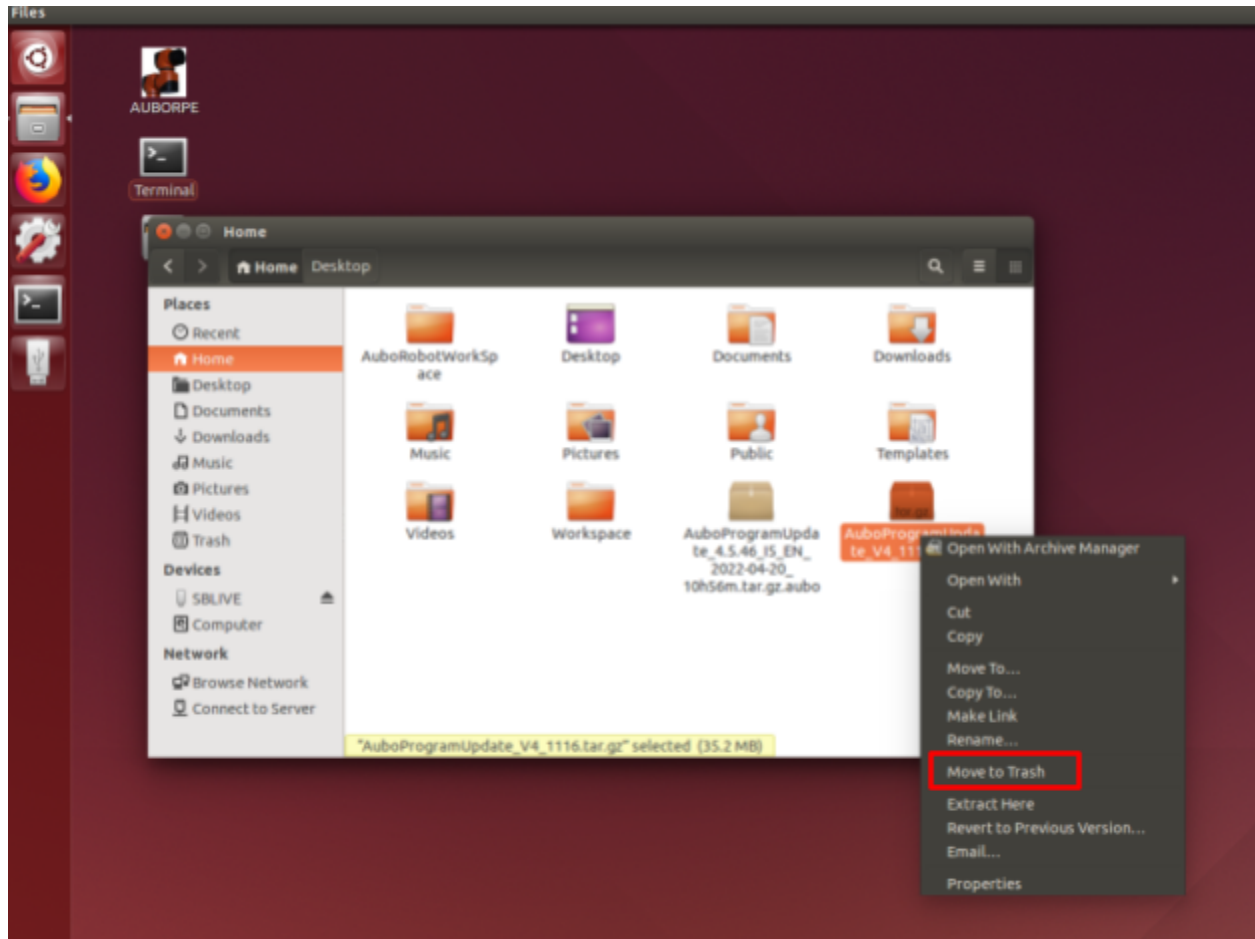


5. Update AUBORPE Version

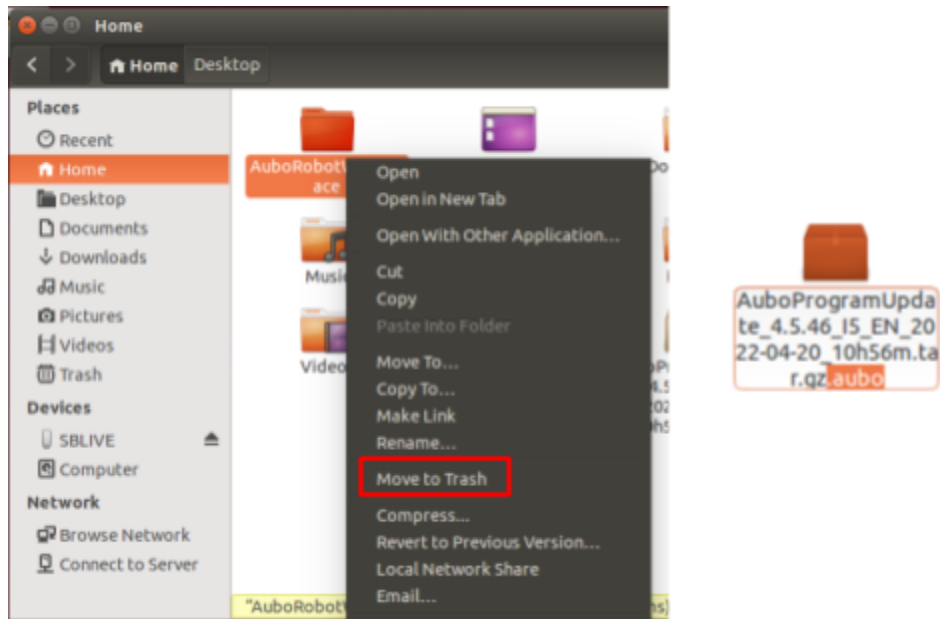
5.1. For example, we want to update our AUBORPE version from v4.0.19 to v4.5.46.



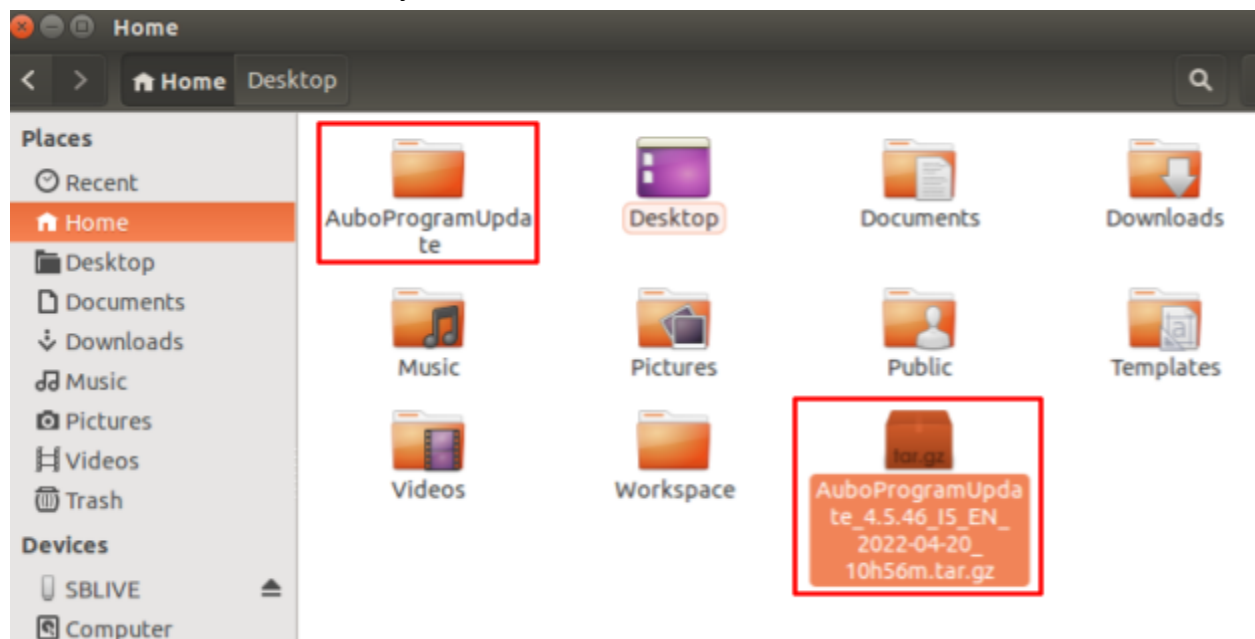
5.2. We firstly need to download the update packages from AUBO website and copy it to “Home” directory as shown below, and delete the existing AuboProgramUpdate folder.



5.3. We then need to rename the file by removing the ".aubo" suffix, and save your project files if needed, and delete the AuboRobotWorkspace folder.



5.4. Right click the file and select “Extract Here” to extract the “AuboProgramUpdate” folder at the current directory.



5.5. Then, open terminal at the current directory and execute “cd AuboProgramUpdate”, after which execute “./upgrade.sh.x upgrade I5 for versions after 4.5.40. For older versions, please execute “./upgrade.sh.x” instead. Now, wait for the upgrade to complete.

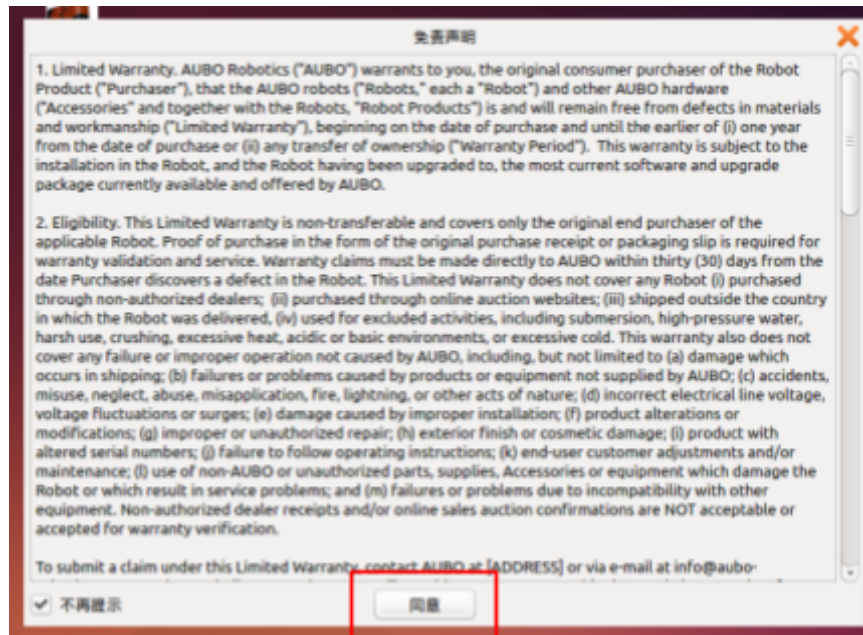
```
root@ubuntu: ~/AuboProgramUpdate
root@ubuntu:~# cd AuboProgramUpdate/
root@ubuntu:~/AuboProgramUpdate# ./upgrade.sh.x upgrade I5

运行脚本: /root/AuboProgramUpdate/Scripts/upgrade/install_change_robottype/aubo_s
oft_shortcut.sh
更新文件: /root//AuboRobotWorkSpace/version.conf
更新文件: /root//AuboRobotWorkSpace/readme
>>>> Upgrade complete
root@ubuntu:~/AuboProgramUpdate#
```

5.6. After the update is complete, open up a new terminal window and execute “reboot” to reboot the system. You may need to wait for a few minutes to reboot the system.

```
root@ubuntu: ~
root@ubuntu:~# reboot
```

5.7. After the system is successfully rebooted, you will automatically enter “AUBOPE”. Click the following icons to enter AUBOPE, and change your language setting to your preferred language.



The default password to “admin” is 1.

Login

User

admin

Password

☐ Auto Login

Login

机器人初始化

工具名称

flange_center

运动学名称

flange_center

末端位置X(m)

0.000000

末端位置Y(m)

0.000000

末端位置Z(m)

0.000000

末端姿态RX(deg)

0.000000

末端姿态RY(deg)

0.000000

末端姿态RZ(deg)

0.000000

动力学名称

flange_center

负载(kg)

0.00

重心X(m)

0.000000

重心Y(m)

0.000000

重心Z(m)

0.000000

关机

保存

启动

交互信息

?

机械臂通信错误,
是否进入仿真模式?

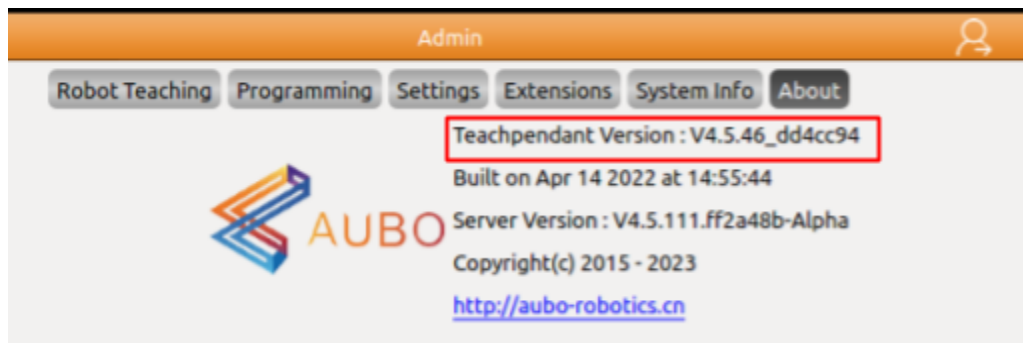
No

Yes

提示窗口		
时间	事件类型	事件信息
01:59:54.455	控制器软件	没有找到真实机械臂，禁用IO设置
确认		



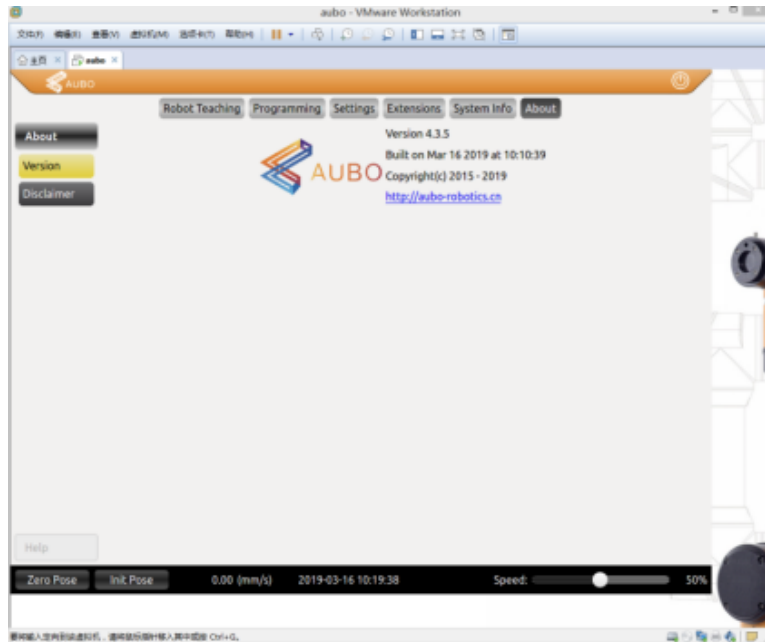
Check “About” in AUBORPE now, you should see that its version has be updated.



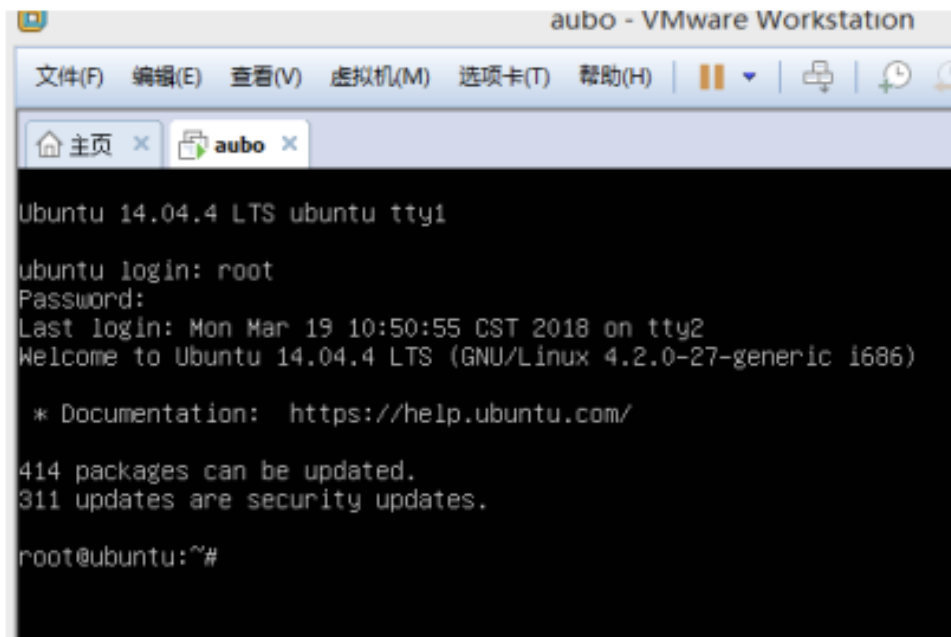
6. Create AUBORPE Desktop Icon on Ubuntu

(You do not need this step for software system updates after version 4.5.40! Skip to Sections 7 and 8.)

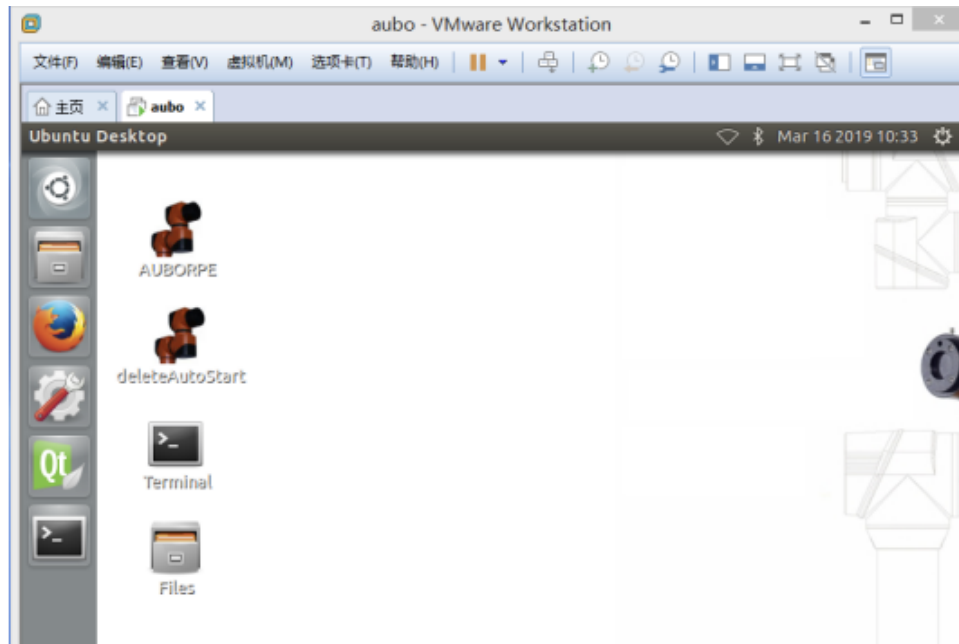
6.1. After software upgrade, the original AUBORPE will disappear from the Desktop and quick start menu. We need to bring them up.



6.2. Ctrl + Alt + F1, to enter the terminal first, and then input “root” after ubuntu login, and “user” after password. Then, return.



6.3. Then, input “
mv .config/autostart/auboApp.desktop .config/autostart/auboApp.desktop.bak” and return. After it is done, we need to input “reboot” to reboot the system. Then, we can see that AUBORPE icon reappears.

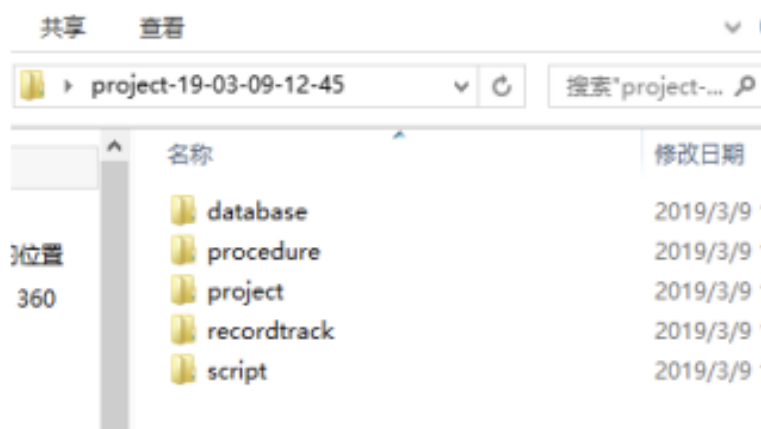


7. Import Projects into the Virtual Environment

7.1. Here is an example of importing existing projects from other sources into the current virtual environment.

 project-19-03-09-12-45.tar 2019/3/9 12:45

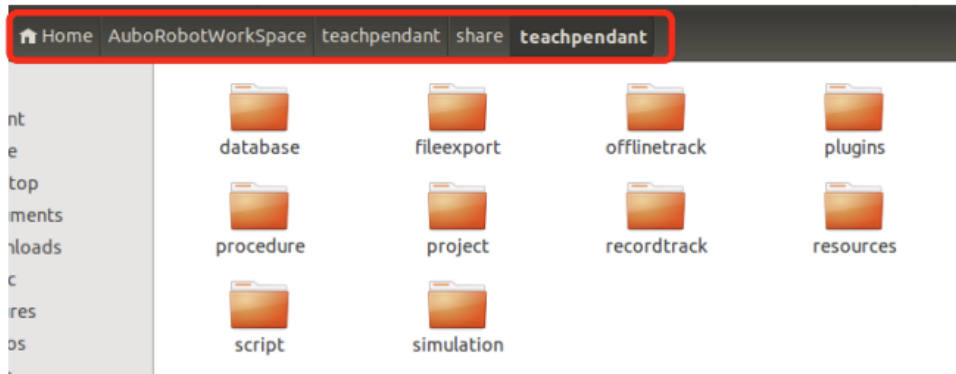
Extract the file and we will have the following files.



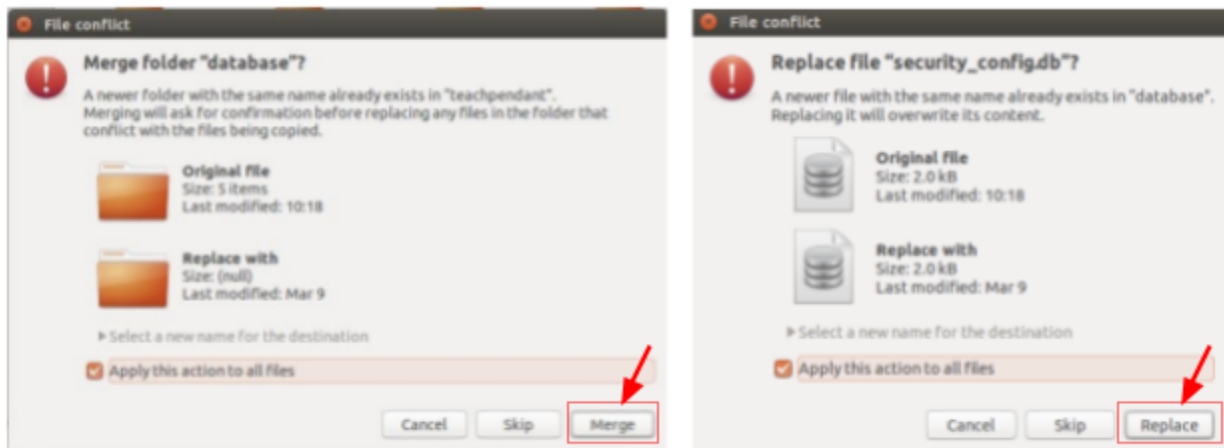
- 'database' folder contains the variables, coordinate systems, and safety parameters, etc.
- 'procedure' folder contains processes.
- 'project' folder contain existing projects.

- 'recordtrack' folder contains the track record.
- 'script' folder contains scripts.

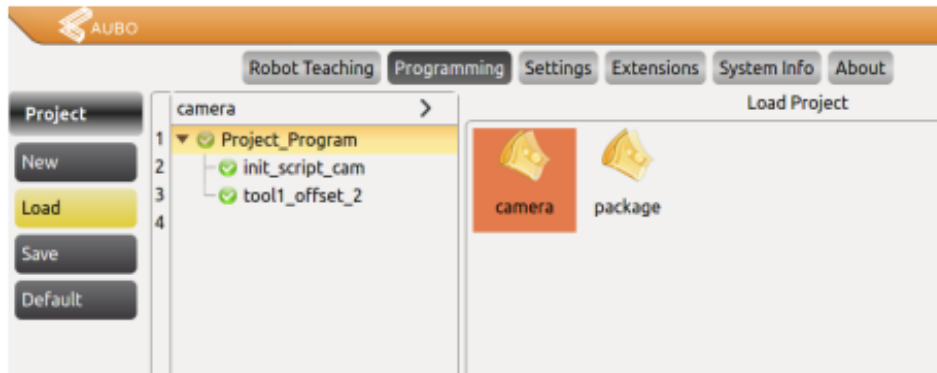
7.2. Copy these five folders into the following directory in the virtual environment. (You can also only copy the ones that are necessary.)



7.3. Click “Merge” or “Replace”

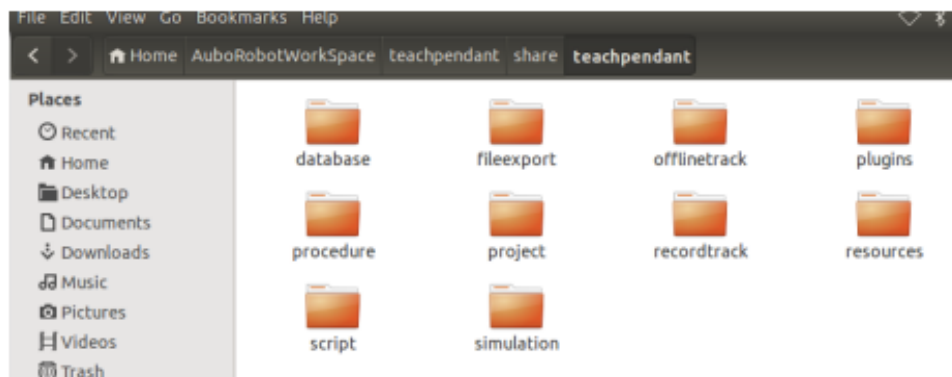


7.4. Now open AUBORPE, you can view the imported projects in the “Project” section.



8. Export Projects from the Virtual Environment

Go the below directory in the virtual environment.



Copy the below five folders into your USB drive:

- 'database' folder contains the variables, coordinate systems, and safety parameters, etc.
- 'procedure' folder contains processes.
- 'project' folder contain existing projects.
- 'recordtrack' folder contains the track record.
- 'script' folder contains scripts.

Based on user's needs, you can choose to only copy necessary files or folders into your USB drive.