

AI & Robotics

ROS Melodic Morenia VM

Goals

The **junior-colleague**

- can explain why an IDE needs to be run from the command line



VMware Workstation Player

The screenshot shows the VMware website's product page for Workstation Player. The top navigation bar includes links for US, Login, Training, Community, Store, and a phone number, along with a search bar. A left sidebar contains icons for VMware Cloud, Products, Support, Solutions, Professional Services, Downloads, Partner Programs, and Company. The main content area features a breadcrumb trail: Products > Workstation Player > Try VMware Workstation Player. Below this is a large graphic for VMware Workstation Player 15, with the text 'VMware 15 WORKSTATION PLAYER™'. To the right of the graphic, the text reads: 'VMware Workstation Player 15' followed by a paragraph describing it as an ideal utility for running a single virtual machine on Windows or Linux PC. It also mentions that the free version is available for non-commercial, personal, and home use, and that commercial organizations require licenses. At the bottom, there are two buttons: 'Try Workstation 15 Player for Windows' and 'Try Workstation 15 Player for Linux', both with 'Download Now' links. A small 'AdChoices' button is in the bottom right corner.

vmware®

US Login Training Community Store 1-877-486-9273 Search

Products > Workstation Player > Try VMware Workstation Player

Try VMware Workstation Player

vmware® 15 WORKSTATION PLAYER™

VMware Workstation Player 15

VMware Workstation Player is an ideal utility for running a single virtual machine on a Windows or Linux PC. Organizations use Workstation Player to deliver managed corporate desktops, while students and educators use it for learning and training.

The free version is available for non-commercial, personal and home use. We also encourage students and non-profit organizations to benefit from this offering.

Commercial organizations require commercial licenses to use Workstation Player.

Need a more advanced virtualization solution? Check out [Workstation Pro](#).

Try Workstation 15 Player for Windows
Download Now »

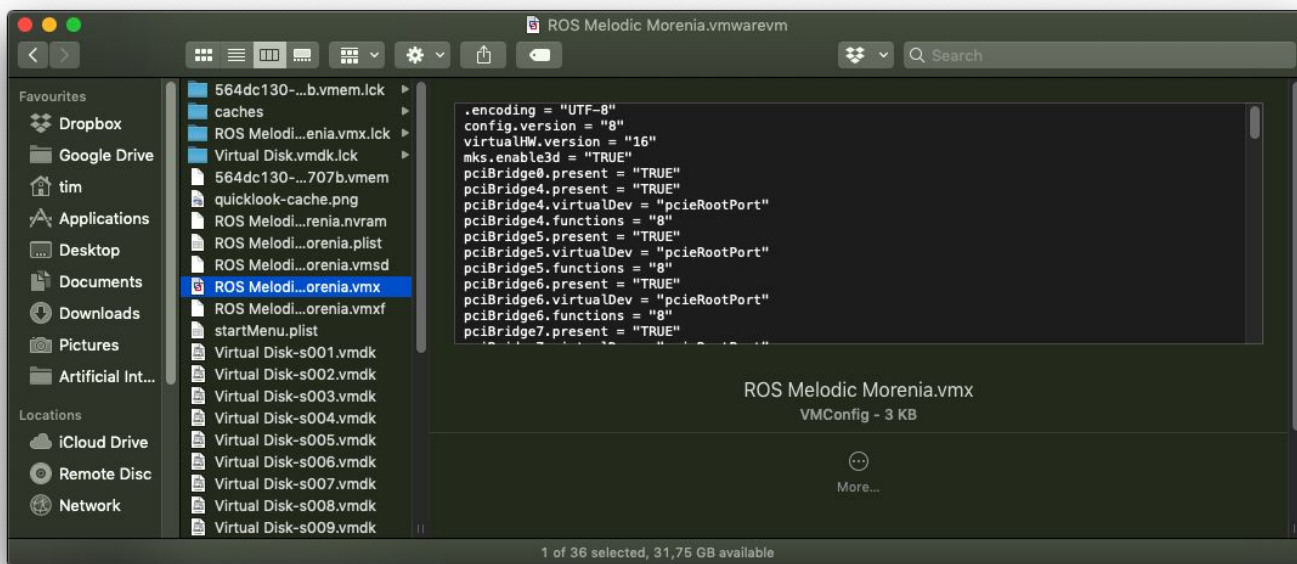
Try Workstation 15 Player for Linux
Download Now »

AdChoices

[INFO]

Free download @ <https://www.vmware.com/products/workstation-player/workstation-player-evaluation.html>

VMware Workstation Player

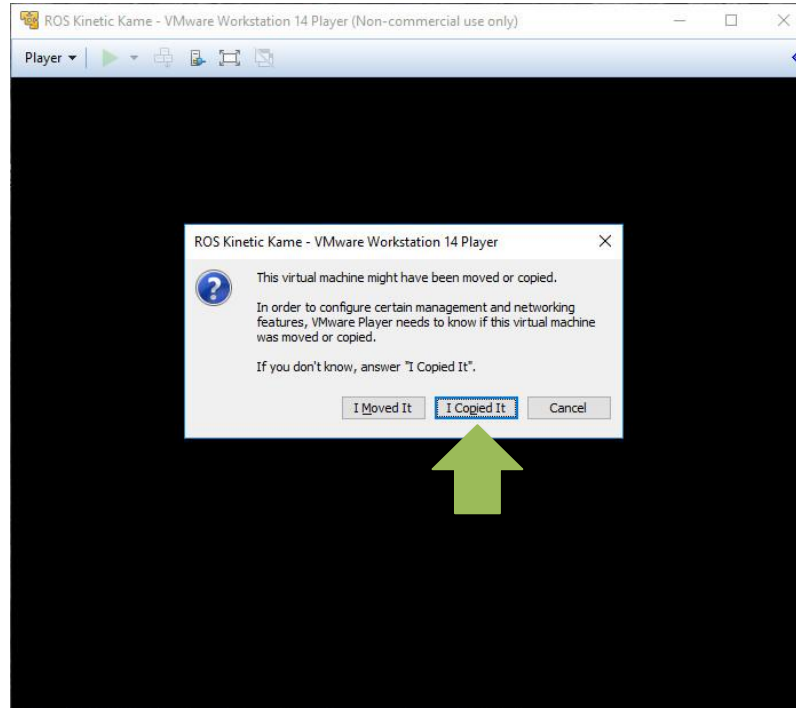


[INFO]

Windows/Linux: double click on "ROS Melodic Morenia.vmx".

OSX: double click on: "ROS Melodic Morenia.vmwarevm".

VMware Workstation Player



[INFO]

Answer "I Copied It".

Known VMware Errors

- **VT-X Error or AMD-V Error**

Cause: Hardware virtualization is disabled.

Solution: Turn “Virtualization” on in BIOS. ***Need help?***

- **Error while opening: VMX File is corrupt.**

Cause 1: Windows: Selected the wrong file.

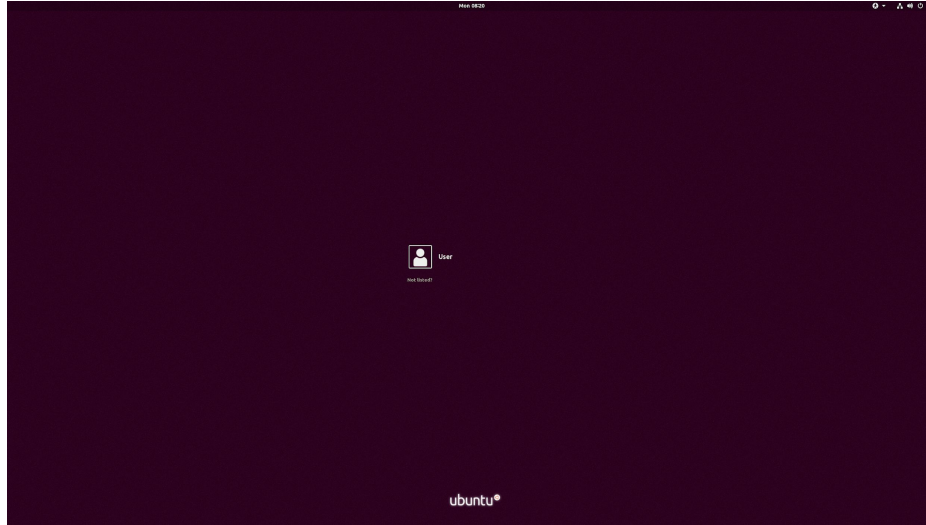
Solution 1: Start “ROS Kinetic Kame.vmx”

Cause 2: OSX (Or correct file): Corrupted files.

Solution 2: Recopy the VM from USB ***and report to us.***

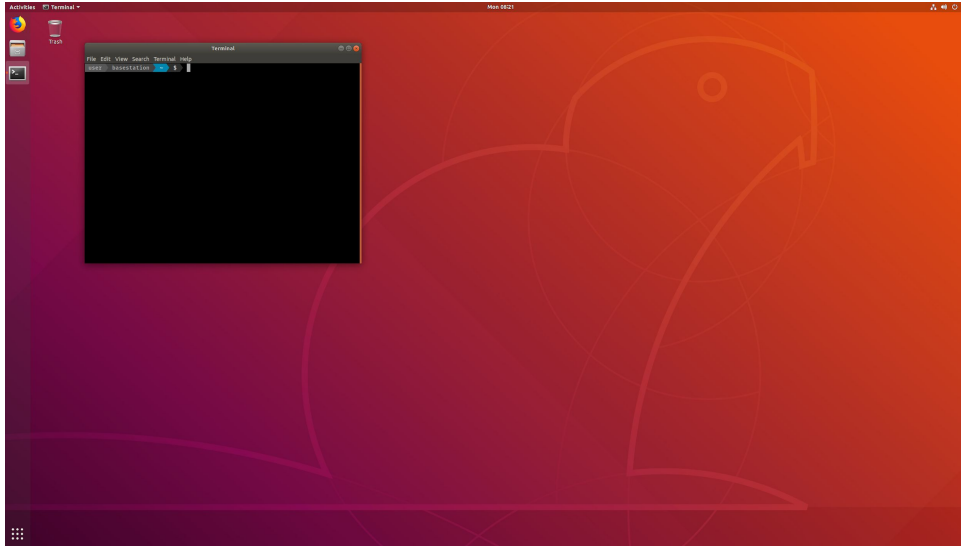
- Other issues? ***Report to us.***

Ubuntu Desktop 18.04 LTS



- Login: user
- Password: user
- The user has sudo rights

Linux Terminal



1. Press: <Win. Key>
 2. Type: `ter`
 3. Select/Click: terminal
- OR
- Click on terminal icon
 - Press <Win. Key> + 3

[INFO]

The terminal starts automatically in the user home directory: `/home/user`

Exploration of Directories


```
user@basestation:~$ pwd
/home/user
user@basestation:~$ ls
Desktop    Downloads  Pictures   Public     Videos
Documents  Music      Projects  Templates
catkin_wsuser@basestation:~$ ls Projects/
catkin_ws
user@basestation:~$ ls /opt/ros/melodic/
bin      etc      lib      setup.sh  setup.zsh
env.sh    include  setup.bash  _setup_util.py  share
```

[INFO]

A Linux command cheat sheet will be supplied.

Exploration: Workspaces

```
user@basestation:~$ ls Projects/catkin_ws/src/  
CMakeLists.txt  own_package  
user@basestation:~$ cd Projects/catkin_ws/src/  
user@basestation:~/Projects/catkin_ws/src$ ls  
CMakeLists.txt  
user@basestation:~/Projects/catkin_ws/src$ cd  
user@basestation:~$  
user@basestation:~$ tail -20 .bashrc | grep source  
source /opt/ros/melodic/setup.bash  
source /home/user/Projects/catkin_ws/devel/setup.bash  
user@basestation:~$
```

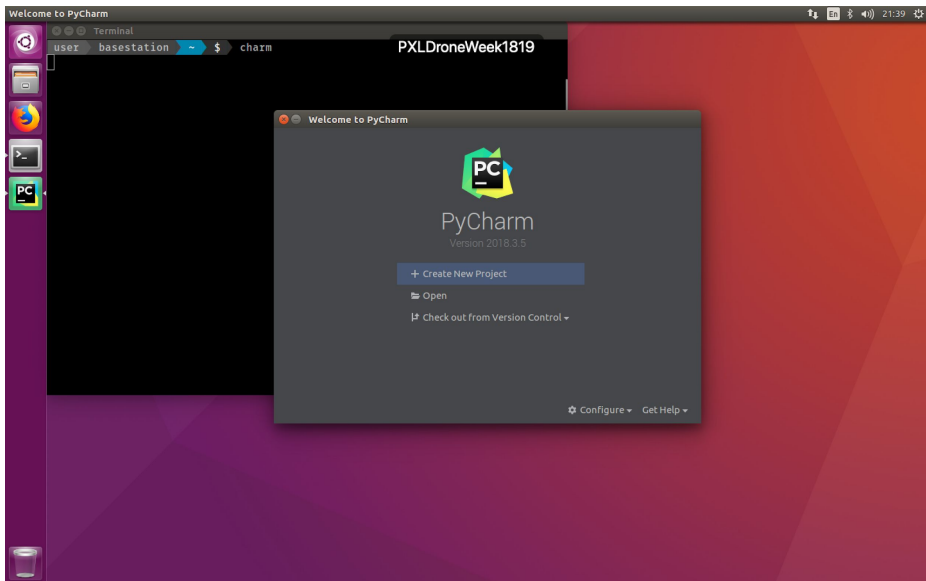


These set environment variables.
That's way you need to run
PyCharm from the command line.

[INFO]

A Linux command cheat sheet will be supplied.

PyCharm IDE



- Community Edition
- Version 2018.3.5
- `$ charm {dir/file}`
- Python 2.7.15rc1
- Python 3.6.7

```
user@basestation:~$ cd Projects/catkin_ws/src/  
user@basestation:~/Projects/catkin_ws/src$ pycharm own_package/ # if own_package exists!  
user@basestation:~/Projects/catkin_ws/src$ # We learn how to make packages in a few moments . . .
```

