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Engineers for Exploration

**Orfeo Toolbox: Setting Up**

## PREREQUISITES

Orfeo Toolbox 6.6.0

QGIS 2.18.21

Windows 10

Ubuntu 16.04

Ubuntu 18.04

## NOTES

Orfeo Toolbox is a powerful image analysis software, mainly for use in remote sensing. It has powerful tools such as clustering algorithms from K-Means all the way to Support Vector Machines and Gradient Boosted Trees to classify any imagery that you get. You can use it inside python programs, or within QGIS and it’s own image manipulation suite, Monteverdi.

There are multiple ways to install Orfeo Toolbox (OTB):

**Direct Download:**

Possibly the easiest way to install OTB is just a simple extract of the Orfeo Toolbox program straight from the site.

Visit the Orfeo Toolbox site at: <https://www.orfeo-toolbox.org/download/>

Download the packages here and click the right package for your OS.



You should either get a .ZIP file for windows or a .RUN file for linux distros.

**For Windows:**

Windows is a very straight forward installation. Once you have the .ZIP file that you have downloaded from the OTB website, simply extract the folder to a location of your choice.

Then run the monteverdi.bat file to start monteverdi to do you image analysis within OTB



**For Linux:**

After you have downloaded your .RUN file for linux, change directories to where you have downloaded this file. In this case, the file is in my Downloads folder. Next, enter these commands to extract OTB.

chmod +x OTB-6.6.0-Linux64.run

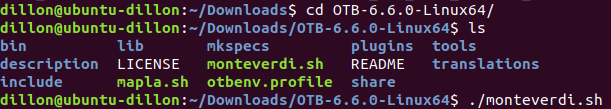
./OTB-6.6.0-Linux64.run

Change these commands according to your version of OTB and the filename that you have downloaded.



Change directories into the OTB folder, and then type this command to start monteverdi

./monteverdi.sh



**Using Orfeo Toolbox with QGIS:**

After you have installed your version of Orfeo Toolbox, you can now enable it to be used with QGIS. This only works with the QGIS long term release version (QGIS 2.18.21 LTR).

Open up QGIS, and then go to the processing tab, then click options.



Then set the two folders to their following locations.

For the applications folder select the description folder within your OTB installation folder.

For the command line tools folder select the bin folder within your OTB installation folder.



If you get an error saying that the mysys folder has not been found, clear the text of the mysys folder, make sure to press enter to ensure that it is empty and then exit back to QGIS.



To open Orfeo Toolbox click on processing and then toolbox, and the processing toolbox with OTB should appear in your QGIS application



# REFERENCES

Orfeo Toolbox Documentation:

https://www.orfeo-toolbox.org/documentation/

QGIS Documentation

https://www.qgis.org/en/docs/index.html

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