**Install xubuntu in Jetson Nano**

https://github.com/Discombobulated88/Xubuntu-20.04-L4T-32.3.1/releases/download/v1.0/Xubuntu-20.04-l4t-r32.3.1.tar.tbz2

**Download balena**

https://www.balena.io/etcher/

**ROS2 install**

**Set locale**

Make sure you have a locale which supports UTF-8. If you are in a minimal environment (such as a docker container), the locale may be something minimal like POSIX. We test with the following settings. However, it should be fine if you’re using a different UTF-8 supported locale.

locale  # check for UTF-8

sudo apt update && sudo apt install locales

sudo locale-gen en\_US en\_US.UTF-8

sudo update-locale LC\_ALL=en\_US.UTF-8 LANG=en\_US.UTF-8

export LANG=en\_US.UTF-8

locale  # verify settings

**Setup Sources**

apt-cache policy | grep universe

\* This should output a line like the one below:

500 <http://us.archive.ubuntu.com/ubuntu> focal/universe amd64 Packages

    release v=20.04,o=Ubuntu,a=focal,n=focal,l=Ubuntu,c=universe,b=amd64

\* If you don’t see an output line like the one above, then enable the Universe repository with these instructions:

sudo apt install software-properties-common

sudo add-apt-repository universe

\* Now add the ROS 2 apt repository to your system:

sudo apt update && sudo apt install curl gnupg2 lsb-release

sudo curl -sSL <https://raw.githubusercontent.com/ros/rosdistro/master/ros.key>  -o /usr/share/keyrings/ros-archive-keyring.gpg

\* Then add the repository to your sources list.

echo "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/ros-archive-keyring.gpg] <http://packages.ros.org/ros2/ubuntu> $(source /etc/os-release && echo $UBUNTU\_CODENAME) main" | sudo tee /etc/apt/sources.list.d/ros2.list > /dev/null

**Install ROS 2 packages**

\*Update your apt repository caches after setting up the repositories.

sudo apt update

\* ROS 2 packages are built on frequently updated Ubuntu systems. It is always recommended that you ensure your system is up to date before installing new packages.

sudo apt upgrade

\* Desktop Install (Recommended): ROS, RViz, demos, tutorials.

sudo apt install ros-foxy-desktop

\* ROS-Base Install (Bare Bones): Communication libraries, message packages, command line tools. No GUI tools.

sudo apt install ros-foxy-ros-base

**Enviroment setup**

\* Sourcing the setup script Set up your environment by sourcing the following file:

source /opt/ros/foxy/setup.bash

\* With these commands, Ros2 was downloaded successfully. To make sure, we type the command:

ros2 topic list