

# GIT

two words introduction

# About

- Git /git/ is a distributed revision control and source code management (SCM) system with an emphasis on speed



**git**

# Why GIT

- Really popular SCM system
- Many ROS packages needs to be downloaded (CLONED) from GIT repositories



**git**

# Why SCM - 1

- Sources sharing across networks
- User signature on each revision
- More advanced features (local/remote repository, branching...)



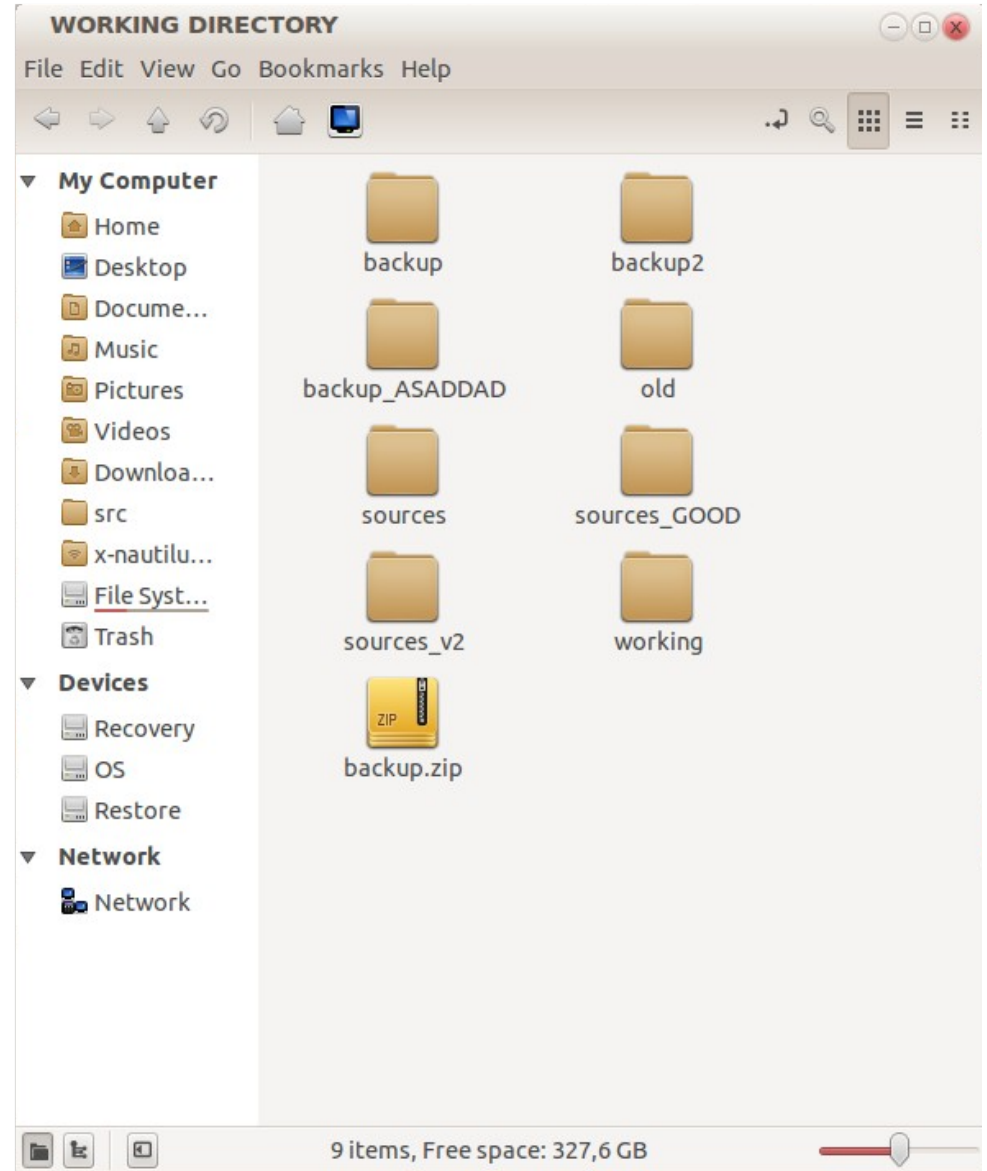
# Why SCM - 2

- Each revision is stored on the repository
- Rollback to a working version (after a disaster update) it's blazing fast



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# Installing GIT

- `sudo apt-get install git-core`

# Obtaining the code

## **FIRMWARE**

```
git clone https://github.com/mauriliodc/capybara.git
```

## **ROS NODE**

```
git clone https://github.com/mauriliodc/capybara\_node.git
```



# Example from a ROS package

## openh2\_camera

groovy hydro **indigo** Documentation Status

### Package Summary

✓ Released ✓ Continuous integration ✓ Documented

Drivers for the Asus Xtion and Primesense Devices. For using a kinect with ROS, try the [freenect stack](#)

- Maintainer status: developed
- Maintainer: Michael Ferguson <developers AT unboundedrobotics DOT com>
- Author: Julius Kammerl <jkammerl AT todo DOT todo>
- License: BSD
- Source: git [https://github.com/ros-drivers/openh2\\_camera.git](https://github.com/ros-drivers/openh2_camera.git) (branch: indigo-devel)

#### Indice

1. [Overview](#)
2. [Usage](#)

## 1. Overview

This package contains launch files for using OpenNI-compliant devices in ROS. It supports the Asus Xtion, Xtion Pro, and multiple version of the Primesense 1.08 and 1.09 cameras. It does NOT support any versions of the Kinect. [freenect\\_camera](#) or [openh2\\_camera](#) is the recommended driver for using a Kinect with ROS.

## 2. Usage

It is recommended to use this driver through the launch files provided in [openh2\\_launch](#)

#### Package Links

[Code API](#)  
[FAQ](#)  
[Changelog](#)  
[Change List](#)  
[Reviews](#)

**Dependencies (8)**

**Used by (1)**

**Jenkins jobs (7)**

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**openh2\_camera**

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#### Utente

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# Example from a ROS package

✓ Released

✓ Continuous integration

✓ Documented

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-

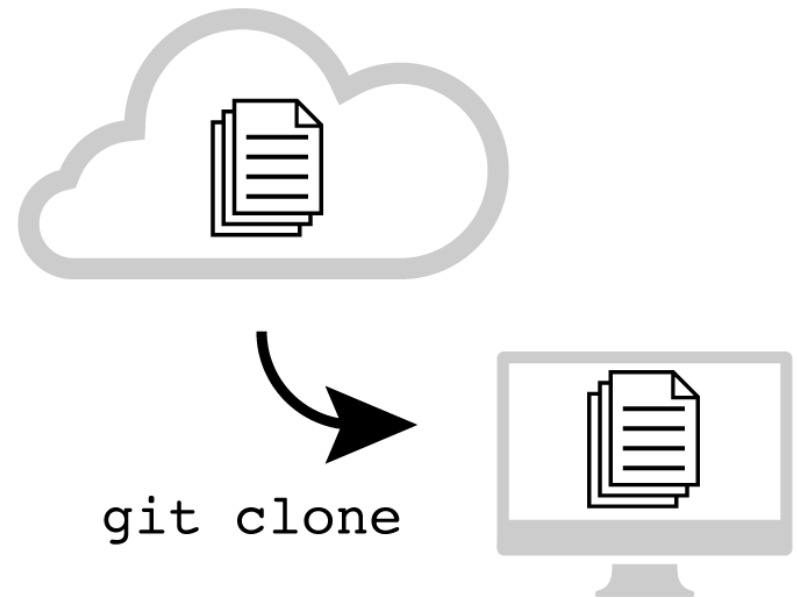
# GITHUB

- Online git repository
- Free for open source projects



# Basics

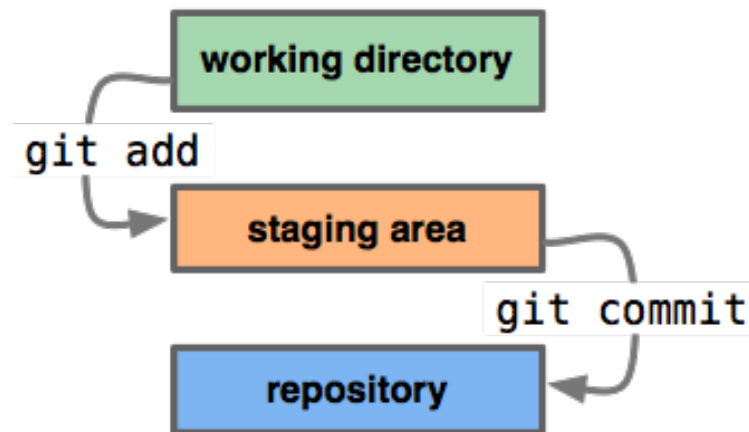
- **git clone \$URL**  
copy the whole repository and it's story on the local machine



# Basics

- **git add \$FILE**  
**git commit \$MESSAGE**

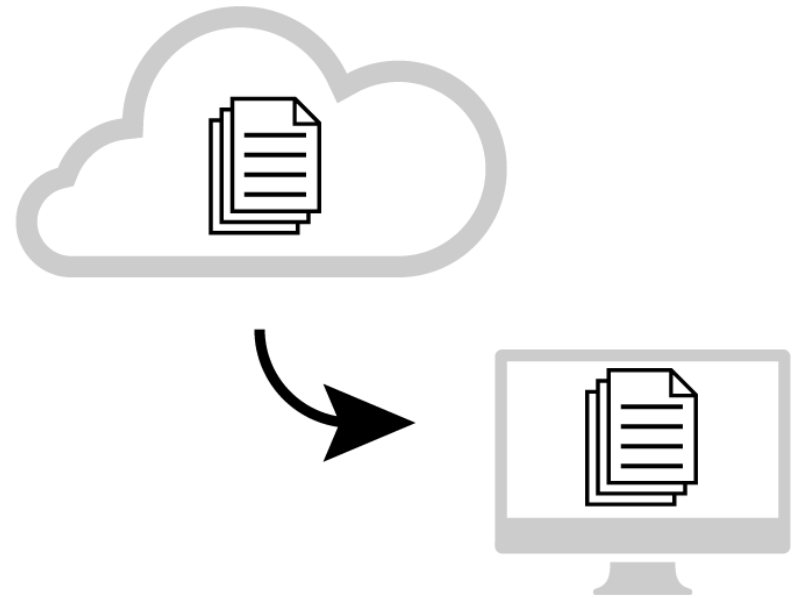
the file new release is confirmed and locked in the local repository.



# Basics

- **git pull**

downloads the updated files from the remote repository



# Basics

- **git push**

sends the committed files to the remote repository

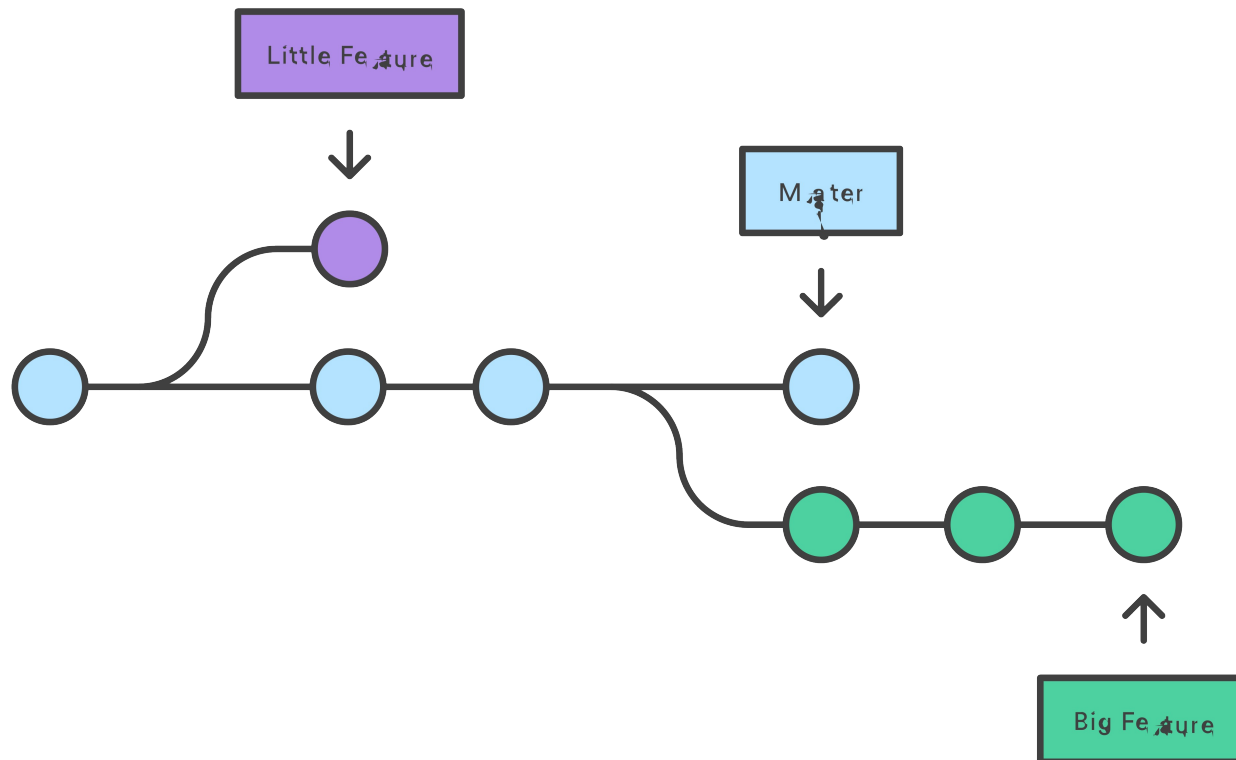




# Basics

- **git branch**

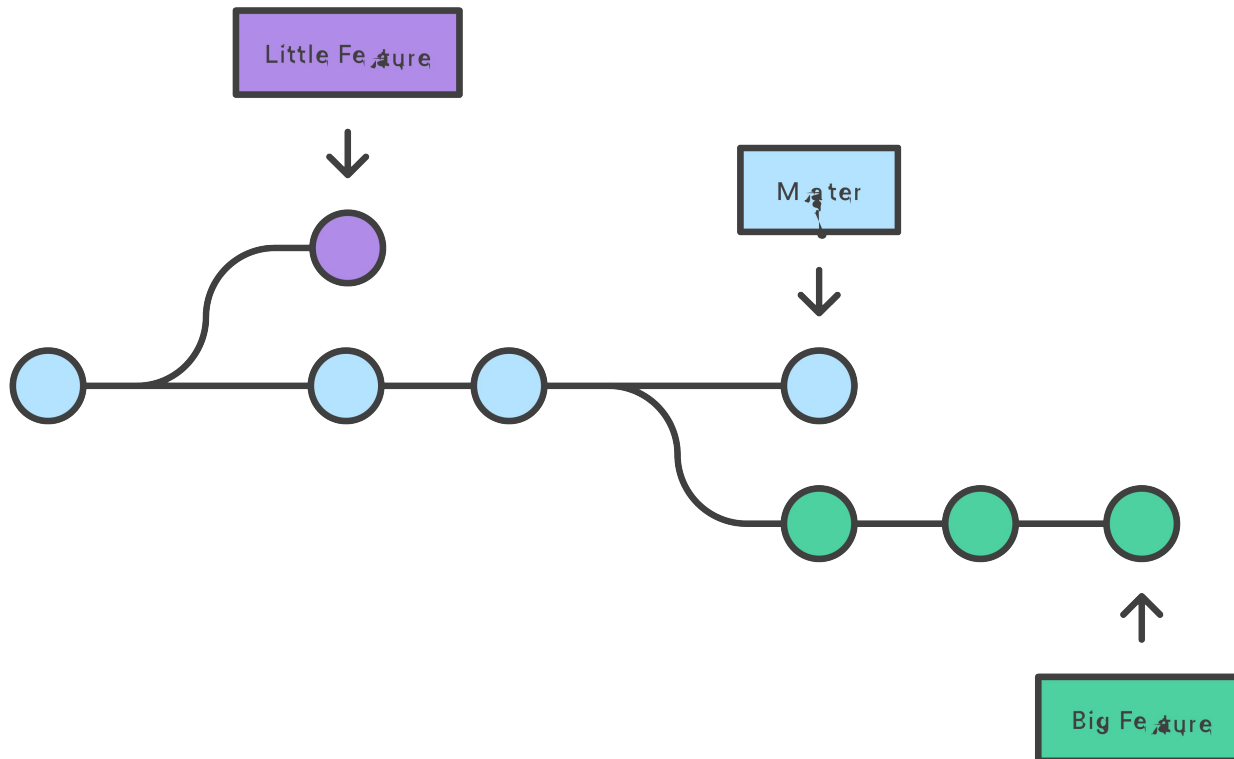
list all available  
branches



# Basics

- **git checkout \$BRANCHNAME**

switch from current branch to  
\$BRANCHNAME



# An example of branches

