

Git: Day 1





Clear your mind

WHAT IS A VCS





What is a VCS?



Fundamentals in web
development

VCS (Version Control Systems) help us to manage different versions of code.

Such us:

- Comparison between versions.
- Restore old versions.
- Merge changes.

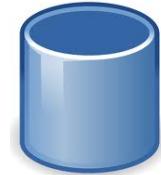




What is a VCS?



Programmer



DB: Stores
the data



VCS: Stores the
code



Server: Runs
applications

Automatization
of deployment

GIT BASIS



1972: Source Code Control System (SCCS): Closed source, free with Unix

1982: Revision Control System (RCS) : Cross platform. Open Source. More features and faster.

They only could work with one file at the same time

1986-1990: Concurrent Versions System (CVS): Concurrent users working on the same file. Open Source.

2000: Apache Subversion. Snapshot of the directory not just the file. Transactional commits.

2000: BitKeeper SCM. Closed source, proprietary.
Distributed version control.

The community version was free. Used for source code of the Linux kernel from 2002-2005

April 2005: The community version not free anymore



Git origin



It was born in 2005, developed by the kernel linux team, leaded by Linus Torvalds.

Tries to improve BitKeeper.

- Fast
- Simplicity
- Multi Branches
- Distributed
- Able to manage big projects



They can share code



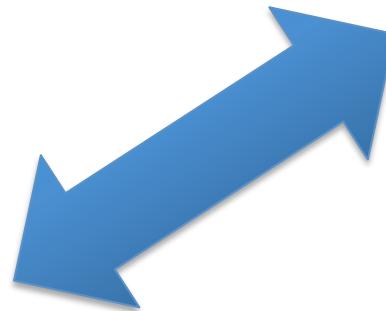
A programmer,
a repository



A programmer,
a repository



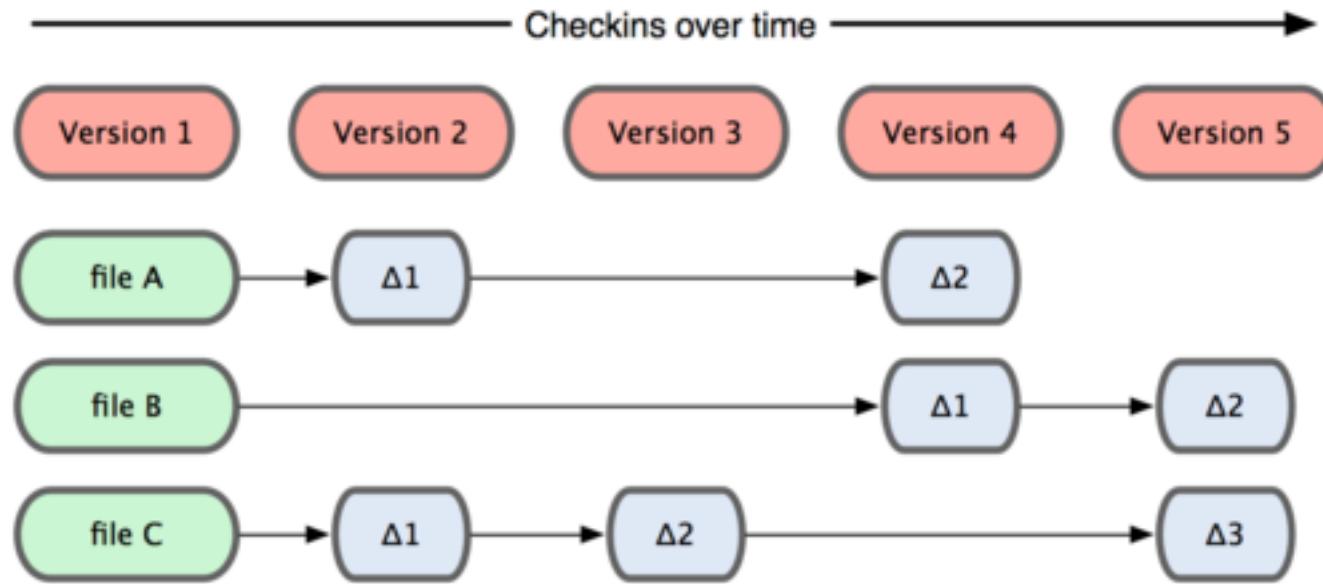
A programmer,
a repository



Everyone has a local repository

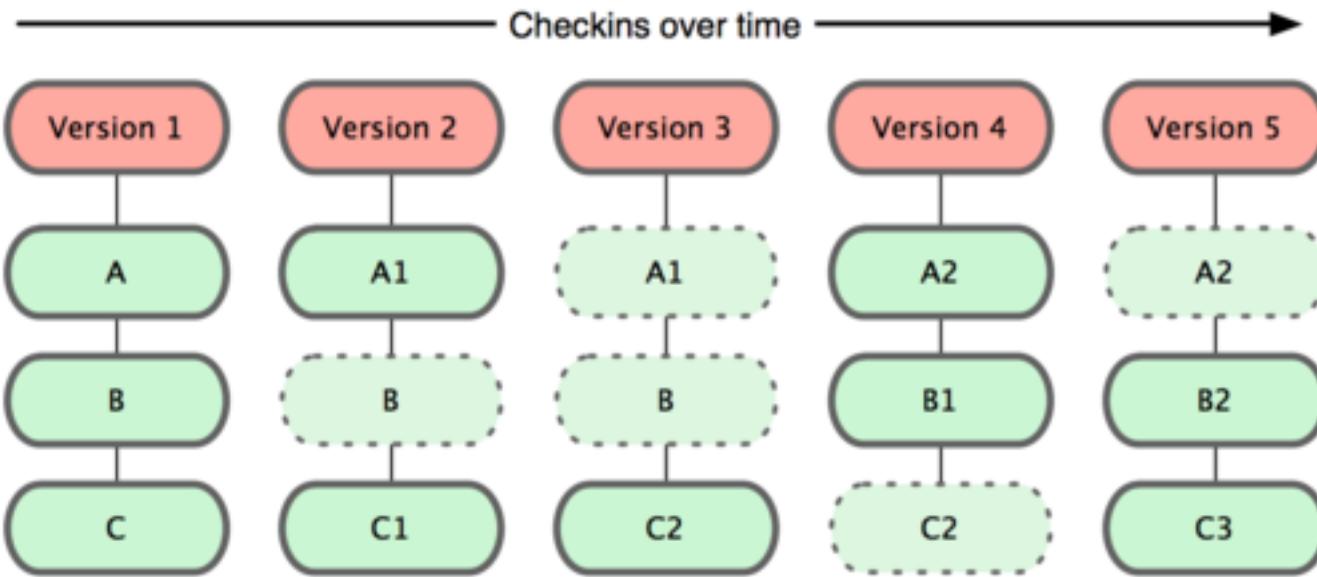
- Git was born in 2005
- GitHub starts in 2008 as a git repositories hosting
- 2009: Github 50000 repos y 100000 usuarios.
- 2011: Github 2M repos y 1M usuarios

Other VCS



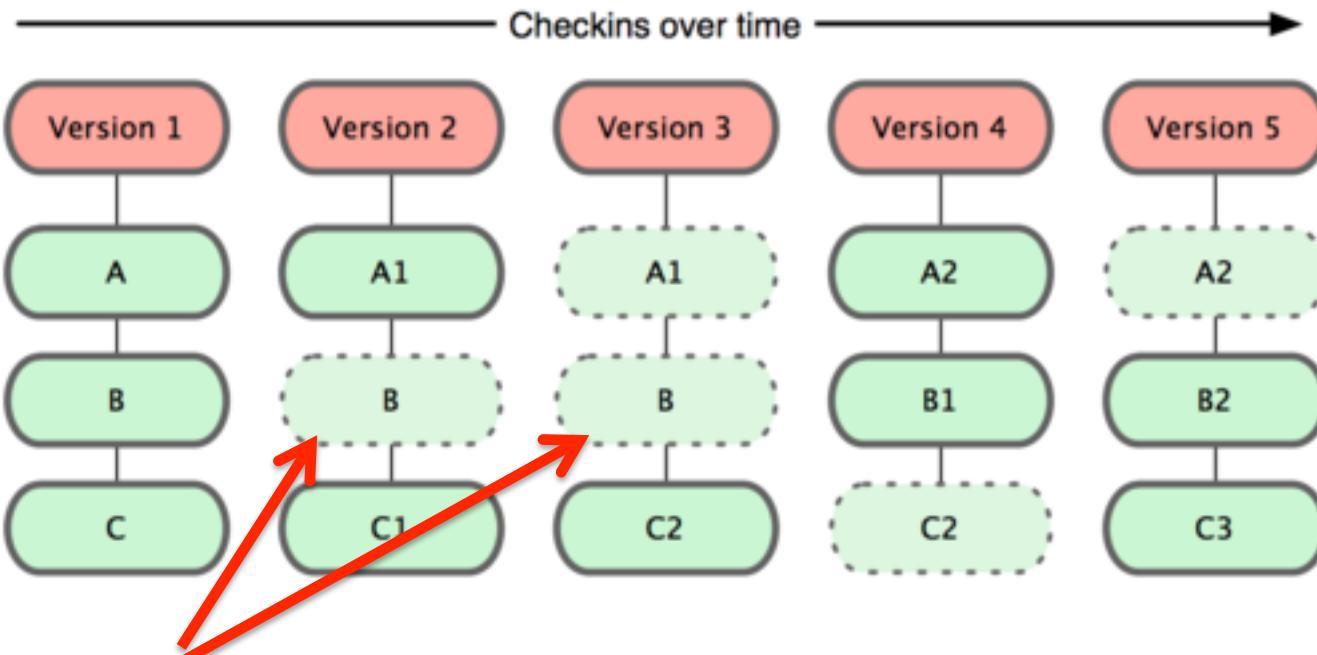
Store info as a list of file-based changes

Git: Set of snapshots



Takes a picture of what all your files look like at that moment and stores a reference to that snapshot,

Git: Set of snapshots



If files have no changes, Git doesn't store the file again

Every operation is done in your local repository.

You don't need connection with some other server.

You can work offline without problems

Faster than centralized repositories

Everything is identified by hashes.

It is impossible to change the content of any file or directory without Git knowing about it.

Can't lose information or get file corruption without Git being able to detect it.

Checksum (sha1):

24b9da6552252987aa493b52f8696cd6d3b00373

You can install your Git repo here:

<http://git-scm.com/downloads>



It's time to configure your settings:

Username

```
$ git config --global user.name "Your Name Here"  
# Sets the default name for git to use when you commit
```

Email

```
$ git config --global user.email "your_email@example.com"  
# Sets the default email for git to use when you commit
```



A gitignore file specifies intentionally untracked files that git should ignore.

Files already tracked by git are not affected.

Located in the root folder.



Patterns

#: Comments

!: Negates the pattern

foo/: Directory named foo (not a file foo)

*: Everything

.html , !foo.html, /.js

- 1) Create a specific folder where your repository is going to be created.
- 2) \$ git init

```
israelalcazar@Mac-Lamaro-2:~$ git init
Reinitialized existing Git repository in /Users/israelalcazar/.git/

```



Create a repository



You can create or clone a Git repository:

- Create

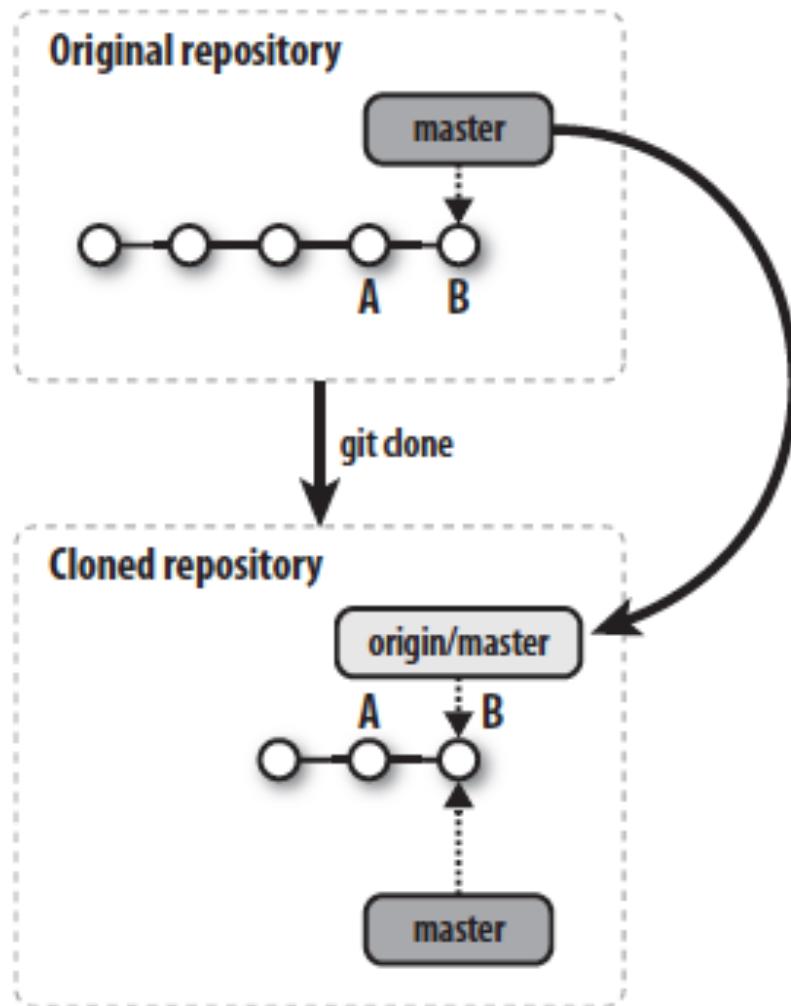
```
$ git init
```

- Clone

```
$ git clone <remote-url>
```



Clone a repo:





github
SOCIAL CODING

Preguntas

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