

# Version Control Systems

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- Introduction to Version Control Systems (VCS)
- What and What not to expect from a VCS
- Centralized VCS
- Distributed VCS
- Subversion
- Mercurial

# Version Control Systems (VCS)

## Why version control

Because human memory is poor!

## Time machine

A Version control system is a time machine, which does not know anything about your future, but remembers everything about your past!

## VCS types

- Line Based/Centralized version control systems
- Distributed version control systems (DVCS)

# What and What not? - VCS

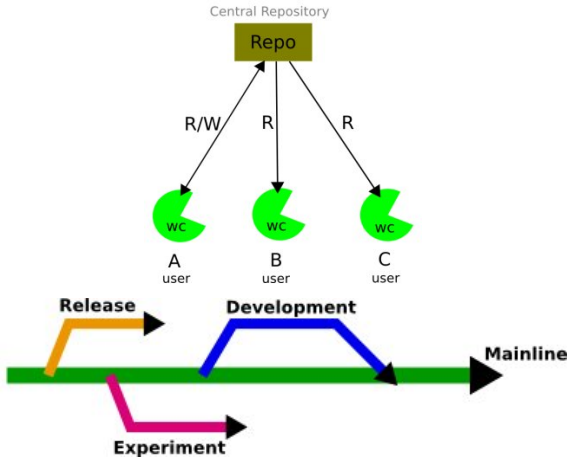
## What does VCS do?

- History watch
- Collaborate with people
- Revert short and long term changes
- Log your changes description
- Praise or Blame
- Sandboxing
- Branching and Merging

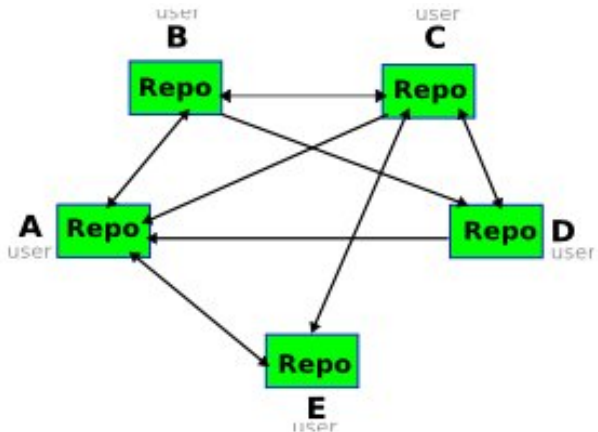
## What not?

- VCS does not generate code for you!
- It wont do release management
- It wont build and test your changes

# Line based/Centralized version control systems



# Distributed version control systems





## About Subversion

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## Getting Subversion

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[Source Code](#)  
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## Helpful

Search:

Read the official Subversion documentation [online!](#)



## Apache Subversion

Welcome to [subversion.apache.org](http://subversion.apache.org), the online home of the Subversion software project. Subversion is an open source version control system. Founded in 2000 by Collabot, Inc., the Subversion project and software have seen incredible success over the past decade. Subversion has enjoyed and continues to enjoy widespread adoption in both the open source arena and the corporate world. The project's original goal of being "a compelling replacement for CVS" (an older version control system with a similar model) was surpassed long ago — today Subversion stands on its own highly-reputable name.

For helpful hints about how to get the most out of your visit to this site, see the [About This Site](#) section below.

## News

[Click [here](#) to see all News items.]

### 2010-01-21 — Subversion 1.6.9 Released

Subversion 1.6.9, the latest stable version of Subversion, has been released. For more information, see the [release announcement](#) or the [changelog](#).

- Repository
- Working Copy
- Copy-Modify-Merge
- webdav, local, svnserve - access methods
- Authentication and authorization
- svn checkout (co)
- svn merge
- svn update
- svn commit (ci)
- svn diff
- svn copy (cp) - branch and tags
- svn log



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## Work easier Work faster

Mercurial is a free, distributed source control management tool. It efficiently handles projects of any size and offers an easy and intuitive interface.

Download now

Mercurial 1.4.3

Linux



Dependencies

> [Python2](#) > [Curl](#) > [libssl](#)

Available OSes

> [Linux](#) > [Mac OS X](#)

> [Windows](#)

> [Solaris](#)

### How you can benefit from Mercurial



#### It is fast and powerful

Mercurial offers you the power and speed to efficiently handle projects of any size and kind. Every clone contains the whole project history, so committing, branching, tagging and merging are local operations which makes them fast and convenient. You can use a multitude of workflows and easily enhance its functionality with extensions.



#### It is easy to learn

[http://www.kitware.com/learning-hg/](#) is a good place to learn how to install and use Mercurial.

### Quick Start

Clone a project and push changes

```
$ hg clone http://www.kitware.com/repo/hello
$ cd hello
$ edit files
$ hg add (new files)
$ hg commit -m 'My changes'
$ hg push
```

... [more](#) ...

- Repository
- Local repository copy, Working directory
- Multi-platform
- hg init
- hg clone
- hg commit
- hg update
- hg pull
- hg push
- hg diff
- hg log

- SVN book - <http://svnbook.red-bean.com/>
- Mercurial book - <http://hgbook.red-bean.com/>
- Wikipedia - <http://en.wikipedia.org/>

Thank You!  
Questions please