**Essential Tools: Version Control Systems**

[Local](05337649.pdf)

[Online](http://ieeexplore.ieee.org/document/5337649/)

VCS definition:

A VCS tracks changes to a set of files—typically a directory's contents—called a project. For each change, the VCS records the date and time, the person who made the change, and the differences between the file contents before and after the change. From this information, it can reconstruct the files' past contents if necessary. VCSs also offer a set of tools to help users employ this information efficiently to solve frequently occurring project management tasks.

# GitOD: An on demand distributed file system approach to Version Control

[Local](06261115.pdf)

[Online](http://ieeexplore.ieee.org/document/6261115/)

VCS definition:

Version Control Systems (VCS) are tools used to manage changes in documents, programs and other kinds of information stored as computer files, usually as part of a collaborative project or task. These systems are an important collaboration tool in many projects involving multiple contributors. A typical VCS platform allows multiple contributors to work in the same project simultaneously, while maintaining the history of all involved files. Contributors also have the ability to synchronize and merge their local copy of the project with other contributors, based on changes performed asynchronously by each one of them. A typical VCS is able to maintain snapshots of the project and its related files, provide tools to view and restore previous versions of the project, and maintain separate branches of project development [1].

https://about.gitlab.com/

https://tortoisesvn.net/

https://subversion.apache.org/

https://git-scm.com/

https://github.com/

http://choosealicense.com/