

SE ASSIGNMENT (IT350)



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Version control Software:

A component of software configuration management, **version control**, also known as **revision control** or **source control**, is the management of changes to documents, computer programs, large web sites, and other collections of information. Changes are usually identified by a number or letter code, termed the "revision number", "revision level", or simply "revision". For example, an initial set of files is "revision 1". When the first change is made, the resulting set is "revision 2", and so on. Each revision is associated with a time stamp and the person making the change. Revisions can be compared, restored, and with some types of files, merged.

The need for a logical way to organize and control revisions has existed for almost as long as writing has existed, but revision control became much more important, and complicated when the era of computing began. The numbering of book editions and of specification revisions are examples that date back to the print-only era. Today, the most capable (as well as complex) revision control systems are those used in software development, where a team of people may change the same files.

Top 3 Version control Softwares:

1. CVS

CVS may very well be where version control systems started. Released initially in 1986, Google still hosts the original Usenet post that announced CVS. CVS is basically the standard here, and is used just about everywhere – however the base for codes is not as feature rich as other solutions such as SVN.

One good thing about CVS is that it is not too difficult to learn. It comes with a simple system that ensures revisions and files are kept updated. Given the other options, CVS may be regarded as an older form of technology, as it has been around for some time, it is still incredibly useful for system admins who want to backup and share files.

2. SVN

SVN, or Subversion as it is sometimes called, is generally the version control system that has the widest adoption. Most forms of open-source projects will use Subversion because many other large products such as Ruby, Python Apache, and more use it too. Google Code even uses SVN as a way of exclusively distributing code.

Because it is so popular, many different clients for Subversion are available. If you use Windows, then Tortoise SVN may be a great browser for editing, viewing and modifying Subversion code bases. If you're using a MAC, however, then Versions could be your ideal client.

3. GIT

Git is considered to be a newer, and faster emerging star when it comes to version control systems. First developed by the creator of Linux kernel, Linus Torvalds, Git has begun to take the community for web development and system administration by storm, offering a largely different form of control. Here, there is no singular centralized code base that the code can be pulled from, and different branches are responsible for hosting different areas of the code. Other version control systems, such as CVS and SVN, use a centralized control, so that only one master copy of software is used.

As a fast and efficient system, many system administrators and open-source projects use Git to power their repositories. However, it is worth noting that Git is not as easy to learn as SVN or CVS is,

which means that beginners may need to steer clear if they're not willing to invest time to learn the tool.

I will be using Git as the version control software.