chem-bla-ics

Offline CDK development using gitsvn

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Abstract

While Subversion is a signification improvement over CVS, they both require a central server. That is, they do not allow me to commit changes when I am not connected to that server. This is annoying when being on a long train ride, or somewhere else without internet connectivity. I can pile up all my changes, but that would yield one big ugly patch.

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While Subversion is a signification improvement over CVS, they both require a central server. That is, they do not allow me to commit changes when I am not connected to that server. This is annoying when being on a long train ride, or somewhere else without internet connectivity. I can pile up all my changes, but that would yield one big ugly patch.

Therefore, I tried Mercurial where each client is server too. The version I used, however, did not have the move command, so it put me back into the old CVS days where I lost the history of a file when I reorganize my archive.

Git

Then Git, the version control system developed by Linus Torvalds when he found that existing tools did not do what he wanted to do. It seems a rather good product, though with a somewhat larger learning curve, because of the far more flexible architecture (see this tutorial). Well, it works for the Linux kernel, so must be good:)

Now, SourceForge does not have Git support yet, so we use Subversion. Flavio, of Strigi fame, however, introduced me to git-svn. Almost two month ago, already, but finally made some time to try it out. I think I like it.

This is what I did to make a commit to CDKs SVN repository:

```
$ sudo aptitude install git-svn git-core
$ mkdir -p git-svn/cdk-trunk
$ cd git-svn/cdk-trunk
$ git-svn init https://cdk.svn.sourceforge.net/svnroot/cdk/trunk/cdk
$ git-svn fetch -rHEAD
$ nano .classpath
$ git add .classpath
$ git commit
$ git-svn dcommit
```

The first git-svn command initializes a log Git repository based on the SVN repository. The git-svn fetch command makes a local copy of the SVN repository content defined in the previous command. Local changes are, by default, not committed; unless one explicitly git adds them to a patch. Once a patch is ready you can do all sorts of interesting things with them, among with commit them to the local Git repository with git commit.

Now, these kind of commits are on the local repository, and I do not require internet access for that. When I am connected again, I can synchronize my local changes with the SVN repository with the git-svn dcommit command.

A final important command is **git-svn** rebase, which is used to update the local git command for changes others made to the SVN repository.