This also means that there is very little you can’t do if you’re offline or off VPN. If you get on an airplane or a train and want to do a little work, you can commit happily until you get to a network connection to upload.

 Git has three main states that your files can reside in: committed, modified, and staged.

Committed means that the data is safely stored in your local database. Modified means that you have changed the file but have not committed it to your database yet. Staged means that you have marked a modified file in its current version to go into your next commit snapshot.

three main sections of a Git project: the Git directory, the working directory, and the staging area.

The Git directory is where Git stores the metadata and object database for your project. This is the most important part of Git, and it is what is copied when you clone a repository from another computer.

The working directory is a single checkout of one version of the project. These files are pulled out of the compressed database in the Git directory and placed on disk for you to use or modify.

The staging area is a file, generally contained in your Git directory, that stores information about what will go into your next commit. It’s sometimes referred to as the “index”, but it’s also common to refer to it as the staging area.