

Git Internals Workshop - Useful Commands

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*NIX Commands

<code>mkdir <path></code>	Creates a directory/folder
<code>ls <path></code>	Lists the contents of a directory
<code>find <path> -type f</code>	Finds all files in a given directory
<code>cat <path></code>	Prints contents of a file to stdout
<code>echo <message> > <path></code>	Overwrites a file with the given message

git Commands

<code>git init</code>	Creates and populates .git/ directory
<code>git hash-object -w <path></code>	Saves an object to the Git object store and prints the hash
<code>git cat-file -p <object hash></code>	Prints the contents of an object in the Git object store
<code>git cat-file -t <object hash></code>	Prints the type of an object in the Git object store
<code>git update-index --add <path></code>	Adds a file to the Git index
<code>git ls-files</code>	Lists the files in the current index
<code>git write-tree</code>	Saves the index as a tree in the Git object store and prints the hash
<code>echo <message> git commit-tree <tree hash></code>	Saves a commit pointing to a tree in the Git object store and prints the hash
<code>echo <message> git commit-tree <tree hash> -p <commit hash></code>	Saves a commit as above, but with (at least one) parent commit
<code>git log <commit hash></code>	Prints all the commits previous to the one specified by the hash
<code>git log <commit hash> --all --decorate --oneline --graph</code>	Prints the log as a easily human parsable graph
<code>git update-ref refs/heads/<branch> <commit hash></code>	Creates a named branched that points at the given commit
<code>git rev-parse <branch></code>	Prints the commit hash to which the branch points
<code>git branch</code>	Lists all the branches in the repository
<code>git symbolic-ref HEAD refs/heads/<branch></code>	Sets HEAD to point at the specified branch
<code>git update-ref refs/tags/<tag> <object hash or reference></code>	Tags a git object with a lightweight tag
<code>git tag -a <tag> <object hash or reference> -m <message></code>	Tags a git object with an annotated tag