Git Cheat Sheet

http://git.or.cz/

Remember: git command --help

Global Git configuration is stored in $HOME/.gitconfig (git config --help)

Create

From existing data

```
cd ~/projects/myproject
git init
git add .
```

From existing repo

```
git clone ~/existing/repo ~/new/repo
git clone git://host.org/project.git
git clone ssh://you@host.org/proj.git
```

Show

Files changed in working directory

```
git status
```

Changes to tracked files

```
git diff
```

What changed between $ID1 and $ID2

```
git diff $id1  $id2
```

History of changes

```
git log
```

History of changes for file with diffs

```
git log -p $file $dir/ec/tory/
```

Who changed what and when in a file

```
git blame $file
```

A commit identified by $ID

```
git show $id
```

A specific file from a specific $ID

Concepts

Git Basics

master	: default development branch
origin	: default upstream repository
HEAD	: current branch
HEAD^	: parent of HEAD
HEAD~4	: the great-great grandparent of HEAD

Revert

Return to the last committed state

```
git reset --hard
```

⚠ you cannot undo a hard reset

Revert the last commit

```
git revert HEAD
```

Creates a new commit

Revert specific commit

```
git revert $id
```

Creates a new commit

Fix the last commit

```
git commit -a --amend
```

(after editing the broken files)

Checkout the $id version of a file

```
git checkout $id $file
```

Branch

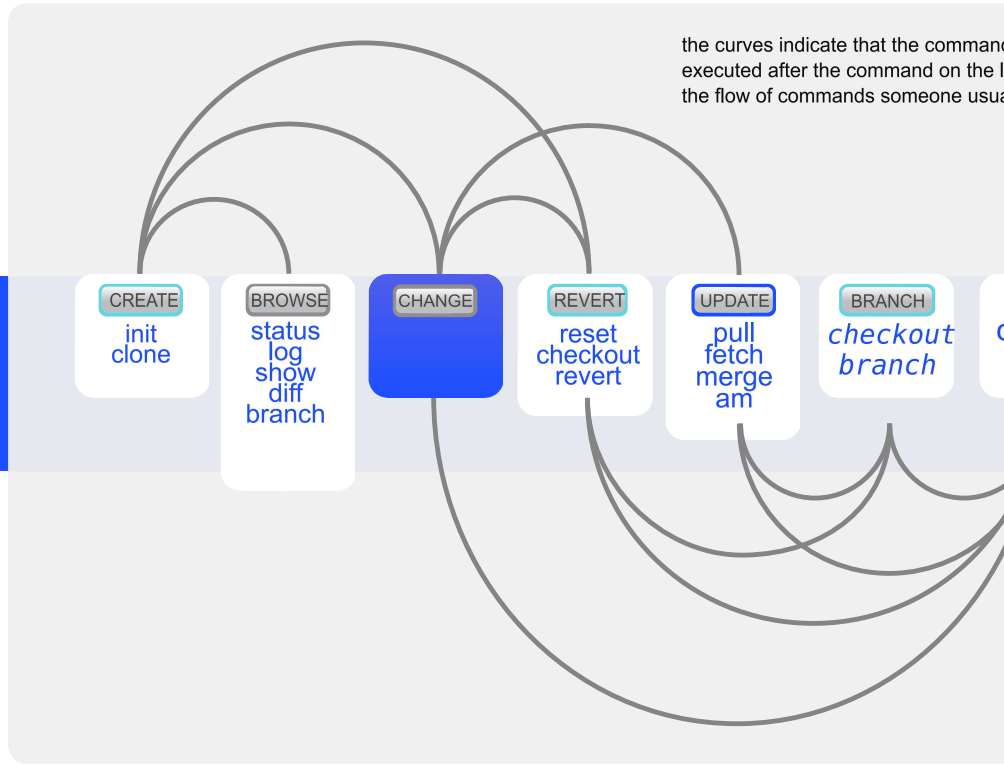
Switch to the $id branch

```
git checkout $id
```

Merge branch1 into branch2

```
git checkout $branch2
```

Commands Sequence



Update

Fetch latest changes from origin

```
git fetch
```

(but this does not merge them).

Pull latest changes from origin

```
git pull
```

(does a fetch followed by a merge)

Apply a patch that some sent you

```
git am -3 patch.mbox
```

(in case of a conflict, resolve and use git am --resolved)

Publish

Commit all your local changes

```
git commit -a
```

Prepare a patch for other deve

```
git format-patch origin
```

Push changes to origin

```
git push
```

Mark a version / milestone

```
git tag v1.0
```

Finding regressions

```
git bisect start          (to start)
git bisect good $id       ($id is the last working version)
git bisect bad $id        ($id is a broken version)
```

To view the merge c

```
git diff                  (complete
git diff --base  $file
git diff --ours  $file
```