Git rebase local vs git pull --rebase origin

Asked 5 years, 4 months ago Modified 2 years, 6 months ago Viewed 11k times



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I have a local (never pushed to a remote) feature branch **F1** made from **master** with a few commits. I don't seem to understand a difference between these two actions (F1 is the current branch):



git fetch origin git rebase master



and

git pull --rebase origin master

My expectation is that they should be equivalent but they aren't - different results are produced.

What's wrong with my thinking?

branching-and-merging version-control git-rebase git

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edited Jul 4, 2017 at 12:57

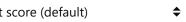
asked Jul 4, 2017 at 12:51



2 Answers

Highest score (default)

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1. git fetch origin and git rebase master will apply changes from F1 to local master branch. Assume your commit history looks like below at first (the remote master branch has commit j in remote):





When you execute git fetch origin and git rebase master, even though origin/master points to J, it will only rebase F1 branch on the top of local master branch (commit E as the graph):

2. The command git pull --rebase origin master will pull changes from remote master branch at first, then rebase current branch F1 on the top of it:

In a word, if local master branch is sync with remote master branch, these two ways have the same result (rebase F1 branch on the top of master branch). If remote master branch has new commit(s) which is(are) not exist on local master branch, the results are different (one rebases on local master branch, the other rebase on origin/master branch).

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Fantastic explanation. I'd also suggest adding --autostash to automatically stash and pop local changes during this process. In total: git pull --rebase --autostash origin master - odigity Apr 21 at 16:34



git fetch origin



only download remote files from a remote repository into your local branch.



git rebase master



takes the whole branch (the commits that are in your branch), and put on the top of your local repository. It changes the history of your project.

```
git pull --rebase origin master
```

git pull by default, performs a merge, but you can force it with a rebase option.

check this link

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answered Jul 4, 2017 at 16:27