

GIT: From Beginner to Fearless

GIT Default MergeTool Activity: Setting our default Merge Tool to VSCode

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Introduction

Although BASH allows us edit files via a call to VIM as the default merge tool for resolving conflicts, using it is a very tricky operation at best. I remember the first time VIM opened up for a message and all I could think was “How the heck do I get out of this thing!” Which, unfortunately, was actually not even as bad as the VIM diff/merge tool, which transports you back to 1979 in no time.

VSCode, however, gives us an incredibly powerful mergetool that easily lets us select the source, target, or both changes for conflict resolution, and also allows us to easily edit the changes during the merge operation. We definitely want a nice tool like this in place to make our lives easier as we work with more complex merge conflicts in the future.

This activity also assumes you’ve completed prior activities to install visual studio code. If not, please make sure to get code installed before proceeding with the activity.

Let’s gets started!

Step 1: Go to any repository

- a) Make sure you are on any working repository. It doesn't even have to be up to date. We are not going to be affecting anything.

- b) Take a quick look at config file settings:

```
[git config --global --list]
```

```
$ git config --global --list
user.name=Brian Gorman
user.email=brian@majorguidancesolutions.com
core.excludesfile=C:/Users/Brian/.gitIgnore
core.editor=code
diff.tool=default-difftool
difftool.default-difftool.cmd=code --wait --diff $LOCAL $REMOTE
difftool.prompt=false

Brian@Prometheus MINGW64 /c/Data/GFBTF/ultimate-default-web (mgs-45678-feature)
```

No settings are in place for the merge tool at this point.

- c) Add the entry for the merge tool

```
[git config --global merge.tool code]
```

```
[git config --global mergetool.code.cmd 'code --wait $MERGED']
```

make sure to use single-quotes on windows or \$MERGED won't take

```
Brian@Prometheus MINGW64 /c/Data/GFBTF/ultimate-default-web (mgs-45678)
$ git config --global merge.tool code

Brian@Prometheus MINGW64 /c/Data/GFBTF/ultimate-default-web (mgs-45678)
$ git config --global mergetool.code.cmd "code --wait $MERGED"
```

- d) Add settings to avoid prompting and keeping backups

```
[git config --global mergetool.prompt false]
```

```
[git config --global mergetool.keepbackup false]
```

```
Brian@Prometheus MINGW64 /c/Data/GFBTF/ultimate-default-web (mgs-45678)
$ git config --global mergetool.prompt false

Brian@Prometheus MINGW64 /c/Data/GFBTF/ultimate-default-web (mgs-45678)
$ git config --global mergetool.keepbackup false
```

- e) Review the config settings:

```
[git config --global --list]
```

```
$ git config --global --list
user.name=Brian Gorman
user.email=brian@majorguidancesolutions.com
core.excludesfile=C:/Users/Brian/.gitIgnore
core.editor=code
diff.tool=default-difftool
difftool.default-difftool.cmd=code --wait --diff $LOCAL $REMOTE
difftool.prompt=false
merge.tool=code
mergetool.code.cmd=code --wait
mergetool.prompt=false
mergetool.keepbackup=false
```

Notes

- f) Fix visual studio code \$MERGED command [only if yours didn't take]
[git config --global -e]

```
Brian@Prometheus MINGW64 /c/D
$ git config --global -e
```

Enter "\$MERGED" into the mergetool.code.cmd line

```
[merge]
  tool = code
[mergetool "code"]
  cmd = "code --wait $MERGED"
[mergetool]
  prompt = false
  keepbackup = false
```

Step 3: Verify mergetool is setup

- a) To see that the mergetool is working, we'll need a conflict to resolve. When we get to that, if something doesn't work, come back to this activity and make sure that everything is setup as expected. For now, let's just take a quick look:

```
[git config --global -e]
```

Make sure have the entries as above or as shown here [same values]

```
[merge]
  tool = code
[mergetool "code"]
  cmd = "code --wait $MERGED"
[mergetool]
  prompt = false
  keepBackup = false
```

This concludes our GIT Default MergeTool Activity.

Closing Thoughts

Setting VSCode [or another tool] to use for the default merge tool gives us a nice way to start working with a more user-friendly option [rather than VIM]. Again, VIM is perfectly fine if you like that tool, and so using a tool like VSCode is entirely optional, but highly recommended, especially for merge operations.

Also, if you are using a tool like Visual Studio or Eclipse to resolve merge conflicts and you have set these variables, you will likely need to unset them in order to get back to your default tool of choice.

Take a few minutes to make some notes about the various commands we've learned about in this activity, and practice using them.

Notes