

# Why Use Patches?

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 [coursera.org/learn/git-distributed-development/supplement/1zWDo/why-use-patches](https://coursera.org/learn/git-distributed-development/supplement/1zWDo/why-use-patches)

A brief review of the **patch** utility and its relation to **diff** is in order. Suppose you have a directory tree named **devel** which was based off of directory tree **stable** and has made some changes. A patch file is simply generated by doing:

```
$ diff -Nur stable_tree modified_tree > /path/to/my_patch
```

Remember the **-N** option means include files that have been added or removed in the patch, **-u** means a unified difference, and **-r** means recursive. If you want to just compare two individual files named **original** and **modified** you just do:

```
$ diff -u original_file modified_file > /path/to/my_patch
```

To apply the patch to the **stable** directory tree, another developer just has to do:

```
$ cd stable ; patch -p1 < /path/to/my_patch
```

where the **-p1** option indicates the patch was made while sitting one directory up.