

Course Introduction

Before Version Control

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Video: Intro to Module 1: Version Control
3 min
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Video: Keeping Historical Copies
2 min
- ✓

Video: Diffing Files
4 min
- ✓

Video: Applying Changes
5 min
- ✓

Video: Practical Application of diff and patch
5 min
- ✓

Practice Quiz: Practice Quiz: Before Version Control
5 questions
- 📖

Reading: diff and patch Cheat Sheet
10 min

Version Control Systems

Using Git

Module 1 Review

diff and patch Cheat Sheet

diff

diff is used to find differences between two files. On its own, it's a bit hard to use; instead, use it with diff -u to find lines which differ in two files:

diff -u

diff -u is used to compare two files, line by line, and have the differing lines compared side-by-side in the same output. See below:

```
1 ~$ cat menu1.txt
2 Menu1:
3
4 Apples
5 Bananas
6 Oranges
7 Pears
8
9 ~$ cat menu2.txt
10 Menu:
11
12 Apples
13 Bananas
14 Grapes
15 Strawberries
16
17 ~$ diff -u menu1.txt menu2.txt
18 --- menu1.txt      2019-12-16 18:46:13.794879924 +0900
19 +++ menu2.txt      2019-12-16 18:46:42.090995670 +0900
20 @@ -1,6 +1,6 @@
21 -Menu1:
22 +Menu:
23
24     Apples
25     Bananas
26 -Oranges
27 -Pears
28 +Grapes
29 +Strawberries
30
```

Patch

Patch is useful for applying file differences. See the below example, which compares two files. The comparison is saved as a .diff file, which is then patched to the original file!

```
1 ~$ cat hello_world.txt
2 Hello World
3 ~$ cat hello_world_long.txt
4 Hello World
5
6 It's a wonderful day!
7 ~$ diff -u hello_world.txt hello_world_long.txt
8 --- hello_world.txt      2019-12-16 19:24:12.556102821 +0900
9 +++ hello_world_long.txt      2019-12-16 19:24:38.944207773 +0900
10 @@ -1 +1,3 @@
11     Hello World
12 +
13 +It's a wonderful day!
14 ~$ diff -u hello_world.txt hello_world_long.txt > hello_world.diff
15 ~$ patch hello_world.txt < hello_world.diff
16 patching file hello_world.txt
17 ~$ cat hello_world.txt
18 Hello World
19
20 It's a wonderful day!
21
```

There are some other interesting patch and diff commands such as patch -p1, diff -r !

Check them out in the following references:

- <http://man7.org/linux/man-pages/man1/diff.1.html>
- <http://man7.org/linux/man-pages/man1/patch.1.html>

Mark as completed

