

# Why is the syntax for touching a file from the command prompt so strange?

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Raymond Chen

The magic incantation for updating the last-modified date on a file is

```
COPY /B FILE+, ,
```

What strange syntax! What's with the plus sign and the commas, anyway?

The formal syntax is the much more straightforward

```
COPY /B A+B+C+D
```

This means to start with the file `A`, then append the files `B`, `C`, and `D`, treating them all as binary files.

If you omit the `B+C+D` part, then you get

```
COPY /B A+
```

This means “Start with A, then append nothing.” The side effect is that the last-write time gets updated, because the command processor opens `A` for append, writes nothing, then closes the handle.

That syntax has worked since at least MS-DOS 2.1 (the earliest version I still have a virtual machine for).

I don't know where the two-comma version came from, but it most likely exploited a parsing glitch in `COMMAND.COM`, and somehow this variant gained traction and became the version everybody used (even though the other version is two keystrokes shorter). As a result, this weird syntax has become grandfathered as a special-case in the `CMD.EXE` parser. Here's some actual code from the part of `CMD.EXE` which parses the arguments to the `COPY` command:

```
if (parse_state == SEEN_TWO_COMMAS)
    copy_mode = TOUCH;
```

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