

Metacharacters

There are several characters that have specialized meaning in Linux. These are known as metacharacters. They are used as part of a command.

In this topic we will be looking at 3 metacharacters: * ? []

The * Sign

* The asterisk (star) sign is used to indicate 0 or any number of characters, having any value. This is known as the wildcard symbol.

For example, to delete all files in a directory, we can use the following command:

```
$ rm *
```

This means: remove all files, having any name.

We can delete files beginning with the letter f:

```
$ rm f*
```

This means: remove the files that begin with f and have any string of characters or numbers.

How can you use the asterisk to remove any file *containing* x? By using the command below:

```
$ rm *x*
```

The ? Mark

? The question mark is used to specify 0 or 1 character, having any possible value. For example, the following command will return files called f1 and f2, but not file1 or file2:

```
$ ls f?
```

The [] Brackets

[] The square brackets are used to indicate a set of values. This can be expressed as a list or a range:

```
$ ls file[1-5]    or    $ ls file[12345]
```

Both commands will return file1, file2, file3, file4 and file5 (if they exist, of course).

You can also use it to specify a list or range of letters:

```
$ ls [a-c]*       or    $ ls [abc]*
```

These commands mean: List all the files that begin with either a or b or c, having any other letters after that.