

1. Versions compatibility with the linux kernel

When we build a module, it is built against a certain version of the linux source tree.

If, for example, we try to load a kernel module that was built with the source tree for kernel version 5.10 in a system with 6.2 we are not going to be able to load the module.

How exactly is this check done?

The module we try to load (the object file) is linked against another file called *vermagic.o*, with which we will be able to check the kernel version of the current running kernel and the one that the module was compiled with.

What is the error that is given when there is a version mismatch?

```
linux@pc ~ $ insmod module.ko
Error inserting './module.ko': -1 Invalid module format
```