**[PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) files and how to make them**

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**About** [**PK3**](http://gronnevik.se/rjukan/index.php?n=Main.PK3)**:s**

You made a map, mod, skin, gun or generally cool thing that you want to share with everyone. So how do you create these neat [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) files that are so easy to drop in the MOHAA main directory?

A [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) file is a ZIP file that has been renamed to \*.pk3 instead of the ordinary \*.zip extension.

Most people are perhaps familiar with using ZIP files, but basically they are created by using a program to assemble one or more files into one single file.

The good thing about this is:

* **Size**. Because compression algorithms are used to make the resulting ZIP file smaller in size than the original set of files.
* **Single file**. It is a lot simpler to place a single file in the main folder than to place a huge amount of them there. It is also simpler to remove a single file, instead of having to remember what 23 files belonged to the mod you want to remove.
* **Error detection**. Part of the ZIP format is creating a number called a checksum and adding it to the ZIP file. A program can later calculate that checksum again and compare it to the one stored in the file. If the numbers are different, the file are probably broken by a download error or a virus or something like that.
* **Organization**. By having your mod in a single file, it is easier to be sure it has what it needs. And if you remove it; you can be pretty sure you will not break other mods. If different mods conflict ( by having files with the exact same name as an example ) it is a lot easier to fix.
* You can have multiple versions of the same mod, and MOHAA will use the latest one ( that is if you follow [my tutorial on PK3 file naming](http://gronnevik.se/rjukan/index.php?n=Main.FileNames) ).

**What's in a** [**PK3**](http://gronnevik.se/rjukan/index.php?n=Main.PK3)**?**

You can put anything in them, but lets focus on what to put in them to get a mod working.

You made a mod, right? And you got it working? Good. If it does not work yet: you are reading the wrong tutorial. **Making a** [**PK3**](http://gronnevik.se/rjukan/index.php?n=Main.PK3) **will not make your mod work if it did not before**.

OK, if you are still here: you have a working mod and a bunch of files scattered around your MOHAA installation.

The thing now is to get all of these files into a [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) file **in the same directory structure**. If you have a map, then you have a \*.bsp file in *<MOHAA>/main/maps* or *<MOHAA>/main/maps/dm* or something similar. Perhaps also a script in the same place. Some custom textures in *<MOHAA>/main/textures/SOME\_DIR*. Probably a \*.shader file in *<MOHAA>/main/scripts*.

The same stuff should be placed in your [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) file, and the directory structure should be the same. So if you have a file *C:/Programs/MOHAA/main/maps/dm/my\_cool\_map.bsp* than it should be placed in *maps/dm/my\_cool\_map.bsp* in your [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) file.

Basically think of your [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) file as the *<MOHAA>/main/* folder. If a file should be in main, then it goes straight into the [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) without placing it in a folder ( I dont know any type of mod file that should bee directly in main however ), but if it should be in *<MOHAA>/MOHAA/main/maps/dm/* then it should be placed in *maps/dm/* in your [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) file.

So remember:

* Same directory structure as when you created the mod on your computer.
* Think of your [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) as your main folder.

**Creating a** [**PK3**](http://gronnevik.se/rjukan/index.php?n=Main.PK3)

OK: Now I've told you about a lot of file and directory stuff, lets go create an actual [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) file.

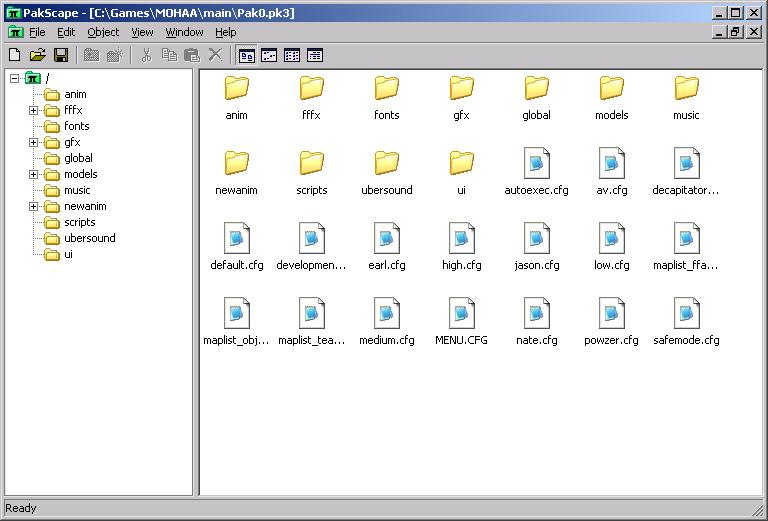
There are lots of packing programs that can create ZIP files out there

* [WinZip](http://gronnevik.se/rjukan/index.php?n=Main.WinZip)
* File Roller
* [WinRar](http://gronnevik.se/rjukan/index.php?n=Main.WinRar)
* 7-Zip
* Built into Windows XP and most other operating systems.
* And so on...

...but there is actually an application out there made specifically to create [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) files: [PakScape](http://gronnevik.se/rjukan/index.php?n=Main.PakScape). A quick goole search should provide you with the latest version. But any of the above programs will work fine as well, just rename the file from \*.zip to \*.pk3 after you created it.

So place files you need in the right dirs in the [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) and you should be fine.

Looking in the standard [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3):s shipped with the game in [PakScape](http://gronnevik.se/rjukan/index.php?n=Main.PakScape) can be a good idea, or any downloaded working mod for that matter, just to see how a working file can look.



**Common mistakes**

* **No folders**. A very common error I've seen is opening a [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) file and seeing all the files in a pile in the root folder... Make sure the files are in the right places.
* **Missing files**. Another very common error ( also among experienced modders ) is to forget including a file. Often a texture. So **test your mod on a clean install** before you send it on. Using a texture from another mod is very easy as all textures are shown from all [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3):s in [MOHRadiant](http://gronnevik.se/rjukan/index.php?n=Main.MOHRadiant). If you have used a custom texture, be sure to copy it to your [PK3](http://gronnevik.se/rjukan/index.php?n=Main.PK3) ( And thank the creator in your [readreadme file](http://gronnevik.se/rjukan/index.php?n=Main.ReadmeFile) ).
* **Missing readme file**. This will not affect the functioning of your mod, but it is [good practice to include a useful readme file](http://gronnevik.se/rjukan/index.php?n=Main.ReadmeFile). This way people can contact you about errors and suggestions and read about your mod in general.