

Jedi Knight II: Jedi Outcast

Custom Skinning Tutorial

How To Make New Multiplayer Skins (without replacing current ones)

Here's what you do (this is a bit longwinded, but it's not really that complicated, I'm just being very thorough)...

1) First thing you may want to do is extract the original model and skins from our assets0.pk3 file. You will find this file in the "base" directory (look where you installed the game - there should be a "base" dir in the GameData directory). Open that file with WinZip (WinZip can open it) and go down the list until you find all the files in the directory for the model you want to modify. All models are in models/players (sort by "path"). So, for example, Lando is in models/players/lando. Select all the files in that directory and extract them into your "base" directory. When you extract make sure that you have the "use folder names" option checked. You should now have a "models" directory inside the "base" dir, a "players" dir in the the "models" dir, and inside "players" you should see the dir of the model you extracted (in this example, "lando").

2) In that folder, you will find a text file called model_default.skin. This is the file that tells the game what image files to apply to each part (surface - collection of polys) of the model. Copy this and rename it to use your new skin name (using the example "solo", for instance: model_default_solo.skin). Note that the "default" MUST be in the skin file's name or the game will not recognize it as a selectable skin.

3) Now open up the .jpg and .tga files in that directory and modify whichever ones you want to, then save them out *under a different name*. When you do, find the name of the image file you modified in the new .skin file you copied and replace the name of the original image file with the name of the new one you just saved. (When we release the model viewer, you'll be able to preview your work).

4) Now you have a .skin file that points to the new image files. All you have to do now is make your "icon" image. This is the small, square picture that shows up in the menu when you're browsing what skin to use (also shows up in-game on the HUD in certain circumstances). You will need to make a new one for your new skin. Open up the original for reference, make your new one and save it back out with a new name, following the name renaming guidelines as the .skin file... so the original icon is called icon_default.jpg, save your new one as icon_default_solo.jpg (again, using "solo" as the example).

5) Now you're done! It will work in the game on your computer (try it out), now you just need to put it together for other people to see. You need to zip it up into a .pk3 file like the others in the "base" dir. Now, since you want to make sure the .zip file remembers the path to each file (remember how when you extracted files into the "base" dir, it created all the right subdirectories?), you have to add the files to the .zip file from a dir higher than "models" and you must add using "wildcards" (don't worry, I'm about to explain and walk you through it). The best way I've found to do this is to make a new directory in "GameData" called "mods" (or whatever you want to call it). This acts as a substitute "base" dir for our current purpose of zipping up your work. Copy the "models" folder into this new folder (if you have more than one skin you've done, be sure the copied "players" dir only has the model you just modified). Now, go back up to your "mods"(or whatever you named it) dir and create a new .zip file. Open it up and hit the "Add" button to add files. Browse to the "mods" directory you just made and make sure that "include subfolders" is checked. Then click on "Add With Wildcards". This will add all the files you just made and include the folder/directory path to them (you should be able to verify this when you're done adding and look at the file list in the .zip file). Make sure the .zip file only contains the new files you made (not, for example, the original image files), this way you keep your filesize down

and don't accidentally overwrite other people's files. Now save and exit WinZip, and rename the file to whatever you want and change the extension from "zip" to "pk3".

You're done! Upload the file somewhere and share the goodness!

Okay, now I know some of you are still going to have questions (after my initial post that contained the above instructions, I got a lot of follow-up questions). Here is a bit of Q&A about this process:

HELP! JK2 crashes when I try to view my skin!

There are 2 problems I have seen people have:

- 1) Over-aggressive jpg compression. When you save your texture as a jpg, use standard compression.
- 2) Pk3 file has a long path in it. Make sure your pk3 file doesn't have some extremely long file path in it – like "C:\Program Files\Lucas Arts\Star Wars JK II Jedi Outcast\GameData\base\models\lando". This is the wrong way to zip up your pk3 file and exceeds Jedi Knight 2's 64-character limit on path name length. When zipped up, the files in your pk3 should have a path that starts under the "base" directory (in this example: instead of that long path, it should just read "models\lando" if you zipped it up right. Make sure when you zip up your pk3 you have "Include subfolders" checked, **not** "Save full path info".

I see we have ModView now, how can we view the model with the skin we made?

Extract the _humanoid.gla and animation.cfg following the same instructions as above (extract into the GameData/base folder and the files should appear in the directory: GameData/base/models/players/_humanoid – remember to have "use folder names" checked when you extract).

Extract the models.shader file using the above instructions (extract into GameData/base. the file should appear in the dir: GameData/base/shaders).

Extract any models/players directories you want to view/modify (see above instructions).

At this point, your directory structure should look something like this:

GameData/base/models/players/_humanoid - this should have the _humanoid.gla and animation.cfg in it

GameData/base/shaders - this should have the models.shader in it

GameData/Base/models/players/lando (using the running example of this tutorial) - this should have the model.glm, model_default.skin and all the .jpgs and .tgas in that directory in it.

Open ModView. Go to open a file and browse to the .glm file in the GameData/base/models/players directory of the model you want to view.

Voila!

If you get some warnings about missing textures when you load the model, you may want to make note of them and go back into the pk3 file, find them, and extract them as well. Most of the time, it will be complaining about not finding the "caps" textures... you do not need these in order to view the model, so don't worry about them.

In the window on the left side, you'll see an expandable list that says "model.glm" expand that (click on the "+") and you'll see another expandable list called "Skins available". Expand that and you'll see all the .skin files in that model's directory. Double-click on them to view them. If you touch up your skin and want to see the changes in ModView hit ALT+R (or look in the "File" menu).

Also note that the editor does not draw every stage of multi-stage shaders nor does it mask out parts of textures with alpha channels.

How do I make the red and blue team-play skins for my skin (so the skin can be used in team multiplayer games like Team FFA, CTF and CTY)?

Using the "solo" skin example at the top of this document:

Copy the model_default_solo.skin you made and make 2 new .skin files: model_red_solo.skin and model_blue_solo.skin.

Then just make red and blue versions of the textures you want to tint, save them with whatever filename you like.

Then, edit the 2 new .skin files you made to point at those files (note: you don't have to replace every texture in the .skin, just the ones you want to tint blue or red).

Then make a red and blue version of your icon_default_solo.jpg, naming them (again, in this case) icon_red_solo.jpg and icon_blue_solo.jpg.

That's it! Now your new skin should be able to be used in team games.

Okay, I start up multiplayer, choose to play my skin I made, but I when I join a server, my skin is reset to some other skin. Why?

It depends on two things. If the server is "pure". "Pure" is a server setting that, when set, does not allow any players to use any files that the server does not have (this is to prevent cheating and maintain compatibility). If "pure" is not set on the server, you can use any files you want, regardless of whether the server also has those files.

If the server is pure, the only way you can use your new skin is if the server *also* has the pk3 file with your skin in it. If you bring down the console (press SHIFT+~) and type "fs_referencedList", you will see all the pk3 files the server is using, including but not confined to the assets0.pk3 and assets1.pk3 that came with the retail game.

All that having been said, 99% of the servers running are going to be pure. If you find one that is not pure, you can use whatever files you want, but it may be less stable. So the best way to get your file to be usable in game is to have server admins get your pk3 and put it in their base folder for everyone to see and use (more on this in the next question).

More useful console commands:

path – once you join a server, this will show you all the pk3 files you've got in your base dir and whether or not they're on the server's "pure" list. If they are, you can use what's in them.

sv_pakNames – the names of all the pk3 files you have.

sv_paks – the CRC's of all the pk3 files you have. The last 2 should be the retail JK2 pk3 files. The game uses the CRC of the file to determine if they're the same, not the name. So if the server has a darthmaul.pk3 and you have one, you still cannot use yours if the CRCs are different (meaning that they're actually different versions of the darth maul skin, they just happen to have been named the same thing). PK3 names should be unique!

Okay, I start up multiplayer, choose to play my skin I made, but no-one else can see it. Why?

Well, only people who actually *have* the skin you just made can see it. Also, if they have "force models" on, they will see every model and skin as the model and skin they are using. If they have "defer models" on, they only get updated models when they die or when the scoreboard comes up.

Now, they can get your model by either of two means:

By downloading it from a site like www.jediknightii.net, www.massassi.net or www.jediknight2files.com and putting it in their base dir...

OR

They can download your pk3 directly from the server when they join it. This will happen automatically if the server has "Allow Downloads" on (look at the "g_allowDownloads" item on the server info for the server) *and* if the player joining the server has "Allow Downloads" enabled.

How difficult will it be to make our own custom meshes and apply them to your animations?

If you have 3D Studio MAX, we will be releasing a plug-in/exporter for MAX and our Ghoul2 compiler that should allow you to make custom .glm meshes (or modify ours) and apply them to our animation skeleton (the _humanoid.gla file).

How difficult will it be to make our own custom animations?

To make new animations, you'd need a copy of SoftImage... we don't expect that many people have access to that...

Well, that's it (for now), if you have any more skinning questions, stop by the mod forums at JediKnightII.net and/or Massassi.net or, if you're totally stumped, e-mail me your question at mgummelt@ravensoft.com

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