

Merchant's guide to Material Settings in D|S

Introduction:

Material settings in D|S are a mystery to many merchants. This tutorial is designed to help you understand how D|S content is made and how to give your customers D|S settings that can be used right out of the box.

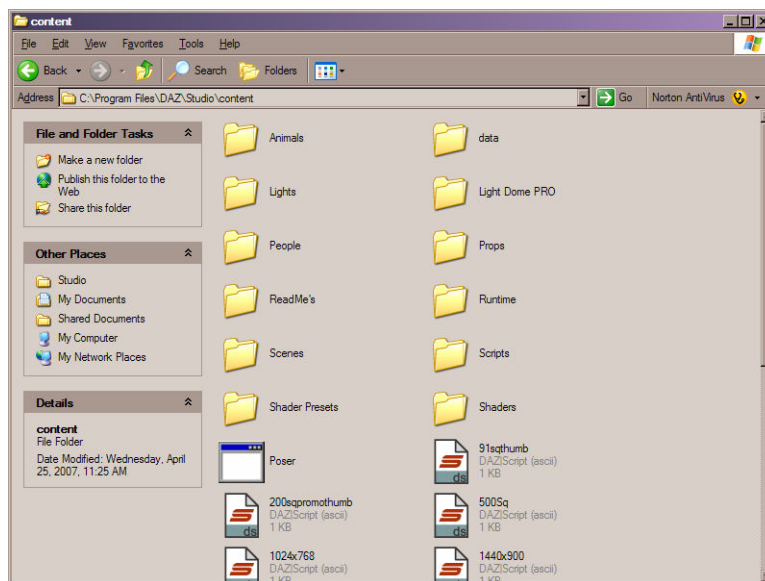
This guide is designed more for the merchant who is comfortable with poser settings but may not be with D|S. It assumes that the reader is comfortable with setting maps and how they work. It only roughly covers how to set maps and strengths in the surface tab of D|S and does not explain how a map should be made or used.

Part 1: Understanding D|S content.

Probably the single most confusing thing about making content for D|S is how the content is setup and managed. The surface settings and actually making the files are easy once you learn them, but where does it all go?

If you open the folders that contain D|S and its content you'll notice several differences from the way the poser content tree is handled. When you open the folders that house poser from the program files you'll see your runtime immediately. But in D|S you'll notice that the studio folder houses the core program, and the runtime and assorted content is in a subfolder of the main one called content.

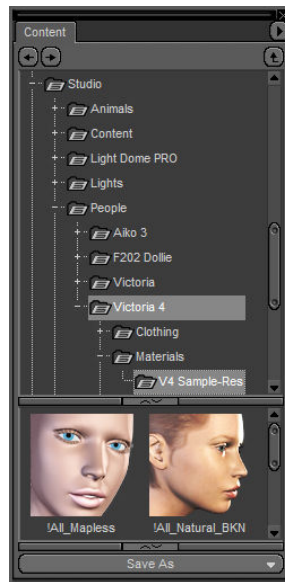
You'll also notice that there are several loose content folders in addition to runtime. These folders are where the D|S content is stored. It may seem a random assortment of folders at first, but once you delve into the structure a bit it makes sense.



Open the people folder. Depending on the models that you have installed you should see a folder for each model that has D|S presets. Opening any of those you should see options that

pertain to that particular figure. Poses, textures, even materials for figure specific clothing are all housed within the folder for that figure.

Open D|S. In the content tab you should see a folder called studio. Open that folder. You should see the folders that you have been browsing repeated in the same fashion in your content tab. They are nested the same way, allowing users easy access to the content without having to scroll through the runtime folders. They only need to open the section that pertains to what they want.

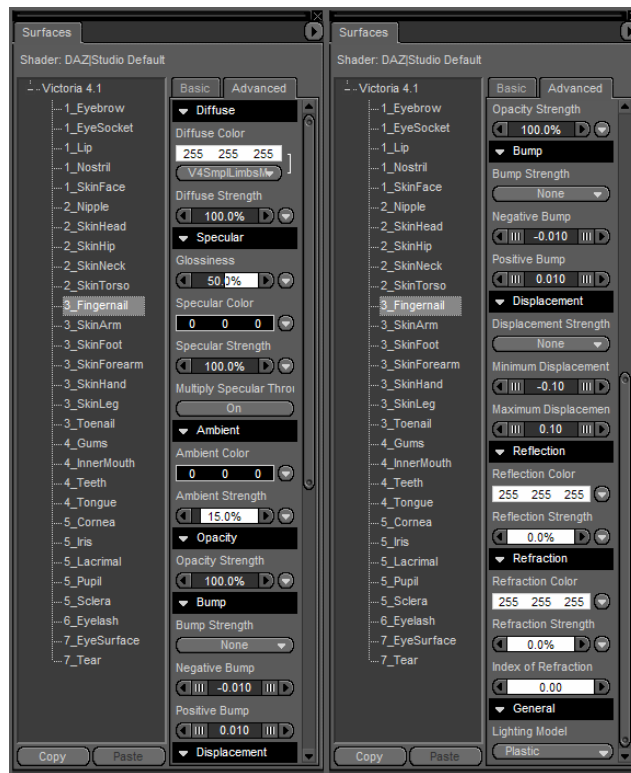


So what does this mean to the merchant? It means that content placement isn't as confusing in D|S as it initially appears. If you are providing D|S presets for a character for V4, then you'd place your content in the following way (starting within the content folder): People→ Victoria 4→ Materials→ *Your Character Name*→ *Your files*

If you were providing clothing materials it would be the same thing except instead of going into the materials folder it would go into the clothing folder and into the folder for the designated clothing item.

Part 2: The Surface Tab in D|S

Load a model or primitive into D|S. Take a look at the surface tab. There are two views, basic and advanced. Basic is really basic, showing options only for diffuse, specular, ambient and opacity. Switch to the advanced view. Now in addition to those basic settings you will see a host of other options. There are now strength levels for the basic settings in addition to settings such as bump, displacement, reflection, refraction, and lighting model.



The surface tab is fairly user friendly. Anyplace you see a downward pointing triangle you can add a map to the option. Slider bars allow you to adjust strength of the options, and color bars allow you to either right click and manually enter settings or a single left click on the bar brings up a color selection dialog. Even the lighting model option is nice; just use the dropdown menu to select how you want the surface to act.

Another friendly aspect of the surface tab is that it allows you to select multiple materials at once and set the same settings. With a complicated model where you may desire the same settings for several different material zones just select one and then use shift while selecting another to add another material zone to the settings that you are changing. Forget a zone that you wanted to have the same settings as another? Use the copy and paste options at the bottom of the material tree to set the materials without manually inputting everything.

Part 2.1- Poser VS. D|S settings

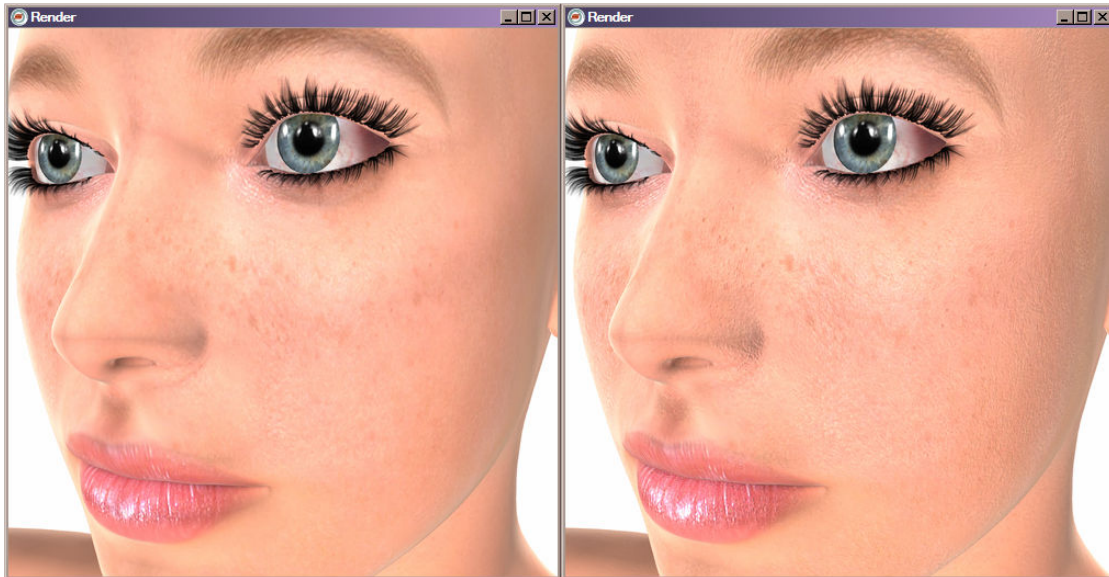
Many poser settings for materials transfer fine to D|S. But there are a few exceptions. These exceptions are why your customers will appreciate D|S specific material files in addition to your poser files.

Most notably, procedural shaders and many node options will not transfer to D|S. For your surface settings to work with D|S they need to be map based. For map based textures there are only a few notable differences.

Probably the most glaring difference between poser and D|S in material settings can be seen in the way that bump maps are handled. What renders as a beautiful bump map in poser will appear non-existent in D|S. This is because poser is much more sensitive to bump than D|S.

Often a Poser mat file will load the bump map in D|S at with the map strength something between 1-2% with a positive and negative bump of +- 0.010. This is not nearly strong enough to show results in a D|S render.

Example: Left side is Poser material file loaded with a map strength of 0.68% and +- 0.010 bump. Right side is adjusted settings of map strength at 100% and +-0.068 bump.



It takes a little trial and error to determine the best bump settings for any texture in D|S. A good place to start is by raising the strength to 100% and multiplying the +-bump by the original strength settings. After that you can use finer adjustments to get the look you desire.

Other settings that should be looked into are the lighting model and sometimes specular. The lighting model always loads as plastic when applying Poser MAT files in D|S. For optimum results this should be changed to reflect the nature of the material that is supposed to be represented. Specularity is rarely an issue, but can cause problems occasionally.

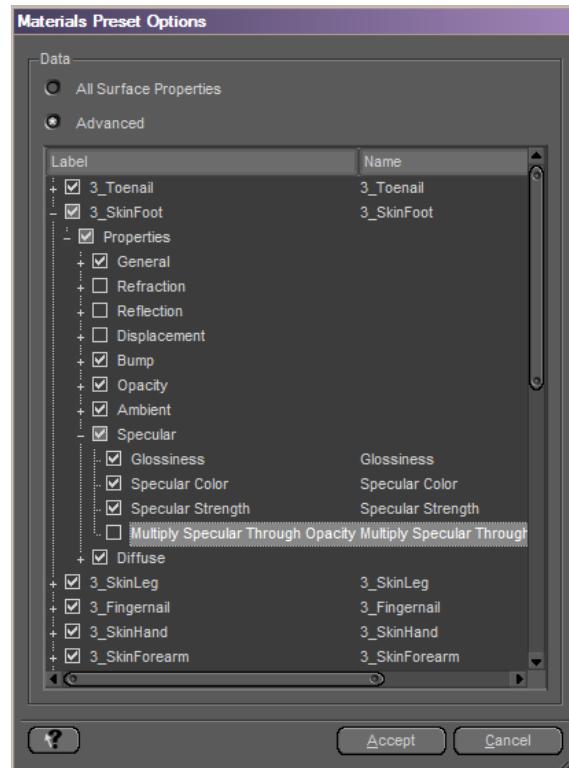
Part 3- Making D|S Materials files

Once your surface settings are providing the desired results select the model in the scene and the material zones that you would like to save settings for. If you would like to save settings for an entire model, select the model name in the surface tree. If you would like to save a setting for only one portion of a model then select the surface that you would like to save the setting for.

Once your object and surface(s) are selected, open the save as option from the file menu. Select 'save as materials preset'. Browse to the folder that you want your preset to go into, and name your file.

The next dialog that opens presents you with a number of options. If you're saving settings for an entire figure select the all surface properties option and accept. Your material preset will be saved in the specified folder.

If you want to save only particular portions of the surface setting, however, or wish to exclude materials that you may have selected choose the advanced option. From there you can specify which surface materials to include in the preset and you can choose whether to include all surface settings for the material or you can choose just a few. If you are using the advanced option, make sure that the properties box is checked for each surface material you wish to save settings for.



Part 4- Packaging

PNG thumbnails are automatically created when you save the materials preset. But they are probably not as good looking as you would like. Just replace the thumbnails with thumbnails of your choosing prior to packaging. Make sure that your thumbnails are 91*91 pixels for proper showing in D|S.

A standardized packaging procedure for D|S files is something that hasn't yet been fully established. Therefore the packaging suggestions given are those that will give a D|S user the greatest ease of unpacking and immediate use.

The first thing a non-D|S user may think when packaging D|S files is that the folder tree should start with content. There are two reason why this may not be the way to go.

The first is ease of unpacking for the customer. Since many D|S files are dependant on the poser files that are already packaged in a runtime structure, having one folder start with runtime and another with content makes for harder unpacking. The package that starts with runtime would have to be unpacked inside of the content folder and the one that starts with content outside of the content folder. It's far easier to unpack both zips to the same directory rather than different ones.

The other reason is how D|S manages external runtimes. D|S doesn't require that its content folder be named content. Therefore some users with external runtimes may not have a folder named content at all. So starting your packaging with a folder named content makes more work for these end users who then have to manually relocate your files to their, non-'content', content directory.

The better option is to start your folder tree from within the content folder. For a character your first folder would be People, for a prop... Props. This will allow users to unpack both zips into the same directory and leaves the flexibility of the D|S content structure intact.

Conclusion:

By now you should have a basic understanding of dealing with material files in D|S. As you get more comfortable making them you'll find that they're really quite simple and your customers will appreciate the extra effort that you took to ensure that your products work great in D|S.

Thank You.