Substance Painter texture assign for Unity

Intro

Ever wondered why every Substance Painter to Unity workflow tutorial shows the Unity scene with all textures already applied? Because this process is incredibly tedious and time consuming. Each material has 4 or 5 textures which you need to find, then drag and drop onto the material.

The TextureAssign editor script solves this problem by automating assigning the textures to the materials in Unity. It works by name-matching textures with materials.

In Substance Painter, the name of the Texture Set is the same as the name of the material in the mesh file. In Unity, the name of the material (automatically assigned on import) is also the same as the name of the material in the mesh file. When exporting textures in Substance Painter, the Texture Set name (and thus material name) is automatically added to the texture. Therefore, the texture names will be the same as the material names in Unity and can be automatically matched.

Substance Painter: texture Export Preset

In order for the name matching to work correctly, a few changes have to be made to the Export Preset in Substance Painter. You can either make your own or use the Unity Metallic preset provided in the package. The preset file (.spexp file) needs to be saved to this directory:

C:\Users*username*\Documents\Substance Painter\shelf\export-presets

To manually make a preset file:
-Press Ctrl-Shift-E to open the texture export dialog.
-Select the Configuration tab.
-Right click the Unity preset and select Duplicate.
-Rename the duplicate.
-At the Output Maps section, remove "$mesh_" from the beginning of the name of all textures.
-At the Output Maps section, click on the button "Gray".
-Drag and drop Ambient Occlusion from Mesh Maps (not input maps) to the Gr icon on the newly created texture slot.
-At the drop down list, select Gray Channel.
-At the name textbox, delete Grayscale.
-Click on the $ sign and select "$textureSet".
-Add "_AO" to the end of the name, so it now is "$textureSet_AO".

The height map can be added using the same method, except it should be taken from the Input Maps. Also, add "_Height" to the end of the name because this is what the Unity editor script expects.

Substance Painter: exporting textures

Once the export preset is installed or created, you can export the textures.

Select the Export tab.
Select the newly created preset as the Config.
Select Export.

Unity: editor script installation

Create a folder called "Editor" in your Unity project and place the file TextureAssign.cs in this folder.

Unity: TextureAssign script usage

First import all the textures into the Unity project.

Go to Window -> TextureAssign -> Assign Textures.
The script takes each texture in the project and tries to find the matching material based on the material name. If a match is found, it applies the texture to the appropriate slot. Normal maps are automatically tagged as a normal map.

Limitations

Currently only jpg and png textures are supported.