# Read Me

Sprite Packer is a tool that allows you to easily generate sprite atlases within the Unity editor.

Sprite atlases are vital for games that need to maintain a low draw call count while having many different types of sprite on screen.

If you have any questions, issues, or feedback, then please e-mail me at: <a href="mailto:carlos.wilkes@gmail.com">carlos.wilkes@gmail.com</a>

Or post on the official forum thread at: http://forum.unitv3d.com/threads/217310-Sprite-Packer

Or check out the YouTube channel here: http://goo.gl/WG16eE

## Step 1 - Creating a Sprite Packer

To create a sprite packer, begin by browsing your Project window until you find a directory you wish to store the sprite packer in.

Once done, right click the directory and select Create / Sprite Packer.

Your selected directory should now contain a prefab called Sprite Packer, feel free to rename it.

# Step 2 - Adding Textures

If you look at the inspector for your newly created sprite packer, then you should see two buttons - one labelled **Drag and Drop**, the other labelled **Rebuild**.

If you drag and drop textures from your project window into the button labelled Drag and Drop, then they will be added to the packer.

If you want to add multiple textures to your packer at the same time, then clicking the **Drag and Drop** button should open a window that allows you to drag and drop multiple textures into any packer in your project.

# Step 3 - Make Your Game!

You should now see that a sprite atlas has been created alongside your sprite packer.

This single atlas contains sprite information for all of your textures, and you can now enjoy minimal draw calls in your game!

To use these sprites, you can expand the sprite atlas and drag the child sprites into your Scene or Hierarchy windows.

You can also find the sprites from a **Sprite Renderer** component by clicking the ⊙ next to the **Sprite** field, this will then open the **Select Sprite** dialog, which will list all atlas sprites under the **Assets** tab.

## **Advanced Settings**

#### **Texture**

If you hover over a texture in the texture packer, then you will see the advanced texture settings.

#### Trim

This setting allows you to choose the trim setting. If enabled, your textures will be trimmed before being packed.

### **Keep Pivot**

This setting forces the pivot point to remain in the same location after the sprite is trimmed.

This is very useful for animated sprites.

## **Border Size**

This setting allows you to choose how far this texture will be placed from any other packed texture.

## **Border Type**

This setting allows you to choose how your texture borders will be written. If your sprites will be tiled, then setting this to **Clamp** or **Repeat** is a good idea.

# **Algorithm**

This setting allows you to change the packing algorithm.

#### **Max Size**

By default, atlases will automatically be made larger until all the textures can be successfully packed.

This setting allows you to set a hard limit of say 1024 x 1024 pixels, which is useful on platforms that have texture size limitations.

## **Force Square**

This setting forces the width and height of of the generated sprite atlas to be the same.

This is useful for platforms or devices that don't support non-square textures, especially if your sprite atlas is compressed.

# **Suffix Atlas Name**

If you enable this setting, then all packed sprites will have the name of the atlas they belong to added to the end of their names.

This is useful if you're packing sprites into your sprite atlas, because otherwise the packed sprites would have the same name as the unpacked counterparts.

#### **Auto Rebuild**

If you enable this setting, then the sprite atlas will be rebuilt every time you change something. e.g. editing the texture colours.

#### **Default Trim**

This allows you to set the Trim value given to new textures or sprites that you add to the Sprite Packer.

#### **Default Keep Pivot**

This allows you to set the Keep Pivot value given to new textures or sprites that you add to the Sprite Packer.

#### **Default Border Size**

This allows you to set the Border Size value given to new textures or sprites that you add to the Sprite Packer.

## **Default Border Type**

This allows you to set the Border Type value given to new textures or sprites that you add to the Sprite Packer.

#### **Notes**

- The textures you give to the sprite packer will automatically have their texture import settings updated when you hit **Rebuild**, so you don't have to worry about them.
- You can create multiple sprite atlases and use sprites from all of them in the same scene, just be aware that mixing atlases might
  increase your draw call count.
- You can remove textures from your sprite packer by pressing the ⊙ button to open the **Select Texture2D** dialog, and setting the texture to **None**. Your texture will then be removed once you hit **Rebuild**.
- If you remove a texture then it will be called **Missing** in the sprite atlas. If these are an issue for you, then you can run 'Remove Missing Sprites' from the Sprite Packer context menu. Just keep in mind that it may require you to set up your scenes again.
- If you want to set custom pivots for the packed sprites, then just select the texture atlas and open the **Sprite Editor**. The pivot values will be preserved between atlas rebuilds.
- If you want to rename the sprites, then just rename the input texture and hit Rebuild. The names will be copied over.
- If your scene or prefabs were made using unpacked sprites and you want to automatically update all your SpriteRenderers to use the
  new sprites. Then open the sprite list inside the atlas texture, select the sprites you want to replace, right click and select 'Replace Sprite
  References'. This will search the current scene and all prefabs and replace any unpacked sprites with the packed sprites you selected.