xPack

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Welcome

xPack allows you to create 'Packed Textures' with a clear and efficient user interface to build your Packed Textures, supporting RGBA **PNG** files and **DDS** files.
Packed Textures are used in many Game engines, GameGuruMAX, Unity and Unreal.

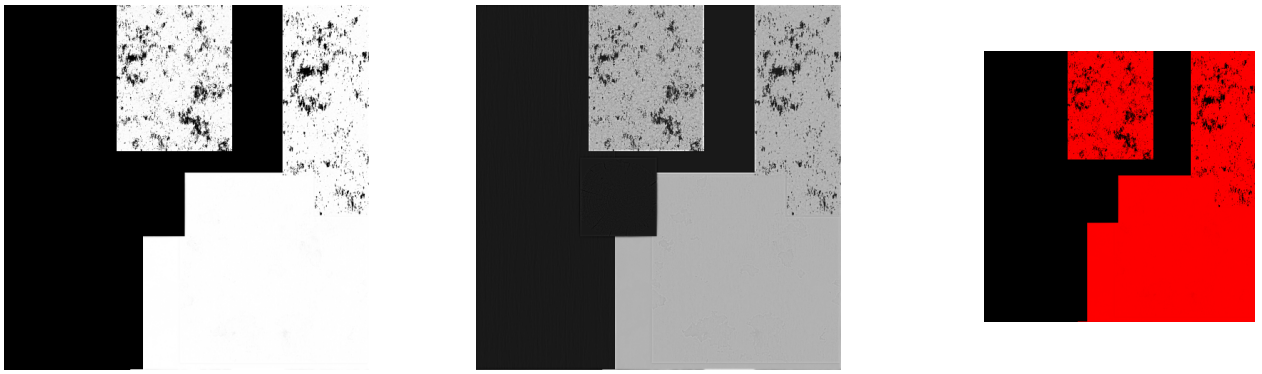
******Please note input textures need to be power of 2 i.e 512x512, 1024x1024, 2048x2048 etc...***

GameGuruMAX Surface Map Example:



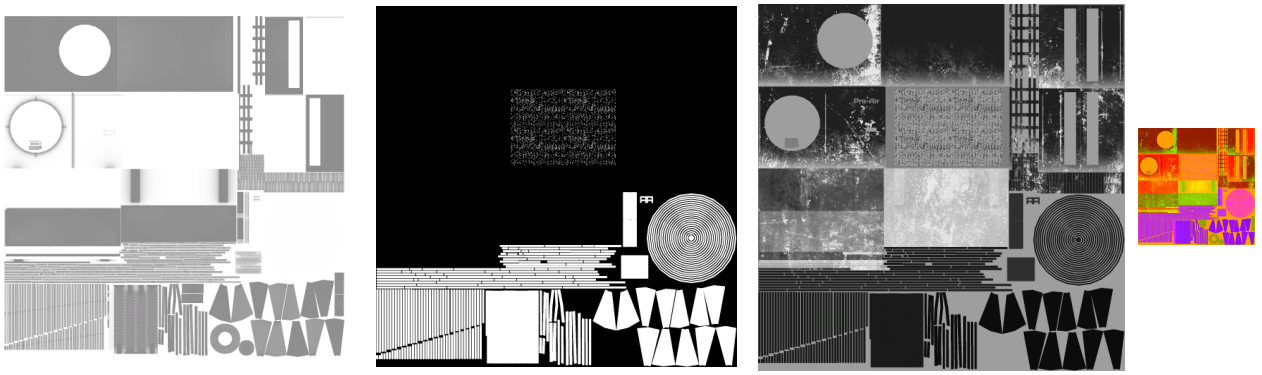
Ambient Occlusion + Gloss - Roughness + Metalness - Metallic = Packed Texture

Unity Metallic Map Example:



Metallic + Smoothness = Packed Texture

Unreal Metallic Map Example:



Ambient Occlusion + Metallic + Roughness = Packed Texture

Introduction

System requirements

xPack's minimum system configuration includes:

- Windows 7
- 1024MB of RAM
- 100MB of free disk space,
- 800 x 600 screen resolution or higher

xPack's recommended system configuration includes:

- Windows 10
- 2048MB of RAM
- 100MB of free disk space,
- 1920 x 1080 screen resolution or higher

License

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xPack End User License Agreement

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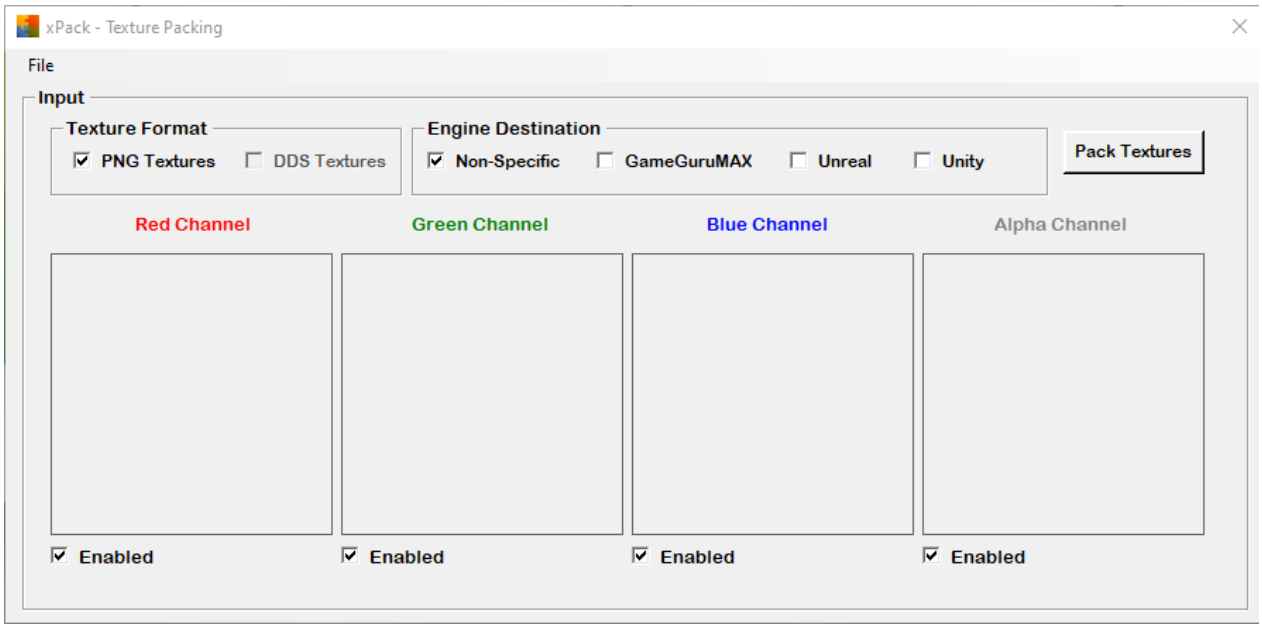
Getting Started

Using xPack

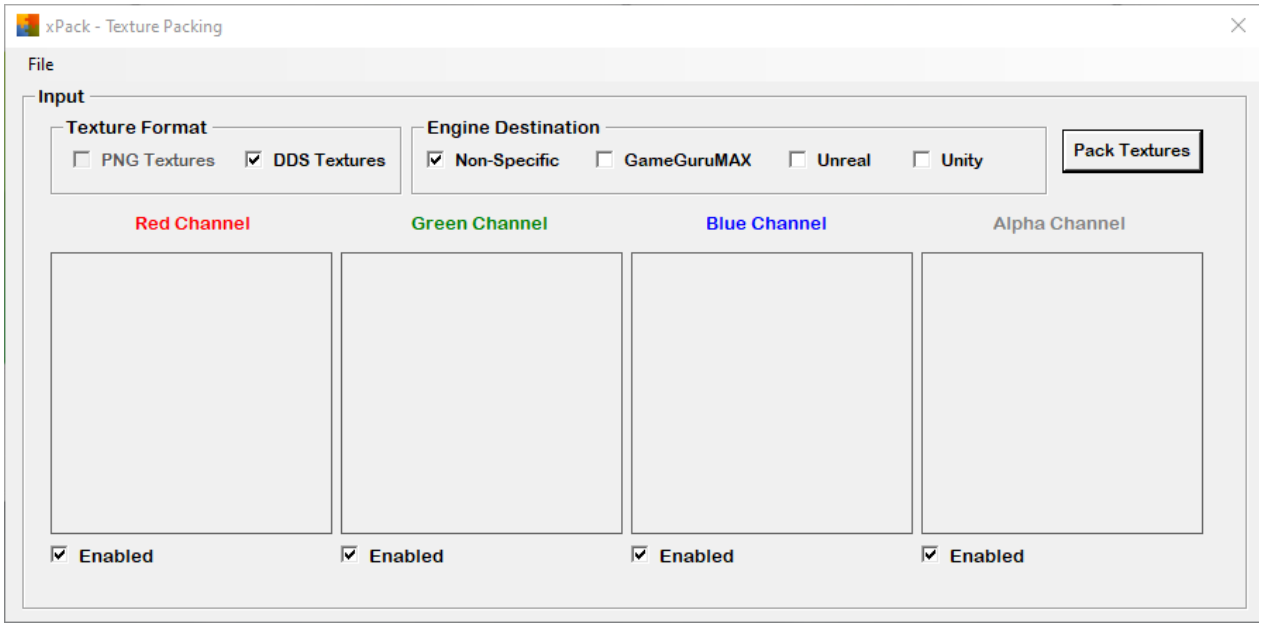
- Locate the xPack shortcut on the desktop or Windows start menu
- Double click the shortcut on the desktop or single click it in the Windows start menu

You will be presented with this screen



The first thing to do is choose your texture format, the default setting is PNG Textures, to use DDS Textures just untick PNG Textures
then choose one of the Engine Destinations.

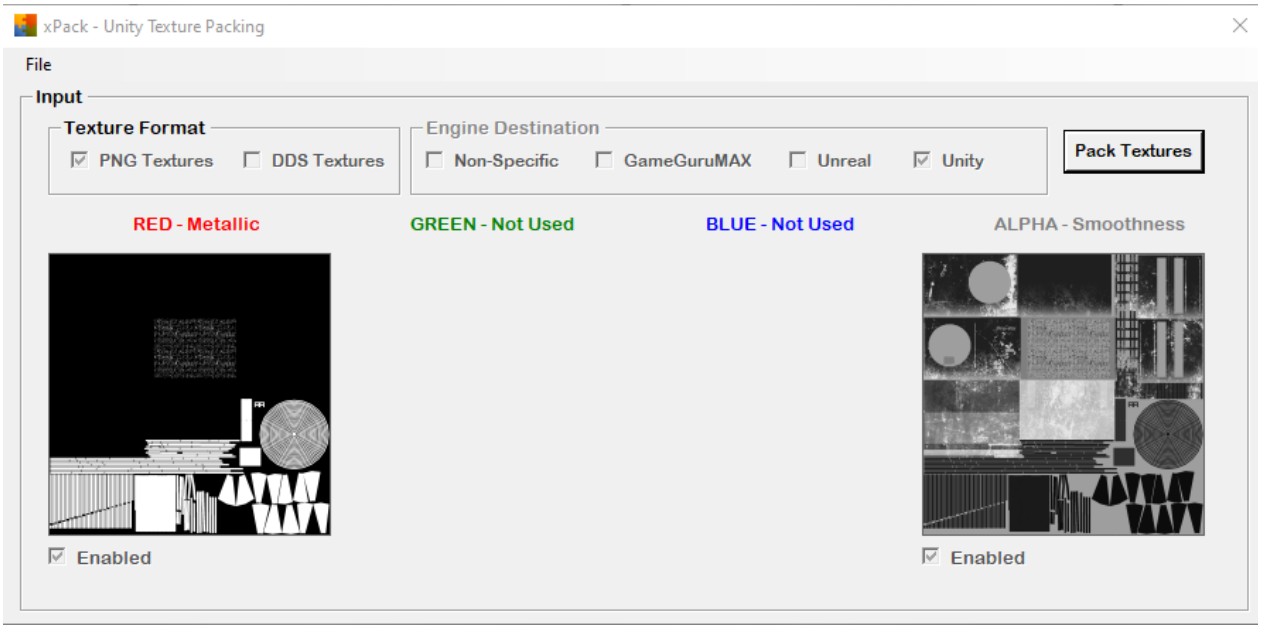
*******Please note input textures need to be power of 2 i.e 512x512, 1024x1024, 2048x2048 etc...***



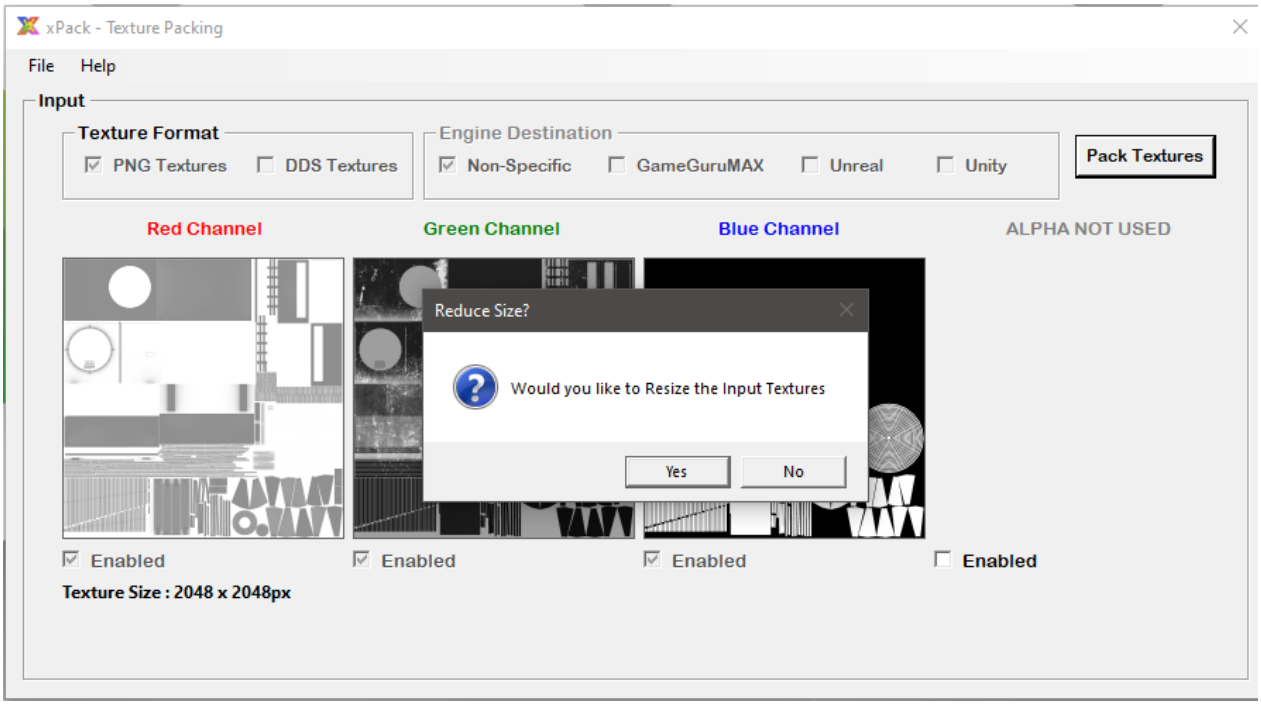
once you have selected your texture format you need to load the input maps into the correct channels, this will depend on
what engine you are creating the packed texture to work with, i.e this is a Unity Smoothness-Metallic Map so the metallic texture would be
loaded into the RED channel and the smoothness texture would be placed into the ALPHA channel, GREEN and BLUE channels are not used
so it is ***important to untick/unselect*** *the channels not being used otherwise the generated packed texture will not be right.*

To load the inputs simply right click in each channel

******Please note input textures need to be power of 2 i.e 512x512, 1024x1024, 2048x2048 etc...***

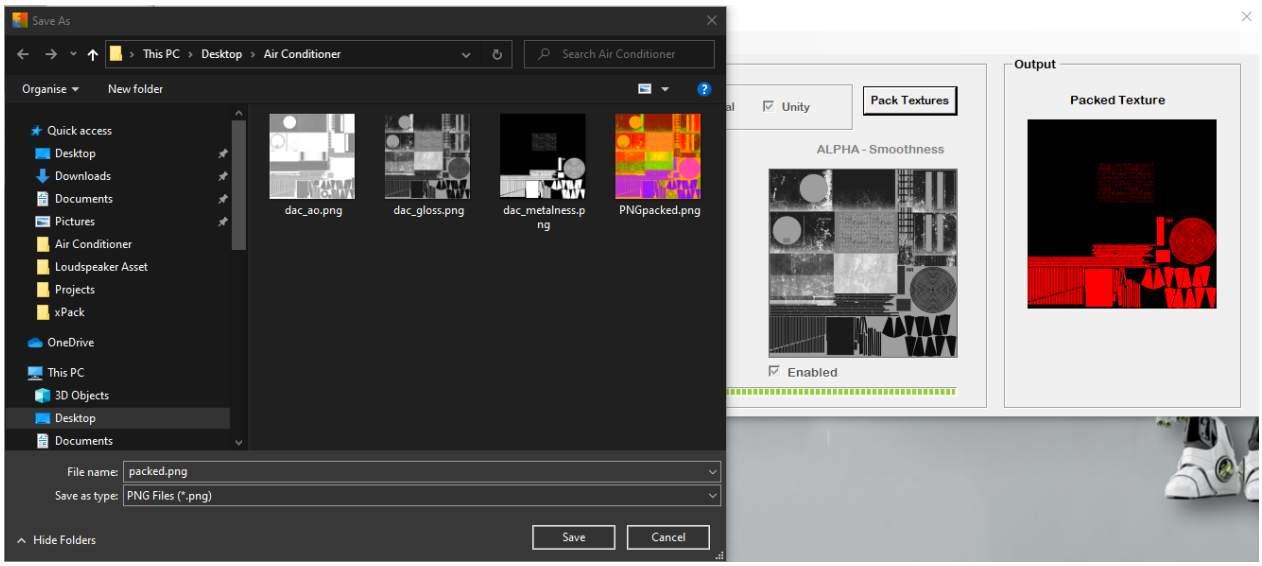


once you have loaded your inputs click on Pack Textures, you will be given the option to resize the output image.

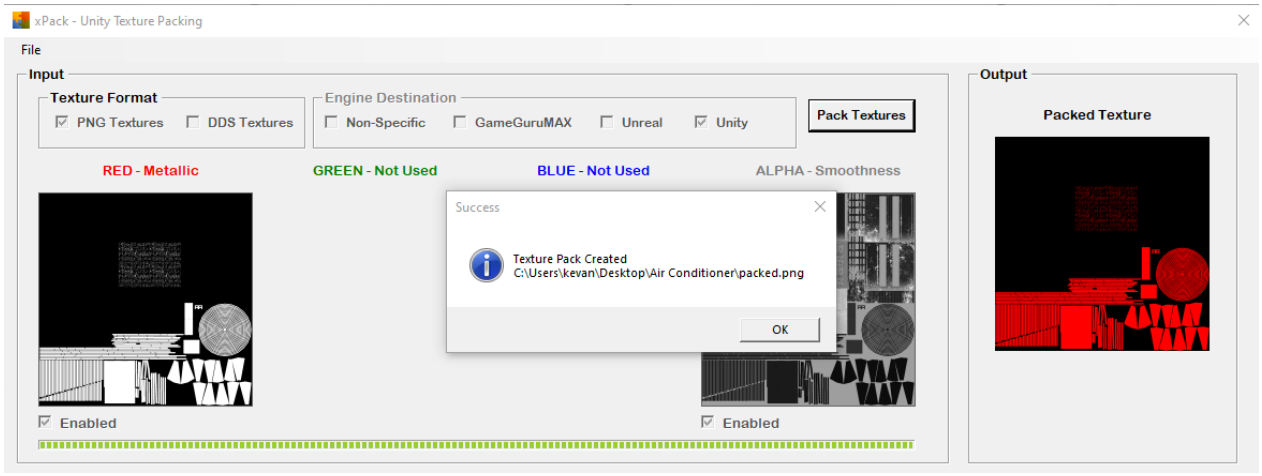


If you select 'Yes' from the prompt further options will be available to choose a size for your image, if you choose 'No' the inputs will be packed at the Texture Size stated.

once the packed texture is generated you will be prompted to save your map



once saved click the OK button on the pop-up message, you will then be able to create another packed texture.

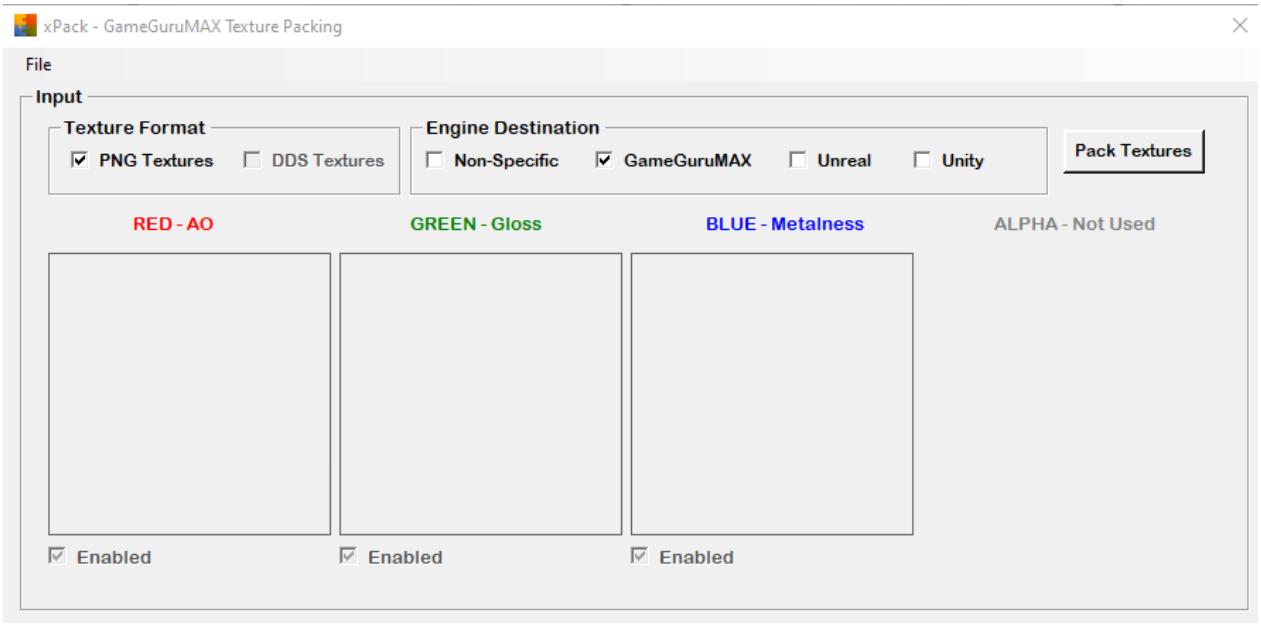


Types of Packing

whilst there is no limit on how you create your packed textures certain engines require your input textures to conform to specific channels, and your inputs
need to be at the Power of 2 i.e 512x512, 1024x1024, 2048x2048, 4096x4096 etc....

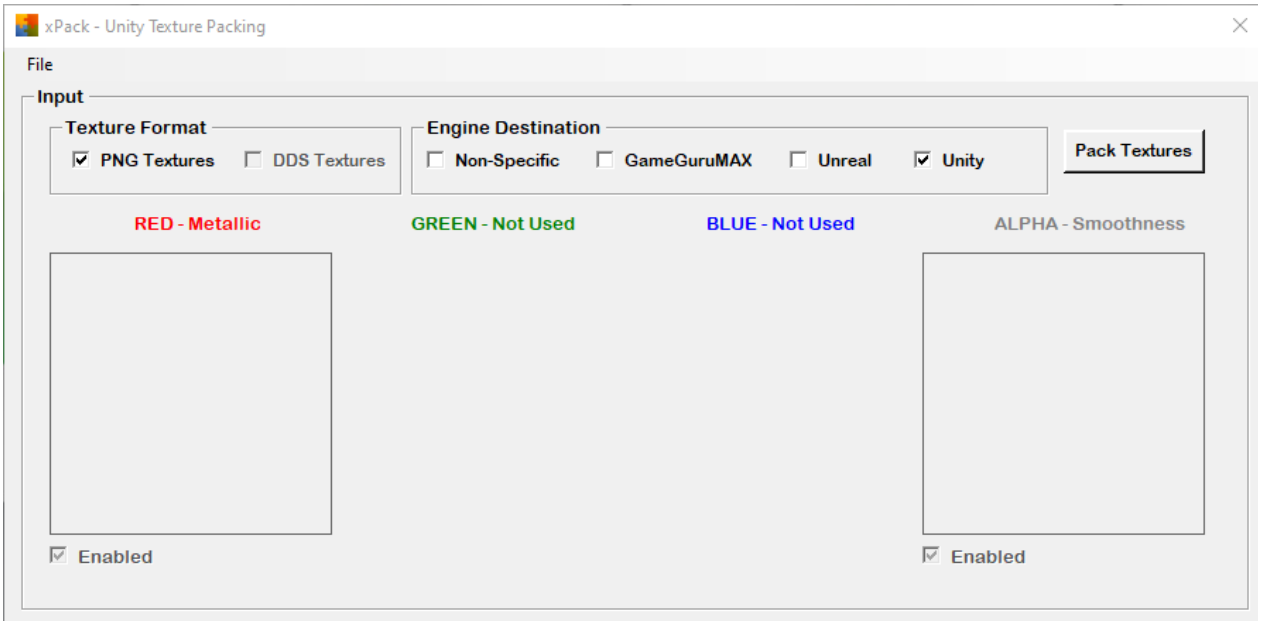
GameGuruMAX uses a Surface Map:

RED Channel = Ambient Occlusion
GREEN Channel = Gloss
BLUE Channel = Metalness
ALPHA Channel = NOT USED



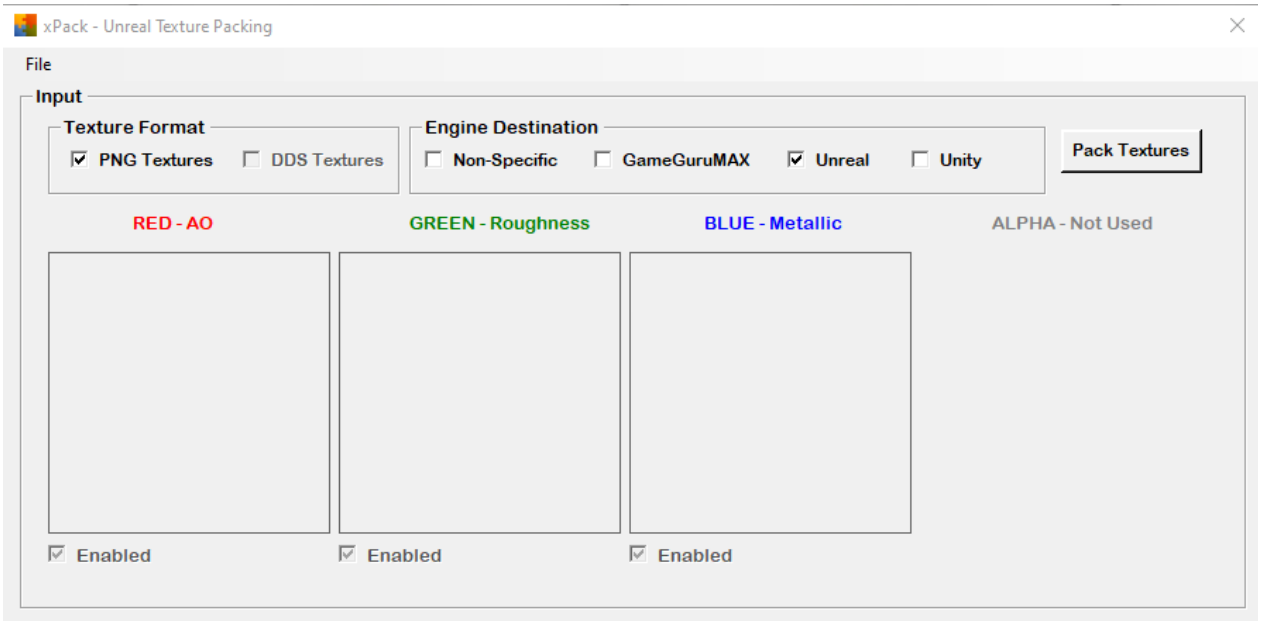
Unity uses a Metallic-Smoothness Map:

RED Channel = Metallic
GREEN Channel = NOT USED
BLUE Channel = NOT USED
ALPHA Channel = Smoothness



Unreal uses a Metallic-Roughness Map:

RED Channel = Ambient Occlusion
GREEN Channel = Roughness
BLUE Channel = Metalness
ALPHA Channel = NOT USED


xPack - Unreal Texture Packing
File
Input
Texture Format
PNG Textures
DDS Textures
Engine Destination
Non-Specific
GameGuruMAX
Unreal
Unity
Pack Textures
RED - AO
GREEN - Roughness
BLUE - Metallic
ALPHA - Not Used
Enabled
Enabled
Enabled