

AGF Asset Packager for AGFPROV3  
NOW WORKS WITH UNITY FREE AND PRO Since the release of Unity 5  
(c) Axis Game Factory INC  
Last Updated: 08/09/2015,  
Compiled with: Unity 5.2.0f3.

Latest additions to the tool

Convex Collider Toggle:

This allows you to choose convex or mesh colliders for you assets. Convex Collider true = Convex Collider. Convex Collider False = Mesh Collider.

Add Rigidbodies Toggle:

If you want Rigid Bodies on your assets, check the button. If you don't, uncheck the button. Don't make rigid bodies unless you need them. No Rigid bodies for faster performance.

The Asset packaging tools may be accessed at the header in unity, Axis Game Factory>Build Asset Pack...

Quick start:

1) Create EMPTY UNITY PROJECT.

2) Import the AGF\_AssetPackager.unitypackage

Asset packager tool is located here: \*:\SteamLibrary\SteamApps\common\Axis Game Factory\

3) After importing you may need to clear the Unity console of any random errors as long as these errors clear you can proceed.

4) Load the Asset Packager scene,

NOTE: You MUST have your project window set to one column layout, There is a small gadget at the top right of the project window that allows you to change this setting.

5) Select a folder in the project view that you wish to package and select Build Asset Pack > (type of package). This option may be found at the header dropdown under Axis Game Factory.

## Overview

Welcome to the Axis Game Factory Asset Packager!

The goal of this software is to bridge the gap between your assets and the Axis Game Factory main editor. Assets packaged together with this tool can be loaded at runtime in AGF, and then placed in the level like any built-in asset.

### How to use

To begin, import the AGF\_AssetPackager unity package into a new or existing project. We recommend a new project to avoid potential conflicts.

Once imported, you should see two folders:

AGF\_AssetPackager: Contains all the core assets needed to run the packager.

AGF\_SampleAssets: Samples for reference. These can be omitted from import. Two subfolders are included here: Final and Source. The sample assets here are intended to be packaged from their Final directory; Source contains base files unsuitable for packaging as-is.

Inside the AGF\_AssetPackager folder, open up the Asset Packager scene. This is a simple scene with the "AssetPackagerSettings" prefab instantiated. Note that if you are integrating the packager into your own scene, you will need to be sure that the prefab is placed in the hierarchy.

Please see "Axis Game Factory" at the header of the menu bar at the top of the screen. "Build Asset Pack" menu can be accessed by selecting it from the header.

**IMPORTANT!** To build an asset pack you must first set your project window to one column layout, There is a small gadget at the top right of the project window that allows you to change this setting.

**Asset packs:** There are four types of asset packs you can make.

**Warehouse:** Anything that you would want to place in AGF that doesn't fall under the other asset types. Please see \* \Assets\AGF\_SampleAssets\Final - Package these\WarehouseModels, for examples.

**Terrain:** Terrain textures that would be used to paint the height mapped terrain or used on voxels as textures. Please see \* \Assets\AGF\_SampleAssets\Final - Package these\TerrainTextures, for examples.

**Vegetation:** Images that would be painted using the vegetation application tools inside AGF. Please see \* \Assets\AGF\_SampleAssets\Final - Package these\VegetationTextures, for examples.

**Skybox:** Skyboxes that you can change in AGF. Please see \* \Assets\AGF\_SampleAssets\Final - Package these\SkyboxCubemapMaterials, for examples.

To make an asset pack using your own assets, follow these steps.

[NOTE: There are some important properties that each type of asset needs to follow. See below for more information]

Please use the Default assets provided as a reference for scale for your ORIGINAL ART!!

a) Select a folder (click on the folder in the Project tab, it should highlight) that contains the assets you wish to package. Make sure that the project tab is in "One Column Layout". (Right click on the project tab to see the available layouts)

b) Select a folder and navigate to "Axis Game Factory>Build Asset Pack> (asset pack type) " in the drop down.

c) A save dialog box should now open. Save the pack in the "Asset Packs" directory of the Axis Game Factory install directory. Name the package according to these guidelines:

Warehouse: "\*\_w.unity3d"

Terrain: "\*\_t.unity3d"

Vegetation: "\*\_v.unity3d"

Skybox: "\*\_s.unity3d"

d) The tool will then scan through the folder you selected recursively looking for all asset files of the specified type. It will attempt to create intermediate files based on these assets and then will compress the intermediate files into the target package.

e) After the package compresses, you can see all of the generated files within the "AGF\_Intermediate" folder. You can check these intermediate files over for errors, but otherwise the files are safe to delete.

f) The package has now been built! Make sure to move it into the "Asset Packs" directory of the AGF install, and start up the game. To apply your asset pack, load a scene in AGF, right click to access the radial menu, and hold space to see the available windows. The "Asset Manager" window will allow you to load and unload packs contained in the "Asset Packs" directory.

### **Information regarding the importing of assets into Unity:**

#### **Warehouse assets:**

a) On import, ensure that "Generate Colliders" is ON. (Unless you have already prepared collision for your object by attaching a sphere collider component to a prefab, or similar. Just remember that all warehouse objects MUST have collision to work properly with AGF. Refer to the "Pine Trees" folder in AGF\_SampleAssets/Final/WarehouseModels for an example of attaching your own collision.)

b) Must be a .fbx, .ma, .mb .obj or .prefab. If your file format is not available in this list and is loadable into unity, you can add it to the scripts.

c) Should have as few hierarchical nodes as possible. The more nodes in a tree, the slower the object will perform.

d) The category that the assets are sorted into when imported into the AGF Editor depend on the name of their parent folder at the time the asset pack was created inside of Unity.

#### **Skybox cubemap materials:**

a) Must be set to the AGF/Skybox Cubed Rotate (included), and must have their associated cube map(s) present in the project. (The associated cube maps are located in the Source folder in this sample)

b) Must have their cube maps set to "readable".

#### **Terrain Textures:**

**ATTENTION!!!! This applies ONLY to terrain textures. Models and their shaders can use any nomenclature and file format.**

a) Textures must be set to match the naming convention for each pair of textures.

"\*\_c" or "\*\_Diffuse" = colormap

"\*\_n" or "\*\_Normal" = normalmap

Where \* must be the same string for both the colormap and normalmap.

ex: Beach\_c.png, Beach\_n.png; Grass\_c.bmp, Grass\_n.bmp.

b) The normalmaps must be marked as a "Normal map" texture in unity's import settings.

c) Must have their textures set to "Read/Write Enabled" in the Texture importer.

#### **Vegetation Textures:**

a) Must follow the same naming convention as terrain textures. Normal maps are not supported.

b) In addition, must have their textures set to "Read/Write Enabled" in the Texture importer.

#### **Asset specifications and best practices:**

IMPORTANT! Your assets will likely require some iteration to ensure that they work perfectly with AGF. Here is a checklist to keep in mind:

- 1) Before you make any models, Use the default assets provided for scale. ALL AGF default objects are set to be the SAME scale as Unity's Scale.
- 2) ALL 3D packages use different scales of measurement. One meter in one package may be one centimeter in another make sure you understand what your modeler's scale is before you export asset for use in AGF.
- 3) All models must have all history and transforms deleted and or removed before exporting from the Modeler they were made in. The only exceptions are animated meshes using weight maps.
- 4) The root node or model MUST have its pivot point at the WORLD COORDINATES OF 0x-0y,0z so they behave properly in AGF.
- 5) Models made in Autodesk's 3ds MAX must be put into a GAME OBJECT and made into a PREFAB with the transforms reset all to 0,

Scaling the root of the prefab or game object, will create problems with manipulation and transforms inside of AGF.

6) Unity has a nasty thing it does when you drop prefabs into the hierarchy. They often are not at 0x-0y-0z. Make sure to reset the transform position if it is different then what is needed.

6) Unity will rotate models made in 3ds MAX on import -90 degrees on the x axis, MAX uses +Z as up. Make note of this as you are preparing your assets.

If your models do not behave in the same manner as the assets provided in the SAMPLE Warehouse assets of AGF they are not set up properly.

7) Feel free to reverse engineer the assets provided in AGF. Use the sample models and prefabs as a guide as to what the setups are for the different types of asset packs that can be made with AGF.

8) PLEASE NOTE: The import scale settings. For whatever reason, Unity decided to set the default import scale to .01. We made our scale match Unity's internal scaling.

9) 1.0 should be used as the import scale of the assets, that is, if you follow the assets we provide you as the proper scale.

10) AGF uses +Z as forward.

The AGF Asset Packager provided is the same asset packager we use every day to make asset packs for AGF. All the scripts and source are available to the users to edit as they need for their particular project needs.

Thank you for using AGFPRO.

Any Questions? ask the great people at the Steam/AGF forums:  
<http://steamcommunity.com//app/253370>

Regards,

Matt McDonald

If you need to get me on skype I'm at axisgamefactory