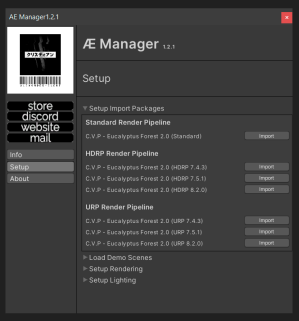
IMPORTANT UPDATE! // NEW DISCORD CHANNEL: https://discord.gg/NJZhZVY

SHARED ASSETS AND TOOLS

Æ CORE



Introduction

Thank you very much for buying **Alexander Elert** packages. Introducing AE Core, this is a shared folder that will be integrated with upcoming C.V.P assets, that contains tools like Æ - G.O Simplifiers, Æ Manager, Æ Script Version Control, 3D models, textures, SFV, VFX and more.

// You can check the latest: online documentation version

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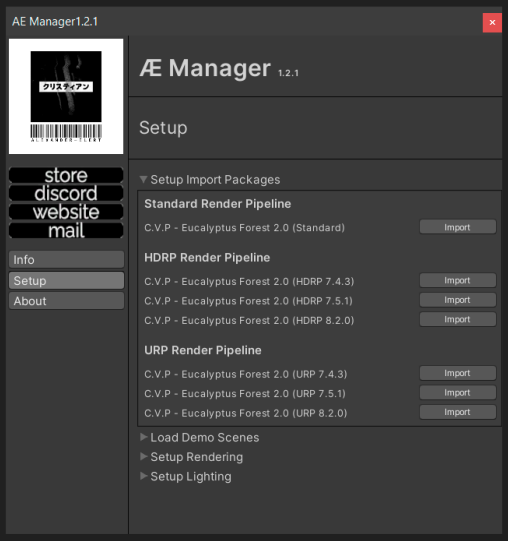
1: Æ Manager



Æ Manager is a tool that provides an easy way to set up your project basics and import the correct assets for work with **Æ Core** and all the **C.V.Ps (Custom Vegetation Packs)** from **Alexander Elert**.

Using Æ Manager

Once you import the package you need to go into **Windows -> Alexander Elert -> AE Manager**, A new window will be displayed with the manager options.

Info

This gives you some information related to the **current version** and status.

Setup

There you have **4 steps** to set up your project and packages.

Setup Import Packages: There you need to choose that fits with your actual project **Render Pipeline** and **API level** this will automatically updates the next resources:

1- **Shaders Version**

2 - **Material Version**

3- **Post Processing Profiles Version**

3 - **Demo Scenes Version**

Load Demo Scenes: This is a fast way to load the demo scenes contained in **Alexander Elert** Packages.

Note: The links only will work if you previously import the **Demo Scenes Version** desired.

Setup Rendering: under this section you can easily switch some **Global Render Settings** like Rendering Path, Color Space, API Compatibility Level.

Note: We always recommend using **Deferred** and **Linear**.

Setup Lighting: under this section you can easily configure the **Global Light Settings** like Linear Intensity, Color Temperature, Bake Lights.

Note: After designing shaders and playing a lot of hours with materials and lighting setup for various scenarios (different light conditions) We spot that unity lights have a bug that makes all the lights use **gamma intensity** no matter if you are or not on linear color space. So we develop a script to fix this issue in **Standard Render Pipeline** and **URP** (Unity HDRP doesn't present this issue) that's called **Use Unity Linear Intensity** also we expose the **Color Temperature** picker functionality for all the lights that are disable by default. We strongly recommend you enable these two features by the way the **DEC Shaders** will present **wrong lighting** results.

About

This shows information related to the developers of these tools.

2: Æ - G.O Simplifiers

Æ - G.O Simplifiers is a tool for **edit/remove game component properties** of **multiple game objects** in your scene. For use it go to **GameObject -> 3D object -> Alexander Elert -> Æ - G.O Simplifiers**. This is a list of the options available with this tool:

GameObject Selector

You have two modes available in there to **select** what objects you want to affect..

Objects Only: will only affect the selected objects in the list.

Include Children: will affect all the children of the selected objects in the list.

Shadow Simplifier

There are two options available for modifying the **mesh renderer** components.

Shadow Casting Mode: Choose how it reacts to shadow-casting lights.

Receive Shadows: Choose if mesh is receiving shadows
(Obviously it only works in **Forward** Rendering Path).

Collision Simplifier

Remove all **collider** components on the gameobject.

Physics Simplifier

There are two options available for modifying the **physics** components.

Remove Rigidbodies: Remove all **rigidbodies** components on the gameobject.

Remove Cloth: Remove all **cloth** components on the gameobject.

Note: **some of these actions can't be undone later**, if you make a mistake you can **press CTRL + Z** but this is kinda limited as usual so **be careful**.

4: Third-Party Assets

This pack includes some **presets** that can be used with other assets available in the Unity Assets Store. to use them it is **necessary to have previously installed versions**

compatible with these presets. (We are working on new presets for other assets for purposes that will be included in future releases).

Post Processing Stack v2 Profiles

Post-processing profiles contain the touch-up seen in the sample scenes, it is necessary to have **Post Processing Stack v2** installed from **Windows -> Package Manager** to maximize its compatibility. Also included here are some extras such as **Cookies** for flashlight spotlights and textures for the **Lens-Dirt** effect in post processing.

Google Fonts

Some fonts files are included in the pack, they are **open source** free fonts from **fonts.google.com** they can be used with **Text Mesh Pro** or unity built in text.

5: Physics Prefabs Tips

Probably you are notified that some prefabs have **Rigidbody** and **Mesh Collider** components attached to it. The idea behind this is to position the objects on the surface in a realistic and easy way, emulating at some point the technique seen in the **Book of the Dead - Uber Tree Spawner.**

Note: Once the desired result is obtained, both components of these objects in the scene **must be eliminated** to reduce the consumption of **GPU** and **CPU**. For this task you can use the ***Æ - G.O Simplifiers*** tool which will make your life easier.

6: Tips and Tricks

Some helpful ideas to improve the graphics, performance and level design.

Object Placement Tool

To take advantage of **Physics Prefabs** it is highly recommended to use this tool, which is available at the following **link** of the asset store.

By setting a **Y (up) Offset to 1** you can spawner small objects to cover the surface realistically.

Several **Ground Details** prefabs use a single **material** so they can take advantage of the **Combine Mesh** tool for **meshes**, grouping and combining them to dramatically reduce the number of **drawcalls**.

Reduce Shadow Distance

It is a good practice to limit the distance of the shadows as much as possible in scenarios with high density of objects such as forests, since you will not be able to see too much in the distance anyway. You can access this from **Project Settings -> Quality -> Shadow Distance**.

Occlusion Culling

Use walls, terrain elevations or other obstacles on your stage to **reduce the amount of objects rendered per frame**, making efficient **Occlusion Culling** bake.

Note: for **reducing the flickering popping** by Culling data is not recommended to set all the vegetation and small details to **Occluder Static**, just **Occludee Static** in game objects properties.

Use far Fog

It is useful for simulating **shadows** and **ambient occlusion** or **volumetric light** from distant areas of the forest. Set subtle values and colors that integrate well with your scene. **This technique helps compensate for the loss of quality** by adjusting the Shadow Distance mentioned above. Be sure to check your camera's Post Processing Layer option: **Deferred Fog -> Exclude Skybox** to prevent the fog from covering your sky.

8: Youtube Video Tutorials (Coming Soon)

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9: Change Log

- v1.2.1 Æ Manager (First Release).
- v1.2.1 Æ - G.O Simplifiers (First Release).
- v2.0.1 Æ Manager (Update manager settings and content).
- v2.2.0 DEC Shaders update.

10: Known Issues

- **Switch between options doesn't work (Partially Solved):** if you experiment this please select the options twice and it will be updated correctly.

11: Contact

Thank you for reading. If you find some errors, suggestions or need a customized vegetation pack or new tools you can contact me at: **alexanderelert@outlook.com**

Join my Discord community for fastest support and check the WIP of upcoming content!

Check my other assets for sale on: https://assetstore.unity.com/publishers/46732