Ambient Skies, the integrated skies, post fx, and lighting system.

Version 1.0.0

AMBIENT SKIES

By Procedural Worlds

Contents

About Procedural Worlds

Powerful, simple, beautiful. Friendly tools, gorgeous games!

Procedural Worlds empowers artists and developers to bring their vision to life by making it easy to create beautiful worlds. Leverage the latest procedural generation techniques to take the pain out of creating stunning environments and focus on creating amazing games.

The only end to end environmental generation and delivery suite:

Gaia - A world generation system for creating, texturing, planting and populating scenes from low poly mobile, VR and through to high end desktop.

https://assetstore.unity.com/packages/tools/terrain/gaia-42618

CTS - Nominated by Unity of as one of the best assets in 2017, a PBR terrain shading system that significantly improves terrain look, performance and usability. The 2019 version comes with support for the Lightweight and High Definition Rendering Pipelines.

https://assetstore.unity.com/packages/tools/terrain/cts-2019-complete-terrain-shader-140806

SECTR - A suite of performance-enhancing tools that enable open world terrain streaming, massive mobile games and includes the latest techniques in audio occlusion and propagation. SECTR CORE is FREE, and can be used to cut your terrains up for streaming!

https://assetstore.unity.com/packages/tools/terrain/sectr-complete-2019-144433

GeNa 2 - A sophisticated localised level design tool that augments Gaia's broad-brush strokes, by working intuitively to give fine grained control.

https://assetstore.unity.com/packages/tools/terrain/gena-2-127636

Path Painter - A powerful path and river channel creation tool.

https://assetstore.unity.com/packages/tools/terrain/path-painter-127506

Pegasus - A cut scene and fly through creator that makes it easy to show off gorgeous environments and also drive characters through scenes with localised avoidance and mecanim animation support.

https://assetstore.unity.com/packages/tools/animation/pegasus-65397

Ambient Sounds - A tool that creates interactive soundscapes and also comes with professionally composed sound effects and music library.

https://assetstore.unity.com/packages/tools/audio/ambient-sounds-interactive-soundscapes-142132

Learn more at our website here: http://www.procedural-worlds.com/

Tutorials, Chat, Ticketed Support

Ambient Skies is self-documenting – to understand a control you can click on the small help button and help messages will appear. Click it again to hide them.
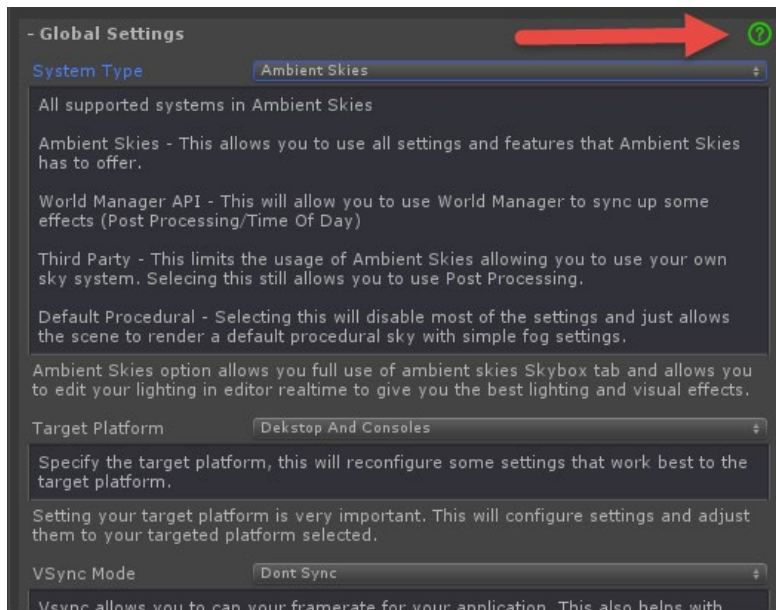
For a Tutorial you can follow along with the Workflow / Quick start chapter of this manual.

Still Stuck? You can contact us on our discord server: https://discord.gg/rtKn8rw

Or lodge a Support Request: https://proceduralworlds.freshdesk.com/support/home

Welcome!

Thank you for purchasing Ambient Skies!

Ambient Skies takes the pain out of setting up your skies, post fx and lighting. It combines the settings of multiple Unity sub systems into one logical and coherent interfaces, as well as providing information on what these settings do.

Please take a moment to read through this document as it will give you an introduction what Ambient Skies is, and how to use it.

Installation

Installing Ambient Skies will create this folder structure with the following contents:

Procedural Worlds – root folder for all Procedural Worlds Assets

- **Ambient Skies** – root folder for the Ambient Skies Asset
    - o **Documentation** – Documentation directory.
    - o **Localization** – Localized UI texts.
    - o **Materials** – Skybox materials.
    - o **Pipeline Dependencies** – Dependency files for different pipelines.
    - o **Profiles And Skies** – Post processing profiles and skybox profiles.
    - o **Resources** – Editor resource files.
    - o **Localization** – Localized UI texts
    - o **Scripts** – The core logic of Ambient Skies
    - o **Systems** – Ambient Skies systems and their resources.
- **Frameworks** – shared functionality between Procedural Worlds assets

# Setup – Getting started with Ambient Skies!

1. To open Ambient Skies, select Window/Procedural Worlds/Ambient Skies/Ambient Skies…

2. The first thing to do when using Ambient Skies is to select your Render Pipeline.
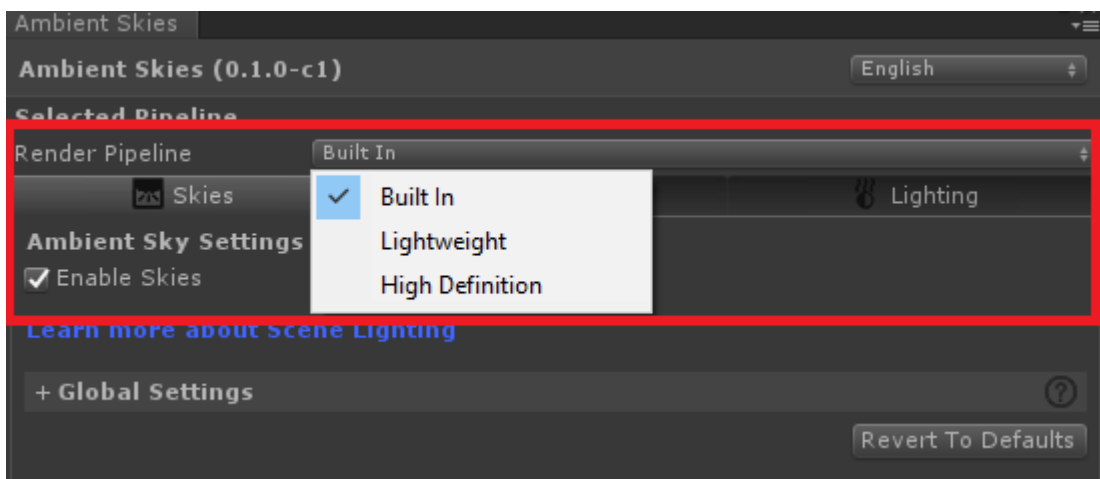
The current render pipeline will be detected and selected, and you can then select a new pipeline.

While it is possible to switch render pipelines within an established project it is not recommended. This should be the first thing you do when you start a project and you should stick with it.

3. When you select a new render pipeline a confirmation popup will be shown.
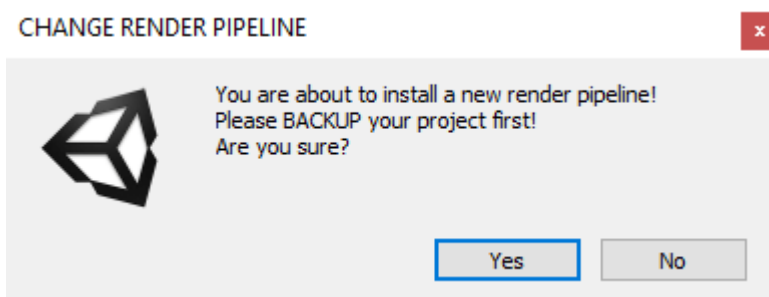

Click Yes to proceed or No to cancel. If you have not backed up your project yet then we recommend that you select No, and take a moment to back it up first. You can continue this process after you have backed up your project.

4. The next dialog will ask if you wish to upgrade your materials to the selected pipeline.
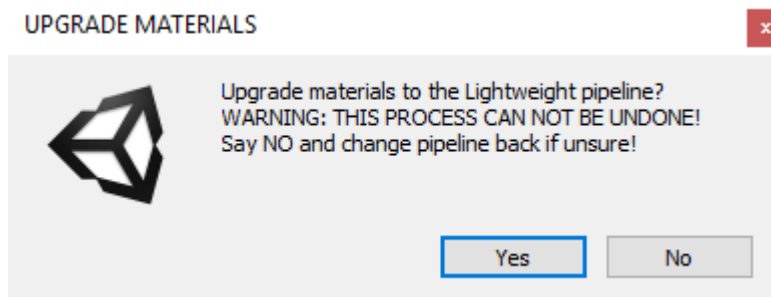
If you press Yes, any Unity Standard materials will be upgraded to the new pipeline you selected. This process cannot be undone, and it is also not able to upgrade custom shaders, so you will need to do that yourself.

5. Ambient Skies window will then close and the Pipeline Installer window will show you the progress as it switches the render pipeline.
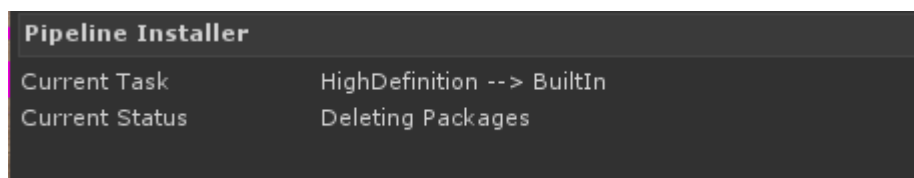

This process can take between 5-20 minutes to complete and you may see various compilation errors and pink shader errors being thrown.

This is a normal by product if the installation and de-installation process and you should wait until it has finished. At the end of the process the window will close, and Ambient Skies will reopen. You can hit the Clear button on the console window to remove all of the warnings and errors that were thrown.

You are now ready to use Ambient Skies!

Using Ambient Skies!
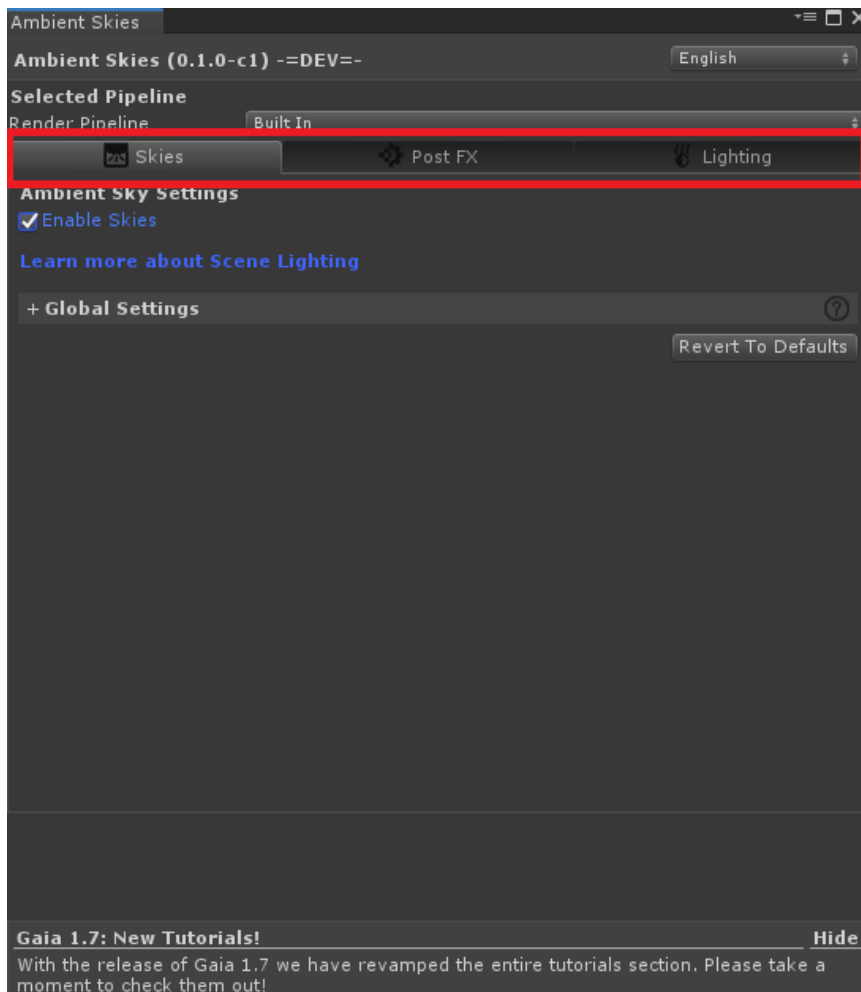
Ambient Skies is broken into Three Tabs:

Skies Tab – controls your lighting and skybox settings.

Post FX Tab – controls your global post processing settings.

Lighting Tab – controls your lightmap baking settings.

Each tab will show or hide panels and variables according to the decisions you have made, so that it will only show information that is relevant to your current setup and render pipeline.

If you are ever confused about what a setting does, be sure to hit the ? button on the panel so display contextually relevant help. This is a convenient way learn more about how Unity works as well, as we have sourced a lot of the information shown directly from the Unity documentation.

Each tab also has a *Learn More About* link which will take you to useful documentation or tips about working with Lighting, Post Fx and Lightmaps.

Skies Tab

To use the Skies Tab, check **Enable Skies**. The number of panels you will see will depend on how Ambient Skies is currently configured.
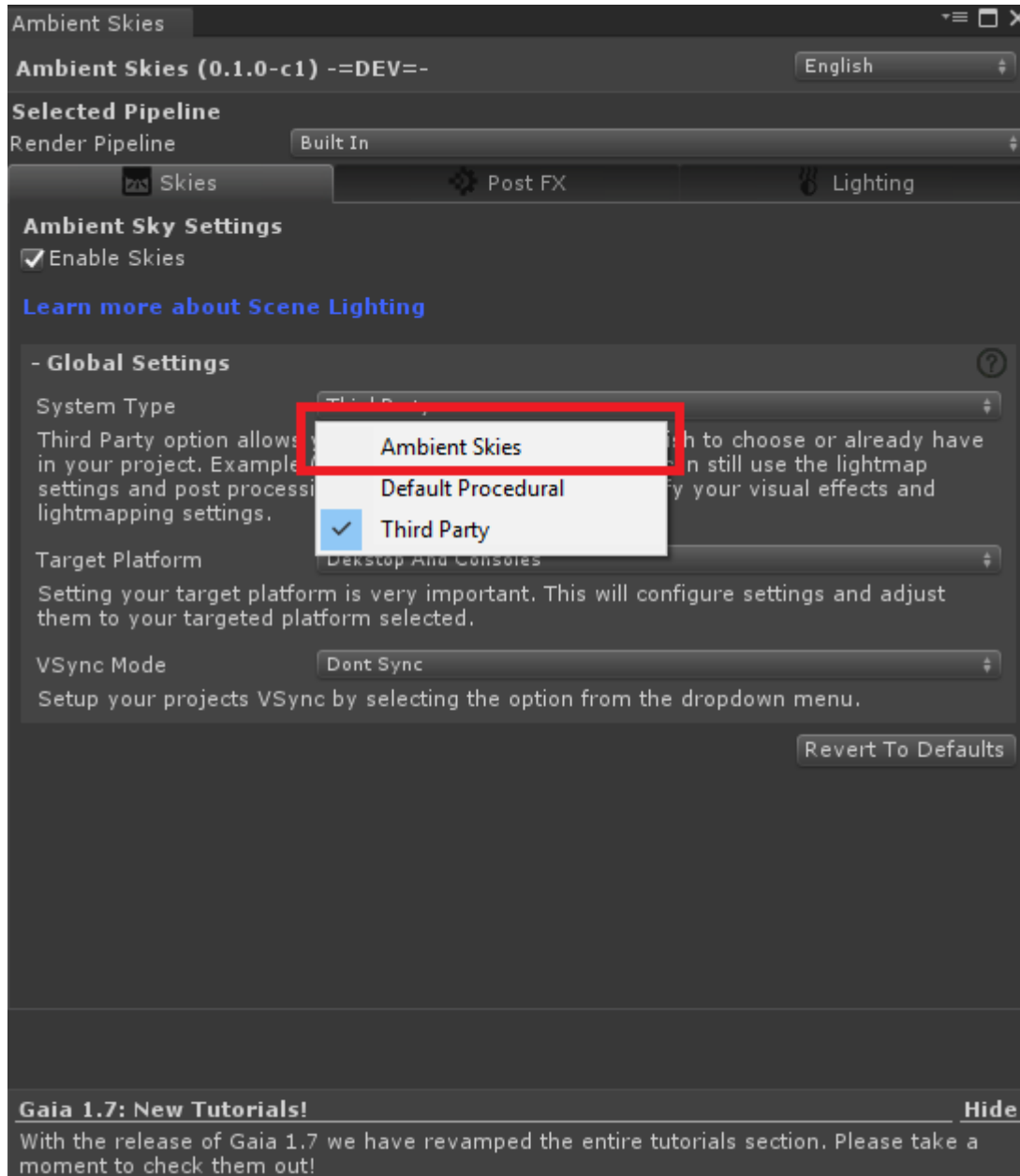
Global Settings Panel
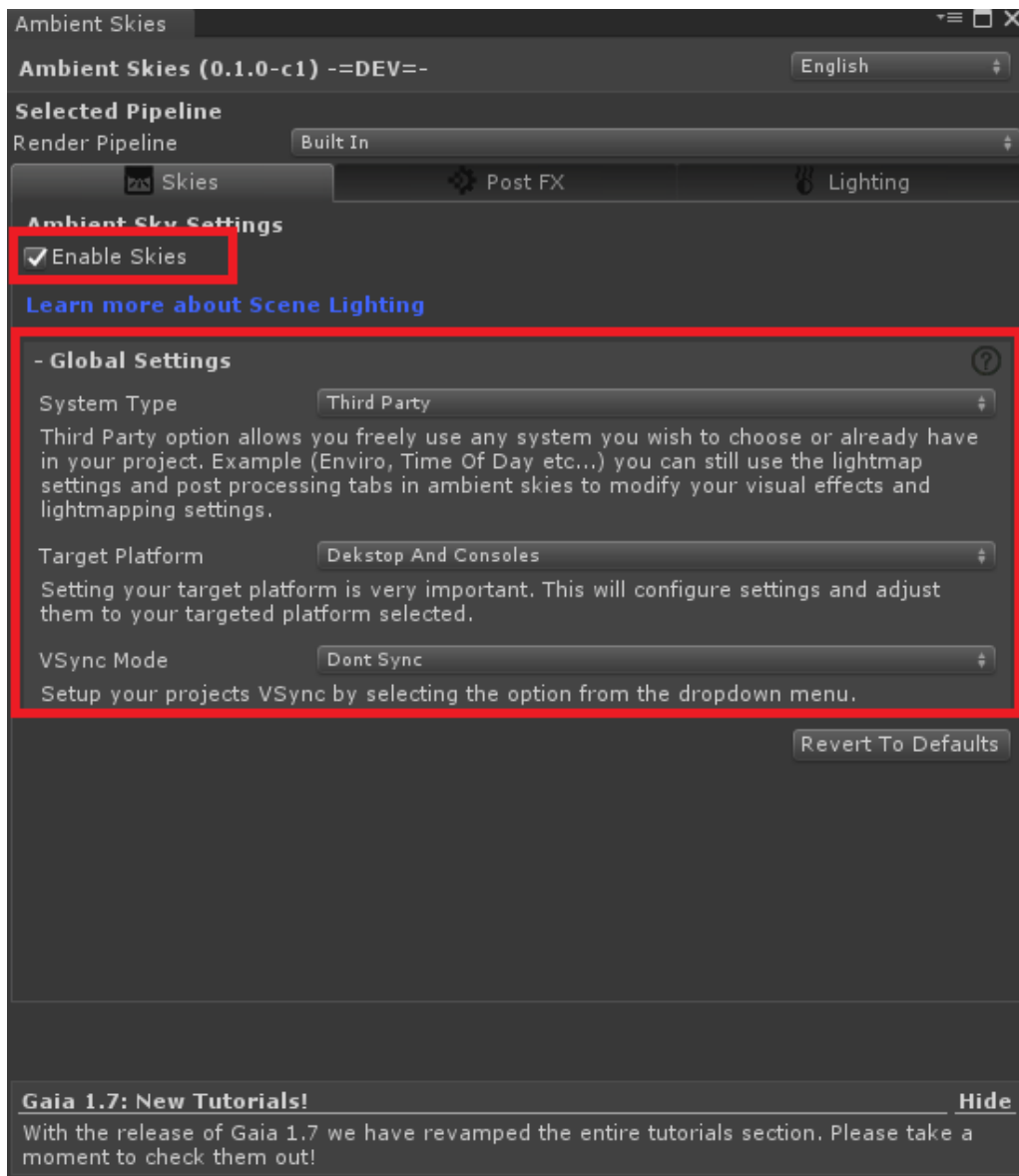
Global Settings is your master controller within Ambient Skies and influences how Ambient Skies works.

First Select your *System type*. These are the Sky systems that are supported by Ambient Skies and you can elect to have Ambient Skies based skies, the default Procedural Sky provided by Unity, and can even use 3rd Party skies and lighting systems.

Then select the **Target Platform**. This influences the light and post processing settings and optimizes for targeted platform to deliver better performance.
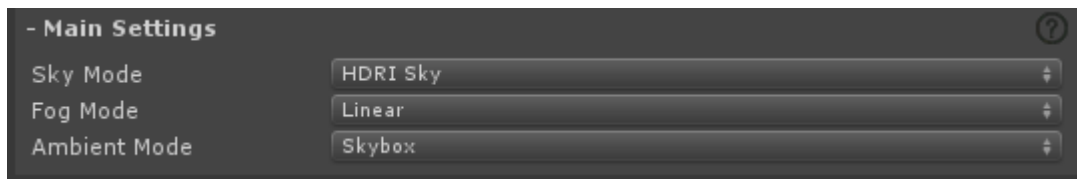
And finally select your **VSync Mode**. This will influence the frame rate delivered by your application and can be a good way to manage performance and battery consumption.

To use Ambient Skies based skies select the Ambient Skies system.

This will then enable all the Panels within the Skies Tab.

Main Settings Panel

The Main Settings panel controls your Sky, Fog and Ambient lighting modes.

Sky Mode options: HDRI Sky, Procedural Sky and Gradient Sky (HDRP only)

Fog Mode options: None, Exponential, Exponential Squared, Linear and Volumetric (HDRP only)

**Ambient Mode**: Color, Gradient, Skybox.

Revert To Defaults

Each Sky profile setting comes with some great defaults, and you can change them as you please, however, you can also undo your changes by clicking on the 'Revert To Defaults' button at the bottom of the panels.

Panel Documentation

Each panel is self-documenting so please use the **?** button to learn more about what it does.

Post FX Tab

To enable the Post FX tab check the **Enable Post Processing** toggle.
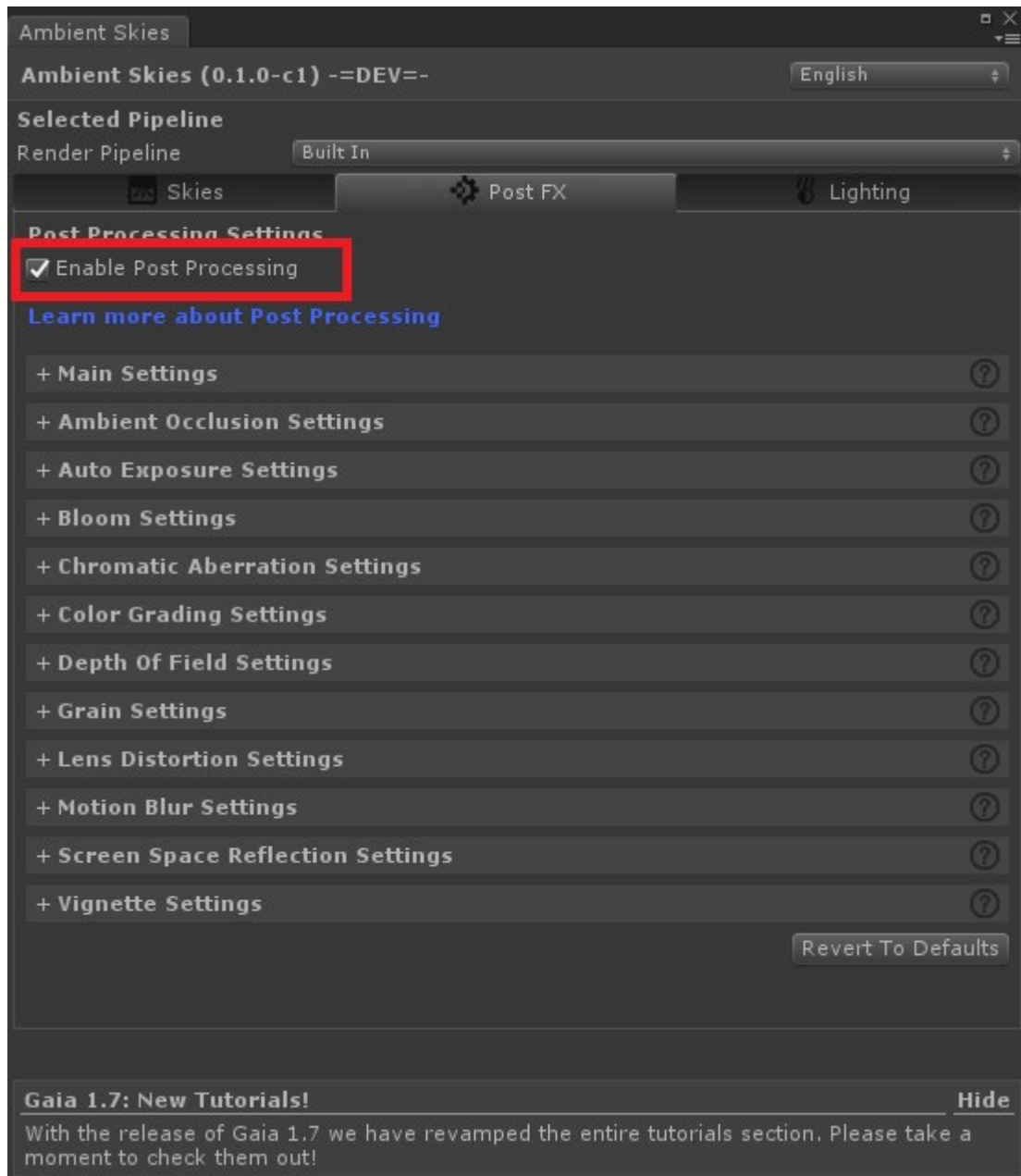
Main Settings Panel

The **Main Settings** panel controls the global post processing properties.

Select your post processing **Profile** to activate one of over 30 pre-configured post processing profiles.

Select your **Anti-Aliasing Mode** to change the anti-aliasing mode on your camera render.

Select your **HDR Mode** to render and use High Dynamic Range lighting in your scene.

Warning: Anti-Aliasing, Bloom, Ambient Occlusion and Screen Space Reflections can be expensive post fx to use. We recommend that you not over-do these settings if you want to get the best performance for your project.
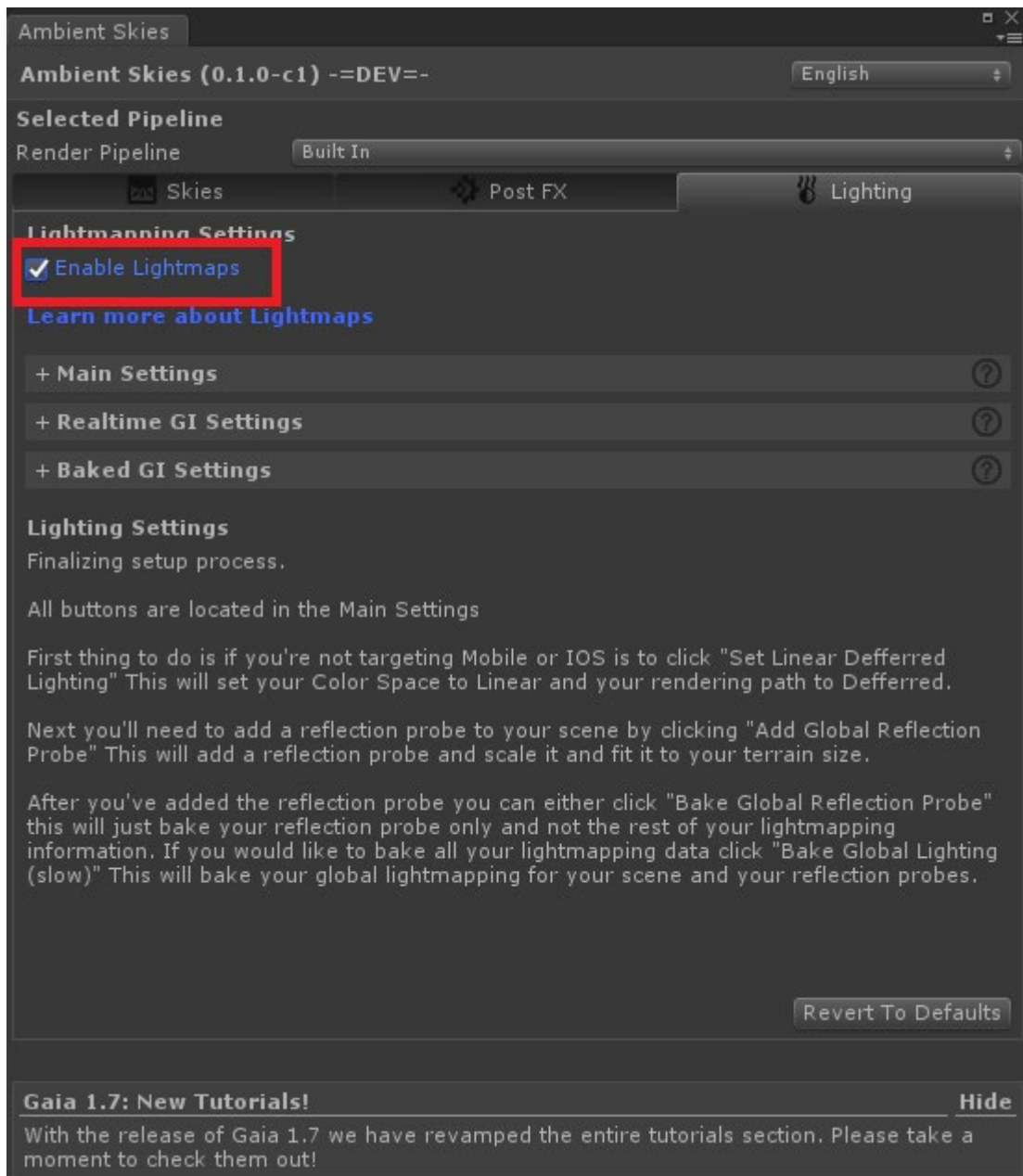
Revert To Defaults

Each Post Processing profile setting comes with some great defaults, and you can change them as you please, however, you can also undo your changes by clicking on the 'Revert To Defaults' button at the bottom of the panels.

Panel Documentation

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Lighting Tab

To modify your lightmap settings select **Enable Lightmaps** to enable the system.

The Lighting Tab will allow you to modify your Baked and Realtime Global Illumination settings to achieve the lighting quality you want.

Revert To Defaults

Each Post Processing profile setting comes with some great defaults, and you can change them as you please, however, you can also undo your changes by clicking on the 'Revert To Defaults' button at the bottom of the panels.

Panel Documentation

Each panel is self-documenting so please use the **?** button to learn more about what it does.

Go Experiment!

You are now ready to enhance your projects visual quality with Ambient Skies!

One of the best ways to do this is to open Ambient Skies, enables its systems, press play and explore. Whatever you change at runtime will be saved and applied back in the editor.

NOTE: If you close the Ambient Skies window while running your application after making some changes, these changes will not be applied to your scene until you open the Ambient Skies window again.