



Sci-Fi Slums Spawner Pack is a collection of GeNa spawner settings for the “NewGen: Sci-Fi Slums” asset pack by ReversedInt.

SCI-FI SLUMS - SPAWNER PACK

By Procedural Worlds

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About Procedural Worlds

At [Procedural Worlds](#) our mission is to empower people to create, automate and navigate worlds. Our products are easy to use, nicely integrated and well supported.

We service indies, professionals and enterprise with our tools, and deliver custom projects for studios, enterprise and government. Our special power is that we have both a deep procedural technology stack, and an amazing team of experts, and we leverage this unique combination to create applications, games, sims, mapping and mmo / metaverse experiences at a fraction of the typical time and cost. Check out our [gallery](#), and then [contact us](#).

We are a Unity Partner, Intel Partner, and have been a top asset store publisher since we first launched Gaia in 2015. Our reviews over this time speak for themselves.

Our Products:

Bundles

[World Building Bundle - 2021 Edition](#) - Get another 20% off our most popular tools with this awesome bundle. It includes Gaia Pro 2021, Gena Pro, Ambient Sounds, Pegasus and SECTR 2019.

Tools

[Gaia Pro 2021](#) - Gaia 2 is an introductory version of Gaia Pro. Gaia 2 expands on the original Gaia 1 with multi terrain and biome support.

[GeNa Pro](#) - GeNa Pro is the big brother of GeNa 2. It is a complete re-write, and includes all of the capability of GeNa 2 plus the ability to create splines, rivers, roads and villages and to shape and fill your terrain with rocks, trees grasses and more.

[GTS - Glyph Terrain Shader](#) - An easy to use terrain shader that enhances the terrain rendering with a lot of additional features - creates great results within minutes, works across all render pipelines.

[SECTR Complete 2019](#) - A suite of performance-enhancing tools that enable open world streaming, massive mobile games and includes the latest techniques in audio occlusion and propagation.

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

[Pegasus](#) - A system that can drive anything along a path. Great for cut-scenes, and even has an ambient ai that supports formations, animation and local avoidance for your NPCs and animals!

Stamp Packs

As the inventor of the stamp concept, and obsessive landscape creators, we know a thing or two about stamps. Check out our [Stamp Packs](#) for a range of landscapes that work with Unity, our tools, and any other tool that supports the stamp concept.

Game Ready Levels

If you have our tools and would like some optimised levels to build your game around or learn from, then check out our [Game Ready Levels](#).

Micro Biomes

[Micro Biomes](#) are small biomes that are designed to be mixed and matched to create more interesting environments with Gaia Pro 2021 and GeNa Pro.

Procedural Spawner Packs

We take some of the best modular assets in the store and make it easy for you to use them in your scene with Gaia Pro and GeNa Pro and our [Procedural Spawner Packs](#). Bring your artistic vision to life and procedurally create in minutes what would take weeks or months by hand!

NEW! Canopy community

Find support and tutorials for the above products and discuss game development with other Procedural Worlds users. Join us at <https://canopy.procedural-worlds.com/>!

Support, Chat, Tutorials, etc.

Canopy – Official Support Site & Community: <https://canopy.procedural-worlds.com/>

Discord – Community Chat: <https://discord.gg/TggjONN>

Tutorials: <https://canopy.procedural-worlds.com/library/>

Forums: <https://canopy.procedural-worlds.com/forums/>

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Introduction

Thanks for purchasing the Sifi Slums Spawner Pack!

The Sifi Slums Spawner Pack helps you to create awesome environments out of the modular NewGen Sifi Slums pack from Reversed Interactive.

We automate the generation and placement of many of objects and structures provided by Reversed Interactive and then use GeNa Pro to generate completely new and unique structures for you.

Be sure to check out the GeNa Decorators section for examples of how you can use the GeNa Pro decorator system to add even more procedural capability to your system.

NOTE: This document will provide some advice on how to start, however for a more detailed understanding of Gaia Pro / Gaia Pro 2021, and GeNa Pro you can read the documentation provided with them and check out the tutorials at [Product Tutorials | Procedural Worlds \(procedural-worlds.com\)](https://procedural-worlds.com).

Installation

Ensure that you have installed the following packages from the Unity asset store before installing the Sifi Slums Spawner Pack. This will ensure that all object references are correctly maintained.

[NewGen Sifi Slums By ReversedInteractive](#)

[GeNa Pro - Terrains, Villages, Roads & Rivers | Terrain | Unity Asset Store](#)

It should still be possible to install the assets in any order, but you might see errors & warnings when e.g. the configurations from the Spawner Pack cannot find the original prefabs from the Sifi Slums asset.

Please make sure to use GeNa Pro version 3.3.21 or higher, the spawners in the pack might not function correctly otherwise.

Then install the Sifi Slums Spawner Pack from Procedural Worlds. It will be installed into the following directories.

Procedural Worlds

Content Packs

Reversed Interactive

NewGen Sifi Slums

Content Resources: Resources used by the pack.

Documentation: Contains product documentation

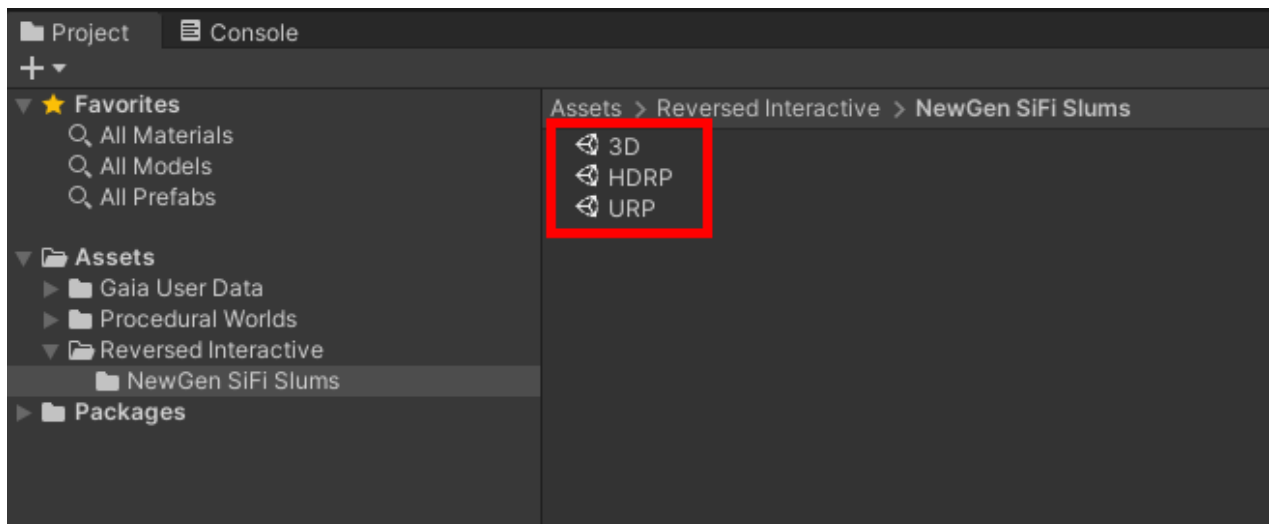
GeNa Masks: Contains a mask used for constructing the GeNa spawners.

GeNa Spawners: Contains the main GeNa spawner prefabs, intended to be used by you

Lighting: Contains a Day Night lighting prefab, extracted from the HDRP demo scene from the original SiFi Slums Asset Pack. Please note that this prefab only works in HDRP as this lighting setup exists only in the HDRP version of the original pack.

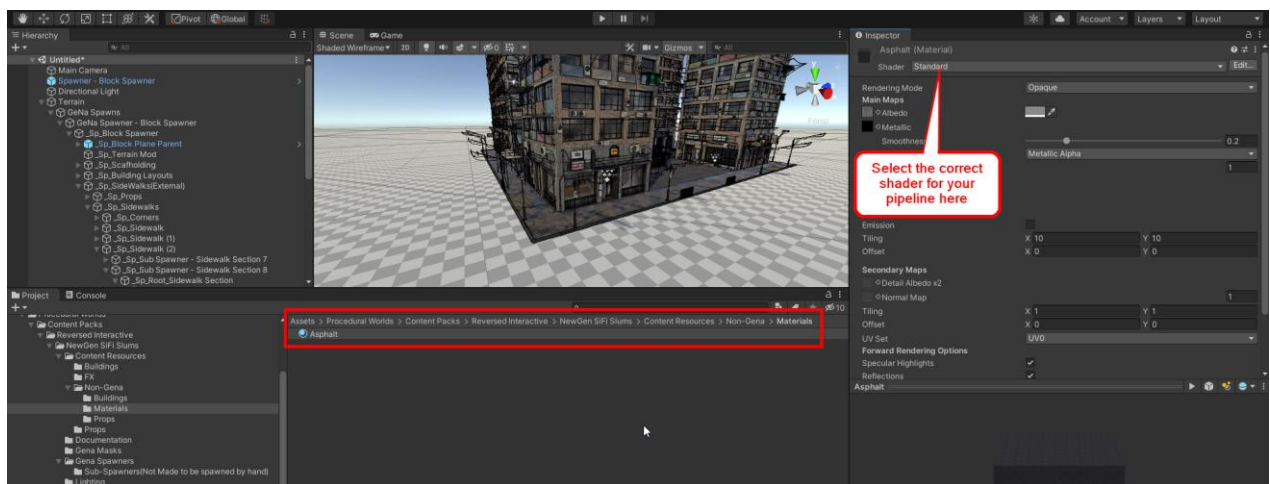
Render pipeline support

When installing into URP or HDRP you will also need to install additional packages for rendering pipeline support. GeNa will automatically switch to the correct pipeline when you start using it, but you need to install the correct unity package for the pipeline that you are targeting:



Double click the package for your render pipeline to install the Reversed Interactive assets for your current pipeline.

Within the spawner pack, there is only one single material that needs to be updated for the correct pipeline manually:



Please select the “Asphalt” material found in the Content Resources folder and select the correct shader for the current render pipeline. The shader names for the respective pipelines are:

BuiltIn: Standard

HDRP: Shader Graphs\Road

URP: Shader Graphs\Road

The "Lighting" folder in the package contains a prefab with the lighting setup from the original HDRP Demo Scene of the SiFi Slums pack. This prefab allows you to quickly use the same lighting settings in your own scenes as well. Please note that this prefab only works in HDRP as this lighting setup exists only in the HDRP version of the original pack.

If you want to copy / mimic the lighting of the demo scenes in other pipelines as well, you could make a duplicate of the demo scene, delete all buildings etc. in it but leave the lighting setup intact. You then have a scene with the same lighting setup as the demo scene and can use this for building your own scene under the same lighting.

Using the Sifi Slums Spawner Pack

Typical Workflow

The Sifi Slums Spawner Pack is designed to be used with Gaia and GeNa. A typical workflow would be to

1. Create a Unity terrain with Gaia;
2. Populate it with GeNa;
3. Optionally finish it off with a full Biome Spawn with Gaia;

Please note: While this is a suggested workflow you do not need to follow it. With GeNa Pro you can quickly enhance any Unity scene. Most of the spawners will work on both Meshes and Unity terrain, however you will lose access to some features such as terrain flattening as this only works with Unity terrains.

You could decide to use all, some, or none of Gaias Runtime system for lighting or water.

Asset Layout

Here is a brief overview of the more important content directories that you would browse to find the Gaia and GeNa spawners to apply to your scene:

GeNa Spawners:

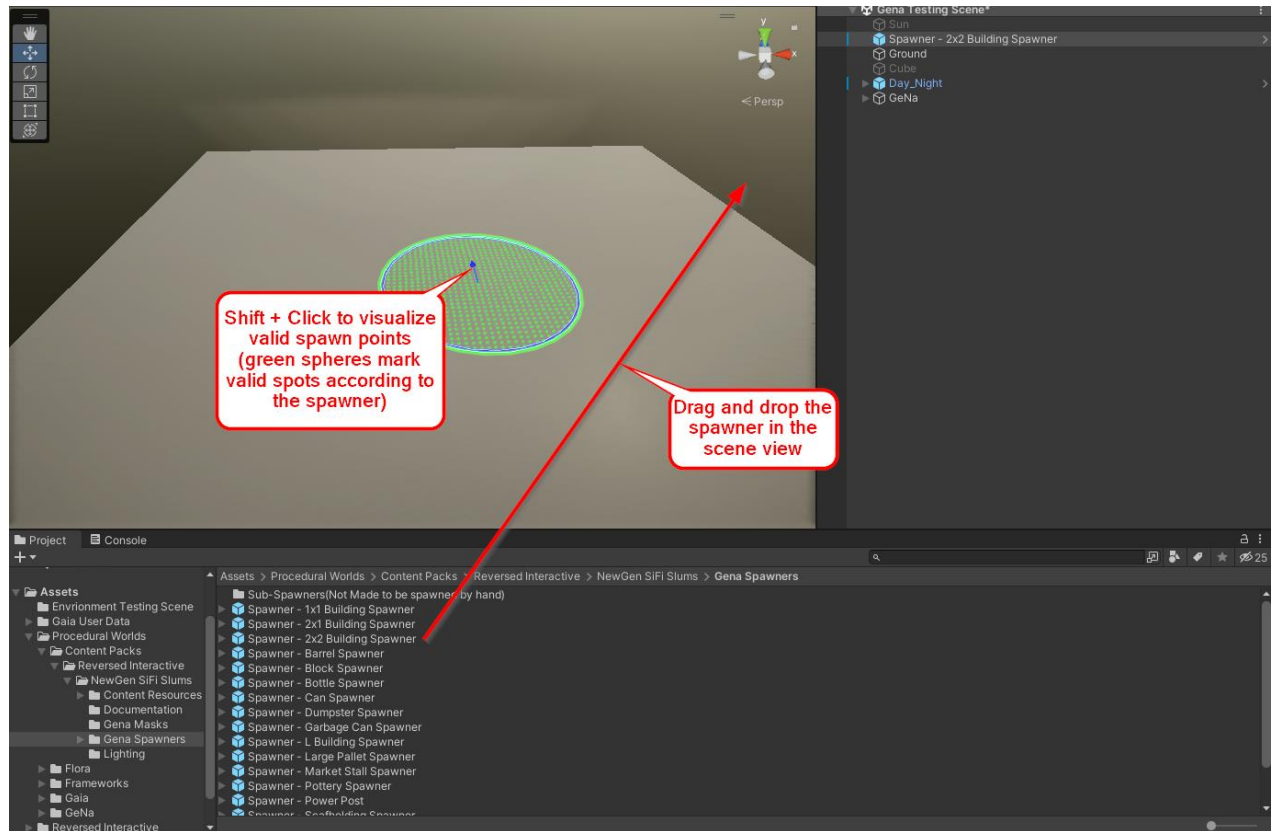
Gena Spawners to spawn variations of buildings and props.

GeNa Spawners / Sub-Spawners:

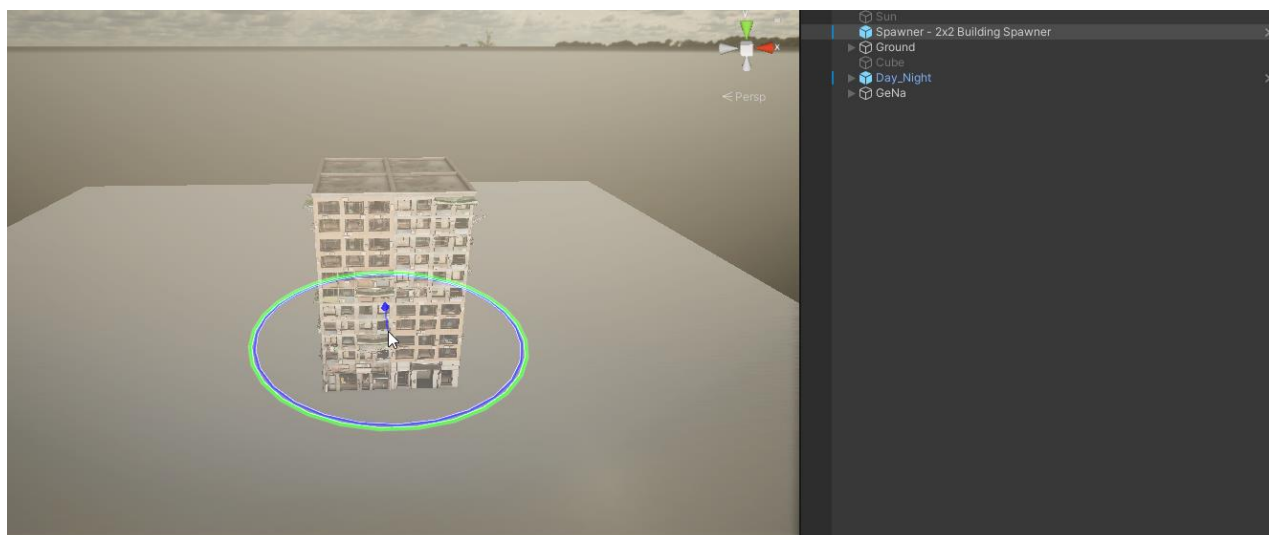
GeNa spawners that are not designed to be used by hand, only by other spawners.

World Population with GeNa Pro

Spawning



To use the GeNa spawners, drag one of the GeNa spawner prefabs into your scene. Hit Shift+Left Mouse click to sample your terrain or mesh. GeNa will also give you a visualization of where the structure can be spawned.



Press Ctrl+Click in any valid area to spawn. GeNa will child any prefabs or splines it spawns into your scene underneath the terrain or mesh of the scene it was spawned on. This is so that

things like Gaia's Terrain streaming system can manage object loading and unloading correctly.



A 2x2 building asset was automatically assembled out of different prefabs. Note that usually you would need to assemble the building out of individual pieces yourself– adjust the terrain so it is flat underneath – all by hand, while here you can spawn a random new house with a single click.

Iterating

Many of the GeNa spawners offer multiple variations on the same basic structure, so you can have fun 'iterating' the spawn result until you get the one you want.

To do this, first hit Ctrl+Left Mouse click to spawn, and then without de-selecting the spawner Iterate the spawn by hitting Ctrl+Shift+I to get another version of it. Keep Iterating until you get what you want.

GeNa will switch the visualizer off while you are doing this in order to make it easier to see the final result.

Undo

You can undo any GeNa spawn or spline operation by hitting Ctrl+Z.

Fixed Rotation Spawning

Some GeNa spawners are set up to operate in Fixed Rotation mode. Fixed rotation allows you to change the direction that the object will spawn.

Fixed Rotation is indicated with a blue arrow that shows the direction that the object will be rotated in when it is spawned.

Hold the left Shift key, and click and drag the mouse to change the direction that the object will spawn in. The blue direction pointer will update to show you the new direction.

When you have selected your rotation then spawn as usual with the Ctrl+Left Mouse click.

This technique enables precise orientation of your structures easy to achieve. It is also very useful when used in conjunction with splines.

Paint Mode

Some GeNa spawners are set up to operate in “Paint Mode”.

With these spawners you can hit Ctrl + Left Mouse Click to spawn, and then drag your mouse to continue to “Paint” your objects into your scene. The flow rate is the distance in meters that you need to move before the next spawn iteration is executed.

If you do not like what it did, you can then hit Ctrl+Shift+I to Iterate and get another version of the paint operation, or Ctrl+Z to undo it.

GeNa Decorator System

GeNa comes with an exceptionally powerful decorator system, and this allows you to exert a high degree of control over how your content is spawned into your scene.

You see how many of the prefabs used in the spawners were configured by looking at them in Procedural Worlds/Content Packs/Reversed Interactive/NewGen Sifi Slums/Content Resources

Study how these prefabs were configured and use the ideas to set up your own content decorators.

For more information on Decorators, please read the GeNa Documentation.

Runtime Spawning

GeNa Pro can be controlled via API to spawn at runtime. Please check out the GeNa Pro documentation to learn more.

World Finalization with Gaia Pro

In some scenarios you will want to use Gaia Pro to finalize your world. This will fill out all the areas you did not design yourself with GeNa & other tools. To do this select your biome under Gaia Tools and hit Spawn Biome.



NOTE: You can add Gaia biomes to your scene at any time by selecting the biome and then clicking 'Add Biome To Scene'. Please note that the Sci-Fi Slums Spawner Pack does not contain a custom biome since the underlying asset pack does not contain any nature / terrain assets.

Scene Finalization

When you are finished creating your scene the following things can reduce the size of your build:

1. Remove Gaia Tools. They are used only for creating environments.
2. Bake and then remove all your GeNa splines.
3. Delete your GeNa spawners.