

Dungeon Architect Quick Start Guide

for Unreal Engine 4

1 Introduction

Dungeon Architect comes bundled with several examples to quickly get you started. The samples below use assets that are freely available (e.g. Infinity Blade's Assets) and some are built on other paid assets, which you can readily use if you have them already.

2 Download Content Pack

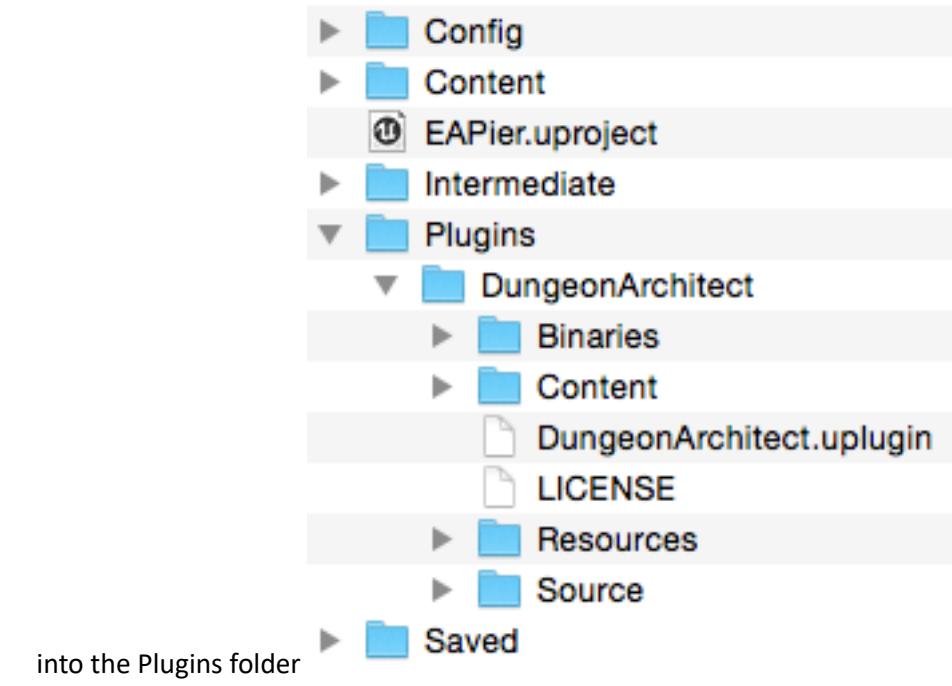
[Download](#) the Quick Start Content pack for Dungeon Architect version **2.6+**

3 Plugin Installation (Manual)

If you have purchased the plugin from the Marketplace, install it from the Epic Launcher

If you have purchased it from the website, follow these steps:

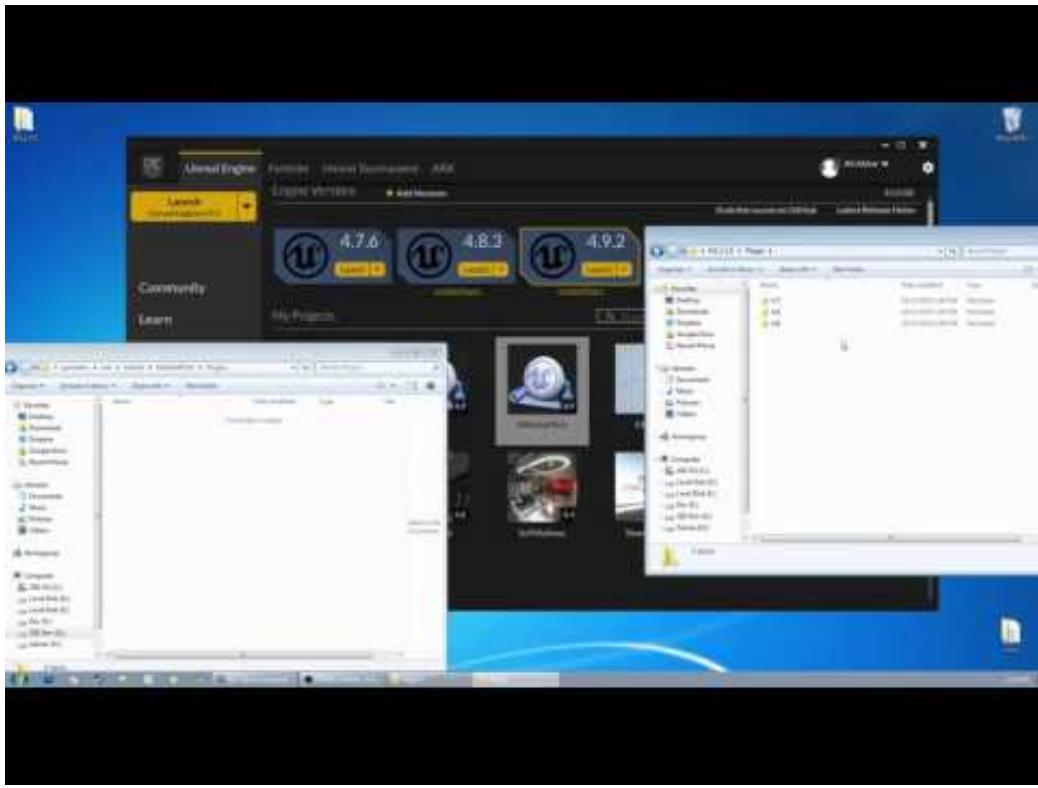
- Create a directory named Plugins in your game's root directory
- Extract the content of the downloaded plugin into the plugins directory. All major versions of UE4 are supported since 4.12. Choose the appropriate one to copy



into the Plugins folder

- Refer the User Guide for more info

Installation Video Tutorial



[View in Youtube](#)

4 Build a dungeon (Design Time)

The plugin comes with sample assets and maps to get you started. Open the test map where everything is already setup

- Install Dungeon Architect plugin
- Download and extract the Quick Start Content Pack
- Copy the extracted Content/DA_StarterPack folder into your game's Content

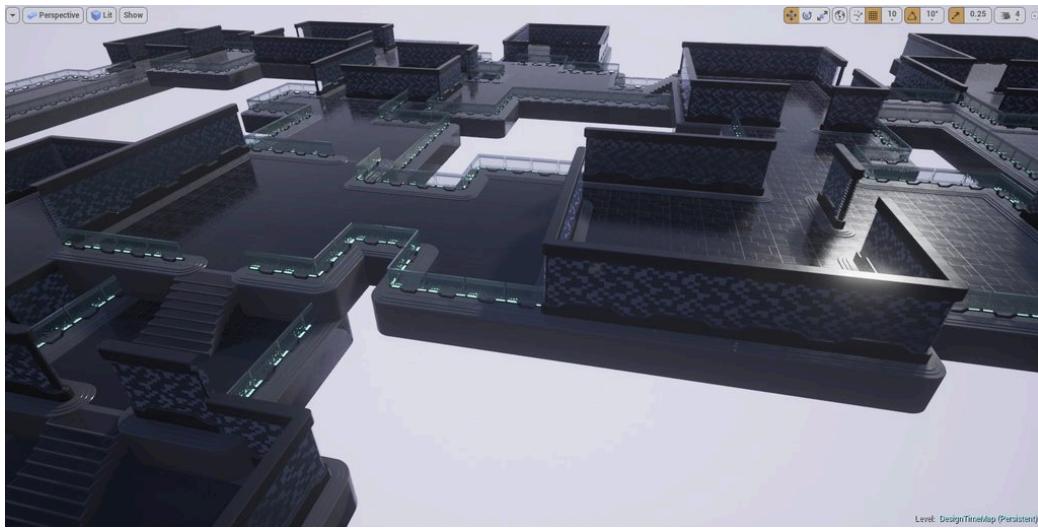
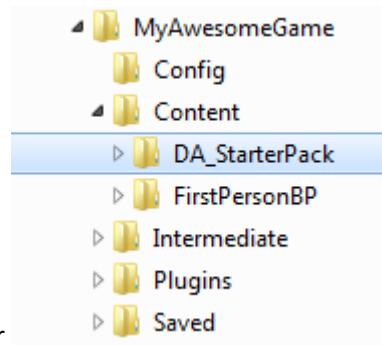


Figure 1: Sample map



- Open the sample map by navigating to Content > DA_StarterPack > Maps > DugeonDesignTime
- From the world outliner, click the Dungeon1 Actor.
- In the details panel, you will find 3 buttons in the Dungeon category. Click the “Build Dungeon” button. This will create a procedural dungeon in your scene using a sample theme you just extracted
- The config structure contains various parameters that can be tweaked to get different results

To build this setup yourself from scratch, refer the User Guide



[View in YouTube](#)

5 Build a dungeon (Runtime)

Random dungeons can be created at runtime (e.g. during level load) using a random seed (some number) and various tweakable parameters and have the map populated with powerups, spawn points, NPCs etc. All this can be done using pure blueprints and this sample map shows you how to do it

- Install Dungeon Architect plugin
- Copy the extracted Content/DA_StarterPack folder into your game's Content folder
- Open the sample map by navigating to Content > DA_StarterPack > Maps > DungeonRuntime
- The scene is empty. Click the play button to have the procedural scene generated at runtime. A different level is generated on each run

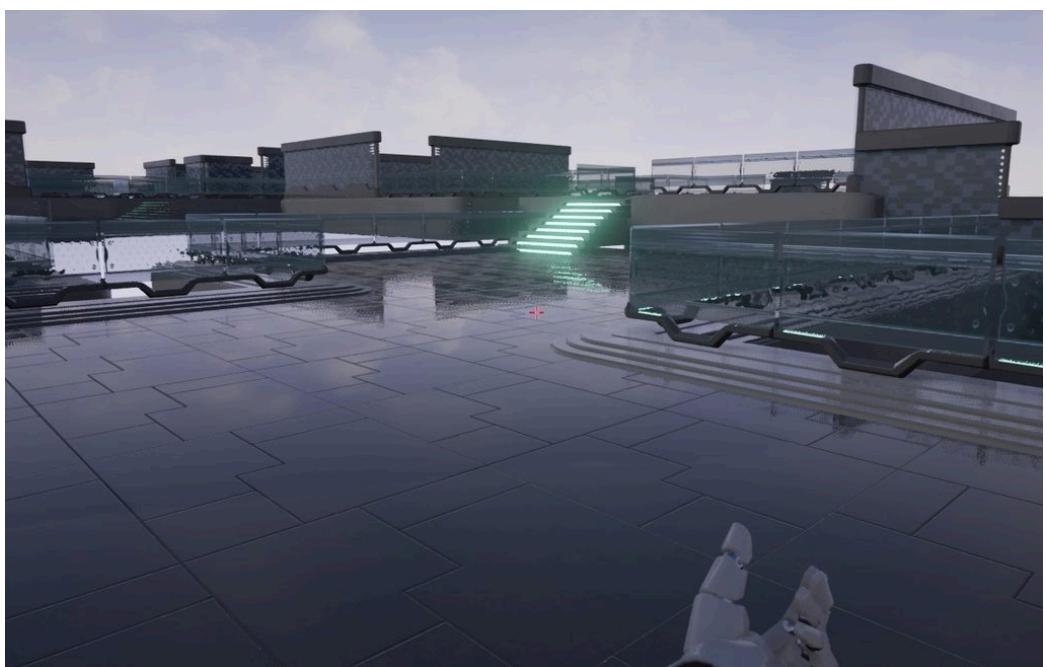
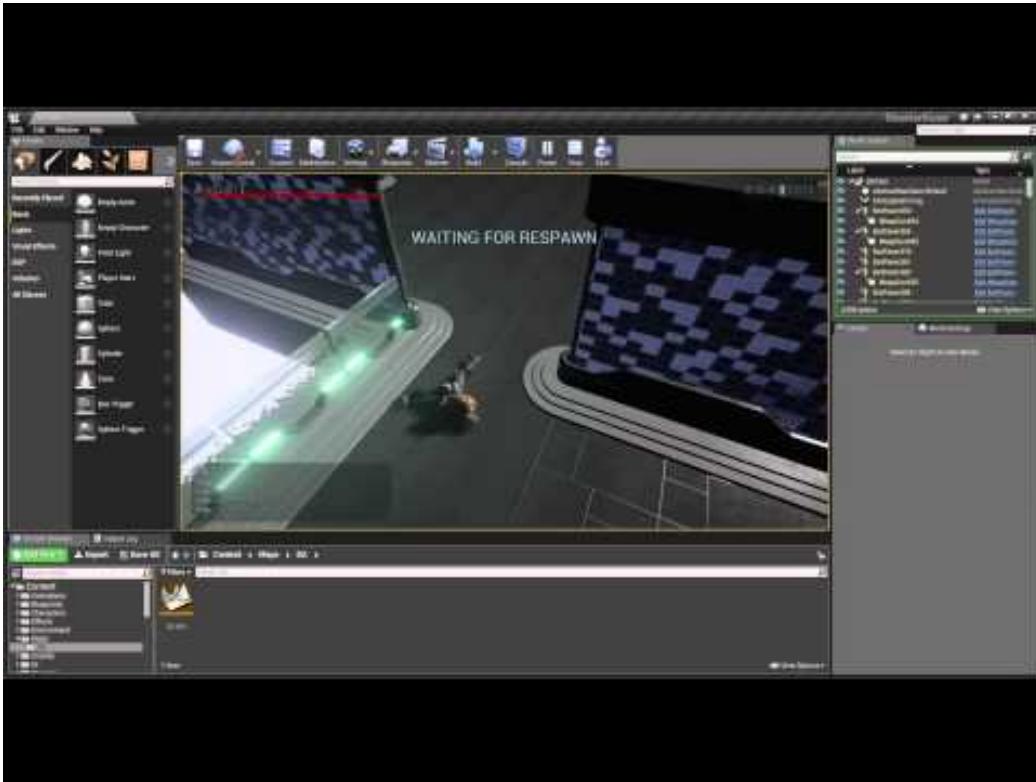


Figure 2: Sample map

- Open the level blueprint to see how this is done



[View in YouTube](#)

6 Level Authoring by Players (Runtime)

Dungeon Architect empowers not just your level designer, but also your players. This sample shows how you can have an in-game level editor and let your player design the layout of the levels. Most of the heavy lifting is done by the plugin. This game mode is designed entirely in blueprints.

- Install Dungeon Architect plugin
- Copy the extracted Content/DA_StarterPack folder into your game's Content folder
- Open the sample map by navigating to Content > DA_StarterPack > Maps > RuntimeLevelBuilder
- Do **not** build the dungeon. Just hit play

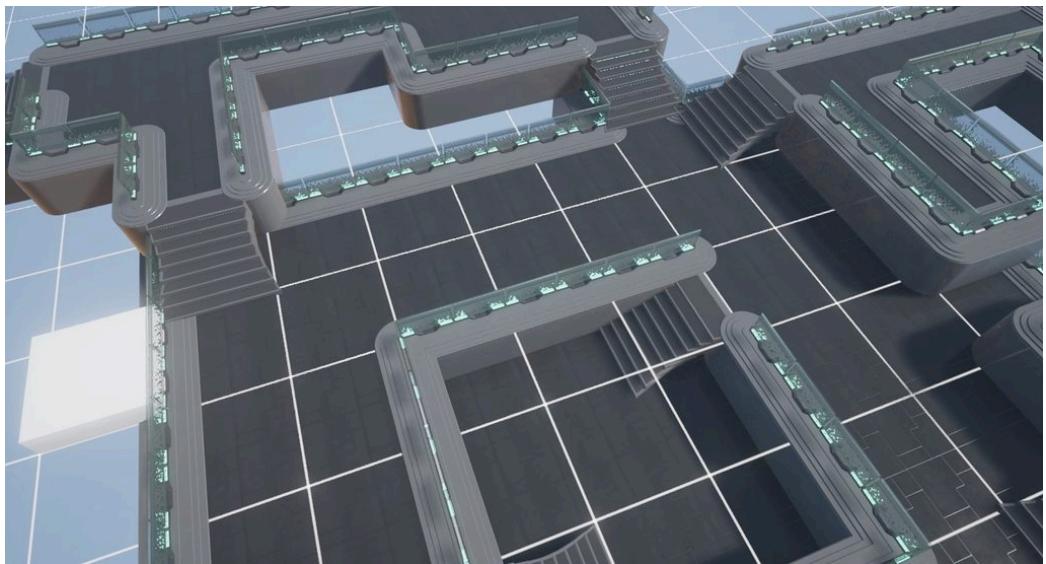
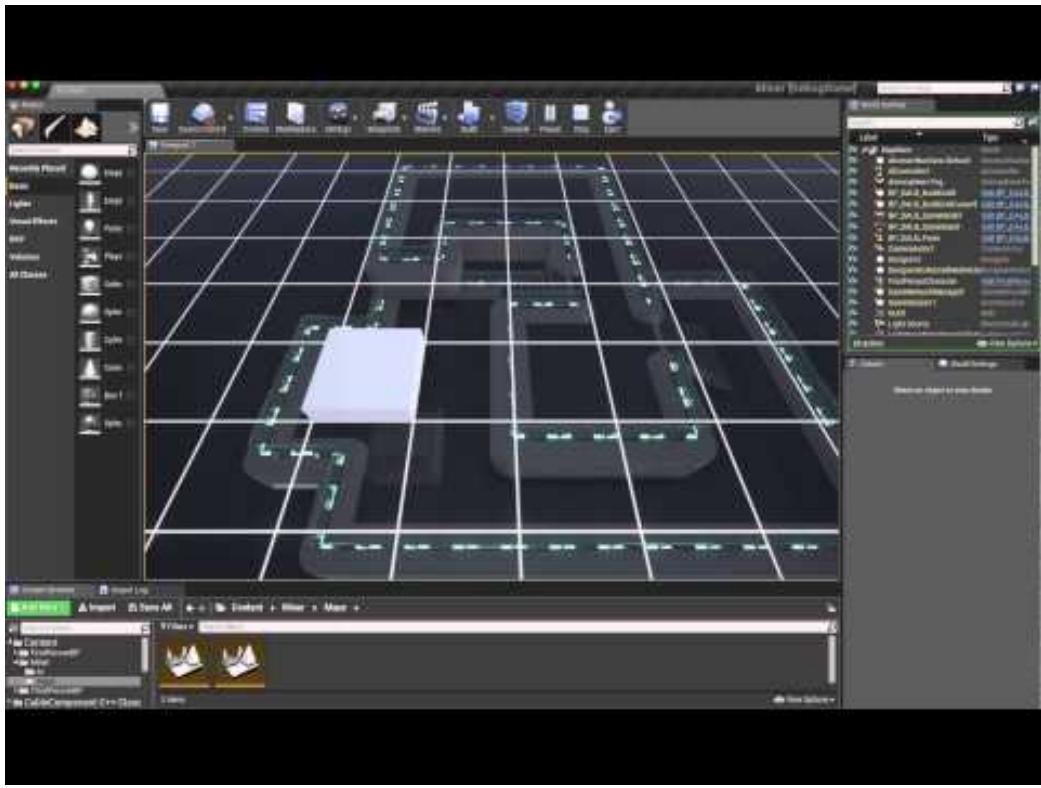


Figure 3: Sample map

Controls

- Use WASD to move around
- Hit space to enter / exit build mode
- In build mode, Left click to draw, right click to erase
- Use the mouse wheel to change level (height)



[View in Youtube](#)

7 Infinity Blade: Fire Lands Theme (Hell Forge)

Generate beautiful cave like procedural levels using assets from Infinity Blade's Fire Lands asset pack

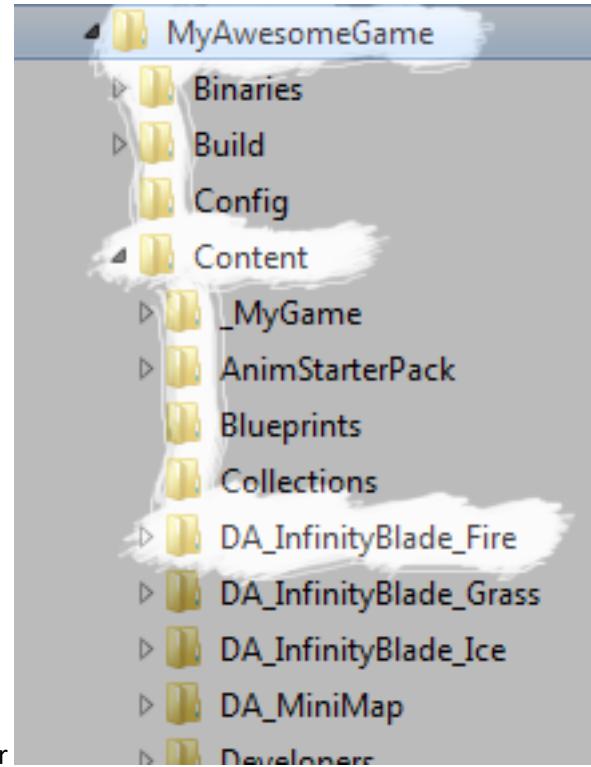


[View in Youtube](#)





- Create a new project (e.g Third Person)
- Install Dungeon Architect plugin
- Add the Infinity Blade Fire Lands pack in your game project
- Add the Infinity Blade Effects pack in your game project
- Copy the Content/DA_InfinityBlade_Fire folder into your game's Content



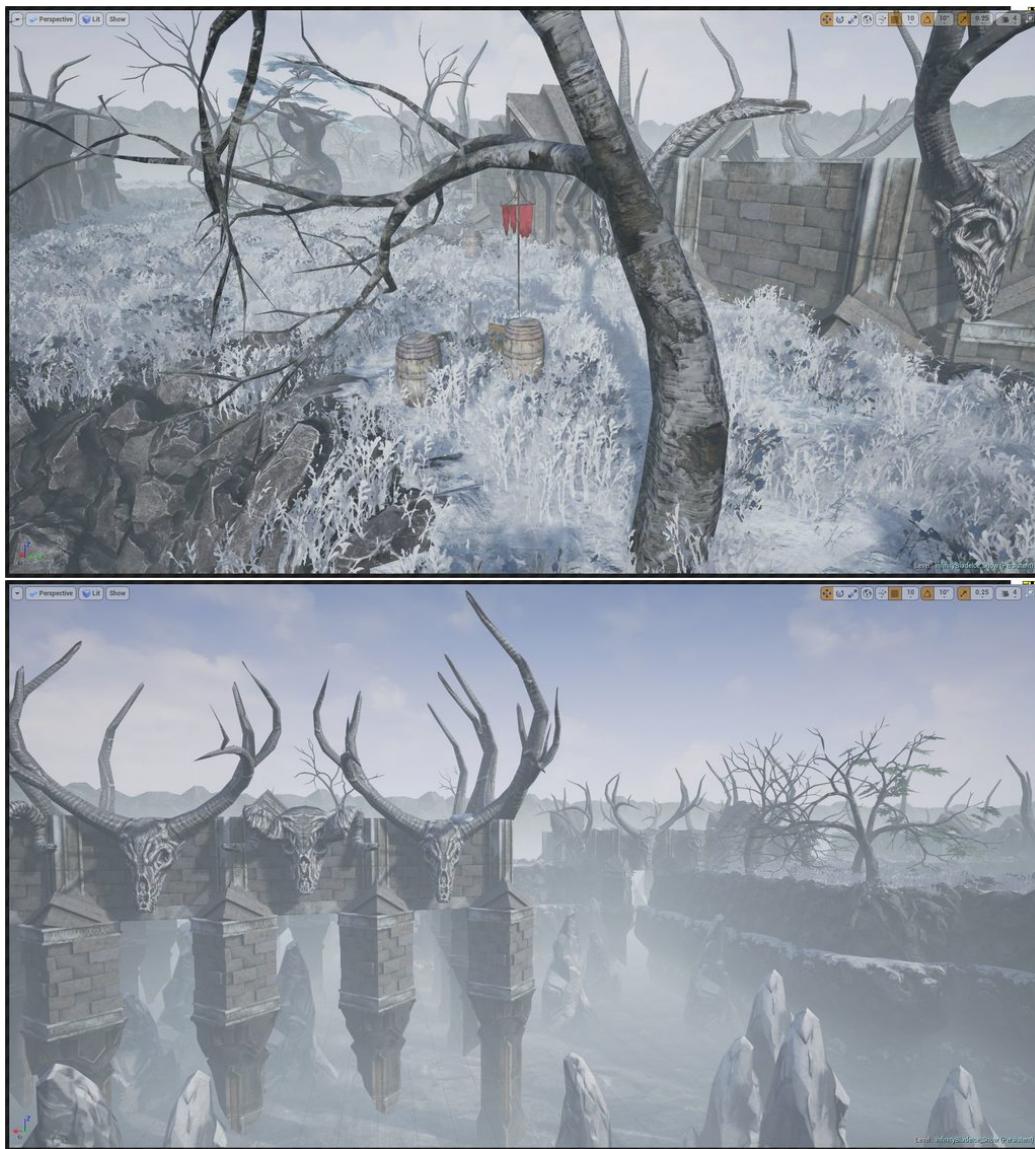
- Explore the maps in the Content/DA_InfinityBlade_Fire/Maps folder

8 Infinity Blade: Ice Lands Theme (Frost Forge)

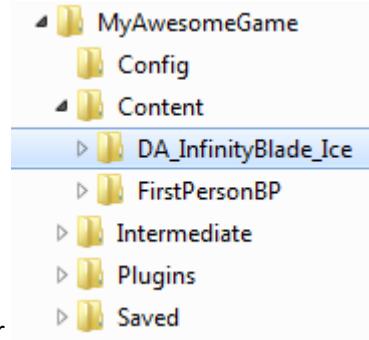
Generate beautiful procedural levels using assets from Infinity Blade's Ice Lands asset pack



[View in Youtube](#)



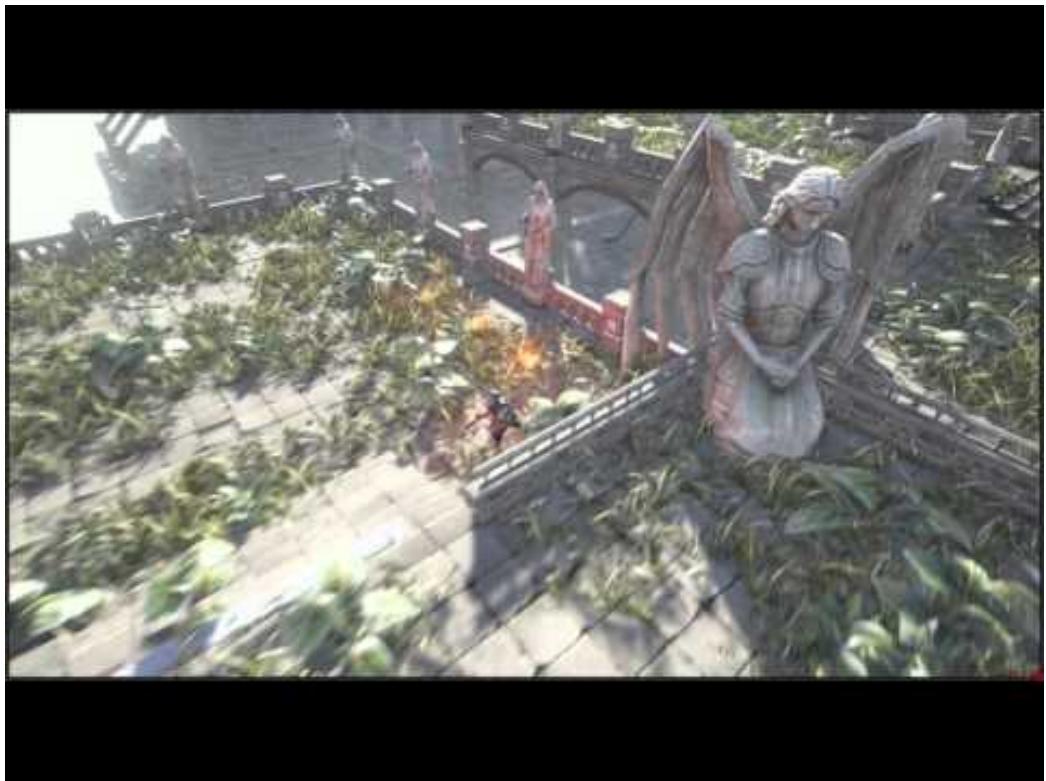
- Create a new project (e.g an Third Person)
- Install Dungeon Architect plugin
- Add the Infinity Blade Ice Lands pack in your Content folder
- Copy the Content/DA_InfinityBlade_Ice folder into your game's Content



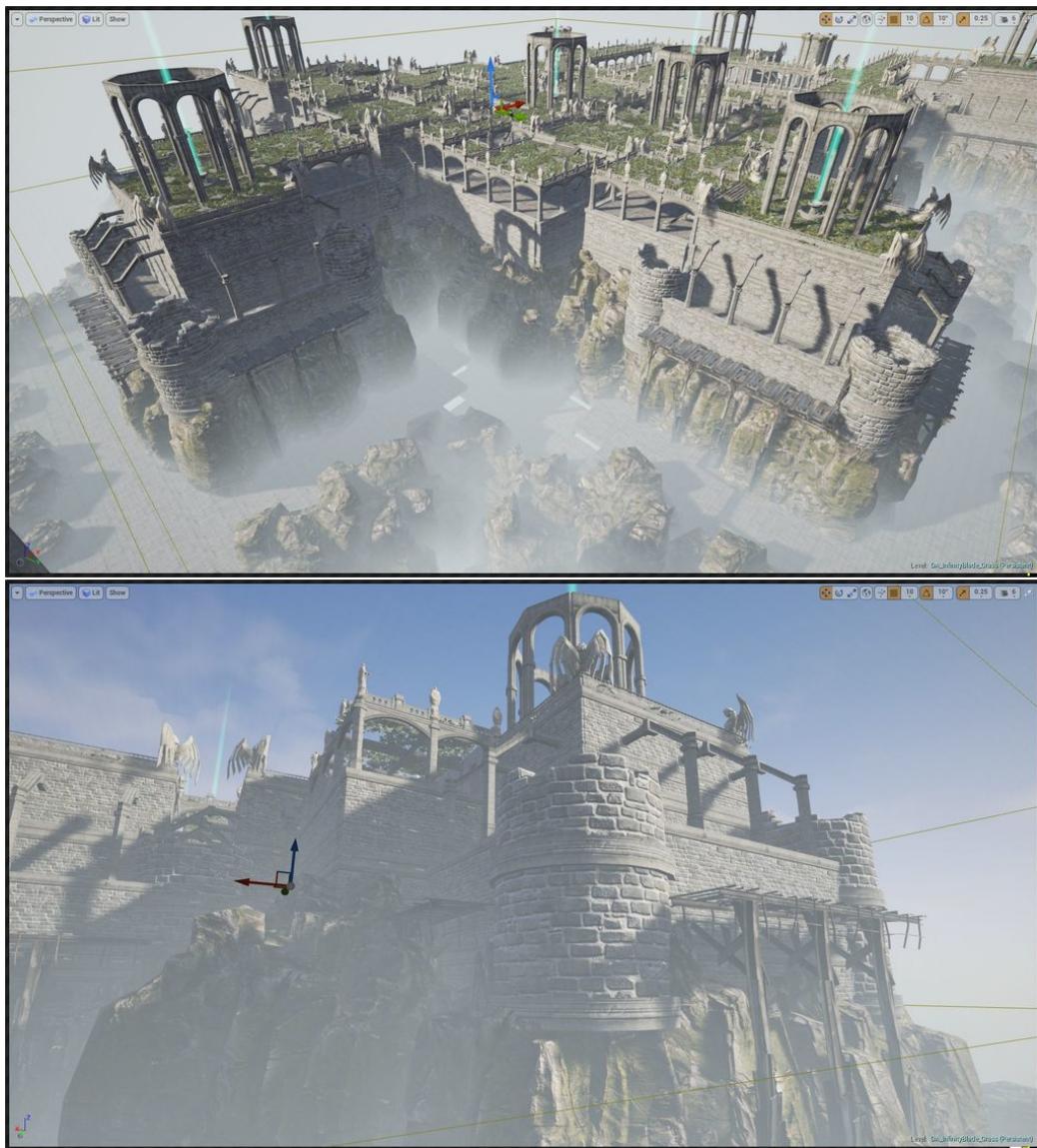
- Explore the maps in the Content/DA_InfinityBlade_Ice/Maps folder

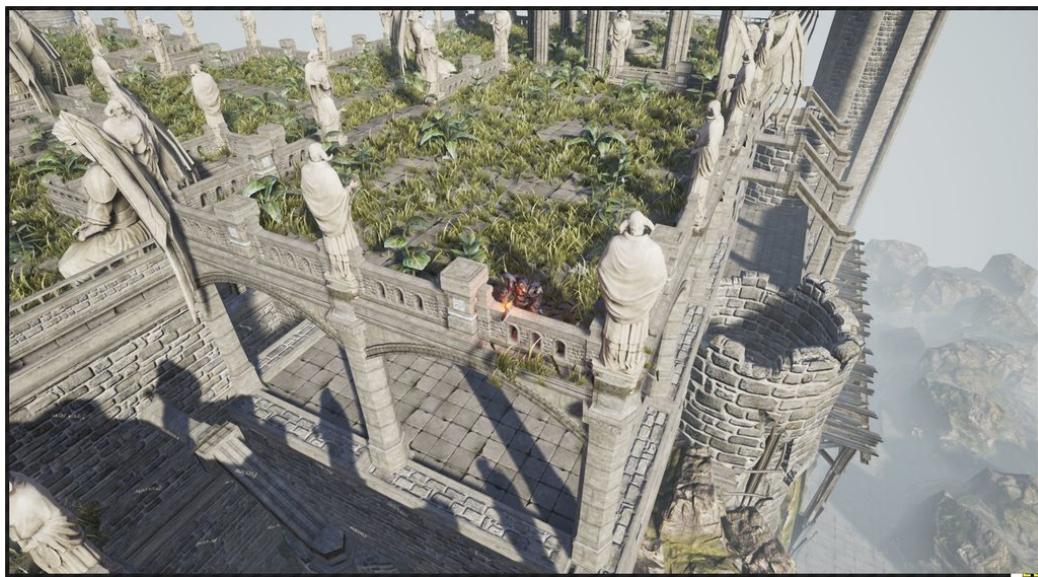
9 Infinity Blade: Grass Lands Theme (Elven Gardens)

Generate beautiful procedural levels using assets from Infinity Blade's Grass Lands asset pack

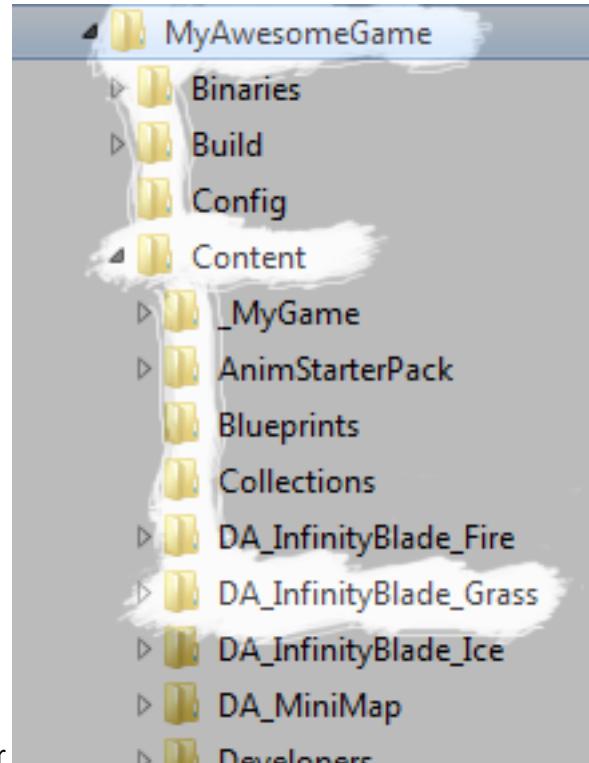


[View in Youtube](#)





- Create a new project (e.g an Third Person)
- Install Dungeon Architect plugin
- Add the Infinity Blade Grass Lands pack in your game project
- Add the Infinity Blade Effects pack in your game project
- Copy the Content/DA_InfinityBlade_Grass folder into your game's Content



- Explore the maps in the Content/DA_InfinityBlade_Grass/Maps folder

10 Candy

A simple theme created using royalty-free assets

- Install Dungeon Architect plugin
- Copy the Content/DA_Candy folder into your game's Content folder
- Explore the maps in the Content/DA_Candy/Maps folder

11 Basic Top-Down Theme

The very basic theme created using simple shapes

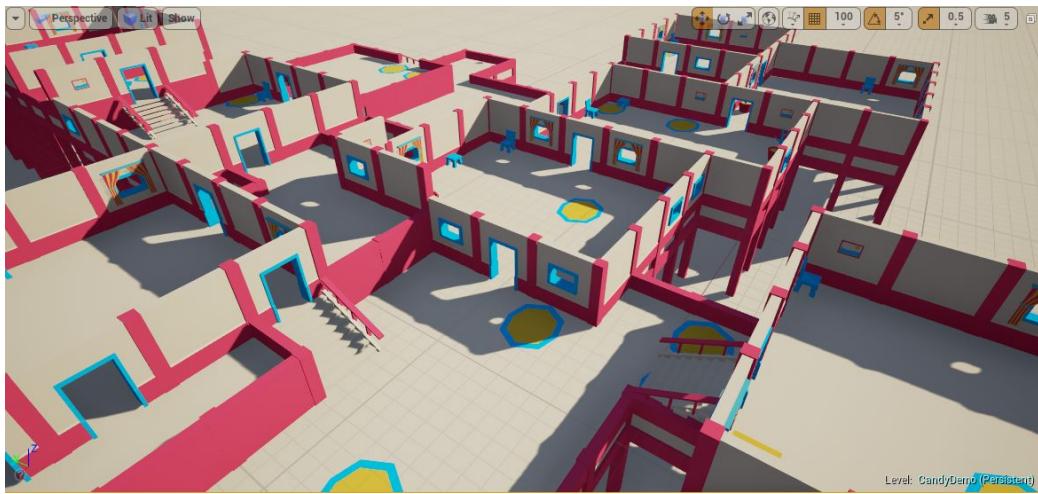
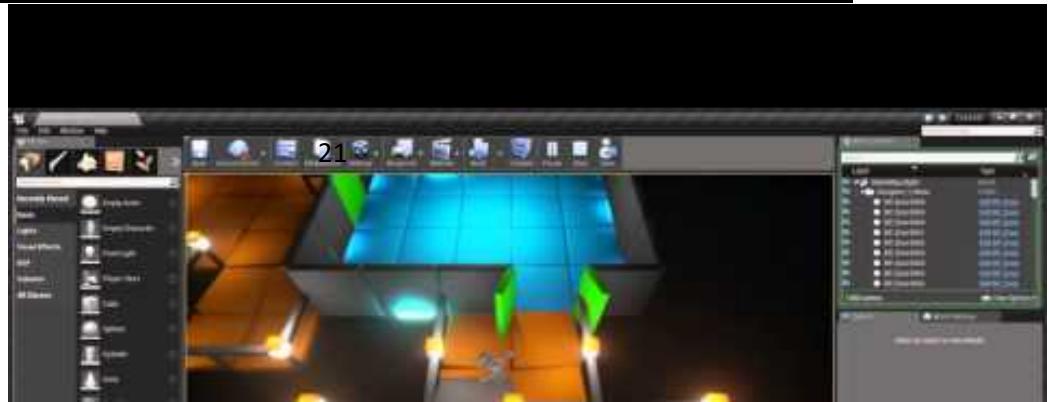
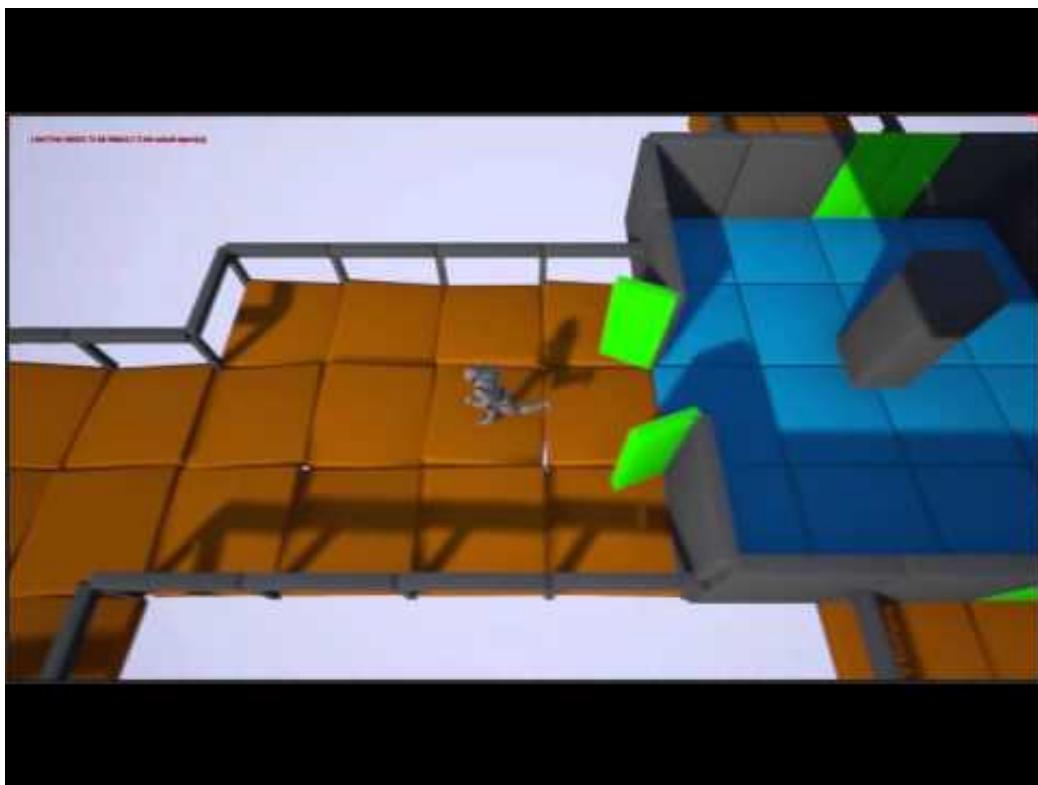
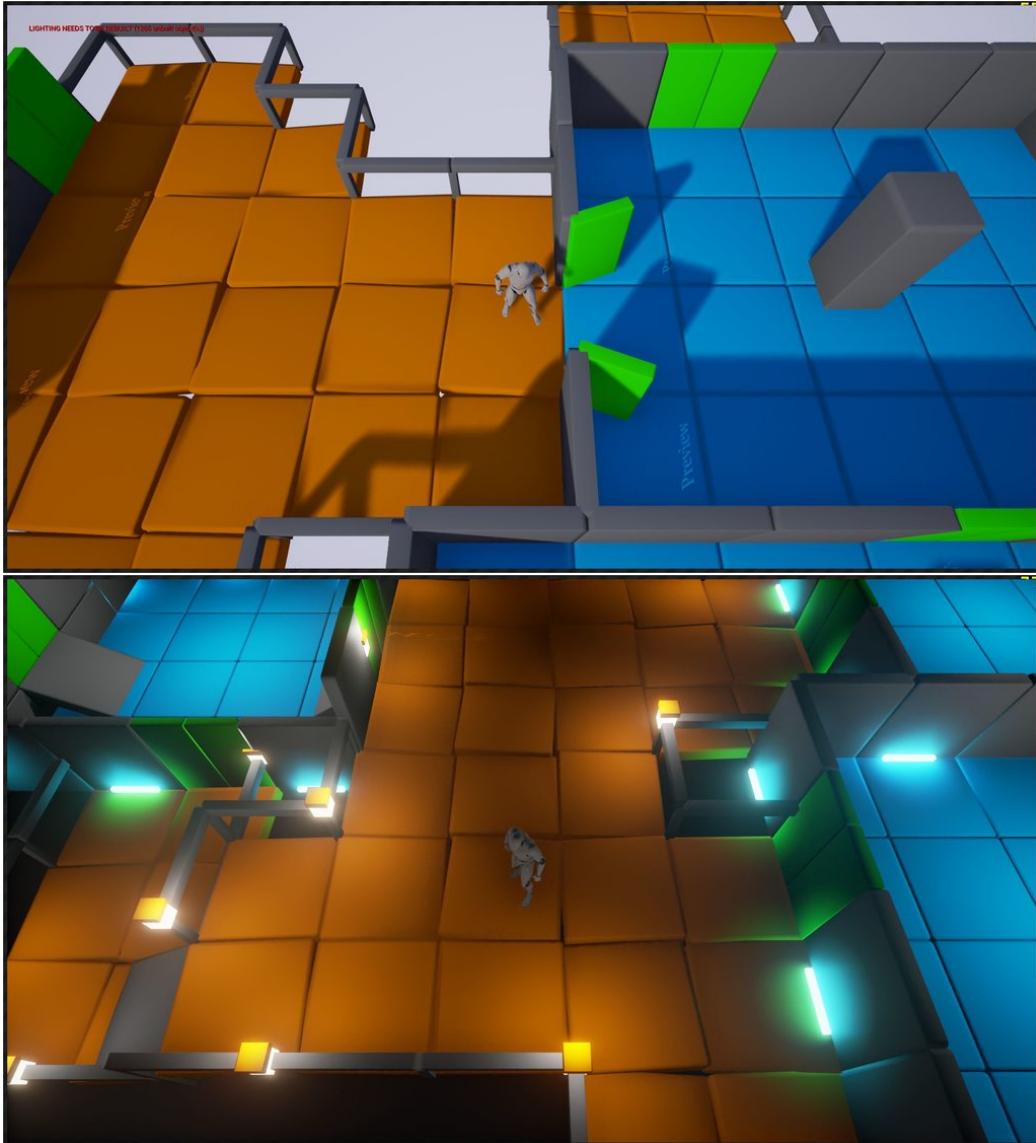


Figure 4: Install folder



[View in Youtube](#)



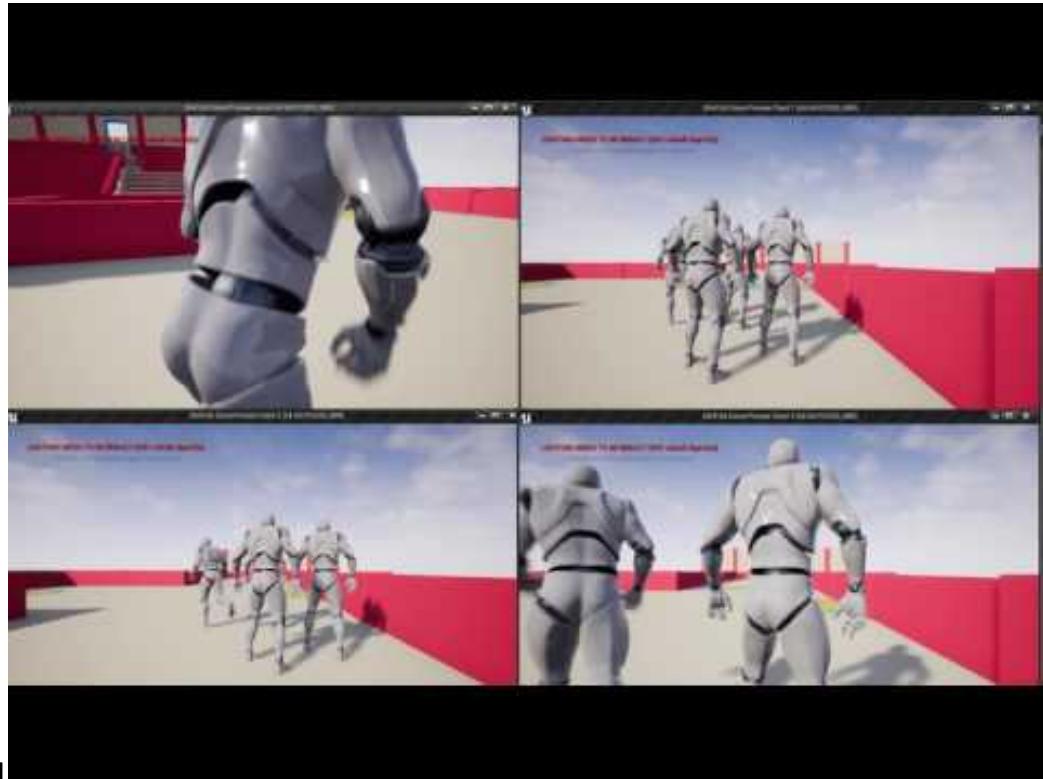
- Create a new project (e.g a Top-down game)
- Install Dungeon Architect plugin
- Copy the Content/DA_TutorialGame folder into your game's Content folder
- Explore the maps in the Content/DA_TutorialGame/Maps folder

12 Multiplayer Demo



[Overview](#)

[View in Youtube](#)



Tutorial

[View in Youtube](#)

This demo shows you how to create a random dungeon in a multiplayer setting:

- The server decides on a seed and sends it to all the clients.
- The clients build the dungeon locally
- The server waits till all the clients have build the dungeon before starting the game
- All players are teleported to valid locations in the dungeon

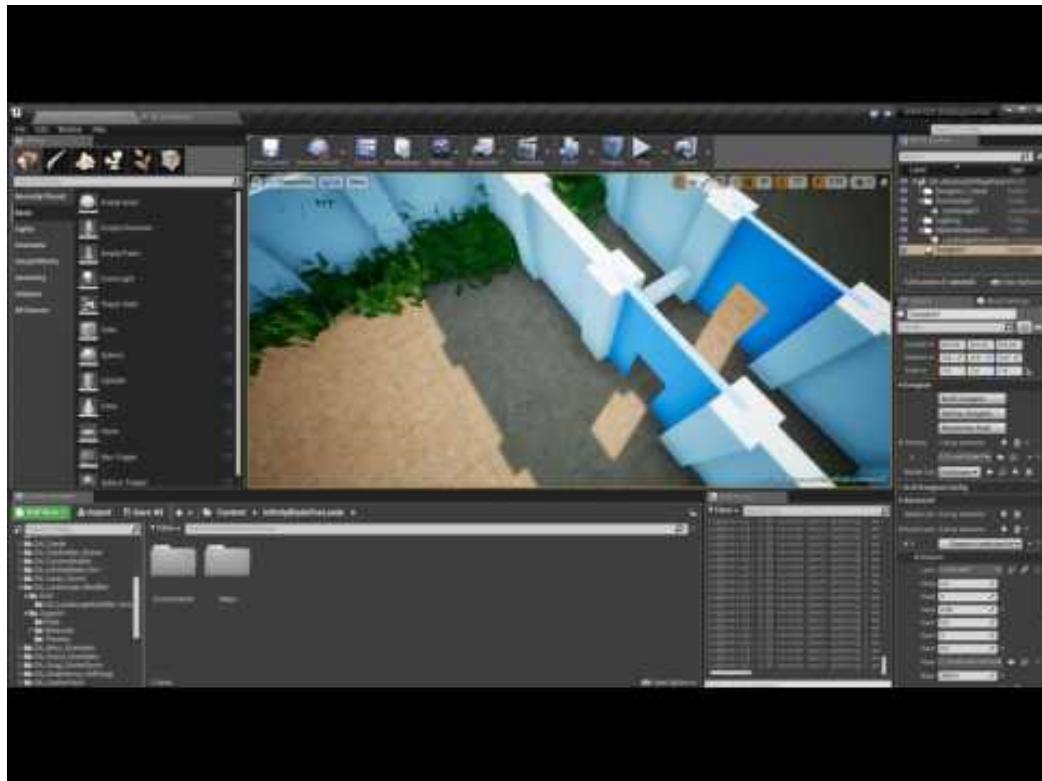
Installation Steps:

- Add third person blueprint feature to the project
- Copy the Content/DA_MultiplayerDemo folder into your game's Content folder
- Copy the Content/DA_Candy folder into your game's Content folder
- Explore the maps in the Content/DA_MultiplayerDemo/Maps folder
- Check the video for more info

13 Landscape Transformer

Using the Landscape Transformer, you can have DA automatically modify a landscape's height and weights (textures) around the dungeon's layout

The landscape transformer is implemented as a event listener, so you'll need to register it in the Dungeon actor's event listener list under the Advanced category



[View in Youtube](#)

- Copy the Content/DA_Landscape_Modifier folder into your game's Content folder
- Explore the maps in the Content/DA_Landscape_Modifier/Grid folder

14 Procedural Deathmatch Map

Generate a random map at runtime with AI bots, powerups, spawn points etc scattered all over the map using only blueprints. It also shows you how to setup multiplayer dungeons, where the server propagates the dungeon seed value to all the clients so they generate the exact same dungeon



[View in Youtube](#)

[Follow the installation steps here](#)

15 Query System Examples

The query system lets you query useful information about the generated dungeon so you can use it for gameplay specific tasks

- Copy Content/DA_Query_Examples folder into your game's Content folder

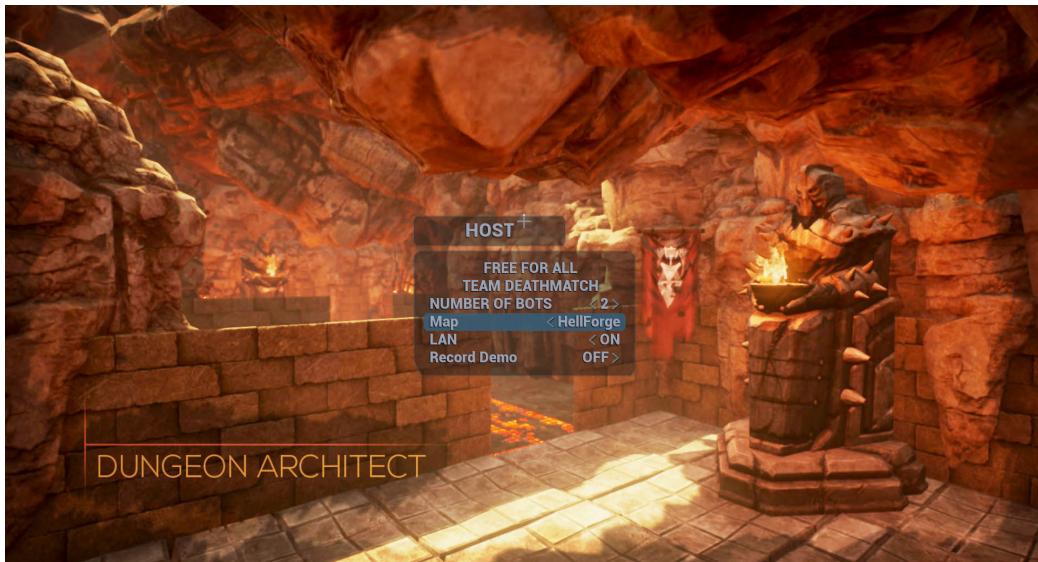


Figure 5: Deathmatch map

- Copy Content/DA_Isaac_Demo folder into your game's Content folder
- Copy Content/DA_Candy folder into your game's Content folder
- Copy Content/DA_TutorialGame folder into your game's Content folder
- Explore the maps in the Content/DA_Query_Examples/Grid and Content/DA_Query_Examples/Isaacfolder

Path_DesignTime_GridQueryExample: Trace a path between any two rooms in a dungeon. The path properly goes through correct cell edge points (like doors and stairways). This demo uses a spline to draw a path

NearbyMarker_GridQuery: Query nearby markers from selector logic. These are great for not placing blocking assets near doors and starways

FurthestRooms_GridQueryExample: Query two furthest rooms in the dungeon and use them as spawn room and boss room

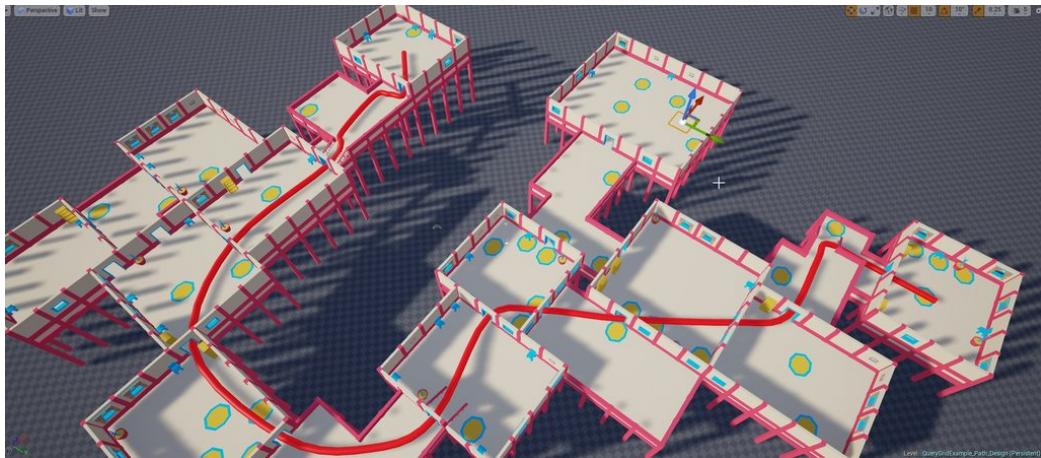


Figure 6: Query Path example

FurthestRooms_IsaacQueryExample: This demo shows how to query the start / end rooms of the isaac builder

LargeStartEndRooms: The same as above demo but this forces the start / end room to remove shape decorations so they are large enough for spawning and boss room

16 Misc Examples

There are various examples showcasing various features of Dungeon Architect

- Copy Content/DA_Misc_Examples folder into your game's Content folder
 - Copy the following folders into your game's Content folder: Content/DA_Candy, Content/DA_StarterPack, Content/DA_TutorialGame
 - Explore the maps in the Content/DA_Misc_Examples/Maps
-

ClusteredTheming: Clustered theming feature allows you to automatically apply different themes to various parts (clusters) of your dungeons. This helps in adding variation to your levels

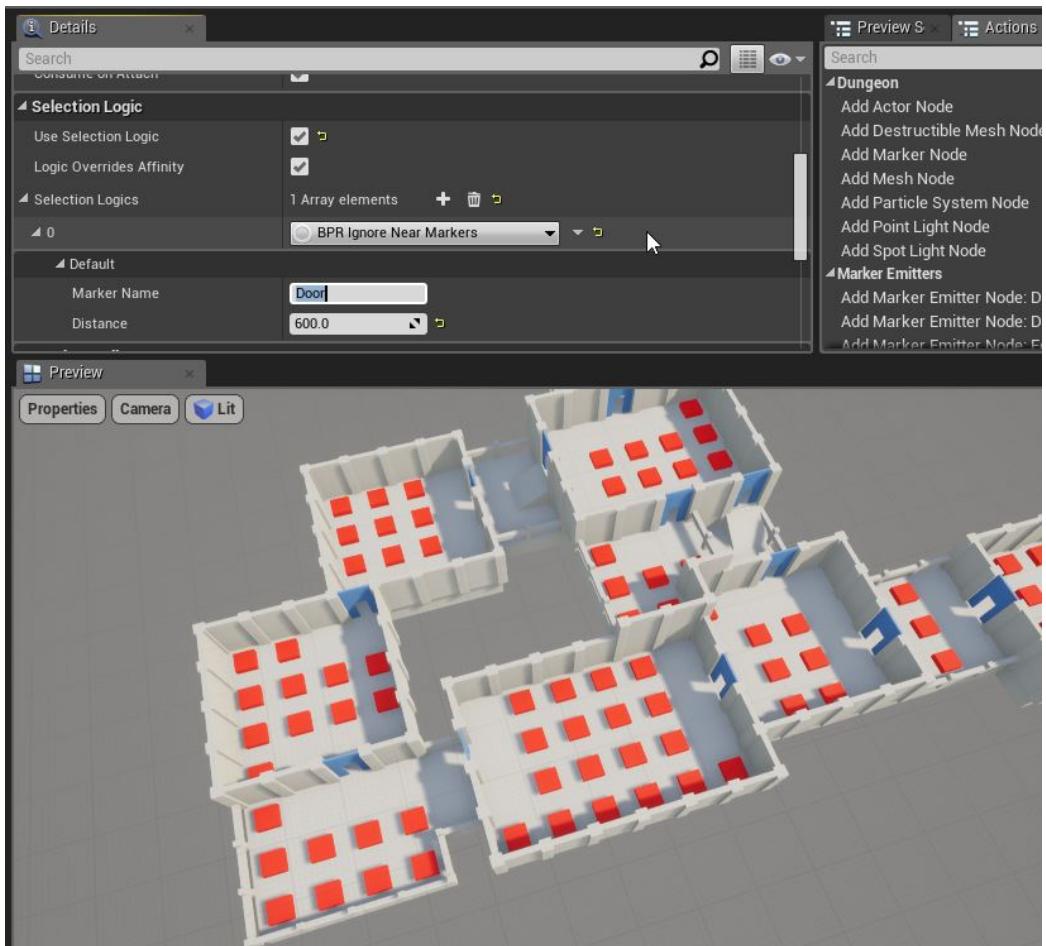


Figure 7: Query Nearby Markers

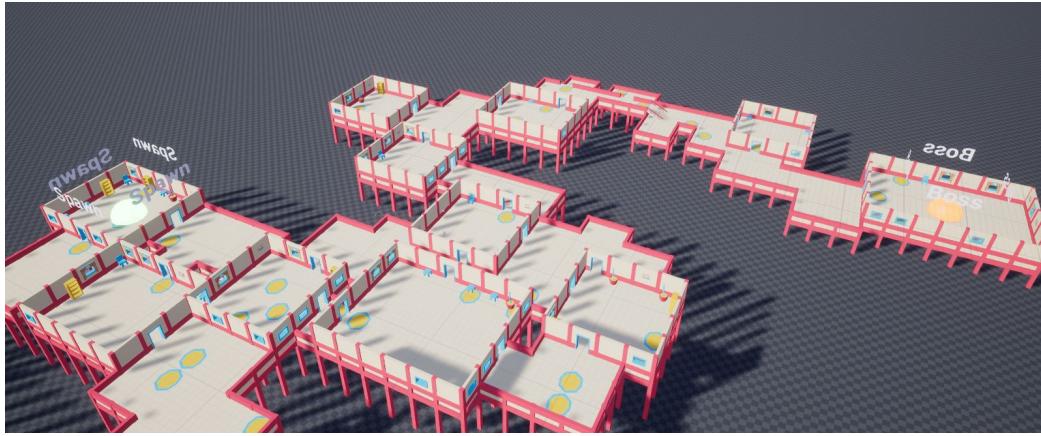


Figure 8: Query Start End Rooms

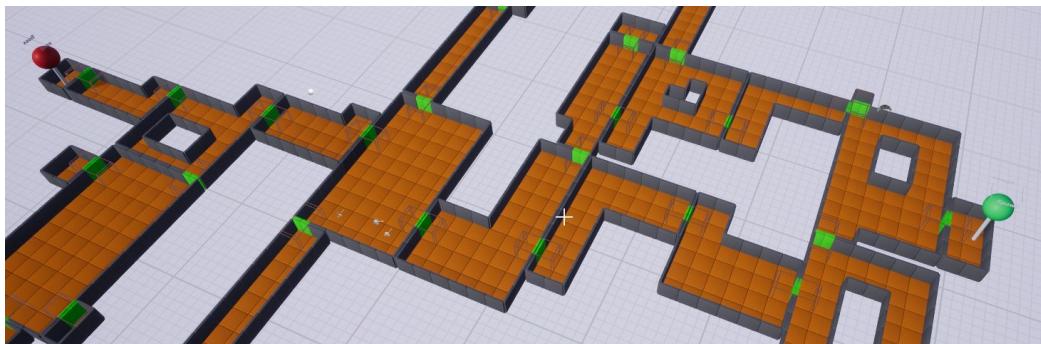


Figure 9: Query Start End Rooms Isaac builder

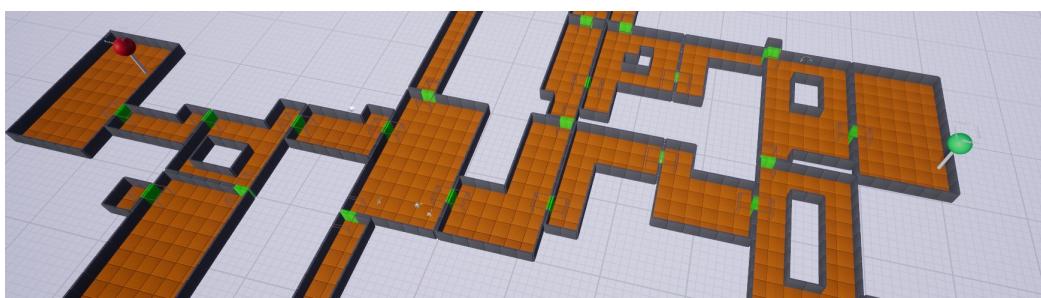


Figure 10: Query Start End Rooms Isaac builder

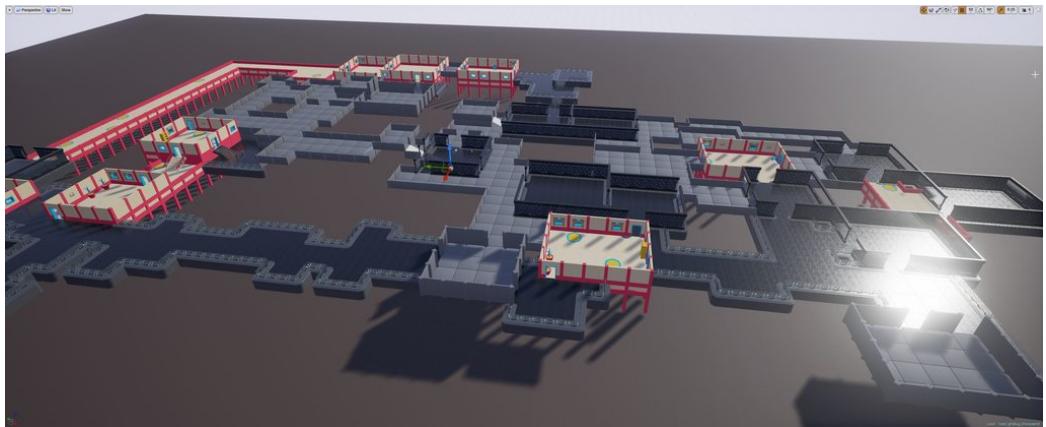


Figure 11: Clustered Theming

Multi_Dungeon_Custom_Layout: This demo shows to use multi-dungeon setup and blend it with user defined setup

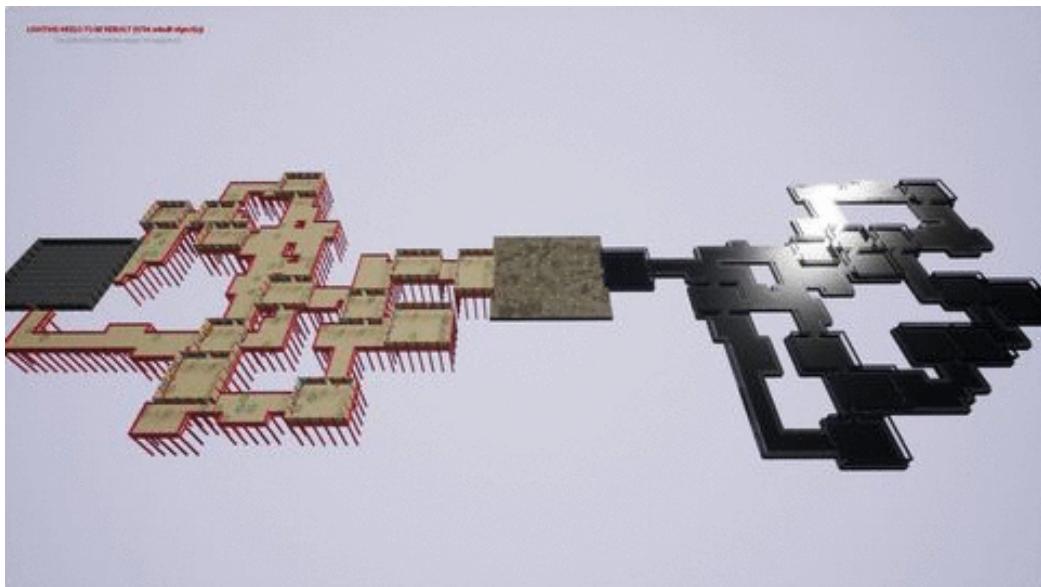
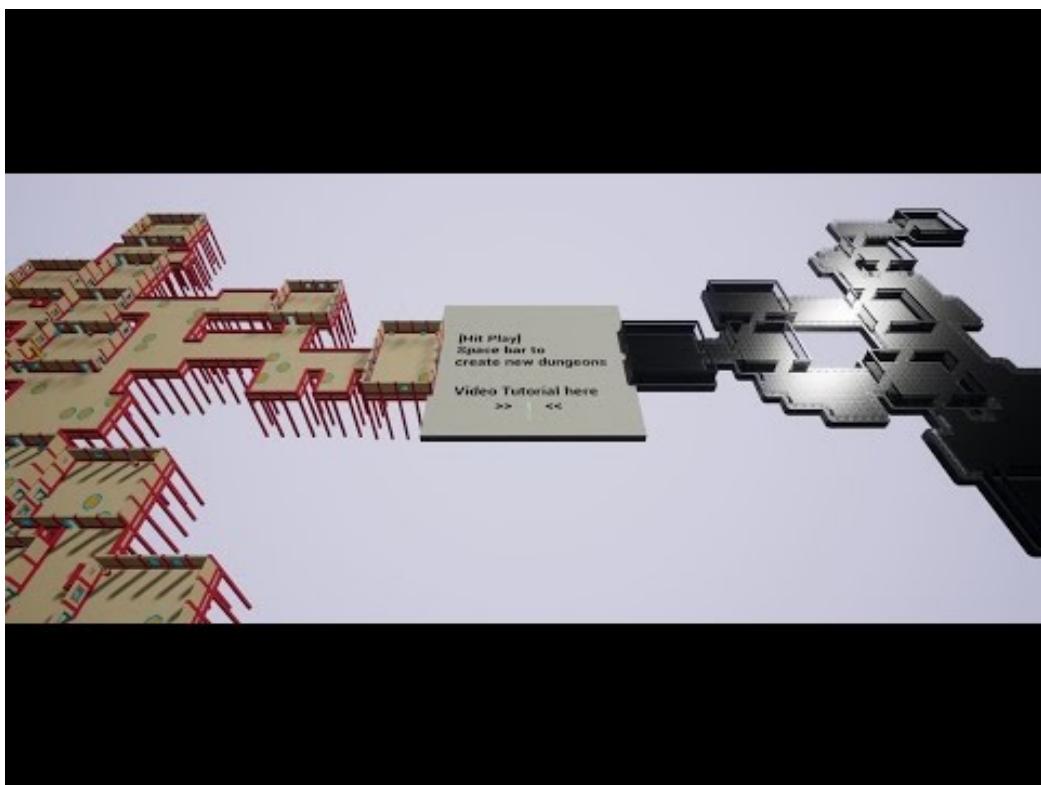


Figure 12: Multi-Story Dungeon Setup



[View in Youtube](#)

WallQueryDemo: This demo shows how to query nearby walls and decorate them differently if both are rooms, or remove the walls to merge the rooms together

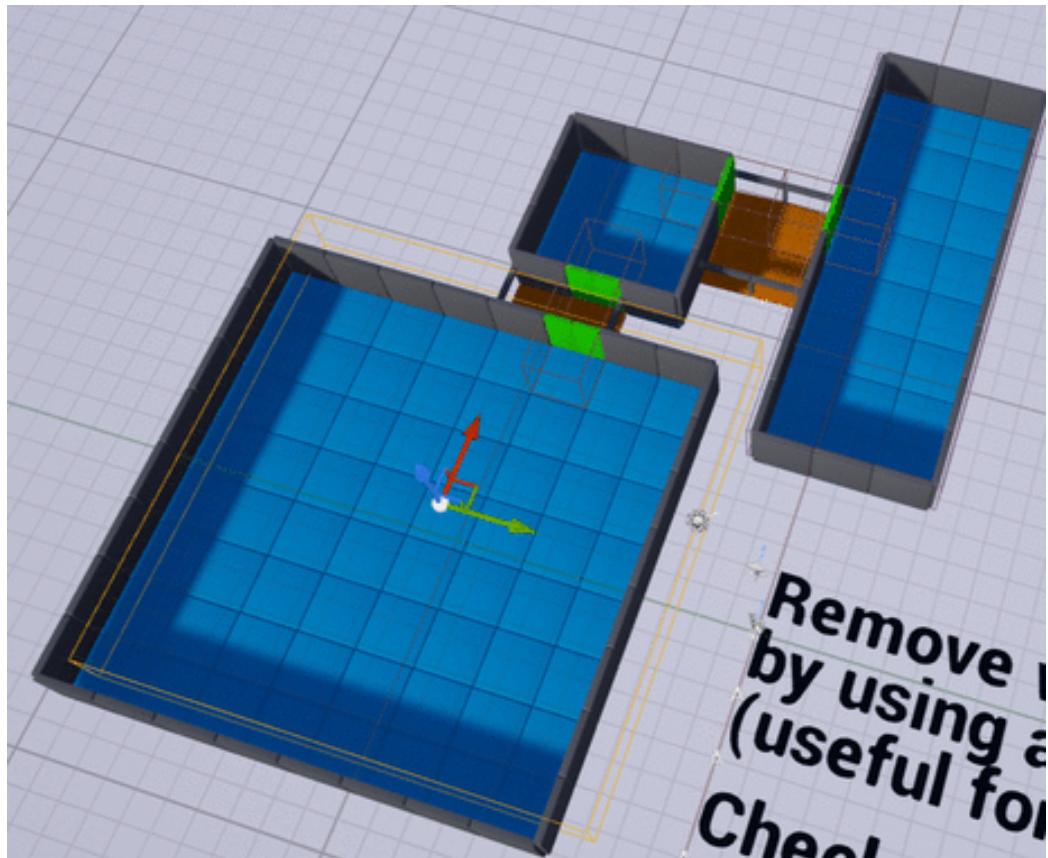


Figure 13: Wall Query Demo

Advanced_DungeonCurveFilter: Markers emitted by Dungeon Architect can be modified by a event listener before it is sent to the theming engine. This give you more low level control on the dungeon.

This example applies a curve filter on the markers

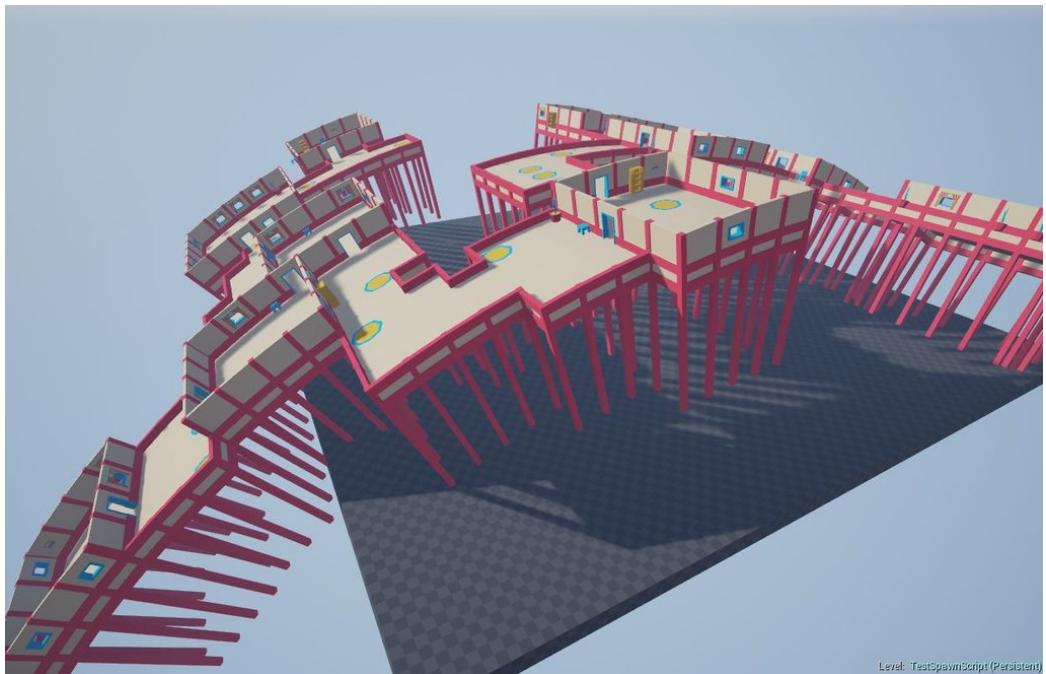


Figure 14: Marker Filter Examples

17 Scifi Theme

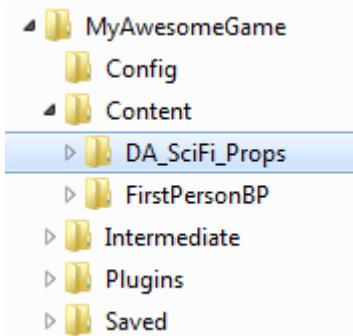
A set of theme files to generate sci-fi levels using the awesome SciFi Props Pack



[View in Youtube](#)



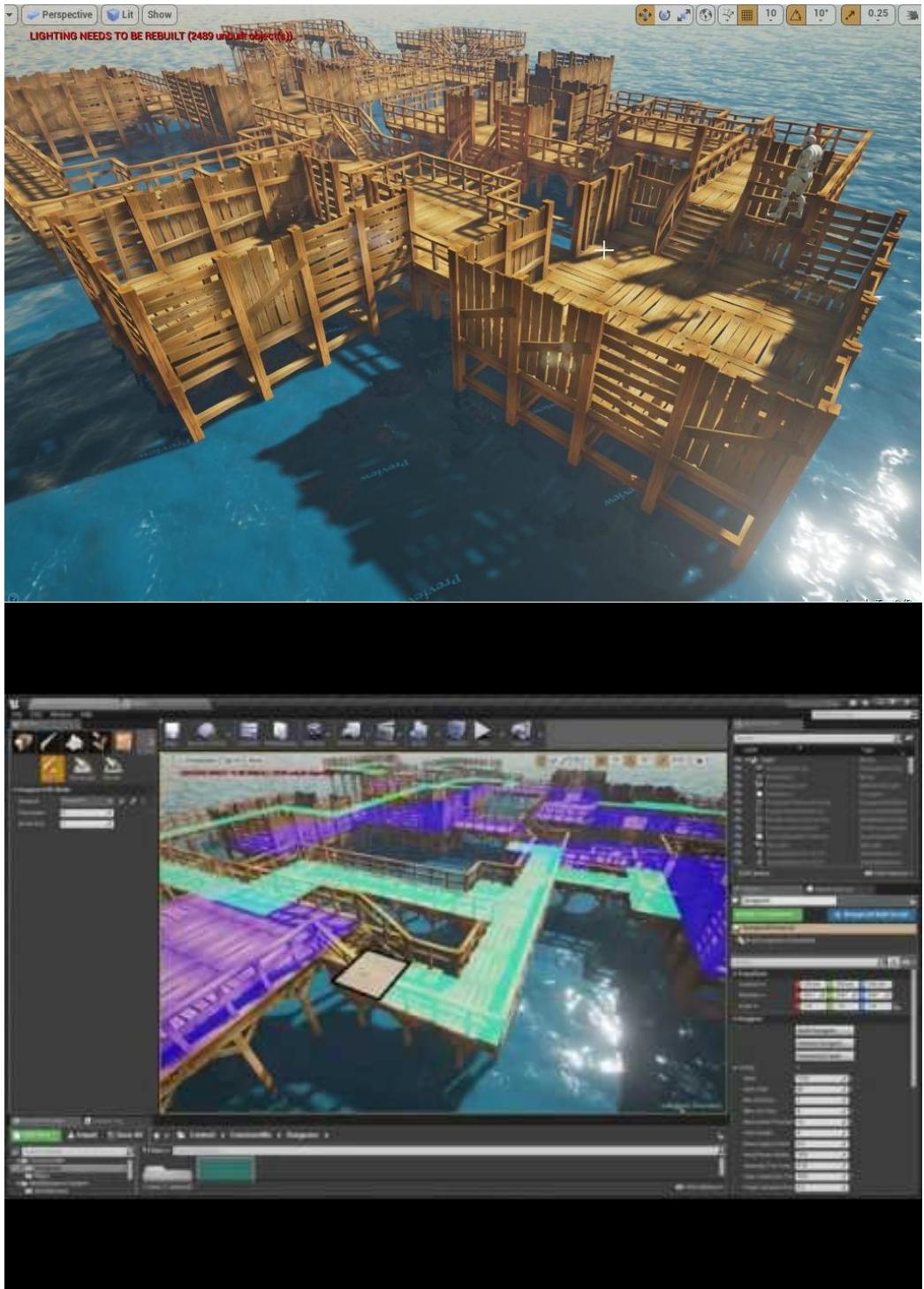
- Create a new project (e.g an FPS project)
- Install Dungeon Architect plugin
- Install the SciFi Props Pack to your project
- Copy the Content/DA_SciFi_Props folder into your game's Content folder



- Open the demo map Content/DA_SciFi_Props/Maps/ScifiMapDemo
- Select the Dungeon1 actor and click *Build Dungeon* from the Details window

18 Wooden Pier Theme

A theme file to generate levels using the awesome Modular Wooden Prop Pack



[View in Youtube](#)

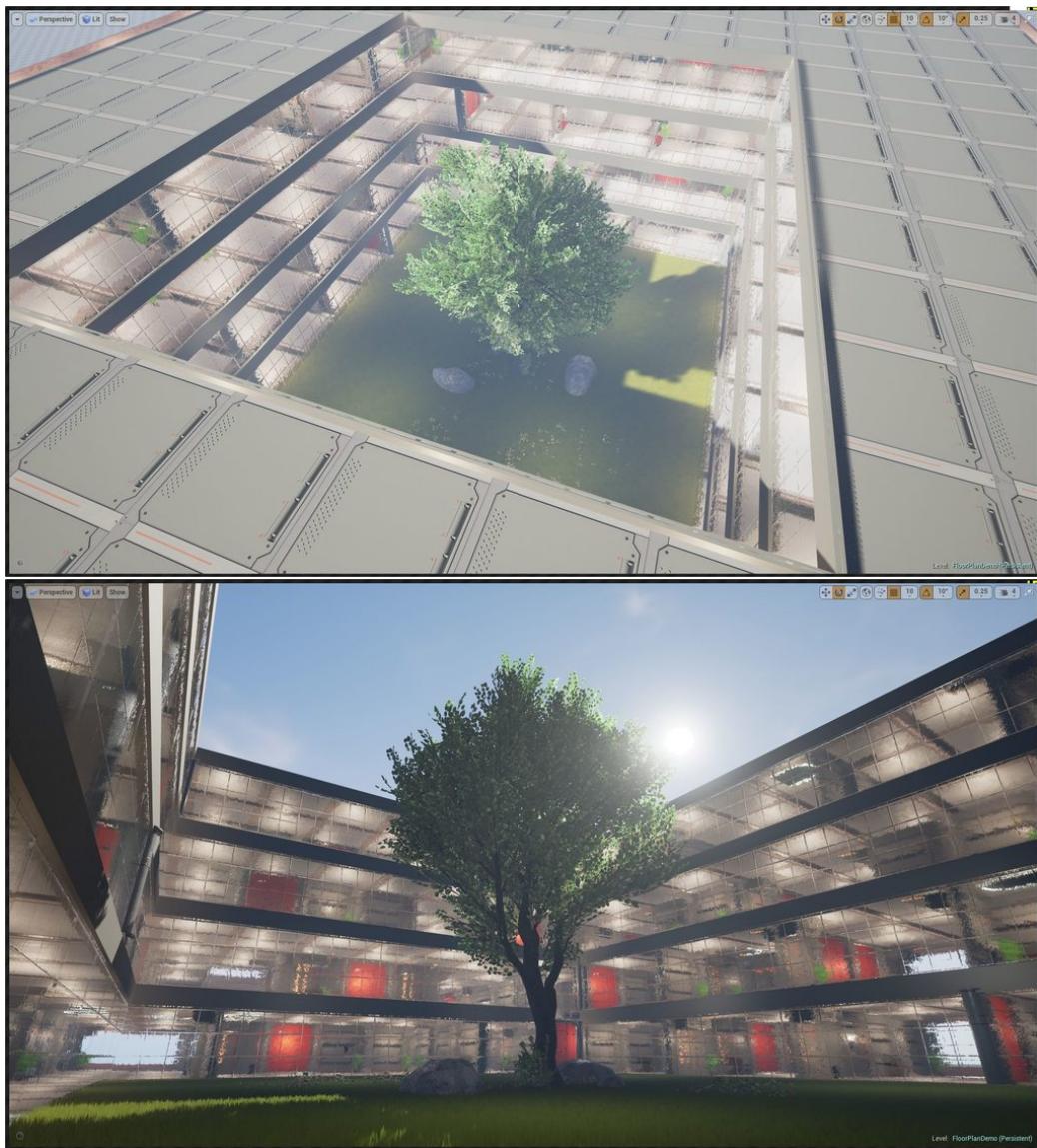
- Install Dungeon Architect plugin
- Install the Modular Wooden Prop Pack to your project
- Copy the Content/DA_WoodenPier folder into your game's Content folder
- Explore the maps under Content/DA_WoodenPier/Maps

19 Floor Plan Demo

Build floor plans for your indoor levels using the new Floor Plan Builder.



[View in Youtube](#)





- Create a new project (has to be First Person Blueprint, since the demo uses a modified player controller for the lift buttons to work)
- Install Dungeon Architect plugin
- Install the free Sci-Fi Hallways (it's ok to install an older compatible version)
- Copy the Content/DA_Floorplan_Demo folder into your game's Content folder
- Open the map Content/DA_Floorplan_Demo/FloorPlan/OfficeBuilding
- Press E to call the lift programmed in the demo

20 City Builder Demo

This demo shows how to use the city builder



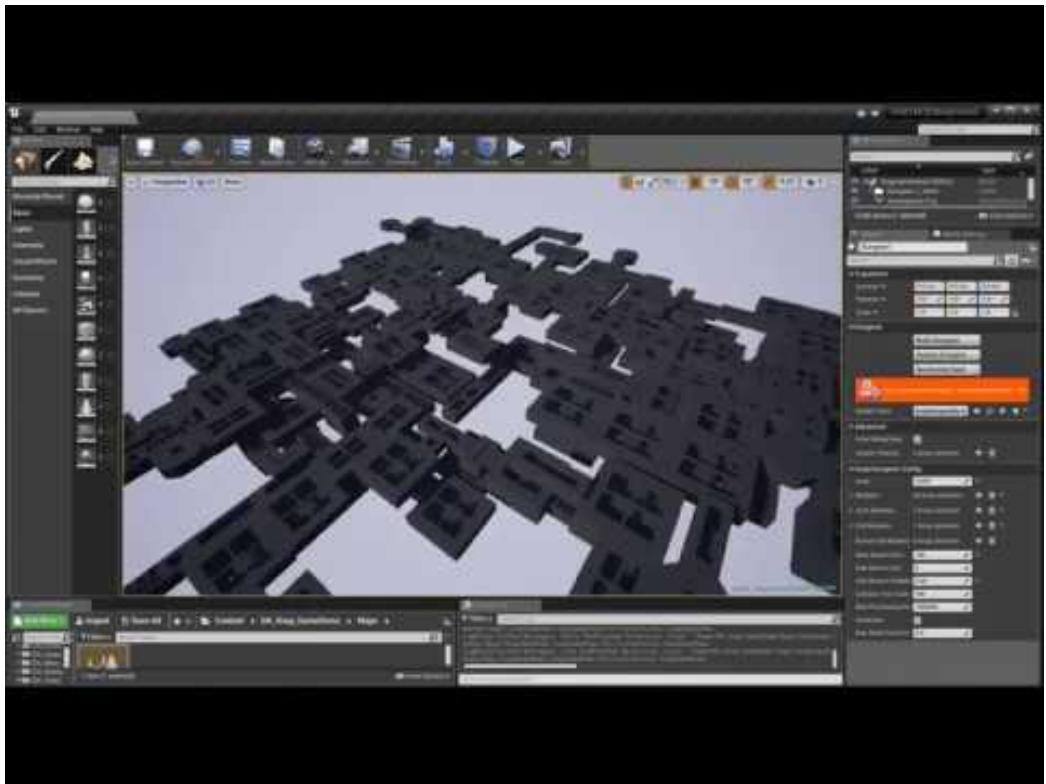
Figure 15: City Builder

- Create a new project
- Install Dungeon Architect plugin
- Copy the Content/DA_CityBuilder_Demo folder into your game's Content folder
- Explore the maps under Content/DA_CityBuilder_Demo/Maps

21 Snap Builder Demo

This demo uses the Snap builder to create a dungeon by stitching pre-built rooms (snap modules) together

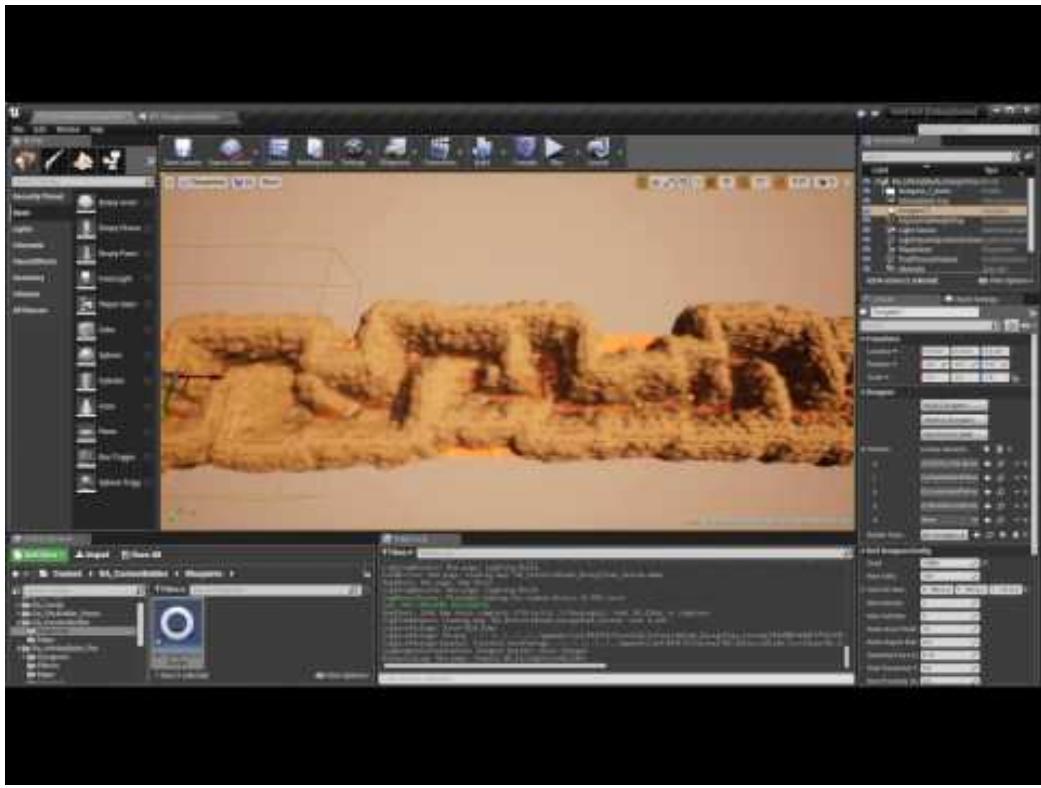
- Copy the Content/DA_Snap_GameDemo folder into your game's Content folder
- Explore the maps under Content/DA_Snap_GameDemo/Maps



[View in Youtube](#)

22 Custom Grid Builder Demo

The Custom Grid Builder has high level functions that you can use to define your own dungeon layouts. This demo shows how a custom layout was created in blueprints to create a dungeon layout along a straight line



[View in Youtube](#)

- Copy the Content/DA_CustomBuilder folder into your game's Content folder
- Explore the maps under Content/DA_CustomBuilder/Maps
- Check the Dungeon's Builder class blueprint BP_StraightLineBuilder for an example on building your own layout

23 Outdoor Cliff

An outdoor theme built with free assets



[View in Youtube](#)

- Install Dungeon Architect plugin
- Copy the Content/DA_OutdoorCliff folder into your game's Content folder
- Open the map Content/DA_OutdoorCliff/ToonLand

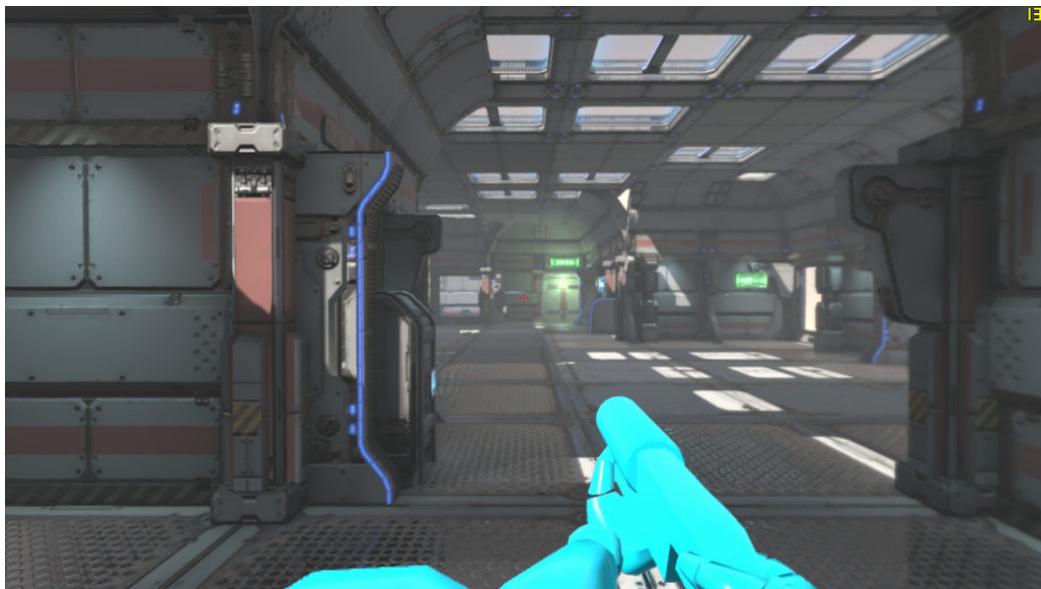
24 Scifi Theme 2 (Manufactura K4)

A set of theme files to generate levels using the awesome Top-Down Sci Fi pack



[View in Youtube](#)

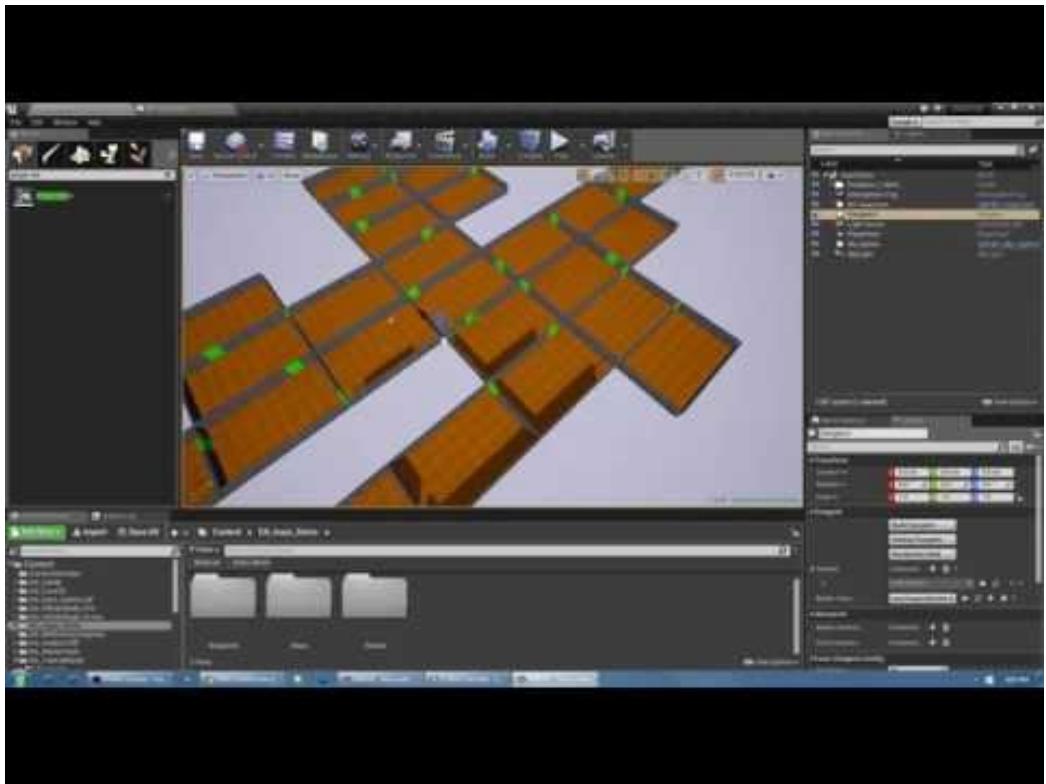




- Create a new project (e.g an FPS project)
- Install Dungeon Architect plugin
- Install Top-Down Sci-Fi pack to your project
- Copy the Content/DA_SciFi_K4 folder into your game's Content folder
- Top-Down Theme:
 - Open the demo map Content/DA_SciFi_K4/Maps/DATopDown
 - Select the Dungeon1 actor and click *Build Dungeon* from the Details window
- FPS Theme:
 - Open the demo map Content/DA_SciFi_K4/Maps/DAFPS
 - Select the Dungeon1 actor and click *Build Dungeon* from the Details window
- Oil Rig Theme:
 - Open the demo map Content/DA_SciFi_K4/Maps/DAOilRig
 - Select the Dungeon1 actor and click *Build Dungeon* from the Details window
- Tweak the parameters and rebuild for a different dungeon. Try painting the layout with the paint tool

25 Isaac Builder Demo Map

A demo map showcasing the Isaac builder



[View in Youtube](#)

- Create a Third Person Blueprint project
- Install Dungeon Architect plugin
- Copy the Content/DA_Isaac_Demo folder into your game's Content folder
- Open the map Content/DA_Isaac_Demo/IsaacDemo

26 Snap Builder Demo Map

A demo map showcasing the Snap builder



[View in Youtube](#)

COMING SOON

27 Support

- Forum Support Thread
- Website