

# Documentation

# AnyRPG Introduction

AnyRPG is an [open source](#) Role Playing Game engine written in [C#](#) for [Unity](#) that enables content creators to rapidly create unique and engaging short stories, scenarios, adventures, and even full games.

By providing a platform with the most common Role Playing Game functionality out of the box, AnyRPG allows content creators to focus directly on the things that make their game unique such as visual assets and story content.

## Getting Started

### Guides: Jump right in

Follow our handy guides to get started on the basics as quickly as possible:



Installing AnyRPG



Creating your first game



Configuring your game



Adding Content To Your Game

# Getting Started

# Installing AnyRPG

There are 3 ways to obtain AnyRPG.

- AnyRPG Core can be found on the [Unity Asset Store](#). This package is not bundled with UMA and must be manually configured after installation.
- AnyRPG Core can be found on [Github](#). This project is identical to the Unity Asset Store package. It is not bundled with UMA and must be manually configured after installation.
- AnyRPG Engine can be downloaded in Unity Package format directly from [anyrpg.org/downloads](#). This package contains the exact same functionality as AnyRPG Core, but is pre-configured with all dependencies already installed, and has approximately twice as many icons, audio files, and 3d models.

## Choose an installation type



Unity Asset Store Installation



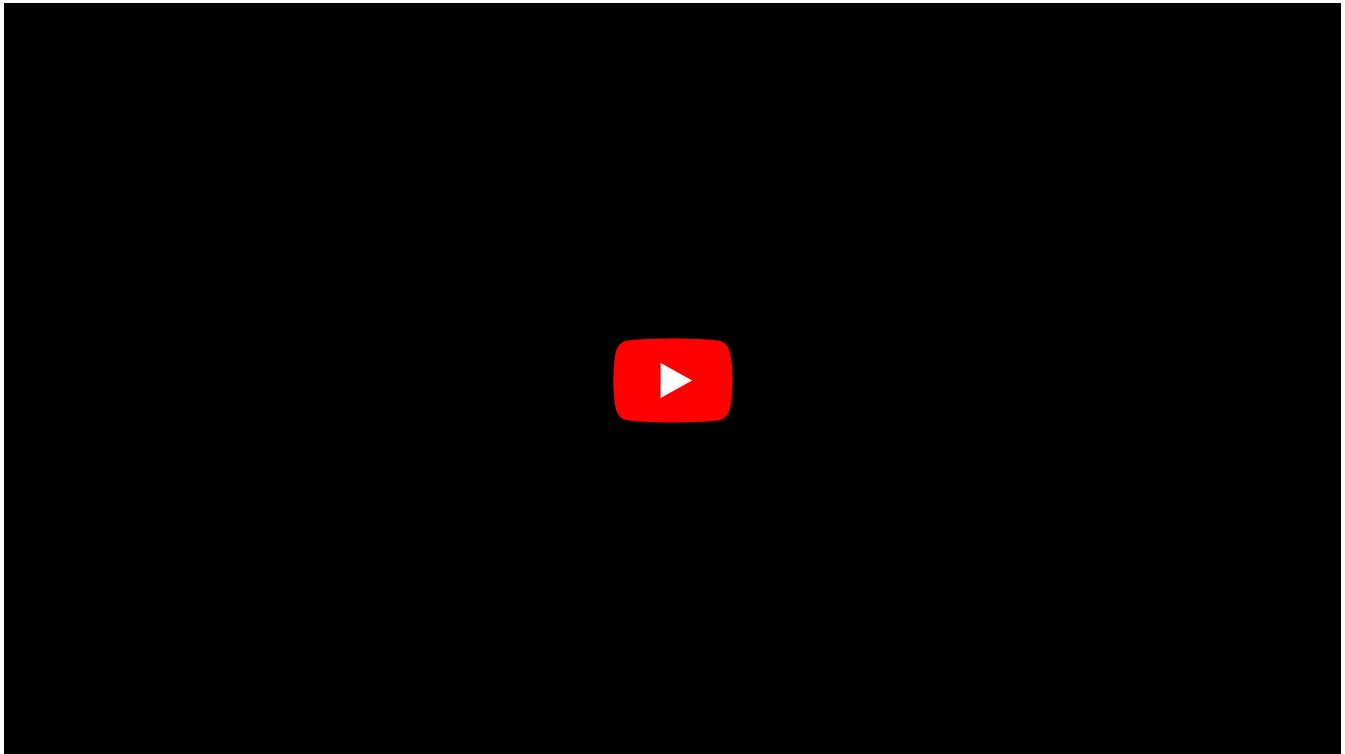
Github Installation



Unity Package Installation

# Unity Asset Store Installation

The AnyRPG Core package is available via github and the Unity Asset Store. This page describes how to install it from the Unity Asset Store.



## Find AnyRPG Core on the Unity Asset Store

AnyRPG Core can be found on the Unity Asset Store at <https://assetstore.unity.com/packages/slug/234361>

## Install the Correct Unity Version

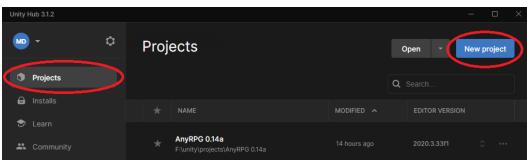
The AnyRPG Unity package is exported as a complete project because it requires specific build settings, compiler settings, layers, and tags to function. Due to the way full projects are exported in Unity, they must be imported with the **same or higher** Unity version they were exported with.

You can find the correct Unity version right on the asset store page.

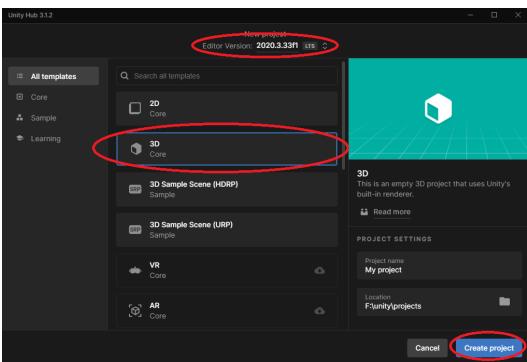
The screenshot shows the Unity Asset Store page for 'AnyRPG Core'. At the top, there's a large thumbnail image of a character in a medieval-style setting. Below the thumbnail, the title 'AnyRPG Core' is displayed, along with the developer 'AnyRPG' and the status 'FREE'. There are also '445 views in the past week' and a 'Add to My Assets' button. Underneath the main title, there's a developer bio: 'I am a student engineer in high school and I loved the AnyRPG engine that helped me create a sample Rog game for the school project with my students.' Below the bio, there are sections for 'License agreement', 'Extension Asset', 'File size', 'Latest version', and 'Required Unity versions'. The 'Required Unity versions' section is circled in red and lists '2021.3.1f2 or Higher'. At the bottom of the page, there are links for 'Overview', 'Package Content', 'Releases', 'Reviews', 'Publisher Info', and 'Asset Quality'.

# Create a New Unity 3D Project

Open Unity Hub and select the *Projects* tab. Click *New project*.

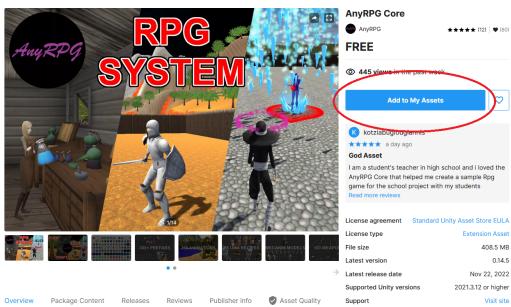


If you have multiple versions of Unity installed, you will need to select the correct editor version. Choose 3D (URP/HDRP are not available yet), optionally name your project, and click the *Create project* button.

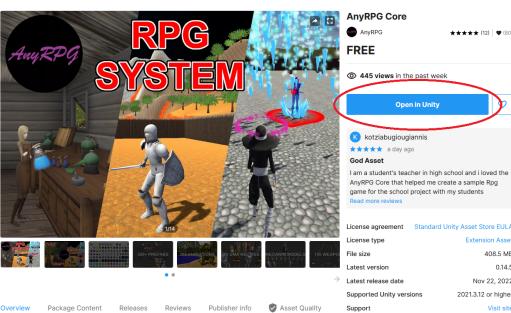


## Install the AnyRPG Unity Package

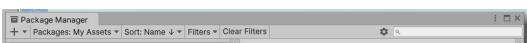
Add the AnyRPG Core asset to your assets by clicking the **Add To My Assets** button on the asset store page.

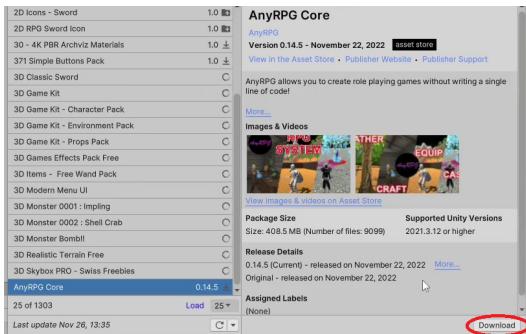


Once the asset is added to your assets, click the **Open in Unity** button.

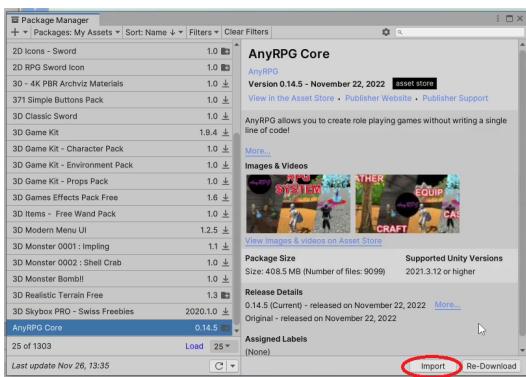


When the package manager opens in Unity, click the Download button to download the package.





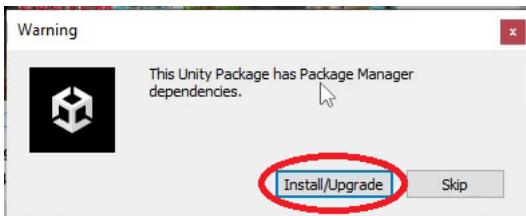
Once the package has downloaded, the **Import** button should become available. Click it.



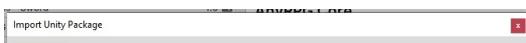
A warning window will pop up letting you know this package will overwrite all project settings. Click **Import**.

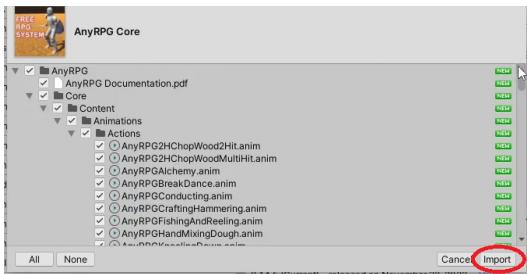


A warning window will pop up prompting you to upgrade package manager dependencies. This is necessary to ensure that packages that AnyRPG relies on, such as the Post Processing package are installed. Click **Install/Upgrade**.

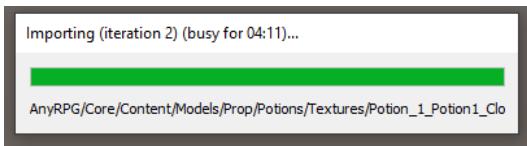


When the Import Unity Package window appears, click **Import**.





The AnyRPG Unity package contains hundreds of textures, icons, 3d models, and audio files. You can expect the import to take a few minutes, even on a reasonably fast computer.



Once the import completes, you will see errors in the console. These will be fixed in the next step by installing UMA.



## Install UMA 2

Install UMA 2 from the Unity Asset Store at <https://assetstore.unity.com/packages/3d/characters/uma-2-unity-multipurpose-avatar-35611>

If you don't already own UMA, click *Add to My Assets*.

### UMA 2 - Unity Multipurpose Avatar

 UMA Steering Group  (415) |  (7324)

**FREE**

 1058 views in the past week



Click *Open in Unity*.

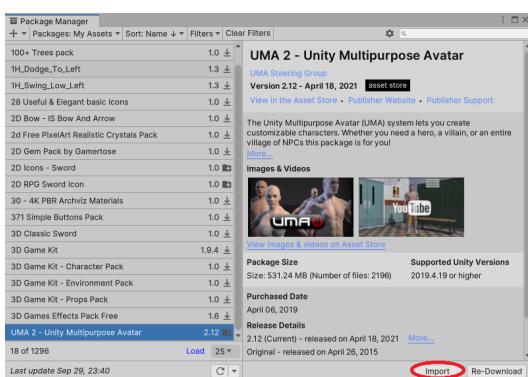
### UMA 2 - Unity Multipurpose Avatar

**FREE**

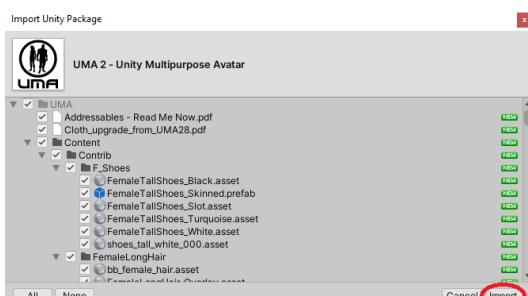
🕒 1058 views in the past week



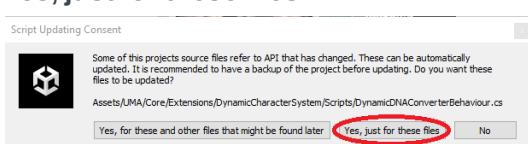
The Unity Package Manager should open in Unity. If you have not downloaded the package yet, click **Download**. Then Click **Import**.



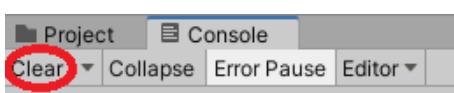
When presented with the option, accept the defaults and click **Import**.



Since UMA has not been updated to the new 2021 API yet, you will have to accept the script update. Click **Yes, just for these files**.



After the UMA package is imported, click **Clear** in the Console pane to clear any old warnings.

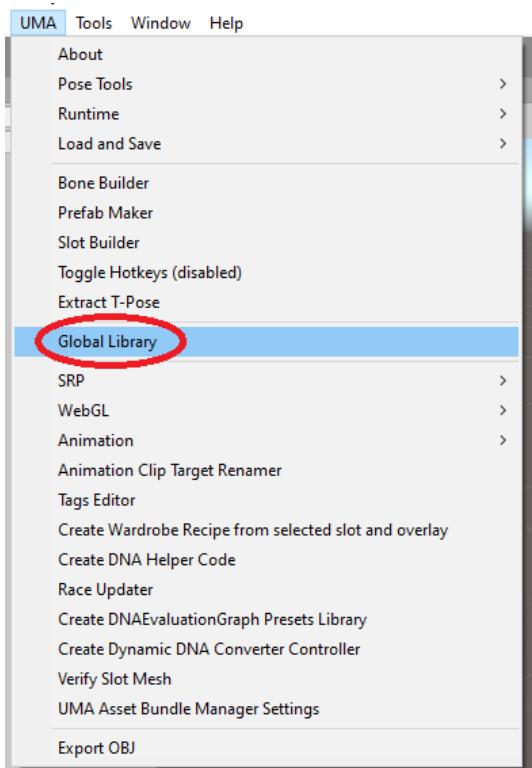


You should no longer see any errors.

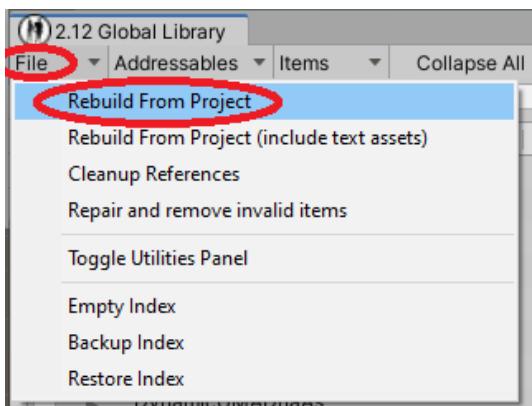




Finally, rebuild the UMA Global Library. Choose from the main menu bar *UMA > Global Library*.



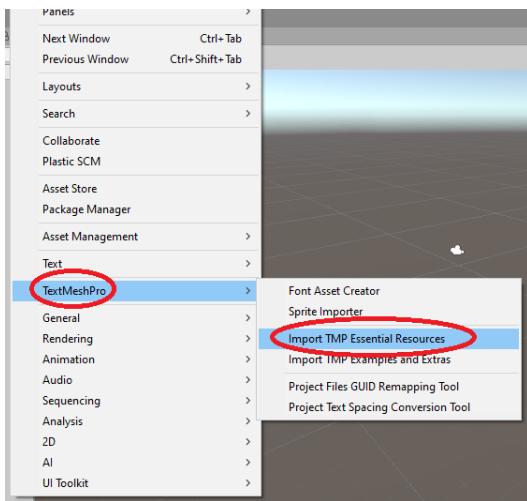
In the Global Library window, choose *File > Rebuild From Project*.



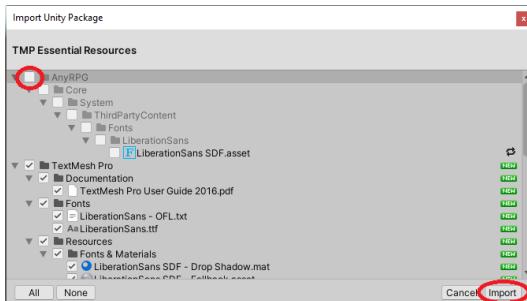
## Install TMP Essential Resources

Open the Window menu in Unity and choose *TextMeshPro > Import TMP Essential Resources*.





- ! AnyRPG Includes a modified version of the Liberation Sans SDF Asset so be sure to **uncheck** the box beside AnyRPG before clicking *Import*.



## Next Steps

Congratulations, AnyRPG is now ready to use!

From here you can explore the [included sample games](#) or get started [creating your own game](#).

# Github Installation

The AnyRPG Core package is available via github and the Unity Asset Store. This page describes how to install it from github.

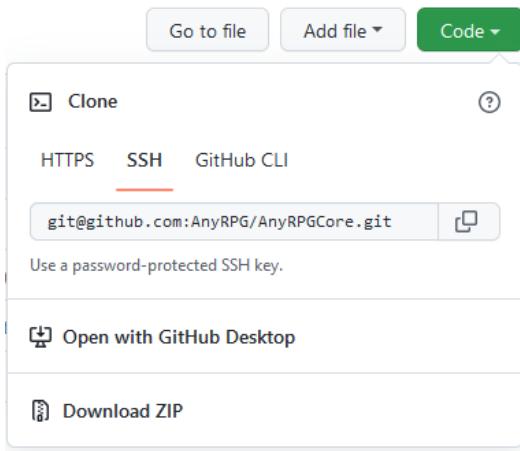
## Install the Correct Unity Version

The AnyRPG Unity package is exported as a complete project because it requires specific build settings, compiler settings, layers, and tags to function. Due to the way full projects are exported in Unity, they must be imported with the **same** Unity version they were exported with.

The correct Unity Version for the current github project is 2021.3.11f1 and can be downloaded from <https://unity3d.com/get-unity/download/archive>

## Download the Project From Github

Choose one of the download methods that Github offers.

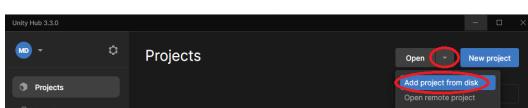


For example, you can clone the project into a directory on your computer if you have the git CLI installed using the command `git clone git@github.com:AnyRPG/AnyRPGCore.git`

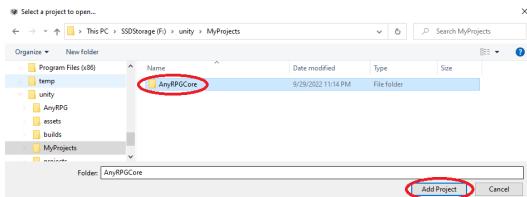
```
$ git clone git@github.com:AnyRPG/AnyRPGCore.git
Cloning into 'AnyRPGCore'...
remote: Counting objects: 55264, done.
remote: Compressing objects: 100% (3043/3043), done.
remote: Total 55264 (delta 2355), reused 3000 (delta 2338), pack-reused 52221
Receiving objects: 100% (55264/55264), 350.50 MiB | 18.48 MiB/s, done.
Resolving deltas: 100% (46440/46440), done.
Updating files: 100% (18856/18856), done.
```

## Open Unity Hub and Add the Project

Open Unity Hub and select the *Projects* tab. Click *Open > Add Project From Disk*.

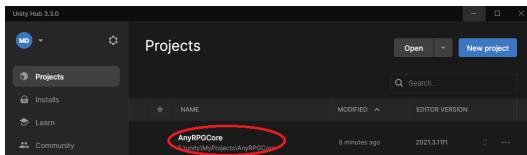


Find the project folder and choose *Add Project*.

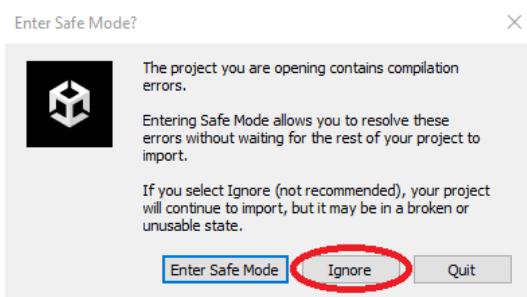


## Open The Project

The project should now be visible in Unity Hub. Click on it to open it.



When presented with the option, choose Ignore. This is necessary because AnyRPG relies on UMA and it's not included in the github project.



Once the project opens, you will see errors in the console. These will be fixed in the next step by installing UMA.



## Install UMA 2

Install UMA 2 from the Unity Asset Store at <https://assetstore.unity.com/packages/3d/characters/uma-2-unity-multipurpose-avatar-35611>

If you don't already own UMA, click *Add to My Assets*.

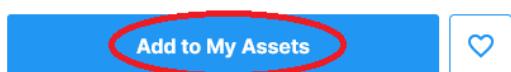
### UMA 2 - Unity Multipurpose Avatar

 UMA Steering Group

★★★★★ (415) |  (7324)

**FREE**

 1058 views in the past week



Click *Open in Unity*.

## UMA 2 - Unity Multipurpose Avatar

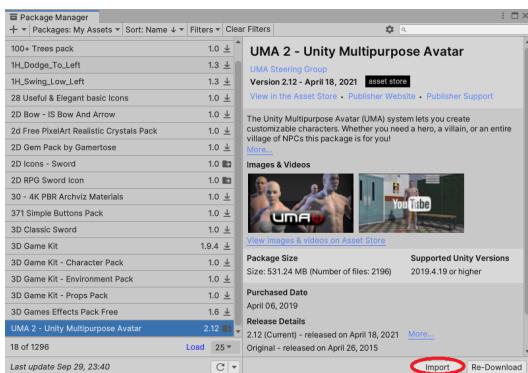
UMA Steering Group ★★★★☆ (415) | ❤ (7324)

FREE

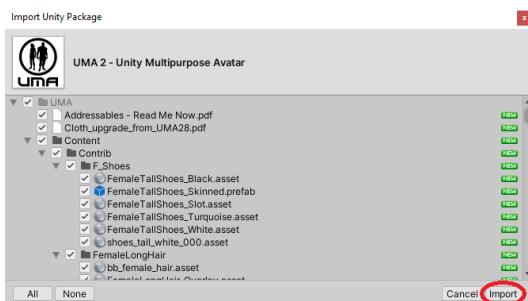
🕒 1058 views in the past week



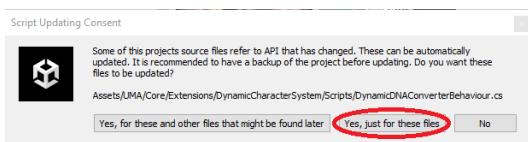
The Unity Package Manager should open in Unity. If you have not downloaded the package yet, click *Download*. Then Click *Import*.



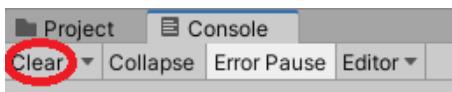
When presented with the option, accept the defaults and click *Import*.



Since UMA has not been updated to the new 2021 API yet, you will have to accept the script update. Click *Yes, just for these files*.



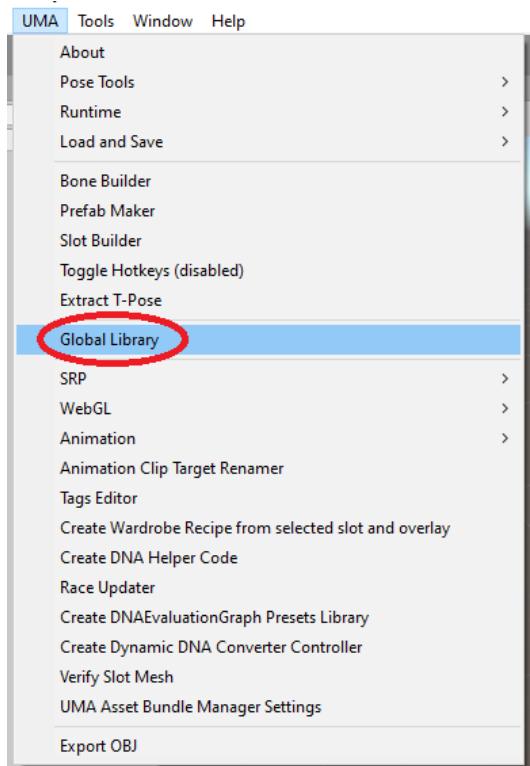
After the UMA package is imported, click *Clear* in the Console pane to clear any old warnings.



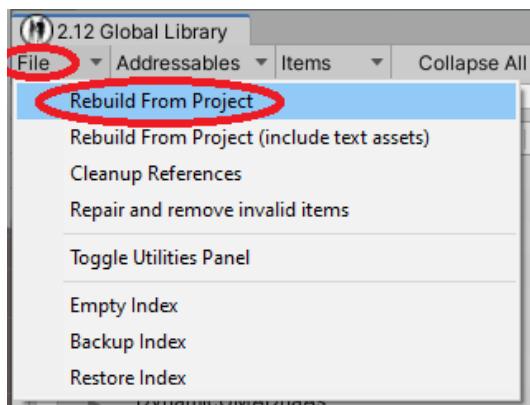
You should no longer see any errors.



Finally, rebuild the UMA Global Library. Choose from the main menu bar *UMA > Global Library*.

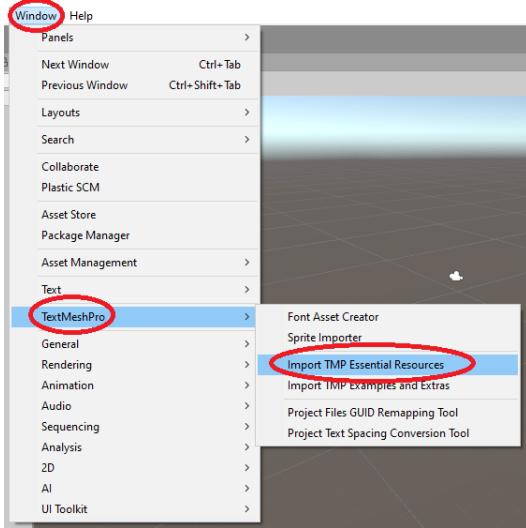


In the Global Library window, choose *File > Rebuild From Project*.

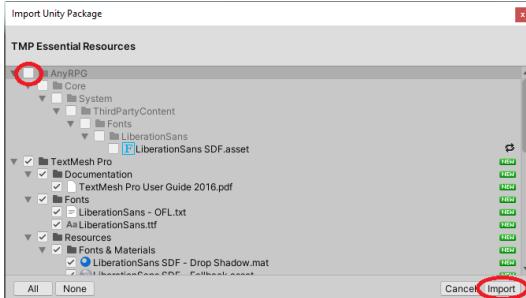


## Install TMP Essential Resources

Open the Window menu in Unity and choose *TextMeshPro > Import TMP Essential Resources*.



! AnyRPG Includes a modified version of the Liberation Sans SDF Asset so be sure to **uncheck** the box beside AnyRPG before clicking *Import*.



## Next Steps

Congratulations, AnyRPG is now ready to use!

From here you can explore the [included sample games](#) or get started [creating your own game](#).

# Unity Package Installation

The full AnyRPG Engine Unity package is a free download that contains extra assets and a more complex sample game than the one included in AnyRPG Core (available on github and the Unity Asset Store).

## Download AnyRPG

Download the AnyRPG Unity package from <https://www.anyrpg.org/downloads/>.

## Install the Correct Unity Version

The AnyRPG Unity package is exported as a complete project because it requires specific build settings, compiler settings, layers, and tags to function. Due to the way full projects are exported in Unity, they must be imported with the **same** Unity version they were exported with.

You can find the correct Unity version for the latest unity package right on the downloads page, and the correct Unity version for previous AnyRPG packages on their individual details pages.

### Unity Package

Downloadable versions of the AnyRPG Engine in Unity Package format. This package includes the full content of A Lost Soul with all third party assets replaced with redistributable assets.

The latest version of the AnyRPG engine (0.14a) is compatible with Unity 2020.3.3f1 which can be downloaded from <https://unity3d.com/get-unity/download/archive>.

### AnyRPG Engine 0.13a

[DOWNLOAD](#)

[free\_download\_btn]

### Primary Download Link (MEGA – fast)

Display	20	downloads per page	Search:
Title	Details	Published	Download
 AnyRPG Engine 0.14a 16 downloads	AnyRPG Engine 0.14a	April 29, 2022	<a href="#">DOWNLOAD</a>

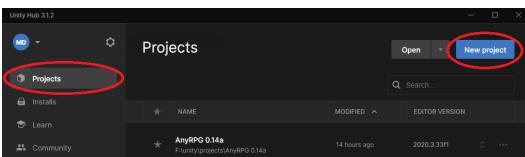
  

Display	20	downloads per page	Search:
Title	Details	Published	Download
 AnyRPG Engine 0.13a 267 downloads	AnyRPG Engine 0.13a AnyRPG Engine 0.13a	December 24, 2021	<a href="#">DOWNLOAD</a>

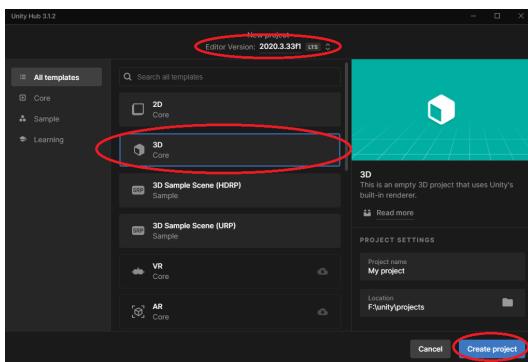
Description	Package Info
<b>Unity Compatibility</b>	
This package is compatible with Unity 2020.3.25f1 which can be downloaded from <a href="https://unity3d.com/get-unity/download/archive">https://unity3d.com/get-unity/download/archive</a> .	

## Create a New Unity 3D Project

Open Unity Hub and select the *Projects* tab. Click *New project*.

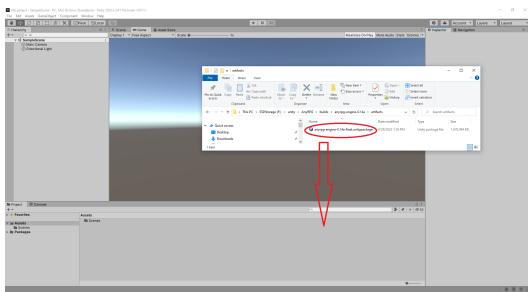


If you have multiple versions of Unity installed, you will need to select the correct editor version. Choose 3D (URP/HDRP are not available yet), optionally name your project, and click the *Create project* button.

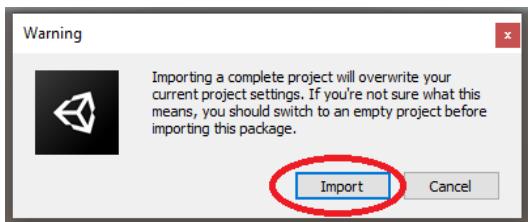


## Install the AnyRPG Unity Package

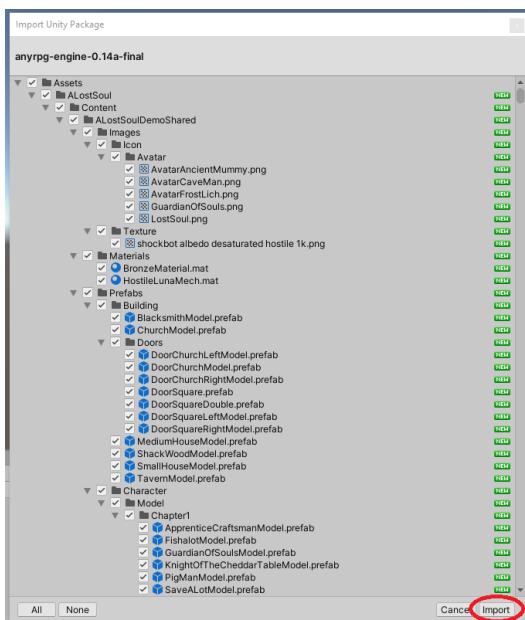
When project loads, find the AnyRPG Unity package on your hard drive, and drag it into the Project pane or tab in the Unity editor.



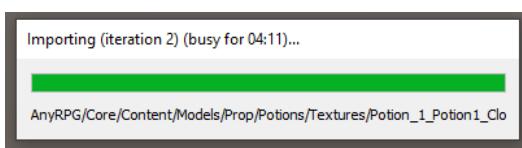
A warning window will pop up letting you know this package will overwrite all project settings. Click *Import*.



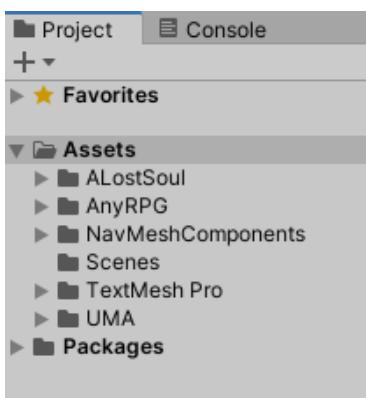
When the Import Unity Package window appears, click *Import*.



The AnyRPG Unity package contains thousands of textures, icons, 3d models, and audio files. You can expect the import to take around 10 minutes, even on a reasonably fast computer.



When the installation completes, your project should have the following folder structure.



You can safely ignore any warning messages in the console. There should be no error messages. If there are error messages, check to ensure you created the project with the correct version of Unity.



## Next Steps

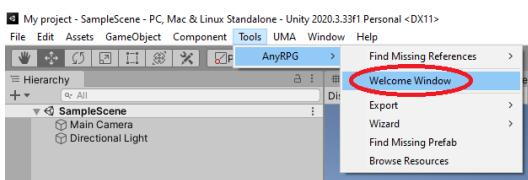
From here you can explore the [included sample games](#) or get started [creating your own game](#).

# Included sample games

AnyRPG includes several sample games. Read on to find out how to play them.

## Welcome Window

You can find links to the included sample games in the welcome window. The window will pop up automatically when you open the Unity project, but if you have just installed the package and not closed the Unity editor yet, you can still open it manually by clicking on the *Tools* menu in the menu bar and choosing *AnyRPG > Welcome Window*.



## Loading the Games

To load any of the sample games from the Welcome Window, click on the button with the game title.



This will open the loading scene for that game, at which point you can press the play button in the Unity editor to play the game.





A brief description of the purpose of each game is listed below.

### **A Lost Soul Story Demo Game**

A Lost Soul Story Demo is the first 2 chapters of the game A Lost Soul re-created using the open source assets included in the AnyRPG Engine.

- (i) A Lost Soul Story Demo Game is only included with the AnyRPG Unity package. If you installed AnyRPG using github, this option will be missing from the Welcome Window.

### **A Lost Soul Character Demo Game**

A Lost Soul Character Demo allows you to explore the world of A Lost Soul by playing as any character and faction you encounter during the more linear story game.

- (i) A Lost Soul Character Demo Game is only included with the AnyRPG Unity package. If you installed AnyRPG using github, this option will be missing from the Welcome Window.

### **Content Demo Game**

The Content Demo allows you to view all included textures, 3D models, and audio content in the AnyRPG Unity package. You can play as any of the included character models. It contains a single playable scene with all 3D models organized by type, all textures, and audio players that allow playing any ambient sound, background music, or sound effects.

- (i) The Content Demo Game is only included with the AnyRPG Unity package. If you installed AnyRPG using github, the option will be missing from the Welcome Window

### **Features Demo Game**

The Features Demo Game is intended to be a simple demonstration of all features supported by AnyRPG. Since the majority of the content in the features demo game was installed using the Template Content Wizard, it also somewhat serves as an example of what type of template content can be quickly installed in your own games using the wizard.

## **Empty (Zero Config Mode) Game**

All of the above games use AnyRPG in configured game mode, meaning they contain a separate loading scene, main menu, and content scenes. They also contain their own resources folders and Game Manager configurations.

The Empty Game is a demonstration of how AnyRPG can be used as a character controller to allow you to explore a scene using the default player model by simply adding and unconfigured GameManager prefab to the scene.

# Creating your first game

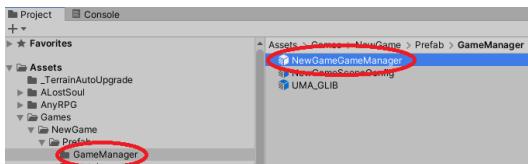
You are now ready to create your first game. Open the [New Game Wizard](#) to get started.

# Configuring your game

## The System Configuration Manager

All configuration options that apply to the entire game are set through the System Configuration Manager.

After using the New Game Wizard to create your game, you can find the System Configuration Manager in the Game Manager prefab at the following directory path : *Games/YourGameName/Prefab/GameManager*.



## Settings

The System Configuration Manager has over 100 settings. They are grouped in common related themes, and listed below.

### Game Configuration

Name	Description
Game Name	The name of the game that will show on the main menu screen when the game is first launched.
Game Version	The version number that will show on the main menu screen when the game is first launched.
Load Resources Folders	Because AnyRPG supports multiple games in the same project, it is necessary to only load the Scriptable Objects that apply to the correct game. Each game has its own resources in subfolder of Resources folder in the format <i>Resources/YourGameName</i> . This has the added benefit of allowing the developer to have shared resources that can be reused across multiple games. This list contains the names of all Resources subfolders that should be loaded into memory when the game is launched.

### Scenes

Name	Description
Initialization Scene	<p>The name of the scene that contains the GameManager prefab. In the launching process, the GameManager prefab is set to <code>DontDestroyOnLoad</code> and then the <i>Main Menu Scene</i> is loaded.</p> <p>If the game is launched from a content scene that has a <a href="#">Scene Config</a> prefab in it, that scene will be unloaded, and the <i>Initialization Scene</i> will be immediately loaded to start the launching process properly.</p>
Main Menu Scene	<p>The name of the scene that contains the main menu, where the player can start new games or load existing saved games.</p> <p>This name can be the name of the scene on disk, the friendly name configured in a <a href="#">Scene Node</a>.</p>
Default Starting Zone	<p>If your game is not configured to allow choosing a Faction when starting a game, or the the Faction's Default Starting Zone field is empty, then new players will start their adventures in this scene.</p> <p>This name can be the name of the scene on disk, the friendly name configured in a <a href="#">Scene Node</a>.</p>

## New Game Options

Name	Description
Default Player Name	If <i>Use New Game Window</i> is false, the player will start a new game with this name. If <i>Use New Game Window</i> is true, the player will have its name set to this by default.
Use New Game Window	If true, the player will be presented with a screen to customize the character name before launching a new game.
New Game Appearance	If true, and <i>Use New Game Window</i> is true, show the appearance tab in the New Game Window.
New Game UMA Appearance	If true, and <i>Use New Game Window</i> is true, an UMA character creator will be shown when UMA characters are selected in the New Game Window
New Game Class	If true, and <i>Use New Game Window</i> is true, the player can select their <a href="#">Character Class</a> in the New Game Window.
New Game Faction	If true, and <i>Use New Game Window</i> is true, the player can select their <a href="#">Faction</a> in the New Game Window.
New Game Specialization	If true, and <i>Use New Game Window</i> is true, and <i>New Game Class</i> is true, the player can select the <a href="#">Class Specialization</a> in the New Game Window.
New Game Audio	An <a href="#">Audio Profile</a> that contains an audio clip to play while the New Game Window is open.
Default Player Unit Profile Name	If <i>Use New Game Window</i> is false, all new players will start the game using this <a href="#">Unit Profile</a> .
Always Show Default Profiles	If <i>Use New Game Window</i> is true, the default profiles will always be shown, in addition to any allowed by <a href="#">Faction</a> (if used).
Character Creator Profile Names	A list of <a href="#">Unit Profiles</a> to show in the New Game Window.

## In Game Character Creator

Name	Description
Use First Creator Profile	If true, when the character creator is used in-game the character will be forced to use the first character creator profile, rather than their current model.

## Inventory

Name	Description
Default Inventory Slots	The number of slots the player inventory contains, without any <a href="#">Bags</a> equipped.
Default Bank Slots	The number of slots the <a href="#">Bank</a> contains, without any <a href="#">Bags</a> equipped.
Max Inventory Bags	The maximum number of bags a player can have equipped on their character.
Max Bank Bags	The maximum number of bags a player can have equipped at the <a href="#">Bank</a> .
Default Backpack Item	If this field is not null, the player will have this item equipped as their backpack when starting a new game.
Default Bank Contents	A list of <a href="#">Items</a> that the player will have in their <a href="#">Bank</a> when starting a new game.

## Controller

Name	Description
Default Controller Configuration	<p>The controller configuration that will be enabled by default the first time the game is launched. This can be changed by the player in the in-game options menu.</p> <p><b>Mouse And Keyboard</b></p> <p>Mouse and Keyboard control will be enabled and the player will use strafe mode as the movement default. Mouse and Keyboard action bars will be shown.</p> <p><b>Game Pad</b></p> <p>Game Pad control will be enabled and the player will use free run mode as the movement default. Game Pad action bars will be shown.</p>
Max Turn Speed	The maximum turn speed in degrees per second.
Walk Speed	The default character walk speed in meters per second.
Run Speed	The default character run speed in meters per second.
Swim Speed	The default character swim speed in meters per second.
Fly Speed	The default character fly speed in meters per second.
Glide Speed	The default character glide speed in meters per second.
Glide Fall Speed	The speed the character will fall while gliding in meters per second.
Use Fall Damage	If true, the player will take damage when falling from heights.
Fall Damage Per Meter	If fall damage is used, the amount of damage per meter fallen the player will take.
Fall Damage Min Distance	If fall damage is used, the minimum distance the player must fall before damage is taken.
Fall Damage Audio Clip	The audio clip to play when fall damage is taken.
Fall Damage Audio	The <a href="#">Audio Profile</a> to play when fall damage is taken. If this value is set, it will override the <i>Fall Damage Audio Clip</i> setting.

Use Third Party Movement Controller	THIS FEATURE IS DEPRECATED. DO NOT USE.
Allow Auto Attack	If true, the player will automatically attack with the current auto-attack even when no abilities are actively used. If a third party movement controller used, disable this to prevent movement lock in combat.

## Camera

Name	Description
Use Third Party Camera Control	THIS FEATURE IS DEPRECATED. DO NOT USE.
Third Party Camera	THIS FEATURE IS DEPRECATED. DO NOT USE.
System Animation Profile Name	

## Animation

Name	Description
System Animation Profile Name	This <a href="#">Animation Profile</a> should contain references to all the default animations that are on the default animation controller so the system knows which animations to replace when overriding them.
Sync Movement Animation Speed	If true, movement animations will be sped up or slowed down to match the actual speed (in m/s) the character is moving at. This will reduce foot sliding but may result in more jerky looking movement.

## Character Animation Configuration

Name	Description
Default Animation Profile Name	This <a href="#">Animation Profile</a> will override the system animations included in the engine when no other unit or weapon specific animations are in use.
Default Animation Controller	The animation controller that will be used to animate characters by default.

## Level Values

Name	Description
Max Level	The character cannot level up past this level.
XP Required Per Level	Every level, the amount of experience you need for the next level is increased by this amount.

## Currency

Name	Description
Currency Group Name	A <a href="#">Currency Group</a> that will be shown by default in tooltips and the Vendor UI window.
Vendor Price Multiplier	When selling an <a href="#">Item</a> to a <a href="#">Vendor</a> , the offered amount will be the regular purchase amount multiplied by this number.

## Currency Scaling

Name	Description
Kill Currency Name	If <a href="#">Automatic Currency</a> is enabled for a <a href="#">Lootable Character</a> , this <a href="#">Currency</a> will be dropped.
Kill Currency Amount Per Level	If <a href="#">Automatic Currency</a> is enabled for a <a href="#">Lootable Character</a> , this <a href="#">Currency</a> amount will be multiplied by the character level.
Quest Currency Name	If <a href="#">Automatic Currency</a> is enabled for a <a href="#">Quest</a> , this <a href="#">Currency</a> will be rewarded.
Quest Currency Amount Per Level	If <a href="#">Automatic Currency</a> is enabled for a <a href="#">Quest</a> , this <a href="#">Currency</a> amount will be multiplied by the <a href="#">Quest</a> level.

## Quest Experience Scaling

Name	Description
Base Quest XP	A flat experience amount to add to all quests that does not scale with level.
Quest XP Per Level	A flat experience amount to add to all quests that does scale with level.
Use Quest XP Level Multiplier Denominator	If true, the experience per level will be multiplied by <code>(1 / level)</code> .
Quest XP Multiplier Level Cap	If the above option is true, and this value is more than 0, the experience per level will be multiplied by <code>(1 / level)</code> .

## Kills

Name	Description
Base Kill XP	A flat experience amount to add to all kills that does not scale with level.
Kill XP Per Level	A flat experience amount to add to all kills that does scale with level.
Use Kill XP Level Multiplier Denominator	If true, the experience per level will be multiplied by <code>(1 / level)</code> .
Kill XP Multiplier Level Cap	If the above option is true, and this value is more than 0, the experience per level will be multiplied by <code>(1 / level)</code> .
Default Despawn Timer	The default amount of time before a unit despawn after killed and looted.

## DPS Scaling

Name	Description
Weapon DPS Budget Per Level	Weapons with <i>Dynamic Level</i> set to true will get this amount of DPS per level.

## Primary Stats and Scaling

Name	Description
Stat Budget Per Level	A Per level stat budget that will be applied to all <a href="#">Character Stats</a> , in addition to their individual budgets.

## Power Resource and Capabilities

Name	Description
Power Resources	A list of <a href="#">Power Resources</a> that all characters will have.
Capabilities	A list of <a href="#">Capabilities</a> that all characters will have.

## Layer

Name	Description
Default Character Unit Layer	Character units will automatically be set to this layer so they can respond to AOE / looting and other things that filter by this layer.
Default Player Unit Layer	Player units will automatically be set to this layer.

## System Abilities

Name	Description
Level Up Effect Name	The <a href="#">Ability Effect</a> to cast on a player when they level up.
Death Effect Name	The <a href="#">Ability Effect</a> to cast on a player when they die.
Loot Sparkle Effect Name	The <a href="#">Ability Effect</a> to cast on any character when it has loot that can be collected.

## System Audio

Name	Description
Weapon Miss Audio Clip	The audio clip to play whenever a weapon (or unarmed) attack misses.
Vendor Audio Clip	This audio clip will play whenever buying from or selling to a <a href="#">Vendor</a> .
Vendor Audio Profile Name	This <a href="#">Audio Profile</a> will play whenever buying from or selling to a <a href="#">Vendor</a> . If this value is set, it will override the <i>Vendor Audio Clip</i> setting above.
Max Chat Text Distance	The maximum distance at which chat in dialogs above characters will also appear in the player ch log. Prevents distant conversations from spamming logs.

## Mini Map

Name	Description
Auto Pixels Per Meter	When a minimap texture for a scene cannot be found, how many pixels per meter should be used when taking an automatic snapshot. A higher number results in better image quality, but also higher memory usage.
Player Mini Map Icon	The icon to show on the mini map to represent the player.
Player Mini Map Icon Rotation	If the icon does not face up on the screen, enter the number of clockwise degrees the image is naturally rotated. This will be subtracted from the player angle at run-time.

## Unit Frames

Name	Description
Real Time Unit Frame Camera	Using a real time camera will reduce performance

## UI

Name	Description
Default Cast Target Circle	The material that will be used to display the cast target on the ground when casting ground targeted spells.
Highlight Circle Color Map	A map of <a href="#">Faction</a> relationship colors to materials to use when displaying a highlight circle when a target character is selected. <b>Source Color</b> The <a href="#">Faction</a> relationship color. <b>Projector Material</b> The material to use for the highlight circle when the character relationship has the Source Color. <b>Tint Material</b> If true, the <i>Projector Material</i> will be tinted with the source color.
Default UI Color	Default UI color for static elements that have no additional transparency applied to them.
Default UI Fill Color	Default UI color for background of UI sliders.
Highlight Outline Color	Default UI color for outline image, when the mouse is hovering over an image.
Highlight Image Color	Default UI color for background highlight image, when a UI element has been clicked on and is the active image from a group of images.
Highlight Button Color	Default UI color for the button image on highlight buttons.
Button Normal Color	The normal color for button UI elements.
Button Highlighted Color	The highlight color for button UI elements.
Button Pressed Color	The pressed color for button UI elements.
Button Selected Color	The selected color for button UI elements.
Button Disabled Color	The disabled color for button UI elements.
Default UI Panel Frame	The image to use for the frame of UI panel elements.
Default Faction Icon	The faction icon to show on the load game screen when the player has no faction.

## System Bar

Name	Description
System Bar Main Menu	The main menu icon to show on the UI system bar.
System Bar Ability Book	The ability book icon to show on the UI system bar.
System Bar Character	The character icon to show on the UI system bar.
System Bar Quest Log	The quest log icon to show on the UI system bar.
System Bar Map	The map icon to show on the UI system bar.
System Bar Skills	The skills icon to show on the UI system bar.
System Bar Reputations	The reputations icon to show on the UI system bar.
System Bar Currencies	The currencies icon to show on the UI system bar.
System Bar Achievements	The achievements icon to show on the UI system bar.
System Bar Inventory	The inventory icon to show on the UI system bar.

## Interactable Configuration

Name	Description
Temporary Material	The material to use when causing an <a href="#">Interactable</a> to glow on mouseover.
Multiple Interaction Name Plate Image	An image to use on a nameplate if there is more than 1 valid interactable option.
Multiple Craft Name Plate Image	An image to use on a nameplate if only crafting is available, but more than 1 craft skill can be shown
Bank Interaction Panel Image	An image to use beside a bank option in the interaction UI window.
Bank Name Plate Image	An image to for a bank option on a nameplate.
Quest Giver Interaction Panel Image	An image to use beside a quest giver option in the interaction UI window.
Quest Giver Name Plate Image	An image to for a quest giver option on a nameplate.
Dialog Interaction Panel Image	An image to use beside a dialog option in the interaction UI window.
Dialog Name Plate Image	An image to for a dialog option on a nameplate.
Name Change Interaction Panel Image	An image to use beside a name change option in the interaction UI window.
Name Change Name Plate Image	An image to for a name change option on a nameplate.
Cut Scene Interaction Panel Image	An image to use beside a cutscene option in the interaction UI window.
Cut Scene Name Plate Image	An image to for a cutscene option on a nameplate
Lootable Character Interaction Panel Image	An image to use beside a lootable character option in the interaction UI window.
Lootable Character Name Plate Image	An image to for a lootable character option on a nameplate.
Character Creator Interaction Panel Image	An image to use beside a character creator option in the interaction UI window.
Character Creator Name Plate Image	An image to for a character creator option on a nameplate.
Unit Spawn Controller Interaction Panel Image	An image to use beside a unit spawn controller option in the interaction UI window.

Unit Spawn Controller Name Plate Image	An image to for a unit spawn controller option on a nameplate.
Faction Change Interaction Panel Image	An image to use beside a faction change option in the interaction UI window.
Faction Change Name Plate Image	An image to for a faction change option on a nameplate.
Class Change Interaction Panel Image	An image to use beside a class change option in the interaction UI window.
Class Change Name Plate Image	An image to for a class change option on a nameplate.
Vendor Interaction Panel Image	An image to use beside a vendor option in the interaction UI window.
Vendor Name Plate Image	An image to for a vendor option on a nameplate.
Portal Interaction Panel Image	An image to use beside a portal option in the interaction UI window.
Portal Name Plate Image	An image to for a portal option on a nameplate.
Skill Trainer Interaction Panel Image	An image to use beside a skill trainer option in the interaction UI window.
Skill Trainer Name Plate Image	An image to for a skill trainer option on a nameplate.
Music Player Interaction Panel Image	An image to use beside a music player option in the interaction UI window.
Music Player Name Plate Image	An image to for a music player option on a nameplate.

## Quest Configuration

Name	Description
Quest Log Size	The maximum number of quests in the quest log.

## Time Of Day

Name	Description
Time Of Day Speed	This value is a multiplier. For every 1 second of real-world time that passes, x seconds of in-game time will pass.
Default Sun Angle	The number of degrees around the X axis that the sun will be rotated compared to world space. 0 is pointing directly North, 90 is pointing straight down (directly over the player head), 180 is pointing directly South.
Default Sun Gradient	A color gradient to use for the sun color. The ends represent midnight, and the center is noon. The alpha value controls sun light intensity and skybox blending.

# Adding Content To Your Game

There are multiple types of content you can add to your game, and multiple ways to add that content. This page provides a high level overview to get you started.

## Static 3D Models and Terrain

The process of adding static 3d models or terrain to a game built with AnyRPG is the same as adding them to any other game. Just open a scene and use the Unity editor like normal.

## Wizards

AnyRPG includes multiple [Wizards](#) that allow you, from a single screen, to automate the addition of certain types of content that would otherwise take many steps and involve the configuration of many objects.

See [Wizards Introduction](#) for more information.

## Intangible Content (Scriptable Objects)

Intangible Content is any content that generally cannot be seen or touched directly, such as dialogs, quests, factions, and all the other unique elements that make up the actual story of your game. It also includes metadata for objects you will interact with, such as information about what type of music should play when a certain scene is loaded.

AnyRPG uses Unity Scriptable Objects to store this type of content and loads it into an in-memory database when a game is launched.

See [Scriptable Objects Introduction](#) for more information.

## Monobehaviours

AnyRPG includes several types of Unity Monobehaviours that are added to GameObjects that permanently exist in scenes, or will be spawned into scenes at runtime.

These Monobehaviours control many things, including, but not limited to:

- How a player can interact with the environment.
- How the environment will change over time as the player progresses through the story.
- How certain objects should be positioned or move around the environment in response to character or player actions.

See [Monobehaviours Introduction](#) for more information.

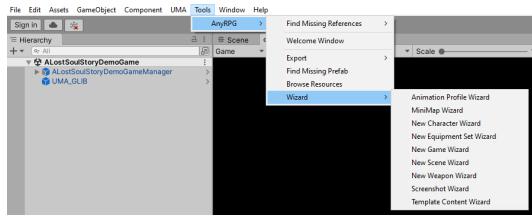
# Wizards

# Wizards Introduction

AnyRPG includes several wizards to help you quickly accomplish the important tasks when setting up a new game or adding content to an existing game.

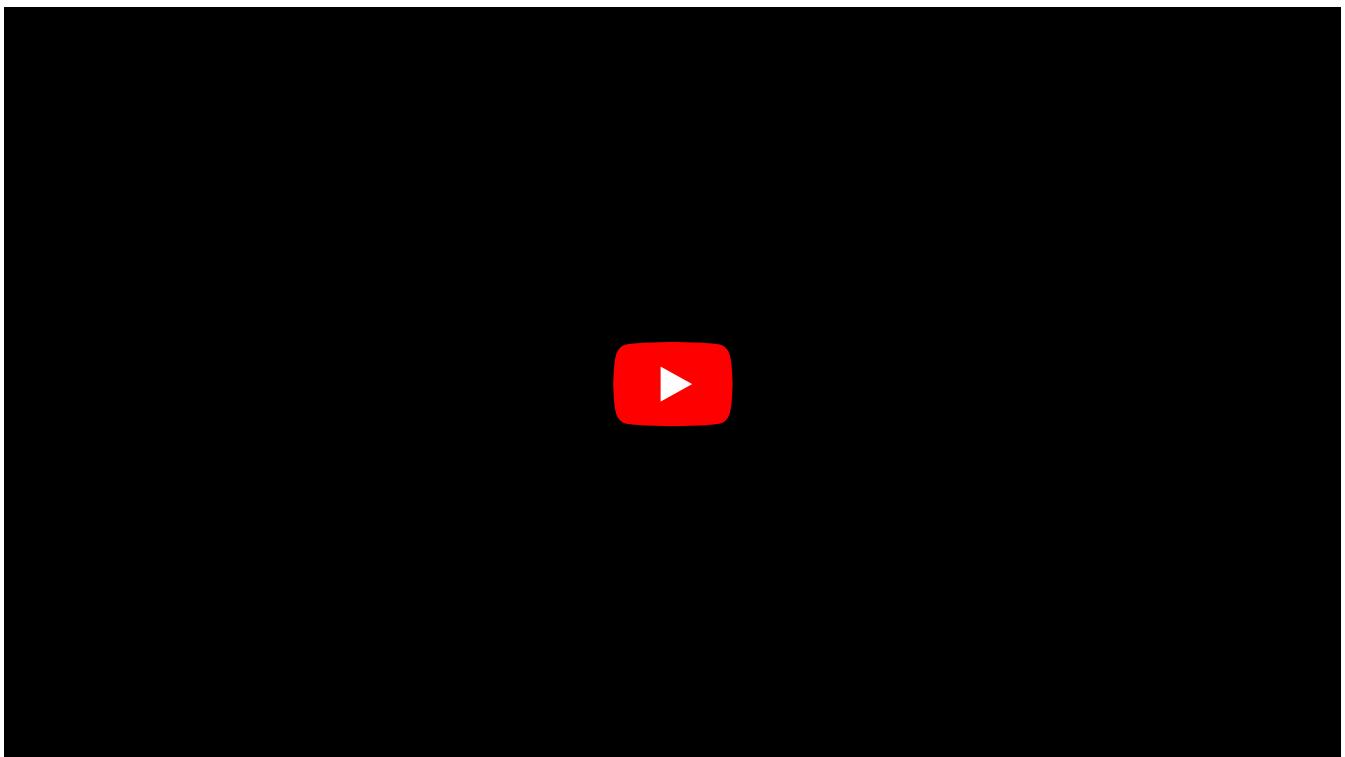
## Usage

All Wizards can be found under the *Tools > AnyRPG > Wizard* menu.



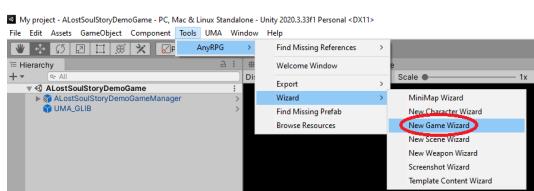
# New Game Wizard

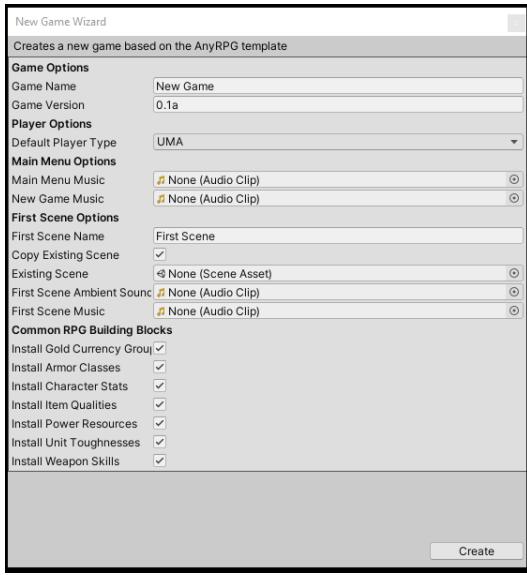
The New Game Wizard will add a new game to your project and fully configure all the minimally required directories, scriptable objects, prefabs and scenes so it is ready to play immediately.



## Accessing The Wizard

The New Game Wizard can be opened by clicking *Tools* in the menu bar, and selecting *AnyRPG > Wizard > New Game Wizard*.





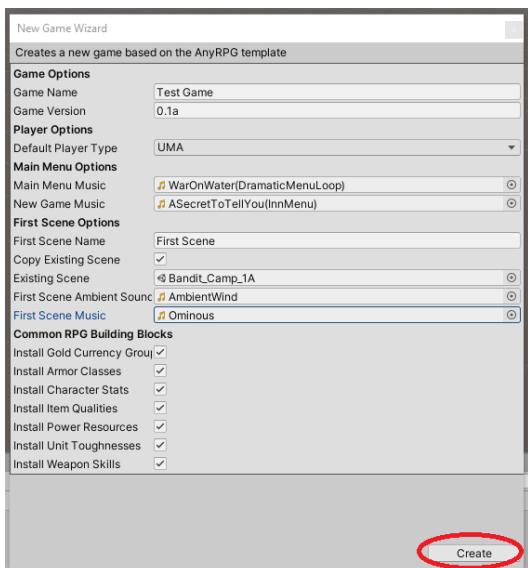
## Options

Name	Description
Game Name	The name of the game. This will show on the main menu screen.
Game Version	A text string describing the game version. This will show on the main menu screen.
Default Player Type	The type of character that will be available by default on the new game screen. UMA : A Unity Multipurpose Avatar with customizable appearance. Mecanim : A standard mecanim character with no customization options.
Main Menu Music	An audio clip to play when the main menu scene is open.
New Game Music	An audio clip to play when the new game window is open on the main menu.
First Scene Name	The file name of the default scene that will load when a new game is started. This will also show as the title for the minimap when that scene is open.
Copy Existing Scene	If this option is not chosen, the first scene will be based on a blank template with only a large flat plane for the player to move around on. If this option is chosen, you can select an existing scene in the project to copy that will be used instead of the blank template scene.
Existing Scene	If <i>Copy Existing Scene</i> is selected, link the scene that should serve as the template for the first scene here.
First Scene Ambient Sounds	An audio clip of ambient environmental sounds to play when the first scene is open.
First Scene Music	An audio clip of background music to play when the first scene is open.
Install Gold Currency Group	Installs the <i>Gold Currency Group</i> template that consists of gold, silver, and copper.
Install Armor Classes	Installs the All Armor Classes template that consists of cloth, leather, and plate armor classes.
Install Character Stats	Installs the All Character Stats template that consists of stamina, intellect, strength, and agility.

Install Item Qualities	Installs the All Item Qualities template that consists of the poor, common, uncommon, rare, epic, legendary, and heirloom item qualities.
Install Power Resources	Installs the All Power Resources template that consists of health, mana, rage, and energy.
Install Unit Toughnesses	Installs the All Unit Toughnesses template package that consists of 2 man, 5 man, 10 man, 25 man, solo dungeon minion, and solo dungeon boss unit toughnesses.
Install Weapon Skills	Installs the All Weapon Skills template package that consists of bow, crossbow, dagger, fist, one hand axe, one hand mace, one hand sword, shield staff, two hand axe, two hand mace, two hand sword, unarmed, and wand weapon skills.
Install Footstep Sounds	Installs the Footstep Sound Effects template that includes many different types of footstep sounds including gravel, sand, snow, etc.
Install Weather	Installs the All Weather Profiles template that includes snow, rain, and fog weather.
Install Human Voices	Installs the Core Voice Profiles template that includes many varieties of male and female human voices.

## Creating A New Game

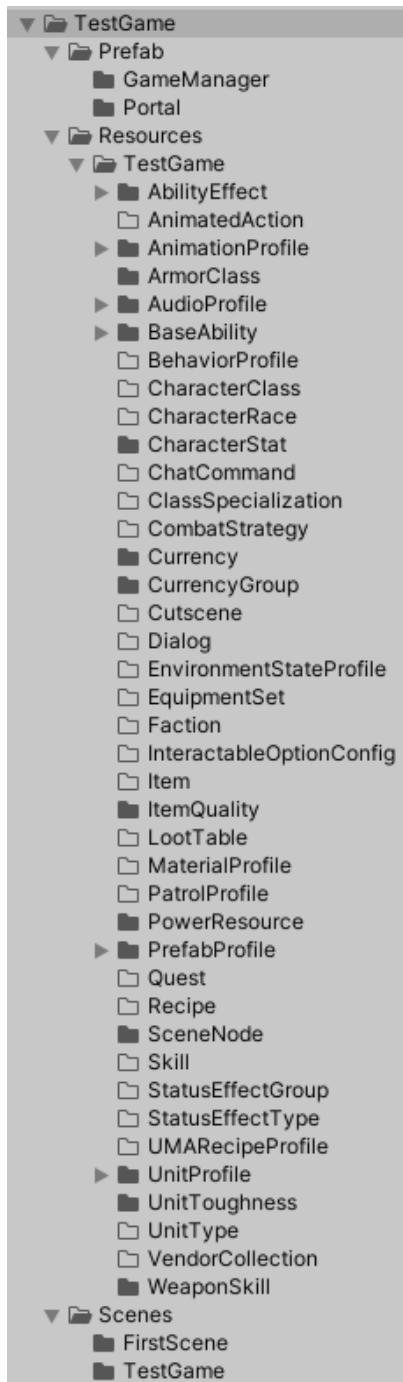
After choosing the appropriate options for your game, click Create.



## Content Created

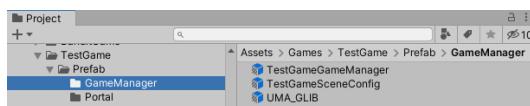
## Folder Structure

A folder structure similar to what is shown in the picture below will have been created.



## Game Manager Prefabs

In the Prefab/GameManager folder you can find 3 prefabs. The purpose of each is discussed below.



## GameManager

The Game Manager prefab contains all of the scripts necessary to run the game. It also contains the global game configuration in the SystemConfigurationManager, which you can edit to customize global options for the game.

The Game Manager should only ever exist in the game loading scene, which the wizard will have setup already.

## SceneConfig

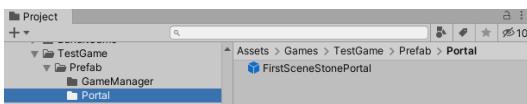
The Scene Config prefab is a special prefab that can go in any scene to allow you to press the Play button in Unity and have the game load correctly.

## UMA\_GLIB

The UMA Global Library is required for the Unity Multipurpose Avatar system to function properly, and will have already been placed in the game loading scene by the wizard.

## Portal Prefab

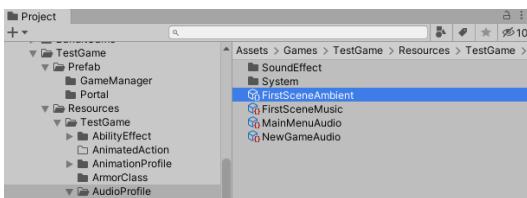
In the Prefab/Portal folder you can find a portal prefab. This object can be placed in any scene to create a portal that your player can walk through to return to the first scene.



## Scriptable Objects

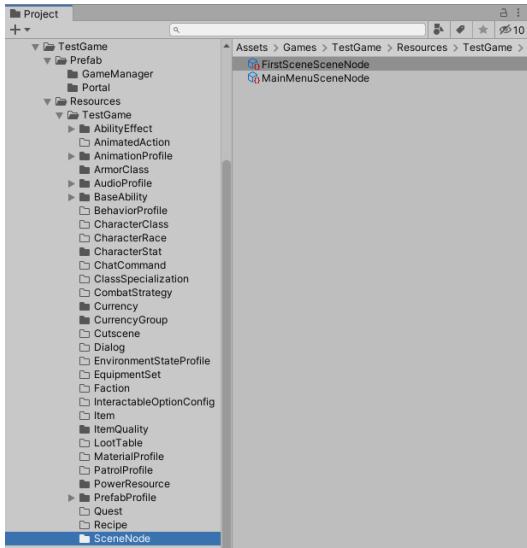
### Audio Profiles

If audio files were chosen on the New Game Wizard window, then AudioProfile scriptable objects will exist in the Resources/GameName/AudioProfile folder. These objects contain links to the audio files that were selected.



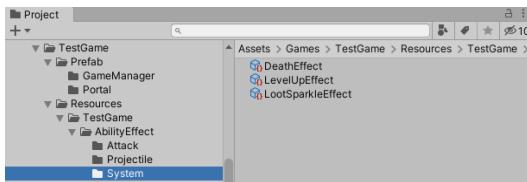
## Scene Nodes

Scene Nodes for the Main Menu and First Scene can be found in the Resources/GameName/SceneNode folder. The objects contain metadata about the 2 scenes, including the name of the scene file on disk, the display name to be used in-game on the minimap title, and the name of the audio profiles to play when that scene is open.



## System Effects

System Effects can be found in the Resources/GameName/AbilityEffect/System folder. These are special visual and audio effects activated by the system when the player dies, when the player gains a level, and when a dead enemy has loot that can be collected. The Game manager will have been automatically configured to use these effects.



## Unit Profiles

Unit profiles are character definitions and can be found in the Resources/GameName/UnitProfile/Player folder. By default, a definition for an UMA character, and a standard mecanim character will have been created. The Game Manager will have been configured to use whichever unity type you selected on the New Game Wizard screen.



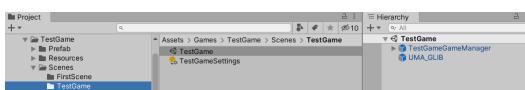
## Other Scriptable Objects

Depending on which other options were selected under the Common RPG Building Blocks subheading on the New Game Wizard screen, you will find the appropriate scriptable objects in subfolders of the Resources/GameName folder.

## Scenes

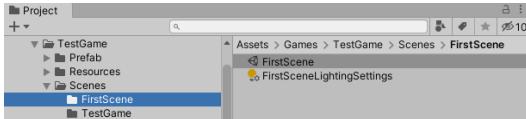
### Loading Scene

The loading scene is a special scene with the sole purpose of setting the Game Manager and UMA Global Library to [DontDestroyOnLoad](#) so they persist through any scene changes, and then running the startup process of the Game Manager to initialize the data factory and UI, before loading the main menu.



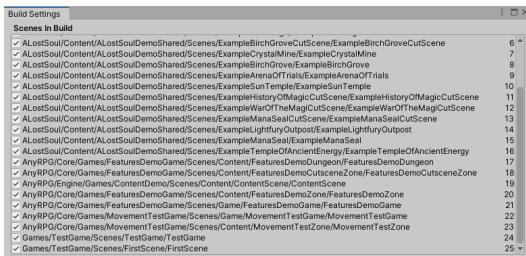
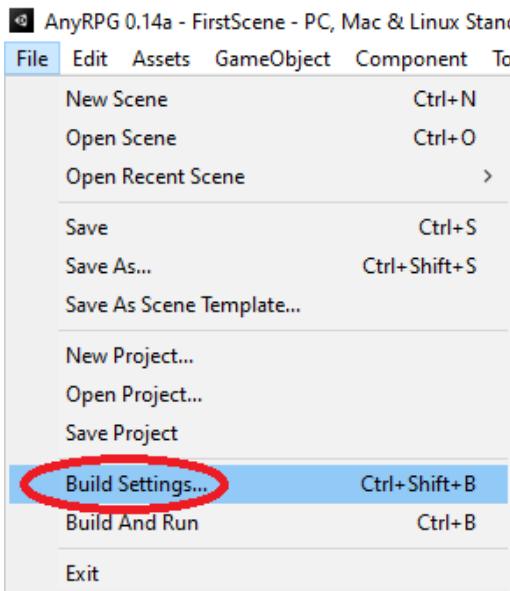
### First Scene

The first scene is the default scene that will load when a new game is started. It will contain the `SceneConfig` object, which is a special object that allows you to press play from that scene, and have the system automatically load the loading scene to perform game initialization. The contents of the scene will either be a blank template level with a plane your character can stand on, or the contents of whatever scene you chose to copy when configuring the New Game Wizard.



## Build Settings

By default, both the loading scene and the first scene will have been added to the build settings, which can be accessed through the *File > Build Settings...* option from the Unity editor menu bar.

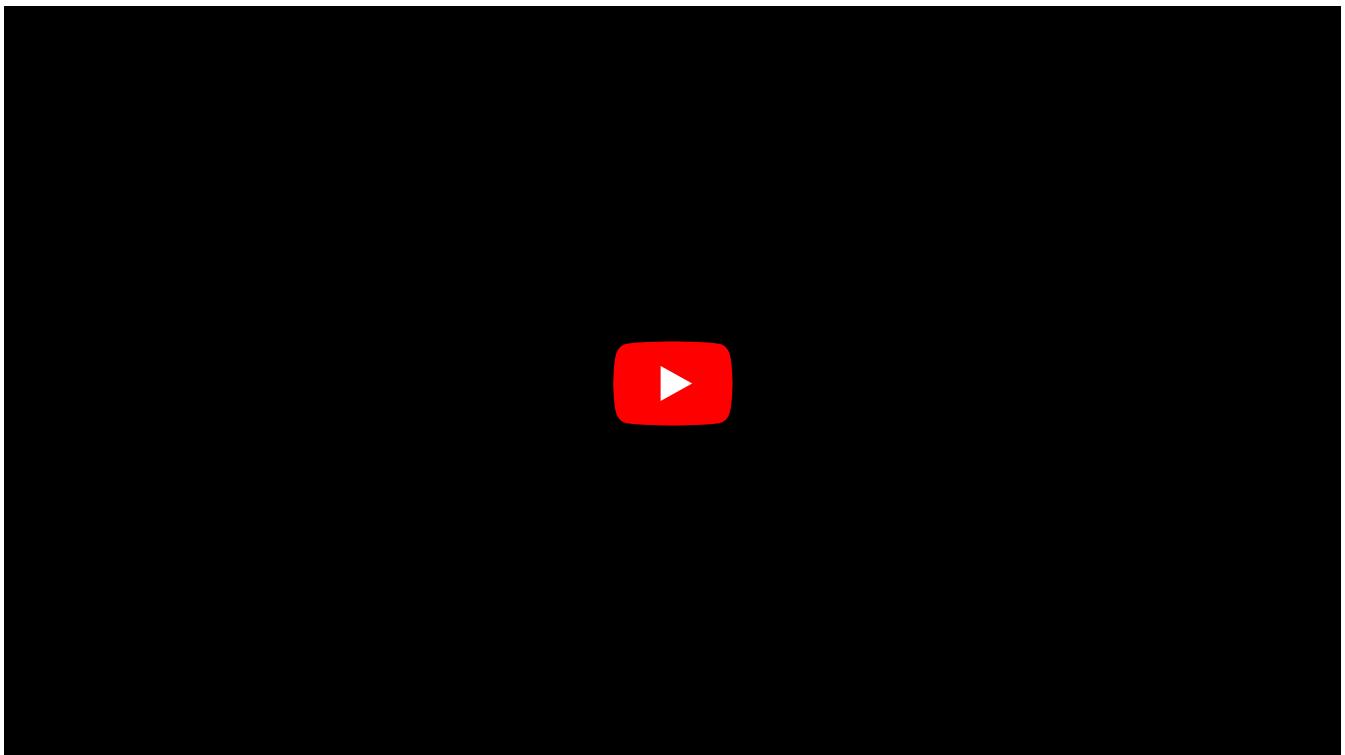


## Playing the Game

After the wizard completes running, the First Scene will be open. Press the Play button in the Unity editor to start playing.

# New Scene Wizard

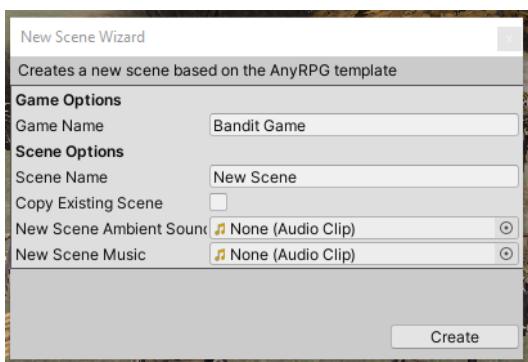
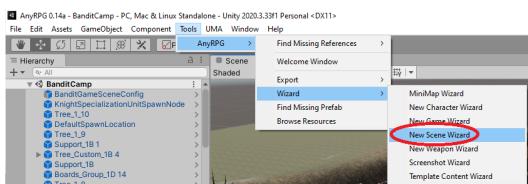
The New Scene Wizard will add a new scene to your project based on an existing scene, or using a blank template scene.



## Accessing The Wizard

The New Scene Wizard requires that one of your game scenes with either a GameManager or SceneConfig object is open in the editor so that it can determine which game to install the content into.

The New Scene Wizard can be opened by clicking *Tools* in the menu bar, and selecting *AnyRPG > Wizard > New Scene Wizard*.

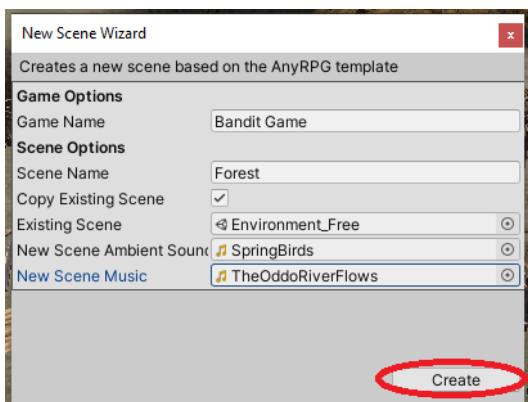


## Options

Name	Description
Game Name	The name of the game. This will show on the main menu screen. The name of the game in your Unity project to install the template content in. This will be automatically filled in if you have any scene with the GameManager or SceneConfig prefabs open.
Scene Name	The file name of the new scene. This will also show as the title for the minimap when that scene is open.
Copy Existing Scene	If this option is not chosen, the scene will be based on a blank template with only a large flat plane for the player to move around on. If this option is chosen, you can select an existing scene in the project to copy that will be used instead of the blank template scene.
Existing Scene	If <i>Copy Existing Scene</i> is selected, link the scene that should serve as the template for the first scene here.
New Scene Ambient Sounds	An audio clip of ambient environmental sounds to play when the scene is open.
New Scene Music	An audio clip of background music to play when the scene is open.

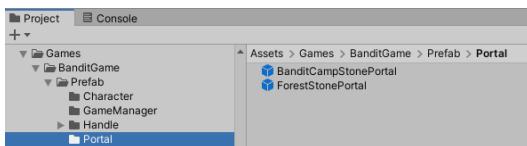
## Content Created

After choosing the appropriate options for the scene, click Create.



## Portal Prefab

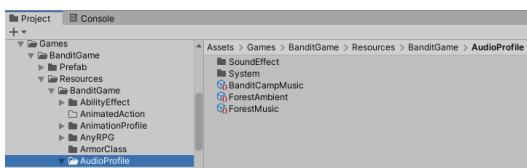
In the *Prefab/Portal* folder you can find a portal prefab. This object can be placed in any scene to create a portal that your player can walk through to return to the new scene.



## Scriptable Objects

### Audio Profiles

If audio files were chosen on the New Game Wizard window, then *AudioProfile* scriptable objects will exist in the *Resources/GameName/AudioProfile* folder. These objects contain links to the audio files that were selected.



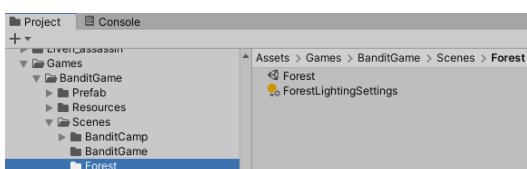
### Scene Node

Scene Node for the new scene can be found in the *Resources/GameName/SceneNode* folder. The objects contain metadata about the scene, including the name of the scene file on disk, the display name to be used in-game on the minimap title, and the name of the audio profiles to play when that scene is open.



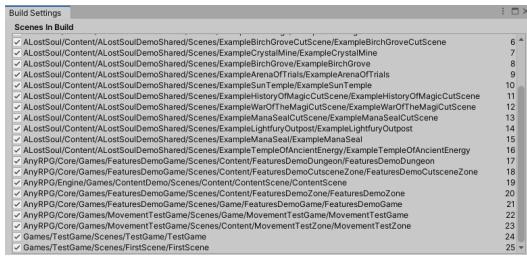
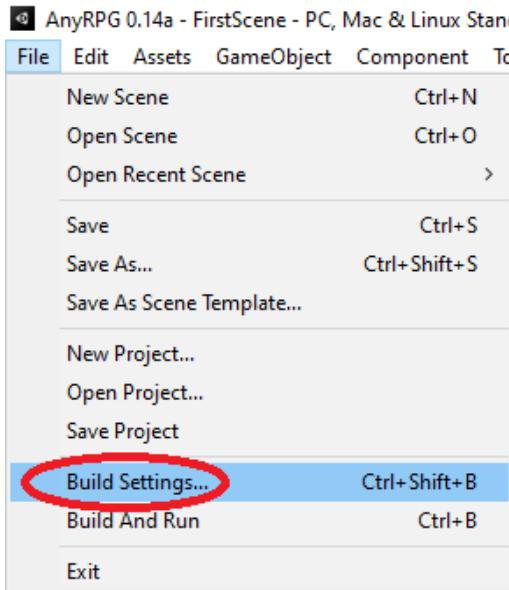
## Scene

The new scene can be found in the *GameName/Scenes/SceneName* folder. It will contain the *SceneConfig* object, which is a special object that allows you to press play from that scene, and have the system automatically load the loading scene to perform game initialization. The contents of the scene will either be a blank template level with a plane your character can stand on, or the contents of whatever scene you chose to copy when configuring the New Scene Wizard.



## Build Settings

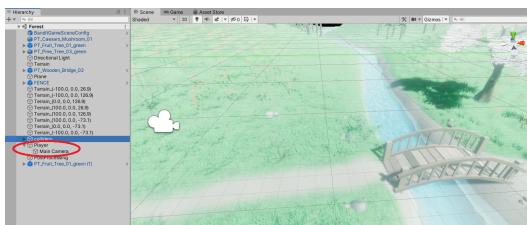
By default, the new scene will have been added to the build settings, which can be accessed through the *File > Build Settings...* option from the Unity editor menu bar.



## Next Steps

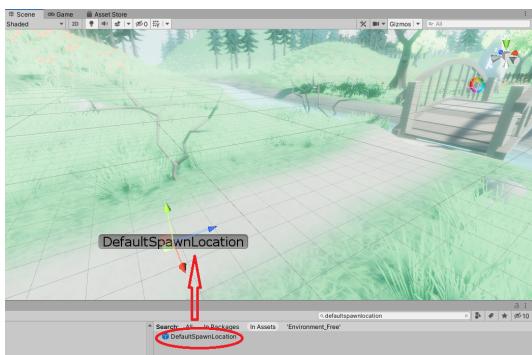
### Scene Cleanup

If you copied a demo scene from a Unity package, you will likely have to clean up the scene so that it works properly. Many demo scenes come with a simple player and camera. Since AnyRPG has a camera and a player, you will likely need to remove these types of objects from the scene.



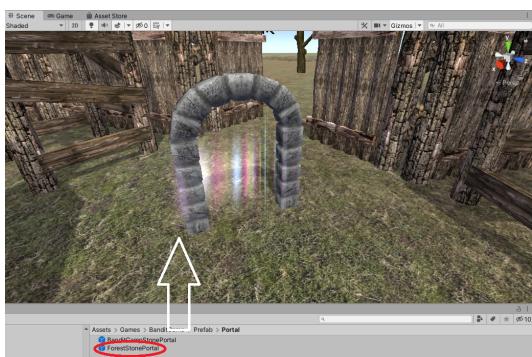
### Default Spawn Location

By default, the player will spawn at the world origin (0,0,0). To make the player spawn at a location of your choosing, search your project hierarchy for the *DefaultSpawnLocation* prefab and drag it into the scene where you want the player to spawn. Rotate the *DefaultSpawnLocation* prefab so the forward (z) axis is facing the direction you want the player facing when they spawn.



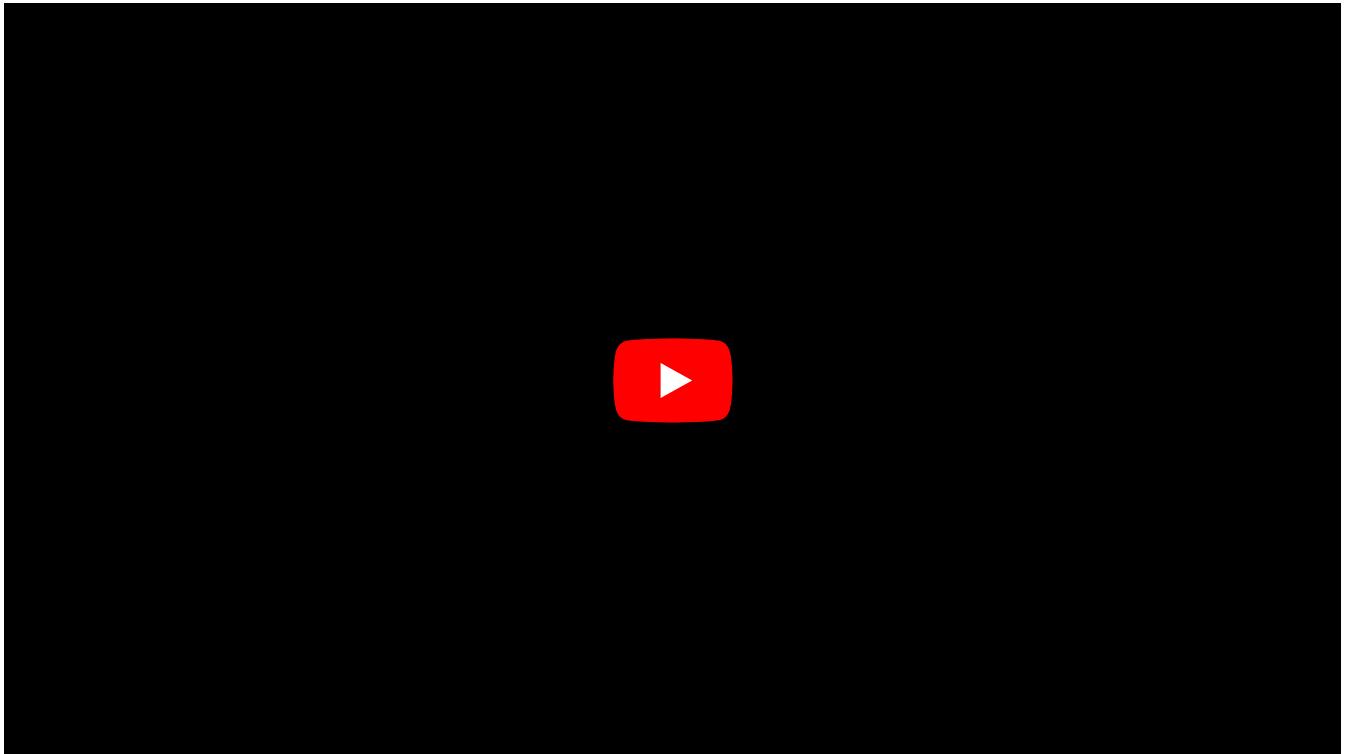
## Add A Portal To Load The Scene

Decide what other scenes the player should be able to travel to this scene from and add portals to them. The New Scene Wizard created a portal prefab to use, so find it and drag it into the other scene(s).



# New Equipment Set Wizard

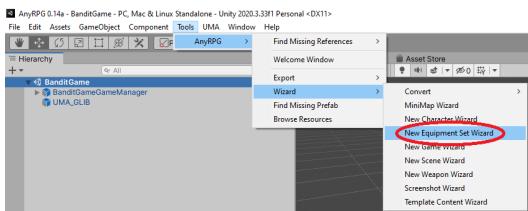
The New Equipment Set Wizard will create equipment, an equipment set for the equipment, an optional vendor collection, and an optional loot table.

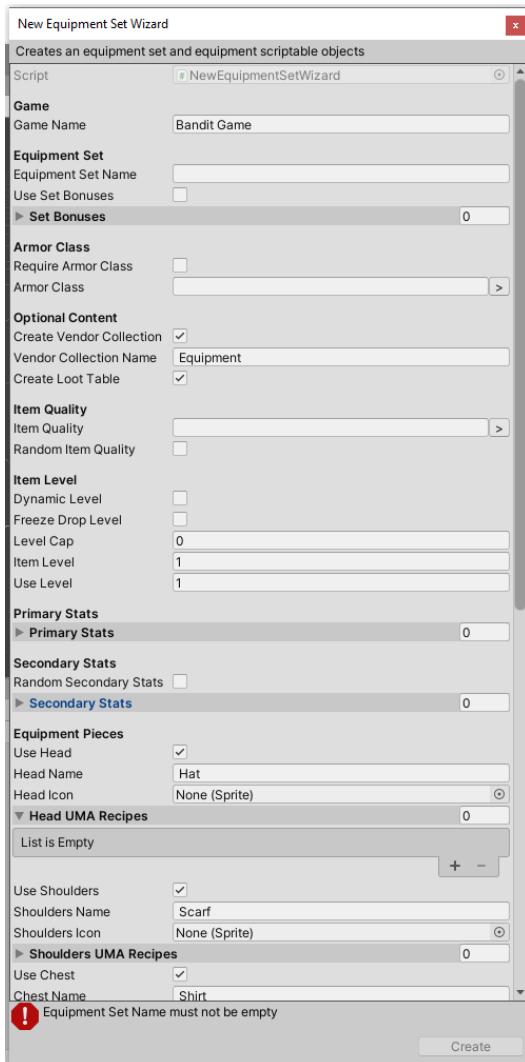


## Accessing The Wizard

The New Equipment Set Wizard requires that one of your game scenes with either a GameManager or SceneConfig object is open in the editor so that it can determine which game to install the content into.

The New Scene Wizard can be opened by clicking *Tools* in the menu bar, and selecting *AnyRPG > Wizard > New Equipment Set Wizard*.





## Options

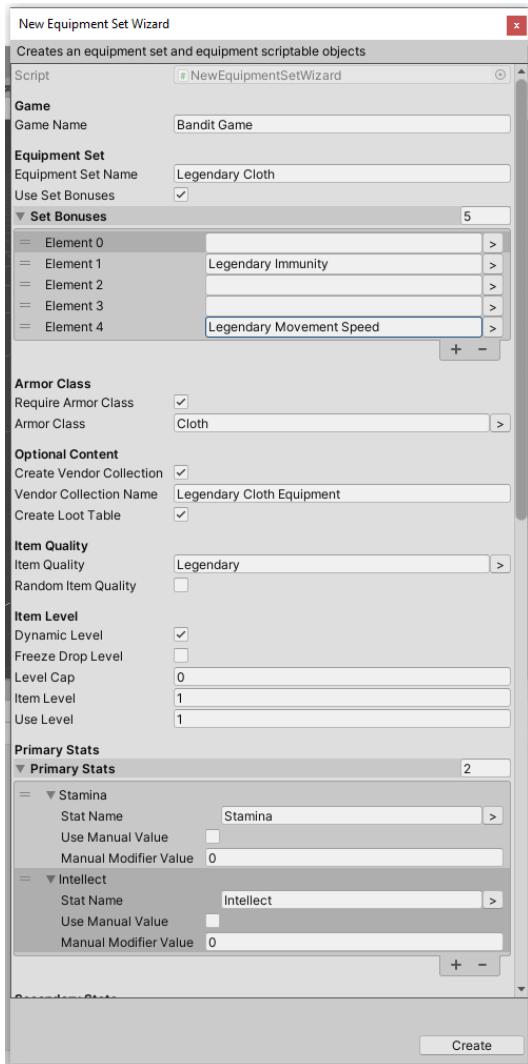
Name	Description
Game Name	The name of the game. This will show on the main menu screen. The name of the game in your Unity project to install the template content in. This will be automatically filled in if you have any scene with the GameManager or SceneConfig prefabs open.
Equipment Set Name	The name of the equipment set. If set bonuses are used, this name will show in the mouseover tooltip for equipment that is part of this set.
Use Set Bonuses	If true, equipment that is part of this set will show which pieces of the set are equipped in the mouseover tooltip. The character can also have different status effects applied depending on how many pieces of the set are equipped.
Set Bonuses	A list of status effects to apply depending on how many pieces of the equipment set are equipped. Each line represents the number of pieces that must be equipped, so blank lines must be provided between bonuses if not every extra piece equipped is providing a bonus.
Require Armor Class	If true, the character must know the armor class listed to be able to equip the item.
Armor Class	If an armor class is provided, the equipment will have the armor value determined based on what the default is for that armor class. This can also affect whether or not the character is able to equip the item.
Create Vendor Collection	If true, a vendor collection will be created with all the equipment so that it can be purchased from a vendor.
Vendor Collection Name	The display name of the vendor collection in the vendor window.
Create Loot Table	If true, a loot table will be created that can be assigned to enemies, allowing this equipment to be gained as a reward for defeating them.

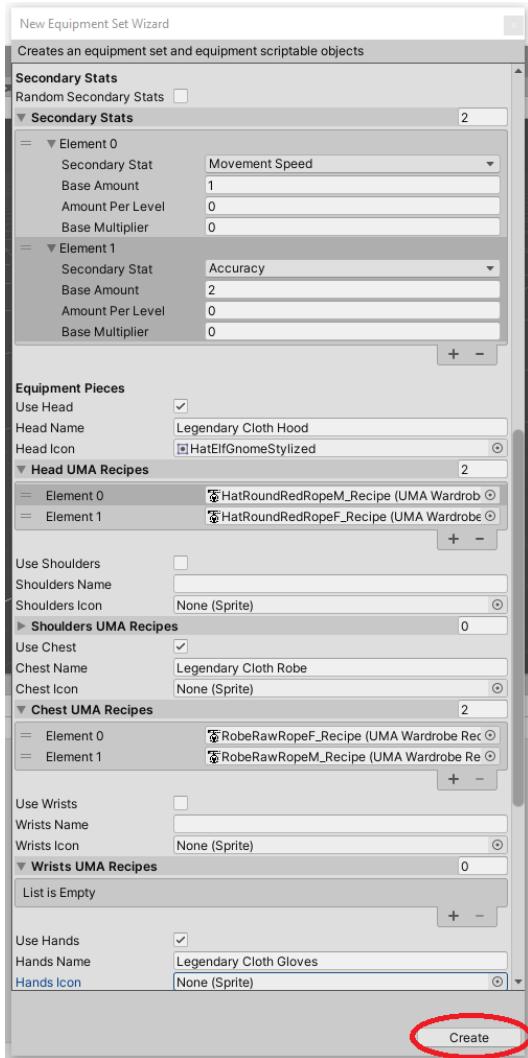
Item Quality	The item quality that will be assigned to all equipment in this set.
Random Item Quality	If true, the equipment will have a random item quality assigned when looted, crafted, or purchased.
Dynamic Level	If true, the equipment will scale up to match the character level.
Freeze Drop Level	If true, and dynamic level is set, the equipment will be fixed at the level the character was when the item was looted, crafted, or purchased.
Level Cap	If this is set to anything other than zero, equipment with a dynamic level will have this value as the maximum level it can scale to or freeze at.
Item Level	If dynamic level is false, the equipment will have this fixed level.
Use Level	The level the character must be to equip this equipment.
Primary Stats	A list of primary stats that will apply to each piece of equipment.
Random Secondary Stats	If true, the secondary stats will be chosen random from the list, up to the limit defined by the item quality.
Secondary Stats	A list of secondary stats that will apply to each piece of equipment.
Use <PieceType>	For each type of equipment, if this is true, equipment will be created.
<PieceType> Name	For each type of equipment, the display name of that piece.
<PieceType> Icon	For each type of equipment, the icon that will be used in the inventory, on the character window, etc.
<PieceType> UMA Recipes	Optional. For each type of equipment, UMA recipes that will determine which UMA gear is applied to UMA characters when the gear is equipped. Provide one recipe here for each race (male/female), and the correct item for the current

race will be applied. If this list is empty, or the character is not UMA, these values will be ignored.

## Content Created

After choosing the appropriate options for the scene, click Create.

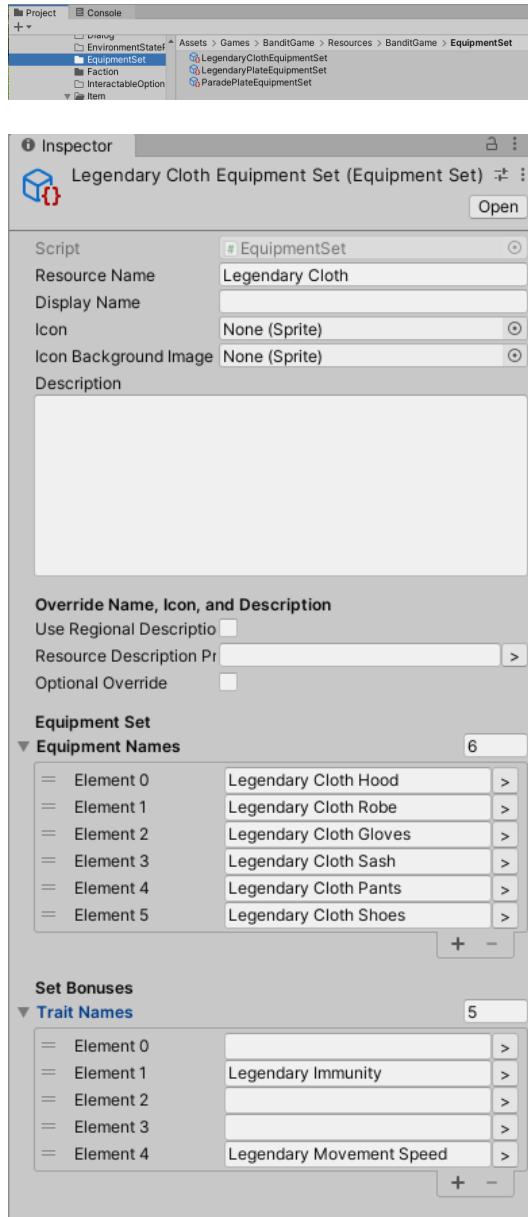




## Scriptable Objects

### Equipment Set

An equipment set can be found at the *Resources/GameName/EquipmentSet* folder. It defines the equipment that belongs to the set, and any set bonuses.



## Equipment

Equipment can be found in the *Resources/GameName/Item/Equipment/Armor* folder. These objects contain all the information for each individual piece of equipment.



## Vendor Collection

If selected, a vendor collection can be found in the *Resources/GameName/VendorCollection* folder. This can be added to a vendor to allow the purchase of the equipment.



## Loot Table

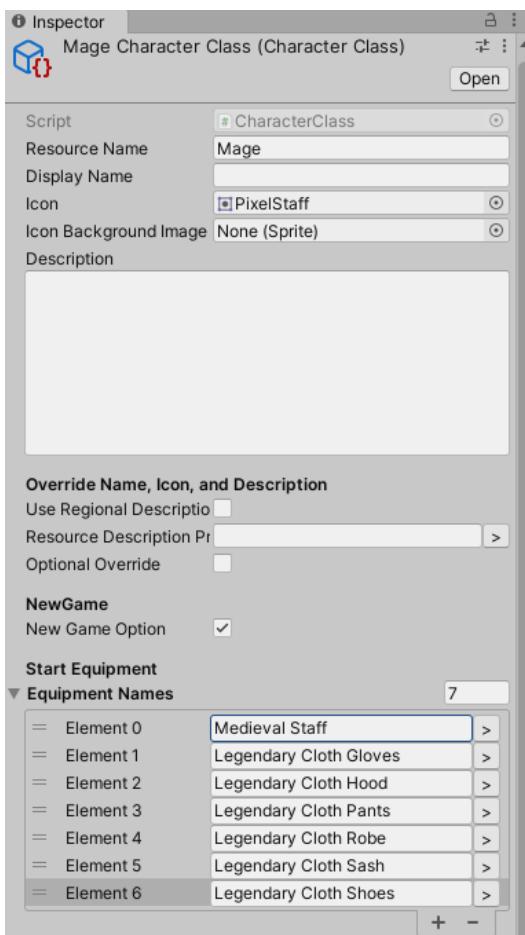
If selected, a loot table can be found in the *Resources/GameName/LootTable* folder. This can be added to a LootableCharacter interactable option on any character to allow the equipment to be looted when the character is defeated in combat.



## Next Steps

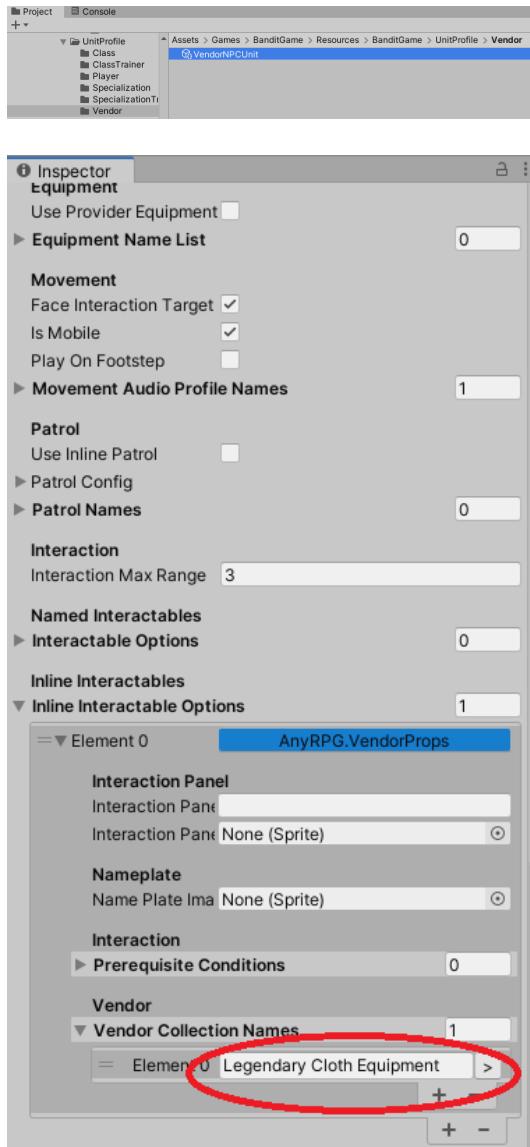
### Assign Gear to a Class or Specialization

If you want a character class or specialization to start new games wearing the equipment, you can assign it to the class or specialization as starting equipment.



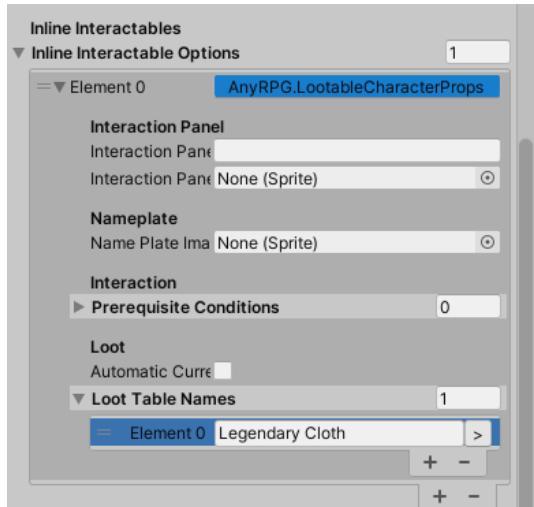
### Make Gear Purchasable

You can add the gear to a vendor by adding it to the *Vendor Collection Names* list on the *VendorProps Interactable Option* on the Unit Profile scriptable object of any NPC. A Sample vendor can be installed by using the [Template Content Wizard](#) and searching for *Vendor NPC*.



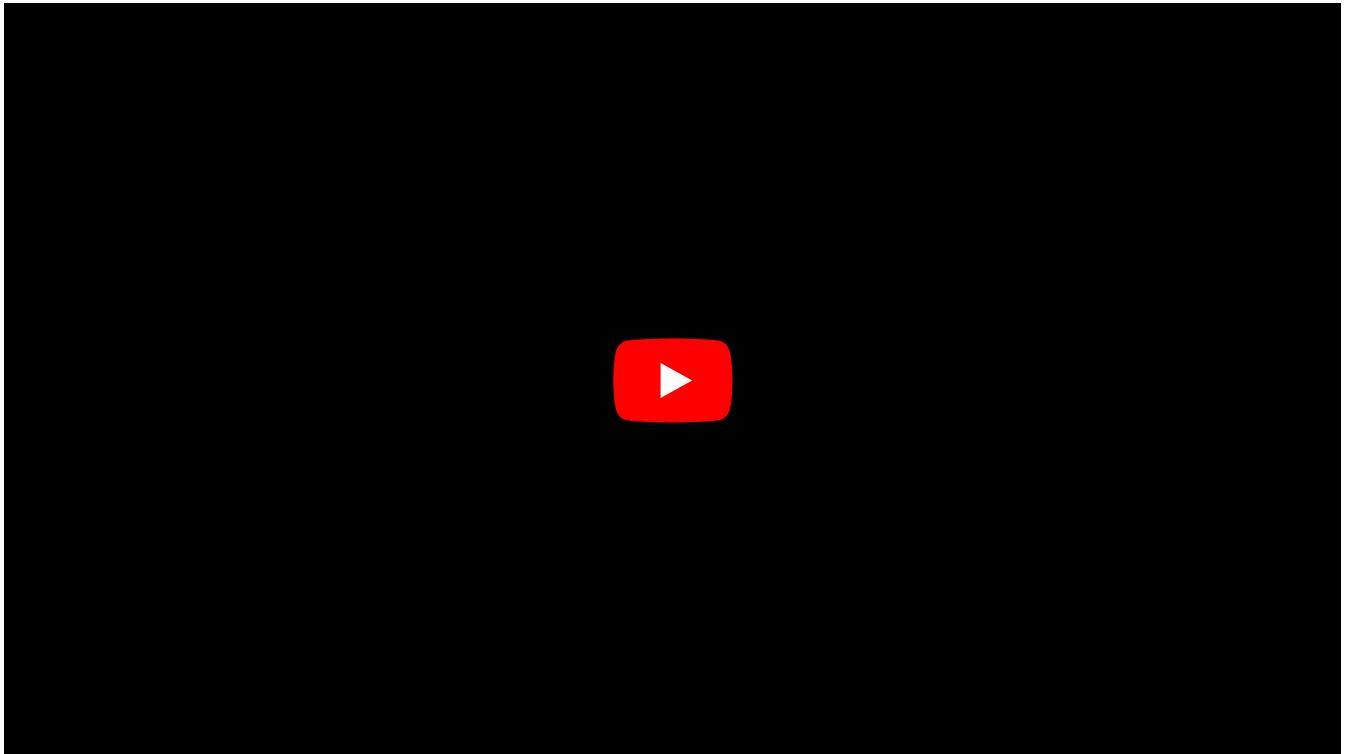
## Make Gear Lootable

Add a *LootableCharacterProps* to any *Unit Profile* and add the new loot table for this equipment to the Loot Table Names list. When you defeat that character in combat, you will have a chance to loot one of the items.



# Animation Profile Wizard

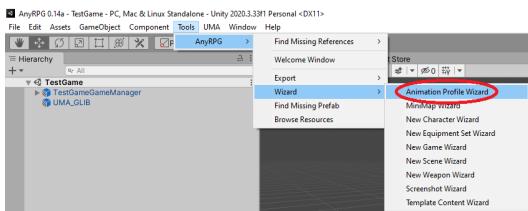
The Animation Profile Wizard will create an animation profile from a list of animations and optionally add the required events to attack animations.

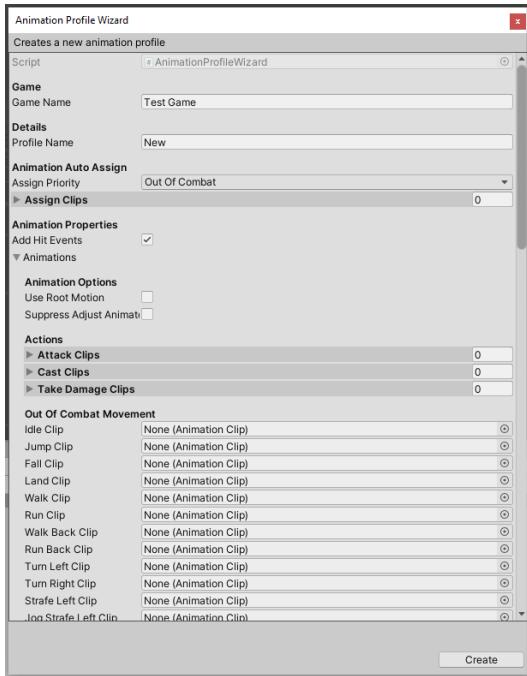


## Accessing The Wizard

The Animation Profile Wizard requires that one of your game scenes with either a GameManager or SceneConfig object is open in the editor so that it can determine which game to install the content into.

The Animation Profile Wizard can be opened by clicking *Tools* in the menu bar, and selecting *AnyRPG > Wizard > Animation Profile Wizard*.





## Options

Name	Description
Game Name	The name of the game. This will show on the main menu screen. The name of the game in your Unity project to install the template content in. This will be automatically filled in if you have any scene with the GameManager or SceneConfig prefabs open.
Profile Name	The name of the animation profile. This is the name that will be called from abilities, weapons, unit prefab properties, etc.
Assign Priority	Determines whether clips added to the <i>Assign Clips</i> property will be assigned as out of combat or in combat animations.
Assign Clips	Drag a list of animation clips into this list. The wizard will attempt to assign them to the correct animations in the <i>Animations</i> property based on their names.
Add Hit Events	If true, any clips in the <i>Attack Clips</i> list in the <i>Animations</i> property that do not have a <code>Hit()</code> event will have one added.
Animations	Lists of animations. See <a href="#">Animation Profile</a> for a description of animation profile properties.

## Configuration

See [Animation Profile Configuration](#).

## Content Created

After assigning the appropriate animations, click Create.



## Scriptable Objects

### Animation Profile

An [Animation Profile](#) can be found at the *Resources/GameObjectName/AnimationProfile* folder.

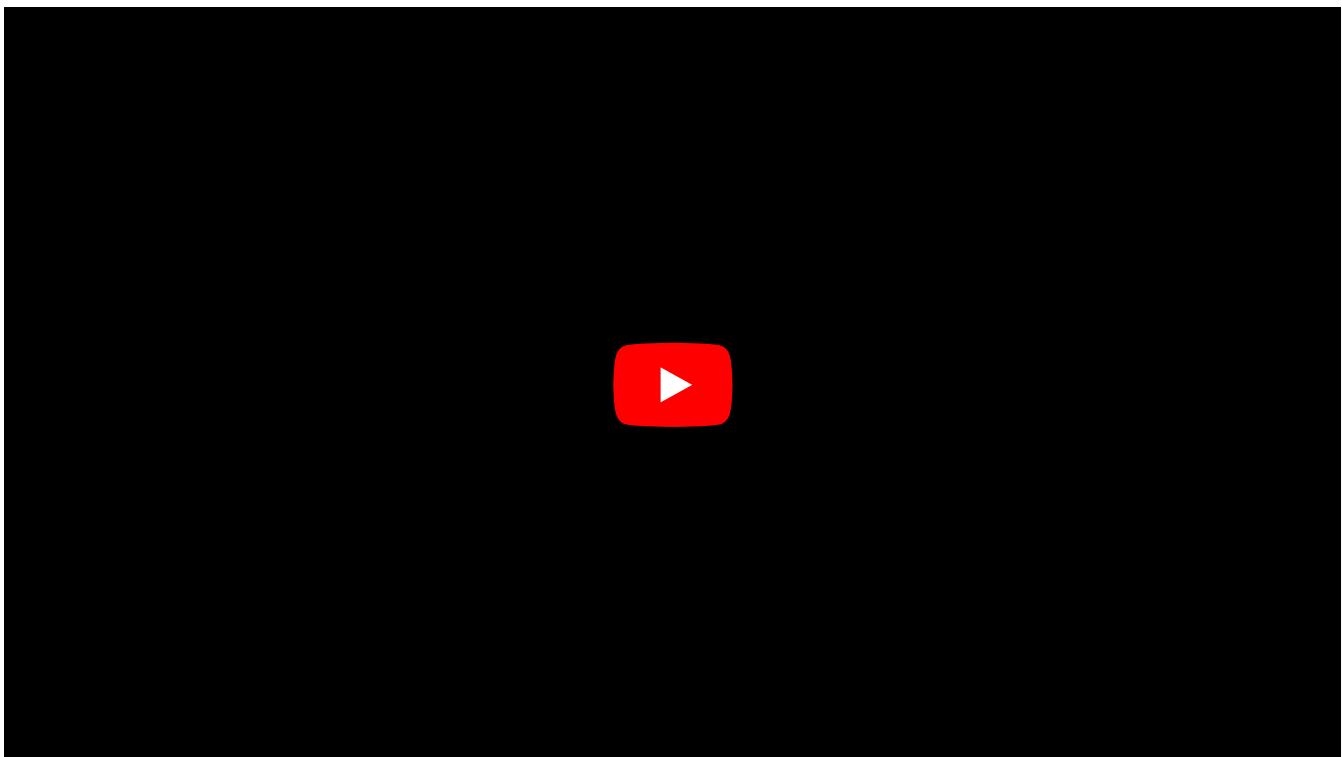


## Next Steps

See [Animation Profile Next Steps](#).

# Screenshot Wizard

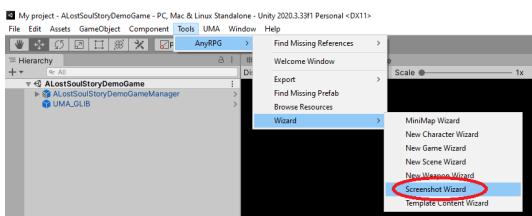
The Screenshot Wizard helps you quickly make icons of any 3D model.

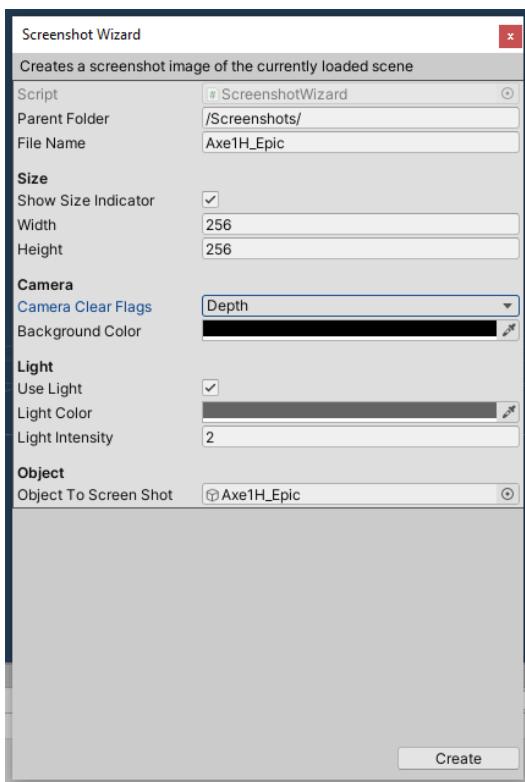


## Accessing the Wizard

The Screenshot Wizard is designed to make icons of 3D models. The recommended workflow is to open a 3D model prefab in the Unity Editor before accessing the wizard.

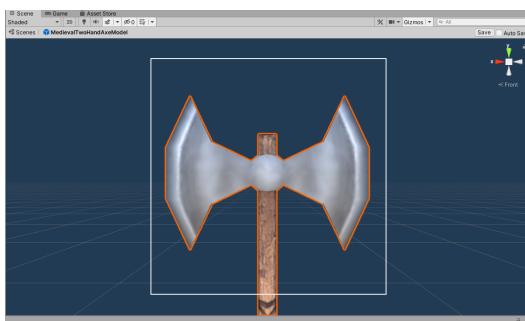
The Screenshot Wizard can be opened by clicking *Tools* in the menu bar, and selecting *AnyRPG > Wizard > Screenshot Wizard*.





## Making an Icon

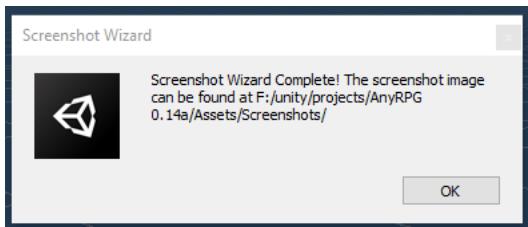
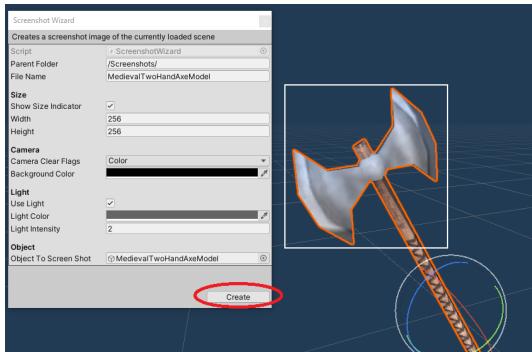
By default, the screenshot wizard will show a white indicator square in the scene view window. This square represents the size and contents of the image that will be saved to disk.



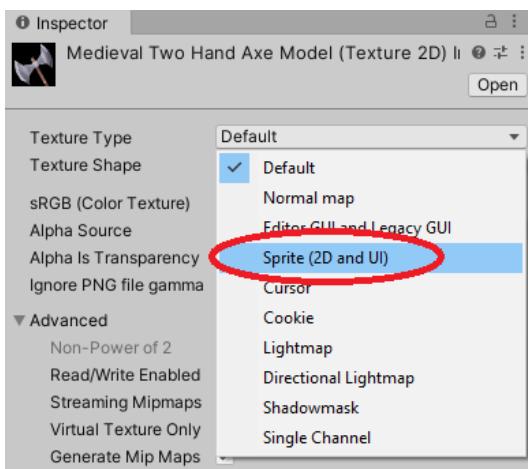
You can adjust the background of the image, and the lighting that will be used when the screenshot is taken, but those settings will not show in the scene view. You may have to take a few screenshots to get the settings just right. A full list of the settings can be found below.

It is recommended to experiment with the rotation of the item to ensure the most distinct or unique feature takes up the full frame of the size indicator preview.

Once you are satisfied with the settings, click the *Create* button and the image will be saved to disk.



Don't forget to open the saved image in the inspector and set the *Texture Type* to *Sprite (2D and UI)* so you can use the image as an icon.

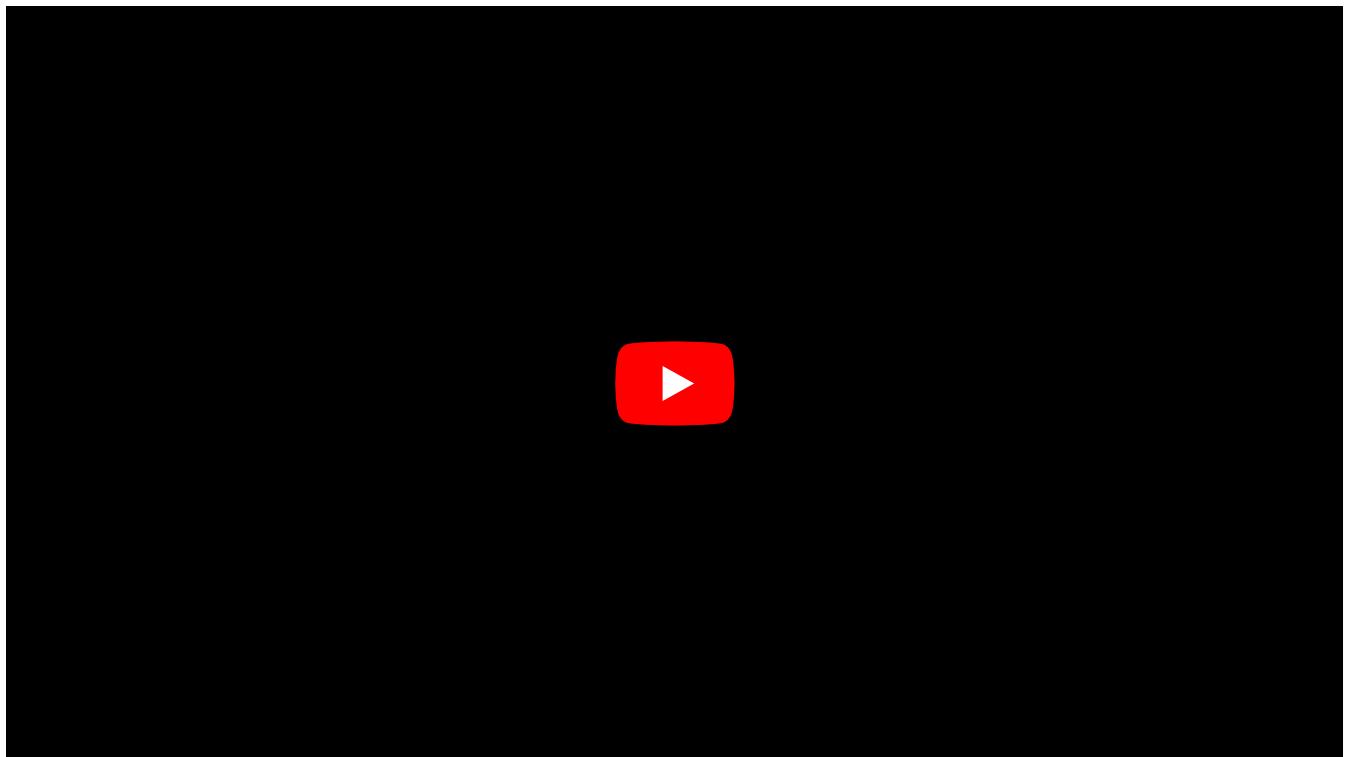


## Settings

Name	Description
Parent Folder	The folder that the screenshot image will be saved in, relative to the Assets folder in your project.
File Name	The name of the image file that will be saved to disk. If a file of the same name exists, the file name will have the current date and time appended to it to make it unique.
Show Size Indicator	If true, a white indicator square will show on screen to represent the size and contents of the screenshot.
Width	The width of the output image
Height	The height of the output image
Camera Clear Flags	<p><b>Depth</b>  The image will have a transparent background</p> <p><b>Color</b>  The image will have a solid color background</p> <p><b>Skybox</b>  The image will have a skybox in the background</p>
Background Color	If the Color option is chosen for the <i>Camera Clear Flags</i> , this is the color that will be used.
Use Light	If true, a light will be attached to the camera that takes the screenshot, emulating the settings you see in the scene view.
Light Color	If <i>Use Light</i> is selected, the color of the light to shine on the object.
Light Intensity	If <i>Use Light</i> is selected, the brightness of the light shine on the object.
Object To Screen Shot	Although the screenshot will take a picture of whatever is shown in the size indicator, the camera must be attached to some prefab in the scene view. This setting controls what object the camera is attached to.

# Template Content Wizard

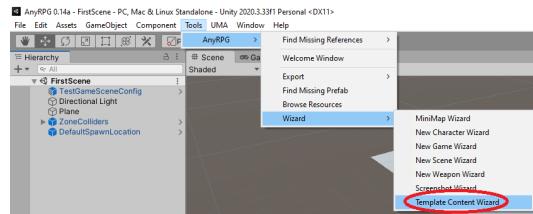
The Template Content Wizard allows you to quickly install template content in your game.

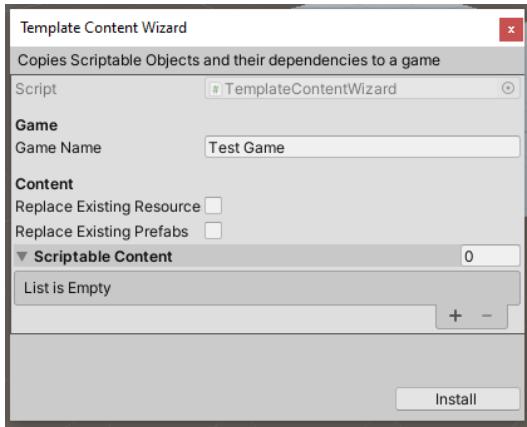


## Accessing the Wizard

The template content wizard requires that one of your game scenes with either a GameManager or SceneConfig object is open in the editor so that it can determine which game to install the content into.

The Template Content Wizard can be opened by clicking *Tools* in the menu bar, and selecting *AnyRPG > Wizard > Template Content Wizard*.





## Settings

Name	Description
Game Name	The name of the game in your Unity project to install the template content in. This will be automatically filled in if you have any scene with the GameManager or SceneConfig prefabs open.
Replace Existing Resources	If true, resources with the same name and folder location will be overwritten. This can be useful if you have made modifications to resources, and want to reset them to their original template values.
Replace Existing Prefabs	If true, prefabs with the same name and folder location will be overwritten. This can be useful if you have made modifications to prefabs, and want to reset them to their default values.
Scriptable Content	A list of template content packages to install.

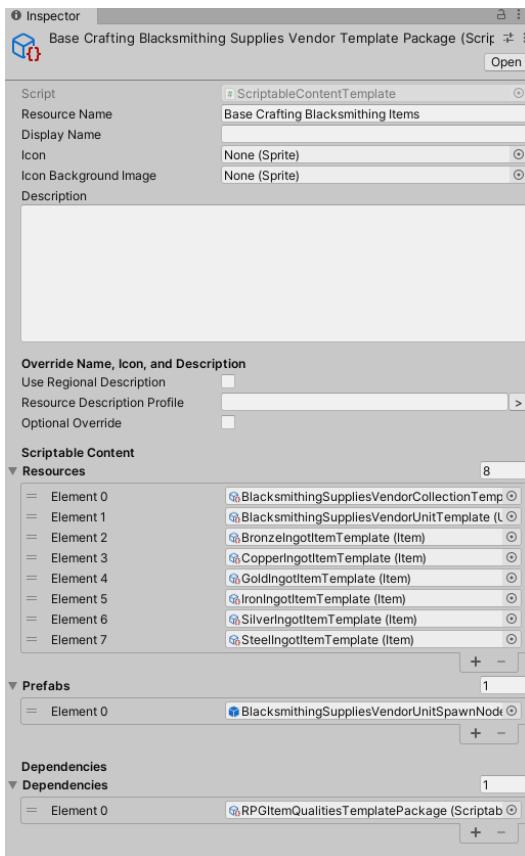
## Available Template Content

Most of the content in the [Features Demo Game](#) can be installed using the Template Content Wizard. There are over 1000 template packages available, so it can be helpful to know what is available. You browse template packages by looking in the AnyRPG/Core/Content/TemplatePackages folder in your project.



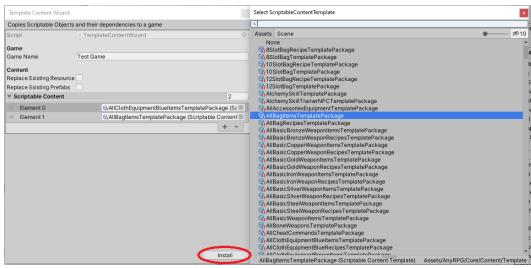
## Template Packages

A Template package consists of resources (Scriptable Objects) and prefabs. Template packages can also have dependencies on other template packages to make re-using packages easy. In general, any package you choose will install all dependencies for it to work without needing to manually install them.



## Installing Content

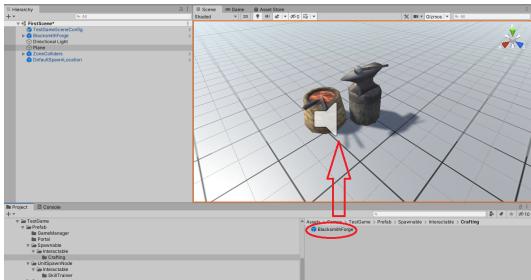
Select content from the object browser window or drag it into the list, and click Install.



## Using Template Content

### Prefabs

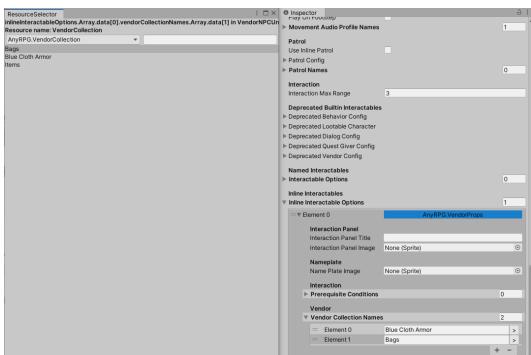
After install template content that includes prefabs such as interactables or unit (character) spawners, you will need to add those prefabs to a scene. You can find them under the Prefab folder in your game folder. Once you find a prefab, just drag it into the scene whereever you want it placed.

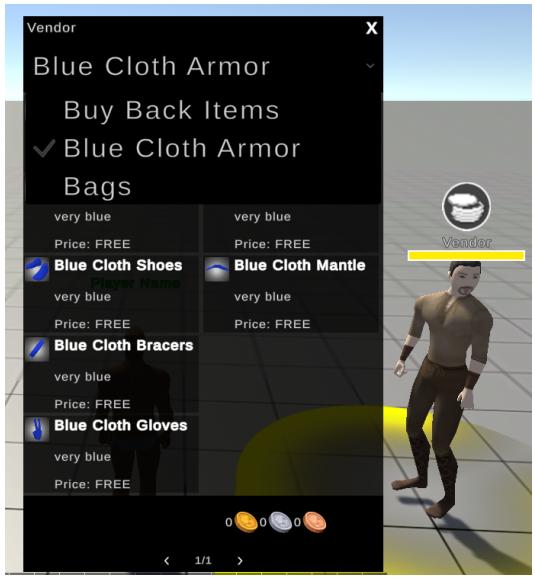


### Scriptable Objects

Some types of template content do not include any prefabs that can be added to a scene, but still require you to define where you want to use them. Examples include vendor collections and loot tables.

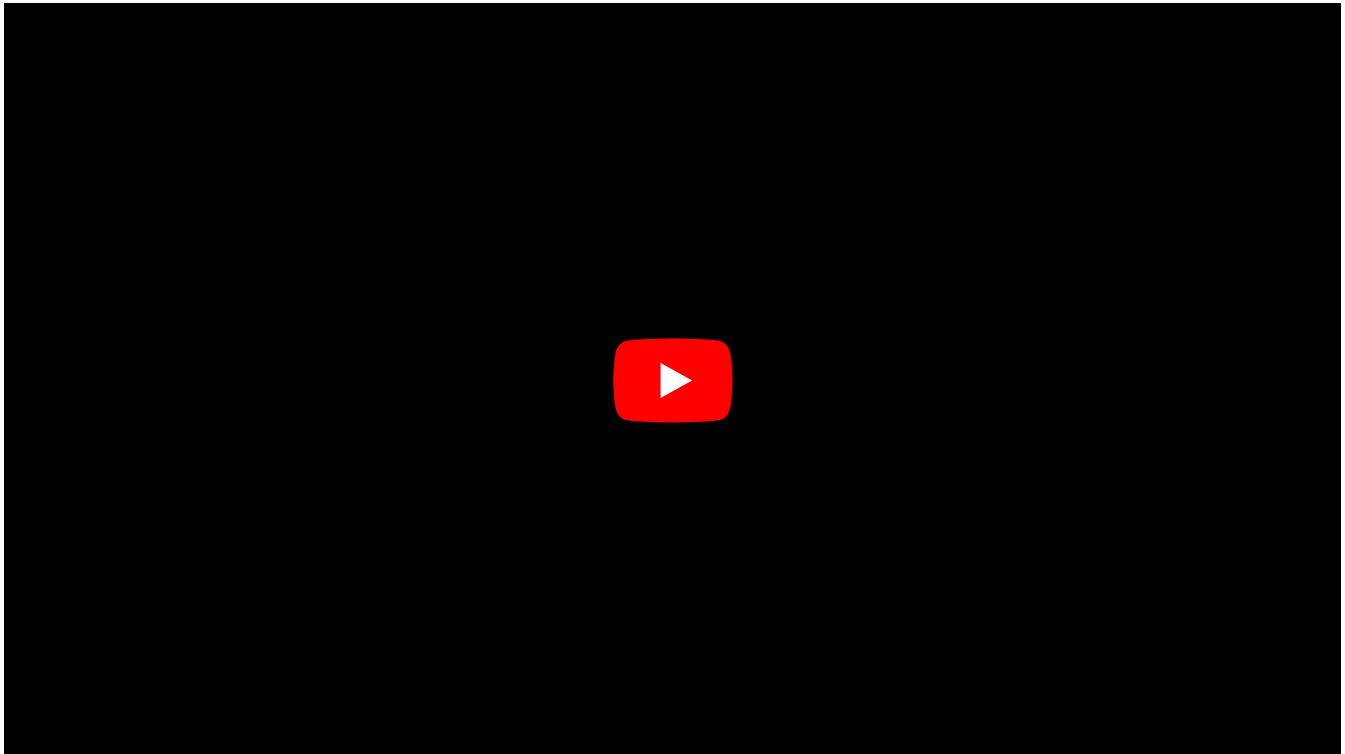
In the screenshot below you can see how you would add vendor collections to a vendor NPC Unit Profile to make them available to purchase on the vendor in game.





# New Character Wizard

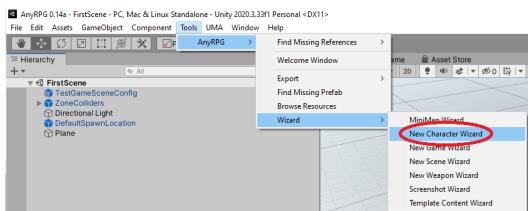
The new character wizard helps you import character models and set them up as NPC or player characters.

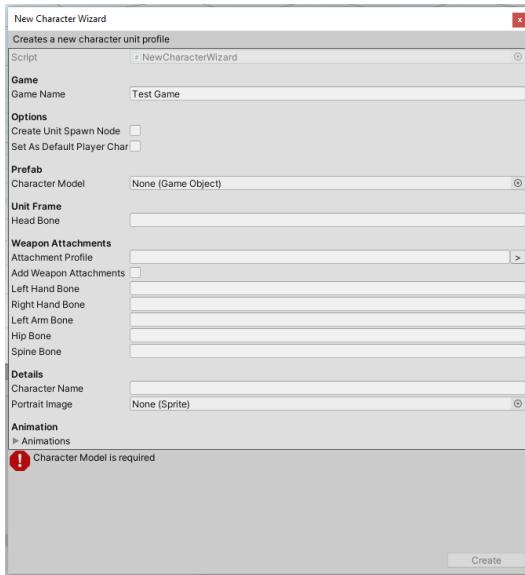


## Accessing the Wizard

The new character wizard requires that one of your game scenes with either a GameManager or SceneConfig object is open in the editor so that it can determine which game to install the content into.

The Template Content Wizard can be opened by clicking *Tools* in the menu bar, and selecting *AnyRPG > Wizard > New Character Wizard*.





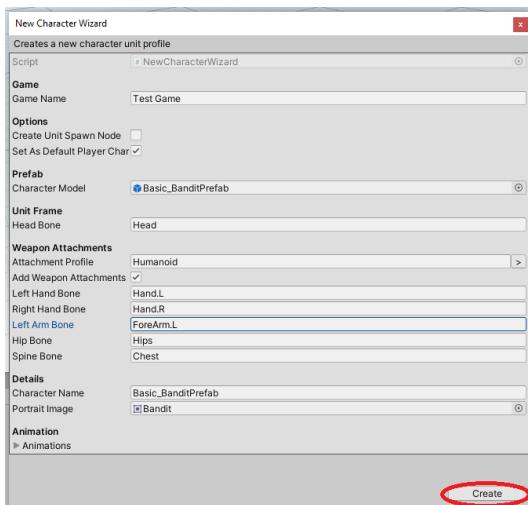
## Settings

Name	Description
Game Name	The name of the game in your Unity project to install the template content in. This will be automatically filled in if you have any scene with the GameManager or SceneConfig prefabs open.
Create Unit Spawn Node	If true, a prefab that can spawn this character will be created. This is useful if the character will be used as an enemy or NPC.
Set As Default Player Character	If true, the GameManager will be updated to use this character as the default player character.
Character Model	Drag an FBX or prefab into this slot, and that mod will be used as the character model.
Head Bone	The bone that the camera will look at when taking picture for the unit frame. This should be automatically filled in when the character model field is filled if it has a common name, but you can enter the bone name manually if has an unusual name.
Attachment Profile	An attachment profile contains a mapping of English names such as "Left Hand" to actual bone for attaching weapons. If the character is an UMA model, choose UMA, otherwise choose Humanoid.
Add Weapon Attachments	If true, several prefabs that contain attachment points for all common weapon types will be added to the model. This is not necessary for UMA characters.
Left Hand Bone	The name of the bone to attach the left hand attachment prefab to.
Right Hand Bone	The name of the bone to attach the right hand attachment Prefab to.
Left Arm Bone	The name of the bone to attach the shield attachment to.
Hip Bone	The name of the bone to attach the hip attachment prefab to.
Spine Bone	The name of the bone to attach the spine attachment prefab to. This will also be used as the floating point in the Unit Profile; meaning when a character is floating in the water, everything below this bone will be submerged.

Character Name	For NPCs, the name that will show above the characters head. For players, the name that will show in the character model selection screen when starting a new game.
Portrait Image	For players, the image that will show beside the character name in the character selection screen.
Animations	If this character has custom animations, enter them in this list to override the default character animations used by the system.

## Running the Wizard

Once you have filled in all the settings, click *Create*.



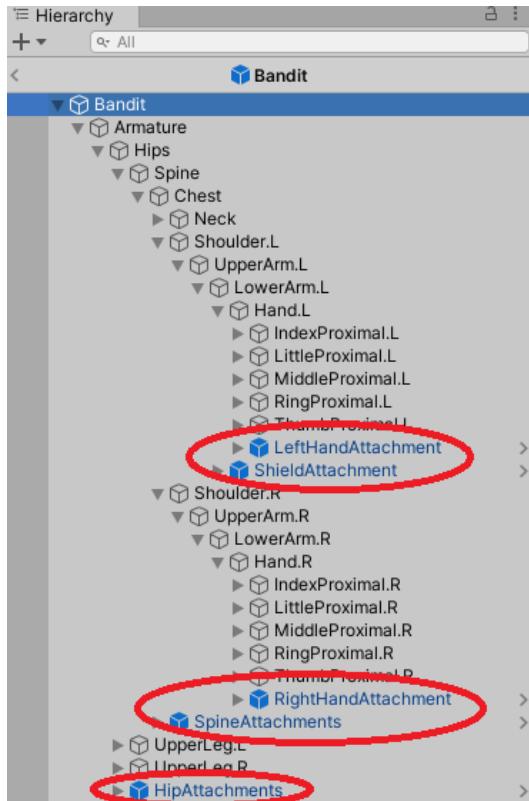
## Adjusting Weapon Attachments

Every character model is different and will have different dimensions and bone orientations. You will need to adjust the weapon attachment to ensure they have the correct orientation so that weapons properly line up with the hip, spine, hands etc when sheathed or held.

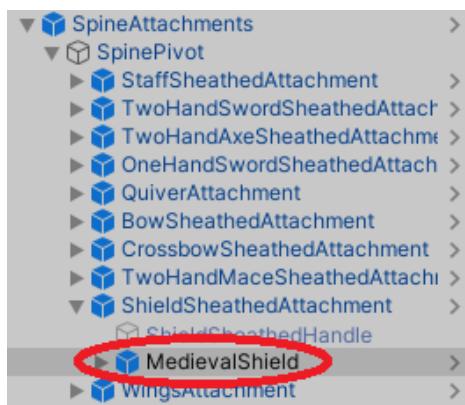
Open the character prefab that can be found in the GameName/Prefab/Character folder.



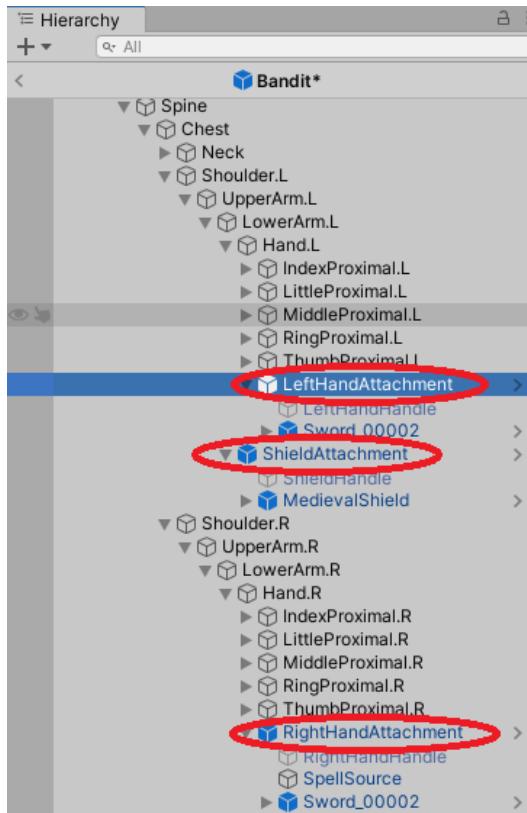
Find the attachments that have been added to the model.



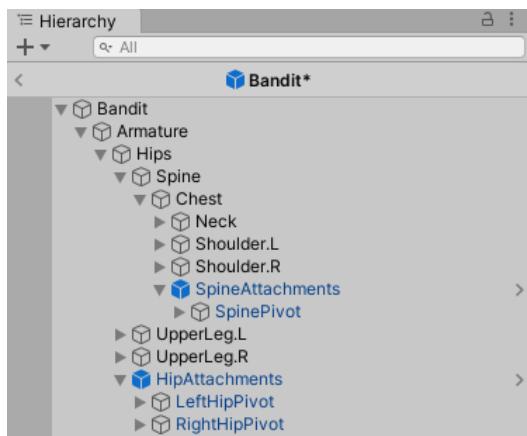
For each attachment, find the preview models included, and enable them so they are visible in the scene view.

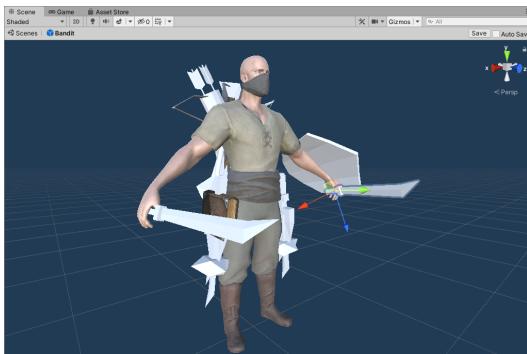


Rotate and move the attachments directly (not the preview models) until everything looks aligned properly on the character.



In the case of the spine and hip attachments, you can move/rotate the attachments directly, or the pivots, whichever you prefer.

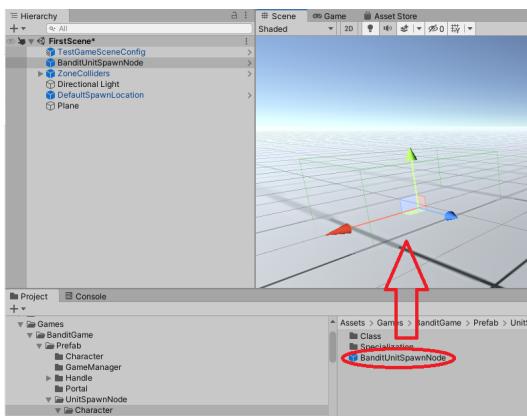




Once everything looks properly aligned, you can disable the weapon previews and save your changes. When the character equips weapons in-game they should now have the correct positioning and alignment.

## Spawning NPC Characters In Game

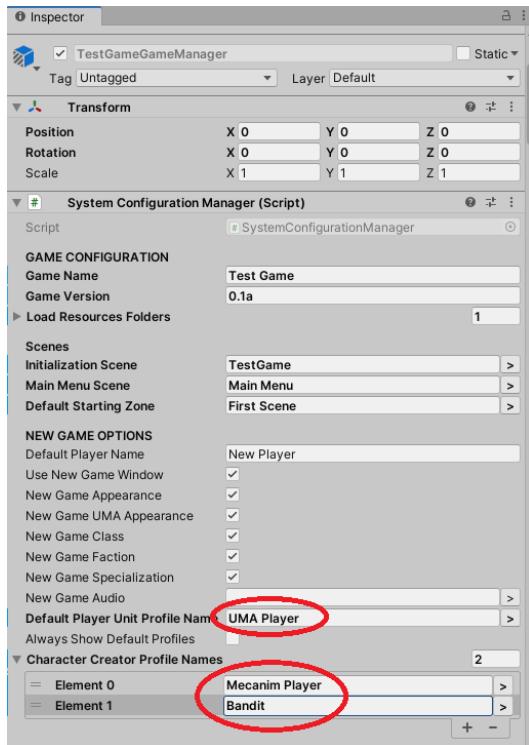
If the character is an NPC, find the Unit Spawn Node under the GameName/Prefab/UnitSpawnNode/Character folder in your project and drag it into the location in the scene you want to spawn in. When you start playing your game, the character will appear at that location.



## Player Characters

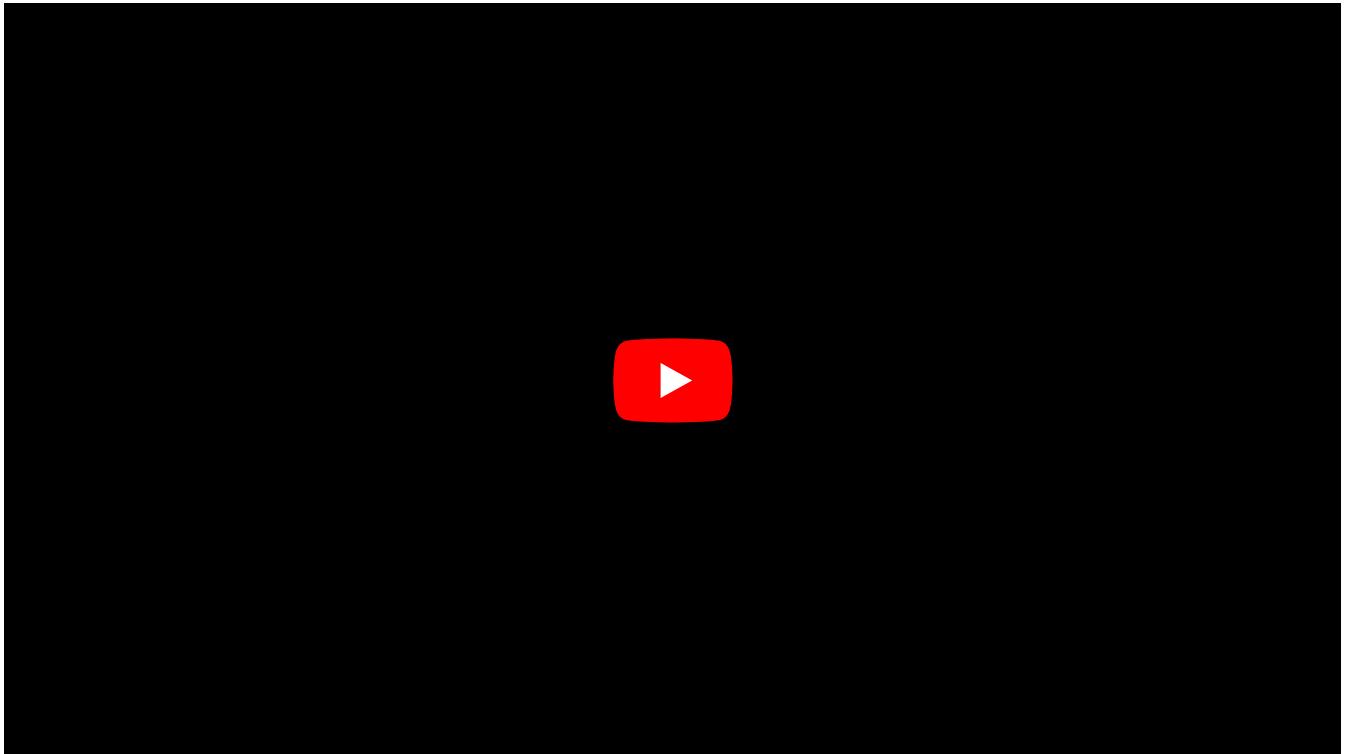
If the character is a player character and you selected the set as default player character option, it will be set in the Game Manager.

If you forgot to set that option, you can add the unit profile name to the *Default Player Unit Profile Name* field in the Game Manager. If you want to have multiple choices of player models, you can add them to the *Character Creator Profile Names* list.



# New Weapon Wizard

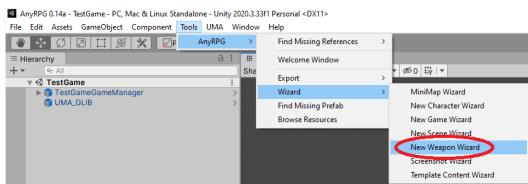
The new weapon wizard creates weapon items and special weapon handle prefabs that ensure a weapon is in the correct orientation when equipped.

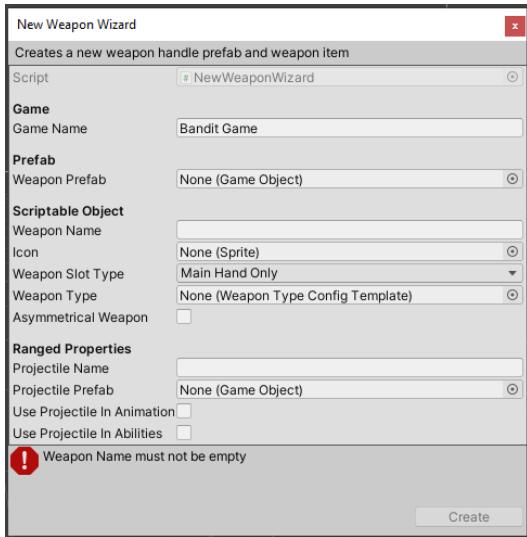


## Accessing the Wizard

The new weapon wizard requires that one of your game scenes with either a GameManager or SceneConfig object is open in the editor so that it can determine which game to install the content into.

The New Weapon Wizard can be opened by clicking *Tools* in the menu bar, and selecting *AnyRPG > Wizard > New Weapon Wizard*.





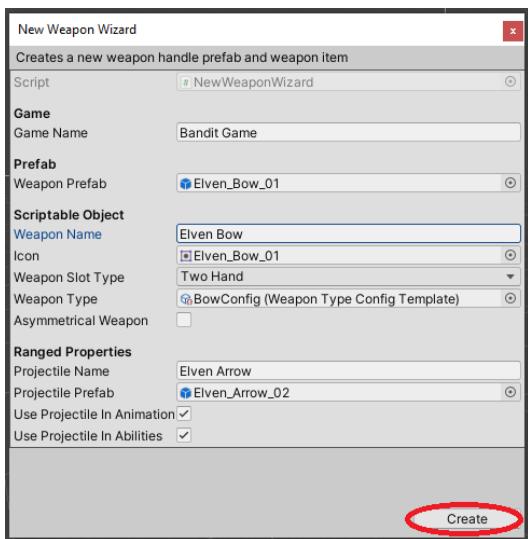
## Settings

Name	Description
Game Name	The name of the game in your Unity project to install the template content in. This will be automatically filled in if you have any scene with the GameManager or SceneConfig prefabs open.
Weapon Prefab	Drag an FBX or prefab into this slot, and that mod will be used as the weapon model.
Weapon Name	The weapon name that will appear in tooltips, vendor lists, loot windows, etc.
Icon	The image to be used to represent the weapon in the inventory, character screen, vendor lists, loot windows, etc.
Weapon Slot Type	<p><b>Main Hand Only</b>  This weapon can only be equipped in the main hand slot. Any other valid weapon can still be equipped in the off hand slot.</p> <p><b>Off Hand Only</b>  This weapon can only be equipped in the off hand slot. Any other valid weapon can still be equipped in the main hand slot.</p> <p><b>Any Hand</b>  This weapon can be equipped in the main hand or off hand slot. Any other weapon can be equipped in the other slot.</p> <p><b>Two Hand</b>  This weapon takes up both hands. It will appear in the main hand slot, and remove any other weapon that is equipped in the off hand slot.</p>
Weapon Type	The weapon type setting controls which animation and effects will be played when the weapon is used in combat. It will also determine which attachment point the weapon is attached to when it is sheathed on the character.
Asymmetrical Weapon	Most weapons are symmetrical and will look the same if held in the main hand or off hand. For asymmetrical weapons such as claws, this should be set to true and separate handle prefabs will be created for the left and right hands.
Projectile Name	The base name that will be assigned for the projectile prefabs and prefab profiles. Leave this blank if the weapon is not ranged.

Projectile Prefab	A Prefab to use for the projectile if this is a ranged weapon. Leave this blank if the weapon is not ranged.
Use Projectile In Animations	For ranged weapons only. Should the projectile be shown during attack animations such as pulling a arrow from the quiver and drawing the bow string. This should not be checked if the ranged weapon does not have a special projectile prefab. In that case, the default projectile settings from the weapon type will apply.
Use Projectile In Abilities	For ranged weapons only. Should the projectile be shown during flight to the target after the attack animation is finished. This should not be checked if the ranged weapon does not have a special projectile prefab. In that case, the default projectile settings from the weapon type will apply.

## Content Created

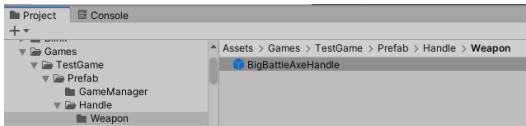
After choosing all the settings, click Create to run the wizard.



The following content will be created.

### Weapon Handle Prefab

Weapon handle, projectile handle, and projectile prefabs can be found in the *GameName/Prefab/Handle/Weapon* folder. The weapon handle is a convenient prefab that contains the weapon model along with a handle that is a visual indicator to help set the correct scale (size) and rotation so that the weapon will look good when held or sheathed.

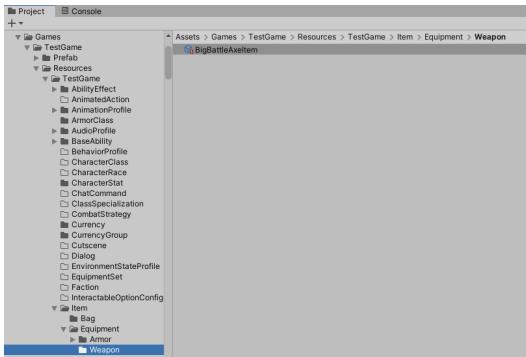


## Prefab Profiles

Prefab profiles, a type of scriptable object that contains the link to the prefab, can be found in the *Gamenname/Resources/GameName/PrefabProfile/Weapon* folder.

## Weapon Item

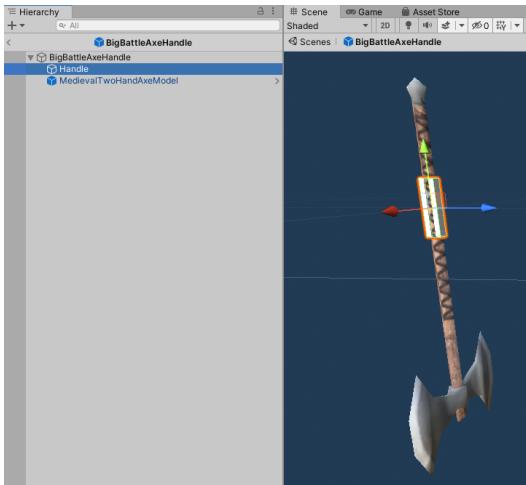
The weapon item Scriptable Object can be found in the *GameName/Resources/GameName/Item/Equipment/Weapon* folder.



## Adjusting the Weapon Handle

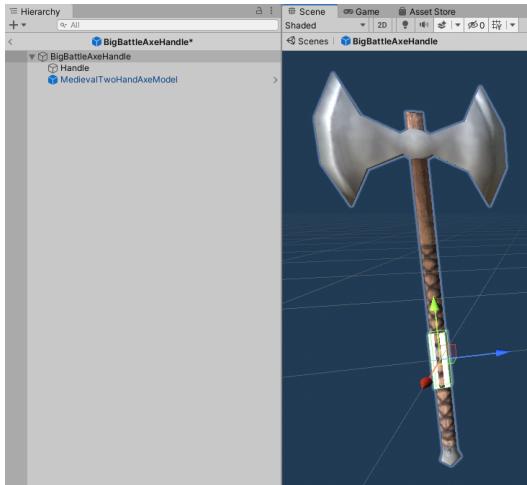
### Weapons

The handle object in the weapon handle prefab is a visual indicator that shows what the size and orientation of the weapon should be when gripped in a character's hand. The blue (z) axis is the forward direction of the hand, the yellow (y) axis is the top of the hand, and the red (x) axis is the right side of the hand.



Set the scale of the weapon model larger or smaller if necessary until the handle looks about the right size in relation to it. You can imagine that if gripped, the handle would fit perfectly in a fist.

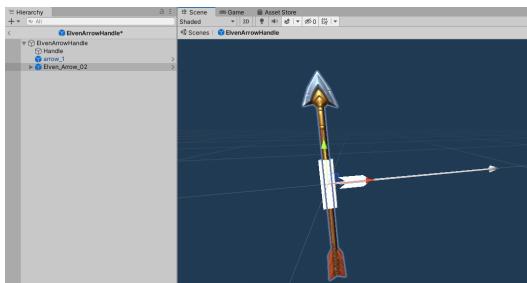
Set the rotation and position of the weapon model so that it would look correct if the handle was gripped in a hand with the character's arm straight in front of them.



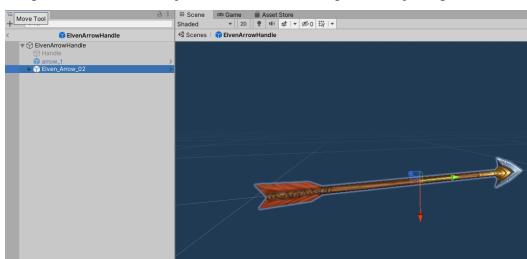
Disable the Handle object so that it is not visible, and save the changes to the weapon handle prefab.

## Projectiles

The steps for projectiles are similar to the steps for weapons. When you open the prefab, you will see a sample projectile that represents the correct position and rotation.



Align the projectile so it matches the position and rotation of the sample projectile, then disable all other objects in the prefab so only the projectile is visible, and save the changes.



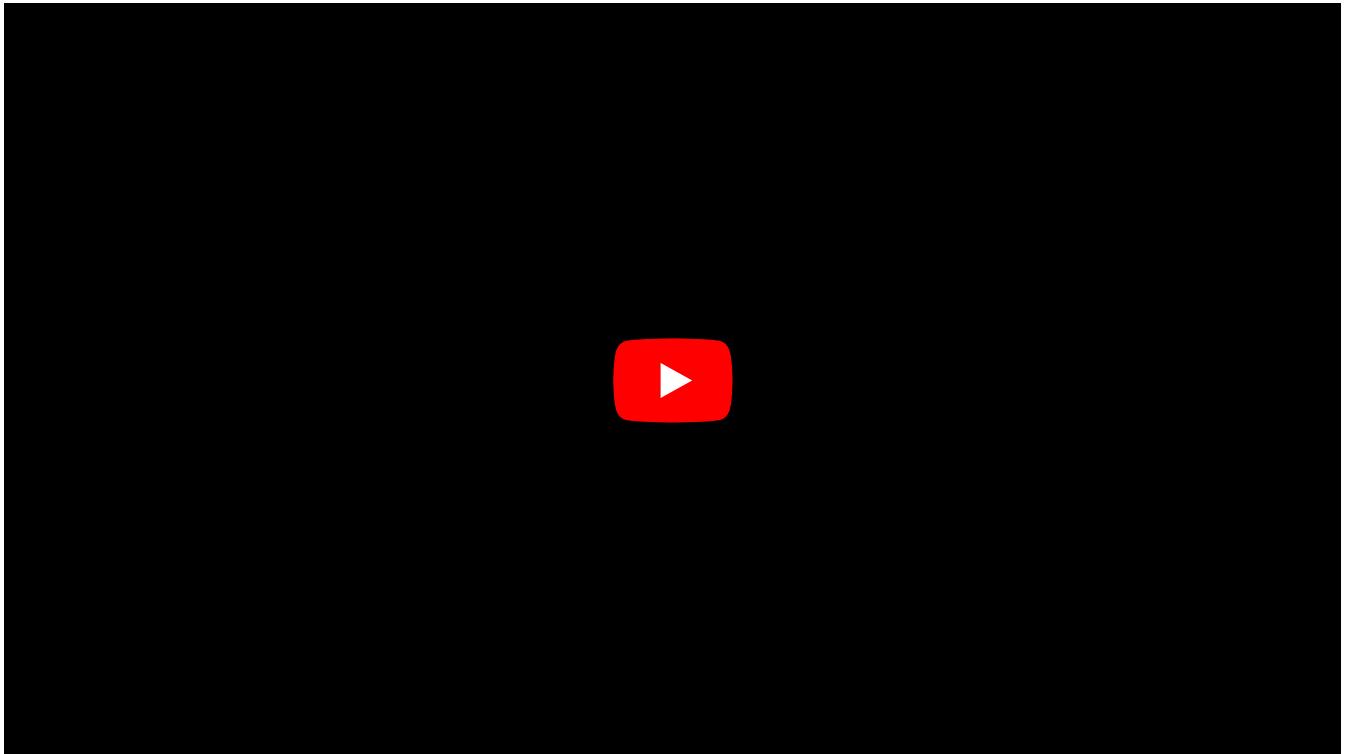
## Next Steps

To make the weapon available in game you may want to take any of the following actions.

- Configure the weapon by adding an item quality, setting a purchase price, or requiring a specific weapon skill to equip the weapon.
- Add the weapon to the default equipment for a character class or specialization.
- Add the weapon to a vendor collection and make it available on a vendor to purchase.
- Add the weapon to a loot table so it can be obtained by defeating an enemy.

# Minimap Wizard

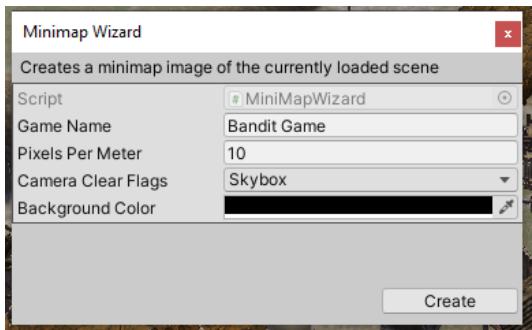
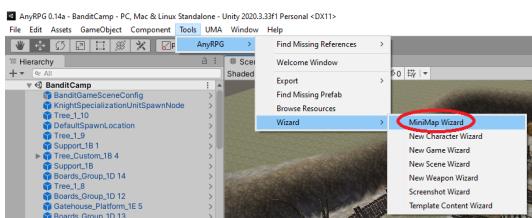
The minimap wizard creates a top down image of a scene to be used for the main map and minimap.



## Accessing the Wizard

The minimap wizard requires that the game scene you want to make the map for is open in the editor. The scene should have a `SceneConfig` object in it to work properly.

The Minimap Wizard can be opened by clicking `Tools` in the menu bar, and selecting `AnyRPG > Wizard > Minimap Wizard`.

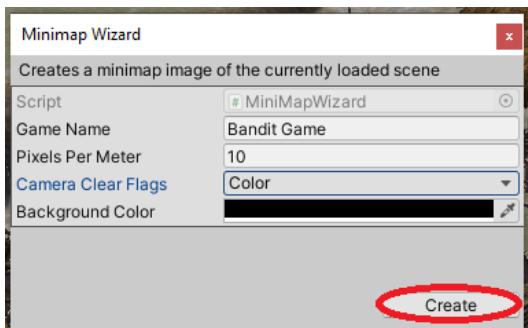


## Settings

Name	Description
Game Name	The name of the game in your Unity project to install the template content in. This will be automatically filled in if you have any scene with the SceneConfig prefab open.
Pixels Per Meter	The number of pixels to be rendered in the map image per horizontal meter of the scene.
Camera Clear Flags	<b>Depth</b> The image will have a transparent background <b>Color</b> The image will have a solid color background <b>Skybox</b> The image will have a skybox in the background
Background Color	If the geometry of the level is not a perfect square, and the Camera Clear Flags are set to color, what color should be used to fill in the empty areas.

## Content Created

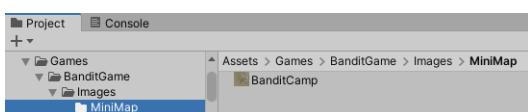
After choosing all the settings, click Create to run the wizard.



The following content will be created.

### Map Image

The map image can be found in the `GameName/Images/MiniMap` folder.



## Next Steps

The minimap image will be loaded automatically when the scene is loaded. There is no additional configuration required.

# Scriptable Objects

# Scriptable Objects Introduction

The AnyRPG Engine makes heavy use of [Unity Scriptable Objects](#) to allow as much configuration of games as possible without requiring changes to the engine code.

## Properties

All scriptable objects used in AnyRPG have a common set of shared properties. To avoid duplication in the documentation, they are all listed here. Individual scriptable object pages will only list additional properties that are not on this page.

Name	Description
Resource Name	The resource name serves as a database key when scriptable object lookups are performed in the engine. If the <i>Display Name</i> field is empty, it will also be the display text wherever the item appears in-game.
Display Name	The display name field can be used when a different display text than the <i>Resource Name</i> is desired, or when using localization to display text in different languages.
Icon	Whenever the UI will show an image for a certain scriptable object, this icon will be used.
Icon Background Image	If an icon is transparent, this image will show behind the icon. This can be useful to reduce effort and save space by re-using background images for multiple icons.
Description	Whenever the UI shows a description for a scriptable object, this text will be displayed.
Use Regional Description	If true, the system will search for a localized regional description for this scriptable object and use its <i>Display Name</i> , <i>Icon</i> , <i>Icon Background Image</i> , and <i>Description</i> instead.
Resource Description Profile	If set, the system will search for a regional description with this name for this scriptable object and use its <i>Display Name</i> , <i>Icon</i> , <i>Icon Background Image</i> , and <i>Description</i> instead.
Optional Override	If true, and one of the two regional override fields is used, the regional override is optional, and will not cause an error if it doesn't exist.

# Abilities

Abilities allow the character to perform actions such as attacks, casting spells, crafting, and gathering.

## Properties

All types abilities share a common set of properties, listed in the table below.

Name	Description
Require Out Of Combat	If true, the character must not be in combat to cast the ability.
Require Stealth	If true, the character must be in stealth mode to cast the ability.
Weapon Affinity Names	A list of <a href="#">Weapon Skills</a> . The character must have weapon equipped that matches the type of at least one of the skill to cast the ability.
Holdable Object List	<p>A list of <a href="#">PrefabProfiles</a> that contain links to GameObjects that will be held while the ability is being cast.</p> <p><b>Holdable Object Name</b> The name of a <a href="#">PrefabProfile</a> that contains a link to a GameObject.</p> <p><b>Use Universal Attachment</b> If true, attachment points from the <a href="#">PrefabProfile</a> will be ignored, and the universal attachment in the <i>Attachment Name</i> field will be used.</p> <p><b>Attachment Name</b> The <i>Node Name</i> field from one of the <i>Attachment Point Nodes</i> in an <a href="#">Attachment Profile</a>.</p>
Ability Prefab Source	<p>An enumeration that defines what sources will be used for holdable objects.</p> <p><b>Both</b> Holdable objects defined directly in the ability, and defined in the weapon will be spawned.</p> <p><b>Ability</b> Only holdable objects defined in the ability will be spawned</p> <p><b>Weapon</b> Only holdable objects defined in the weapon will be spawned.</p>
Animator Create Prefabs	If true, holdable objects will be created in response to animation events, and not created automatically by the ability manager when the cast starts.
Prefab Destroy Delay	The amount of time, in seconds, that holdable objects should persist past the end of the ability cast before being destroyed.
Animation Clip	A link to an animation clip that the character will perform while casting.
	The name of an <a href="#">Animation Profile</a> that contains a

Animation Profile Name	list of <i>Cast Clips</i> or <i>Attack Clips</i> (only for <a href="#">Animated Abilities</a> ) that will be performed while the ability is casting.
Use Unit Cast Animations	If true, the ability will use the <i>Cast Clips</i> or <i>Attack Clips</i> currently active for the character, instead of the clips defined in the ability.
Animation Hit Audio Profile Name	If the animation has <i>Hit</i> events while it is playing, this <a href="#">Audio Profile</a> will be played in response to those events.
Casting Audio Clip	An audio clip to play while the ability is casting.
Casting Audio Profile Name	An <a href="#">Audio Profile</a> to play while the ability is casting
Loop Audio	If true, the audio will be looped until the cast is complete.
Required Level	The level the character must be to learn the ability
Character Class Requirements	A list of <a href="#">Character Classes</a> . The character must be one of the classes to learn the ability.
Class Specialization Requirements	A list of <a href="#">Class Specializations</a> . The character must be one of the specializations to learn the ability.
Useable Without Learning	If true, the ability can be cast without learning it. This is useful for teleport abilities that will be cast on interaction with a <a href="#">Teleport Interactable Option</a> .
Auto Add To Bars	If true, when learned, the ability will be automatically added to the action bars in the UI if there is room.
Can Simultaneous Cast	If true, this ability can be cast while another ability cast is in progress.
Can Cast While Moving	If true, the ability can be cast while the character is in motion.
Ignore Global Cooldown	This spell can be cast while the global cooldown is active.
Power Resource Name	The name of a <a href="#">Power Resource</a> that will be spent to cast the ability.
Base Resource Cost	The base amount of the <a href="#">Power Resource</a> that will be spent to cast the ability. This amount is not scaled by level.
Resource Cost Per Level	The amount of the <a href="#">Power Resource</a> that will be spent to cast the ability. This amount is multiplied

Spend Delay	by the character level. The time delay (in seconds) before the <a href="#">Power Resource</a> is spent when the ability is cast.
Generate Power Resource Name	The name of a <a href="#">Power Resource</a> that should be gained when the ability hits the target.
Base Resource Gain	The base amount of the <a href="#">Power Resource</a> that will be gained. This amount is not scaled by level.
Resource Gain Per Level	The amount of the <a href="#">Power Resource</a> that will be gained. This amount is multiplied by the character level.
Use Speed Multipliers	If true, after the cast time is calculated, it will be affected by the <a href="#">Speed</a> secondary stat.
Use Animation Cast Time	If true, the cast time is based on the length of the animation played while casting.
Ability Casting Time	If <a href="#">Use Animation Cast Time</a> is false, this value will be used for the cast time.
Ability Cool Down	The cooldown time, in seconds, before the ability can be cast again.
Cool Down On Cast	If true, the cooldown will be initiated at the start of the cast, instead of the end of the cast, which is the default.
Use Ability Effect Targetting	If true, the <a href="#">Target Options</a> of the ability will be overridden by the <a href="#">Target Options</a> of the first <a href="#">Ability Effect</a> .
Target Options	A list of <a href="#">Target Options</a> .
Inline Ability Effects	A list of <a href="#">Ability Effects</a> , defined directly, to cast when the ability casting is complete.
Ability Effect Names	A list of <a href="#">Ability Effects</a> to cast when the ability casting is complete.
Tick Rate	This is the number of seconds between ticks, where <a href="#">Channeled Ability Effects</a> will be cast while the ability is casting.
Inline Channeling Effects	A list of <a href="#">Channeled Ability Effects</a> , defined directly to cast while channeling the ability.
Channeled Ability Effectnames	A list of names of <a href="#">Channeled Ability Effects</a> to cast while channeling the ability.

## **Target Options**

Target options control which targets will be considered valid targets for the purpose of determining if the ability can be cast on the target.

Name	Description
Require Target	If true, the character must have a target selected.
Require Line Of Sight	The caster requires a clear line of sight to the target.
Require Live Target	The target must be alive.
Require Dead Target	The target must be dead.
Can Cast On Self	The ability can be cast on the caster.
Can Cast On Others	The ability can be cast on targets other than the caster.
Can Cast On Enemy	The ability can be cast on targets the caster has a hostile <a href="#">Faction</a> relationship with.
Can Cast On Neutral	The ability can be cast on targets the caster has a neutral <a href="#">Faction</a> relationship with.
Can Cast On Friendly	The ability can be cast on targets the caster has a friendly <a href="#">Faction</a> relationship with.
Auto Self Cast	If true, and the caster does not have a target, the ability will automatically choose the caster as the target.
Unit Type Restrictions	A list of valid <a href="#">Unit Types</a> the ability can be cast on
Use Melee Range	If true, the ability can only be cast on a target when that target is in the casters hit box.
Max Range	If <i>Use Melee Range</i> is false, the ability will have a maximum range of this value.
Require Facing Target	If true, the target must be in front of the caster.
Max Angle	The maximum angle to the left or right the target can be located at.
Require Behind Target	If true, the caster must be behind the target.
Require Ground Target	If true, this ability will be cast on the ground, and not on a target.
Ground Target Color	The color that will be used to tint the ground target casting circle.
Ground Target Radius	The radius that will be used for displaying the ground target casting circle.

## Next steps

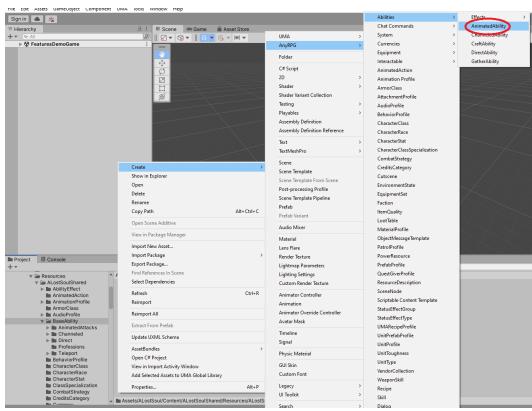
- Add an ability to the *Capabilities* of a [Character Class](#).
- Add an ability to the *Capabilities* of a [Class Specialization](#).
- Add an ability to the *Capabilities* of a [Unit Type](#).
- Add an ability to the *Capabilities* of a [Faction](#).
- Add an ability to the *Capabilities* of a [Unit Profile](#).

# Animated Ability

An animated ability is an attack-type ability, where the damage to the target should occur in the middle of the animation, based on animation events.

## Creation

To create an animated ability, find (or create) the *GameName/Resources/GameName/BaseAbility* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > AnimatedAbility*.



## Properties

Name	Description
Is Auto Attack	If true, this ability will be used as an auto-attack, and automatically cast on an enemy target when in combat and in range.
Use Unit Attack Animations	If true, the <i>Attack Clips</i> will be used from the currently active <a href="#">Animations</a> for the character, instead of any animation clips defined directly in the ability.
Use Auto Attack Animations	This option is only valid if this is not an auto-attack ability. If true, it will use the current auto-attack animations so it looks good with any weapon.
Use Weapon Hit Sound	If true, the current Weapon default hit sound will be played when the attack hits an enemy.
Use Weapon Skill Attack Voice Setting	If true, the choice of whether or not to play the attack voice is controlled by the weapon skill.
Play Attack Voice	If true, the character will play their attack voice clip when this ability is used.

## Next steps

- Add an animated ability to the [Capabilities](#) of a [Character Class](#).
- Add an animated ability to the [Capabilities](#) of a [Class Specialization](#).
- Add an animated ability to the [Capabilities](#) of a [Unit Type](#).
- Add an animated ability to the [Capabilities](#) of a [Faction](#).
- Add an animated ability to the [Capabilities](#) of a [Unit Profile](#).

# Channeled Ability

Channeled abilities are deprecated, and should not be used. All properties of channeled abilities have been moved to Direct Abilities and the class will be removed in the future.



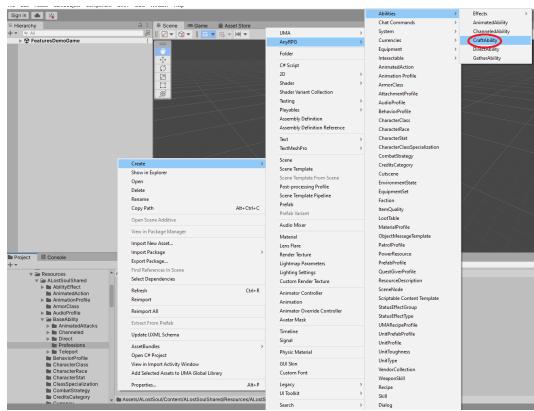
Deprecated, do not use.

# Craft Ability

Craft abilities are special types of abilities that do not require ability effects and will automatically craft the current item in the crafting queue when the cast is complete.

## Creation

To create a craft ability, find (or create) the *GameName/Resources/GameName/BaseAbility* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > CraftAbility*.



## Properties

Craft abilities do not contain any properties other than the default properties shared by all [Abilities](#).

## Next steps

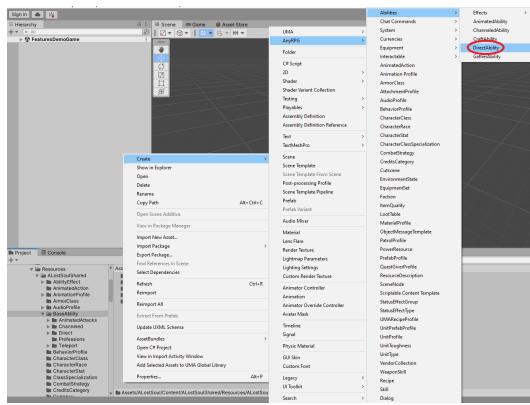
- Add a craft ability to the *Capabilities* of a [Character Class](#).
- Add a craft ability to the *Capabilities* of a [Class Specialization](#).
- Add a craft ability to the *Capabilities* of a [Unit Type](#).
- Add a craft ability to the *Capabilities* of a [Faction](#).
- Add a craft ability to the *Capabilities* of a [Unit Profile](#).
- Add a craft ability to a [Skill](#) so the player learns it when they learn the [Skill](#).
- Add a craft ability to a [Recipe](#) to require knowing the ability to craft the [Item](#).

# Direct Ability

A direct ability is the default ability type, and should be used mainly for spell-type abilities.

## Creation

To create a direct ability, find (or create) the *GameName/Resources/GameName/BaseAbility* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > DirectAbility*.



## Properties

Direct Abilities do not contain any properties other than the default properties shared by all [Abilities](#).

## Next steps

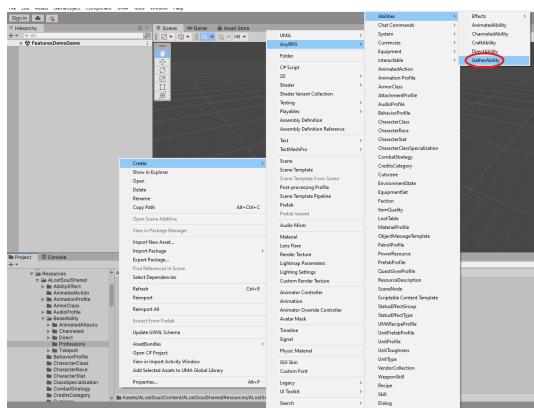
- Add a direct ability to the *Capabilities* of a [Character Class](#).
- Add a direct ability to the *Capabilities* of a [Class Specialization](#).
- Add a direct ability to the *Capabilities* of a [Unit Type](#).
- Add a direct ability to the *Capabilities* of a [Faction](#).
- Add a direct ability to the *Capabilities* of a [Unit Profile](#).

# Gather Ability

Gather abilities are special types of abilities that do not require ability effects and will automatically gather from the current gathering node when the cast is complete.

## Creation

To create a gather ability, find (or create) the *GameName/Resources/GameName/BaseAbility* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > GatherAbility*.



## Properties

Gather abilities do not contain any properties other than the default properties shared by all [Abilities](#).

## Next steps

- Add a gather ability to the *Capabilities* of a [Character Class](#).
- Add a gather ability to the *Capabilities* of a [Class Specialization](#).
- Add a gather ability to the *Capabilities* of a [Unit Type](#).
- Add a gather ability to the *Capabilities* of a [Faction](#).
- Add a gather ability to the *Capabilities* of a [Unit Profile](#).
- Add a gather ability to a [Gathering Node Config](#) to allow the ability to be used to gather from it.
- Add a gather ability to a [Skill](#) so the player learns it when they learn the [Skill](#).

# Ability Effects

Ability effects are the components (building blocks) responsible for the behavior of all spells or attacks and can be combined together to create unique and powerful abilities.

## Properties

All ability effects share a common set of properties, listed in the table below.

Name	Description
Target Options	Ability effect <a href="#">Target Options</a> .
Chance To Cast	The percentage chance that this ability effect will be cast when called.
Effect Material Name	The name of a <a href="#">Material Profile</a> containing a material to use to replace the material of the target.
Material Change Duration	The number of seconds the target material should be changed for, before changing the material back to the original one.
On Hit Audio Profile Names	A list of <a href="#">Audio Profiles</a> containing audio clips to play when the ability effect hits the target.
Random Audio Profiles	If true, a random <a href="#">Audio Profile</a> from the <i>On Hit Audio Profile Names</i> list will be played, instead of all of them.
Hit Ability Effect Names	A list of other <a href="#">Ability Effects</a> to cast when the current ability effect hits.
Input Multiplier	All ability effects pass on information about how much damage or healing they did to the next ability effect they cast. This number will be multiplied by those amounts before adding them to the amounts of the current ability effect.
Threat Multiplier	The basic threat any ability effect does will be multiplied by this amount.

## Length Effect Properties

[Length Effects](#), which are ability effects that have a duration, have the following additional properties.

Name	Description
Ability Prefab Source	<p>An enumeration that defines what sources will be used for holdable objects (visual effects).</p> <p><b>Both</b> Holdable objects defined directly in the ability, and defined in the weapon will be spawned.</p> <p><b>Ability</b> Only holdable objects defined in the ability will be spawned</p> <p><b>Weapon</b> Only holdable objects defined in the weapon will be spawned.</p>
Random Prefabs	If true, a random prefab will be selected from the <i>Ability Prefab Source</i> instead of spawning all of them.
Ability Object List	<p>A list of <a href="#">PrefabProfiles</a> that contain links to GameObjects that will be spawned when the ability effect hits.</p> <p><b>Holdable Object Name</b> The name of a <a href="#">PrefabProfile</a> that contains a link to a GameObject.</p> <p><b>Use Universal Attachment</b> If true, attachment points from the <a href="#">PrefabProfile</a> will be ignored, and the universal attachment in the <i>Attachment Name</i> field will be used.</p> <p><b>Attachment Name</b> The <i>Node Name</i> field from one of the <i>Attachment Point Nodes</i> in an <a href="#">Attachment Profile</a>.</p>
Prefab Spawn Location	<p>An enumeration of options that define where the visual effects for this ability effect should spawn.</p> <p><b>None</b> No prefabs should be spawned.</p> <p><b>Caster</b> The prefabs should be spawned with the caster as their parent.</p> <p><b>Target</b> The prefabs should be spawned with the target as their parent.</p> <p><b>Ground Target</b> The prefabs should be spawned at the location of the ground target of the original ability, if one was used.</p> <p><b>Original Target</b> The prefabs should be spawned with the original target of the ability as its parent.</p>

	<p><b>Target Point</b> The prefab should be spawned at the location of the current target, with no parent.</p> <p><b>Caster Point</b> The prefab should be spawned at the location of the caster, with no parent.</p>
Prefab Destroy Delay	The amount of time, in seconds, that visual effect prefabs should persist past the end of the ability effect before being destroyed.
Destroy On End Cast	If true, the visual effect prefabs will be destroyed when casting ends, regardless of prefab lifetime.
Tick Rate	The number of seconds that should pass between ticks.
Cast Zero Tick	If true, a tick will happen immediately at the start of the ability effect.
Tick Ability Effect Names	A list of ability effects to cast on each tick.
On Tick Audio Profile Names	a list of <a href="#">Audio Profiles</a> containing audio clips which will be played on each tick.
Random Tick Audio Profiles	If true, a random <a href="#">Audio Profile</a> from the <i>On Tick Audio Profile Names</i> list will be played, instead of all of them.
Complete Ability Effect Names	A list of ability effects to cast when the duration of the current ability effect is complete.

## Fixed Length Effect Properties

In addition to all the properties of its parent class, [Length Effect](#), fixed length effects have the following additional properties.

Name	Description
Default Prefab Lifetime	The length of time, in seconds, that any visual effect prefab should last before being destroyed.

## Amount Effect Properties

In addition to all the properties of its parent class, [Instant Effect](#), amount effects have the following additional properties.

Name	Description
Allow Critical Strike	If true, the amount of the effect can be increased to a critical amount, determined by the casters critical strike chance.
Resource Amounts	<p>A list of resources to affect, and the amounts of the effects.</p> <p><b>Resource Name</b> The name of a <a href="#">Power Resource</a> to affect.</p> <p><b>Input Remap</b> By default, any inputs that match the <i>Resource Name</i> will be added to the current amount. If this field is not blank, the name of the <a href="#">Power Resource</a> in this field will be used for the input instead.</p> <p><b>Add Power</b> If true, the appropriate power (spell / physical) will be added to this amount.</p> <p><b>Min Amount</b> If the amount is lower than this value, it will be raised to this value.</p> <p><b>Base Amount</b> A base amount of the effect, not scaled by level.</p> <p><b>Amount Per Level</b> An amount that will be multiplied by the caster level.</p> <p><b>Max Amount</b> If the amount is higher than this value, it will be lowered to this value.</p> <p><b>Ignore Cast Time</b> By default, all amounts of the first effect to land are considered to be per second (DPS / HPS) and are multiplied by animation or cast time. If this value is set to true, the amount will not be normalized to the cast time.</p>
Ignore Accuracy	If true, the effect will always hit, regardless of current accuracy.

## Target Options

Target options control which targets will be considered valid targets for the purpose of determining if the ability can be cast on the target.

Name	Description
Require Target	If true, the character must have a target selected.
Require Line Of Sight	The caster requires a clear line of sight to the target.
Require Live Target	The target must be alive.
Require Dead Target	The target must be dead.
Can Cast On Self	The ability can be cast on the caster.
Can Cast On Others	The ability can be cast on targets other than the caster.
Can Cast On Enemy	The ability can be cast on targets the caster has a hostile <a href="#">Faction</a> relationship with.
Can Cast On Neutral	The ability can be cast on targets the caster has a neutral <a href="#">Faction</a> relationship with.
Can Cast On Friendly	The ability can be cast on targets the caster has a friendly <a href="#">Faction</a> relationship with.
Auto Self Cast	If true, and the caster does not have a target, the ability effect will automatically choose the caster as the target.
Unit Type Restrictions	A list of valid <a href="#">Unit Types</a> the ability effect can be cast on.
Use Melee Range	If true, the ability effect can only be cast on a target when that target is in the casters hit box.
Max Range	If <i>Use Melee Range</i> is false, the ability effect will have a maximum range of this value.
Line Of Sight Source Location	<p>When calculating line of sight, the following origin location will be used.</p> <p><b>Caster</b></p> <p>The line of sight will be calculated from the caster, to the current target.</p> <p><b>Ground Target</b></p> <p>The line of sight will be calculated from the original ground target, to the current target.</p> <p><b>Original Target</b></p> <p>The line of sight will be calculated from the original target, to the current target.</p>
	When calculating the range to the target for the purpose of determining maximum range, the following source location will be used.

Target Range Source Location

#### Caster

The target range will be calculated from the caster to the current target.

#### Ground Target

The target range will be calculated from the origin ground target, to the current target.

#### Original Target

The target range will be calculated from the origin target, to the current target.

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## Next steps

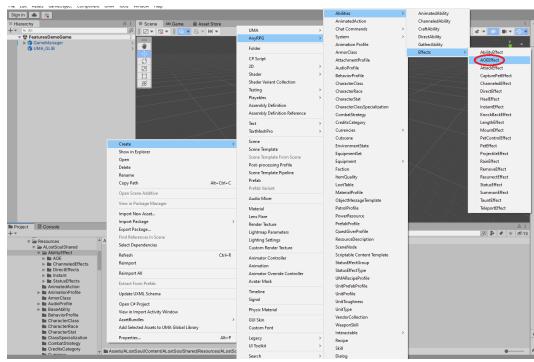
- Add an ability effect to an [Ability](#).
- Add an ability effect to another ability effect to chain them together.

# AOE Effect

An aoe effect is a type of intermediate effect that is responsible for choosing multiple valid targets and casting any additional ability effects on them.

## Creation

To create an aoe effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Abilities > Effects > AOEEffect`.



## Properties

In addition to all the properties of its parent class, [Fixed Length Effect](#), aoe effects have a single property, [\*AOE Properties\*](#), with the following fields.

Name	Description
Aoe Radius	The radius from the center of the target location which will be used to find valid targets.
Use Radius	If true, the target finding algorithm will use a sphere with a radius to find targets.
Use Extents	If true, the target finding algorithm will use extents to find targets.
Aoe Center	A Vector3 offset from the default center to use for finding targets.
Aoe Extents	If <i>Use Extents</i> is true, then these extents will be used to create the bounding box to find valid targets within it.
Max Targets	The maximum number of valid targets that can be returned. 0 is unlimited.
Prefer Closest Targets	If true, and <i>Max Targets</i> is not unlimited, the target will be sorted by distance from the center, and the closest ones will be returned.
Inter Target Delay	Set this value to a positive non-zero number if you want a delay between the time each target has additional effects cast on them.

## Next steps

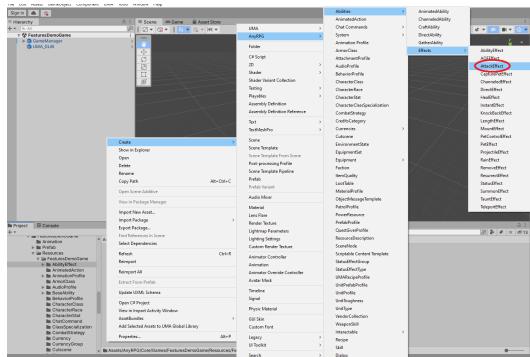
- Add an aoe effect to an [Ability](#).
- Add an aoe effect to another [Ability Effect](#) to chain them together.

# Attack Effect

An attack effect does damage to a target, draining one or more power resources.

## Creation

To create an attack effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > AttackEffect*.



## Properties

In addition to all the properties of its parent class, [Amount Effect](#), attack effects have the following properties.

Name	Description
Weapon Attack	If true, this attack will be considered to have been landed by the equipped <a href="#">Weapon</a> . It will play <a href="#">Weapon</a> sounds, as well as trigger <a href="#">Weapon</a> effect and active <a href="#">Status Effect</a> on-hit effects.
Damage Type	An enumeration of damage types. <b>Physical</b> <a href="#">Weapon</a> damage and physical power will be added to the damage amounts. <b>Ability</b> Spell power will be added to the damage amounts
Ignore Armor Percent	If the <i>Damage Type</i> is <i>Physical</i> , the percentage of the target armor to ignore when dealing damage.

## Next steps

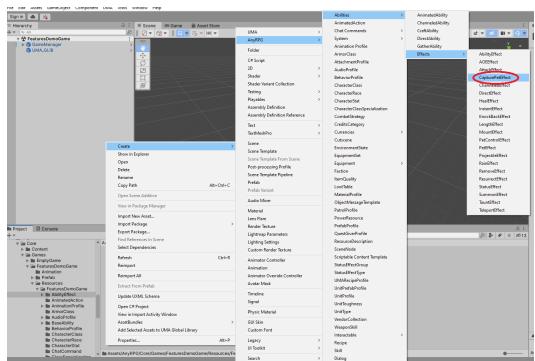
- Add an attack effect to an [Ability](#).
- Add an attack effect to another [Ability Effect](#) to chain them together.

# Capture Pet Effect

A capture pet effect captures a pet, allowing the caster to call it to follow them and aid them in combat at any time.

## Creation

To create a capture pet effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > CapturePetEffect*.



## Properties

In addition to all the properties of its parent class, [Fixed Length Effect](#), capture pet effects have the following properties.

Name	Description
Unit Type Restrictions	A list of <a href="#">Unit Types</a> that the ability can be cast on.

## Next steps

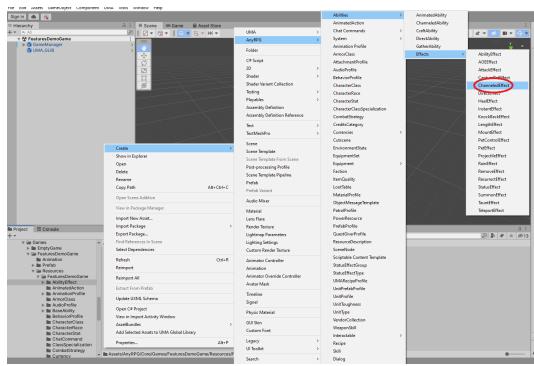
- Add a capture pet effect to an [Ability](#).
- Add a capture pet effect to another [Ability Effect](#) to chain them together.

# Channeled Effect

A channeled effect is a type of intermediate effect that is responsible for delaying the cast of subsequent effects.

## Creation

To create a channeled effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > ChanneledEffect*.



## Properties

In addition to all the properties of its parent class, [Fixed Length Effect](#), channeled effects have the following properties.

Name	Description
Effect Delay	The delay, in seconds, that should pass after spawning the visual effects, before any subsequent <a href="#">Ability Effects</a> are cast.

## Next steps

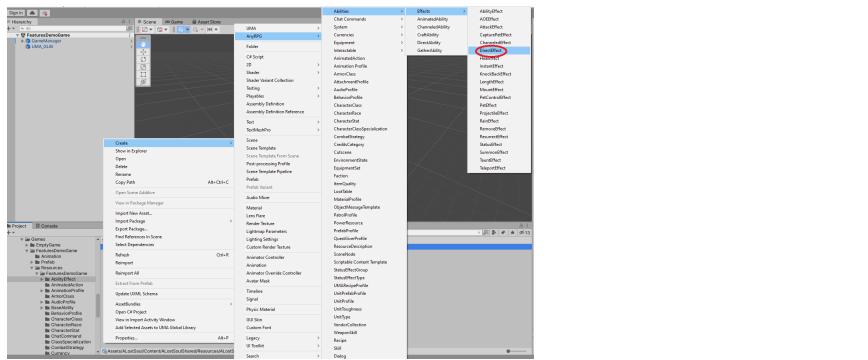
- Add a channeled effect to an [Ability](#).
- Add a channeled effect to another [Ability Effect](#) to chain them together.

# Direct Effect

A direct effect is a type of intermediate effect that can be used to chain multiple effects together.

## Creation

To create a direct effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Abilities > Effects > DirectEffect`.



## Properties

Direct Effects do not have any properties other than the properties provided by their parent class, [Fixed Length Effect](#).

## Usage

Direct Effects will cast Tick Ability Effects, and Complete Ability Effects, but will never cast Hit Ability Effects. Hit Ability Effects will be cast by [Projectile Effects](#), [AOE Effects](#), and [Channeled Effects](#).

## Next steps

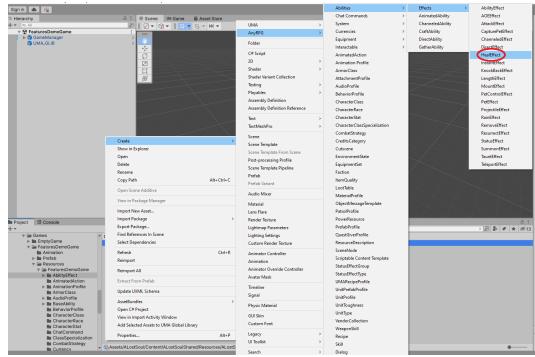
- Add a direct effect to an [Ability](#).
- Add a direct effect to another [Ability Effect](#) to chain them together.

# Heal Effect

A heal effect heals a target, restoring one or more power resources.

## Creation

To create a heal effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > HealEffect*.



## Properties

Heal Effects do not have any properties other than the properties of its parent class, [Ability Effect](#).

## Next steps

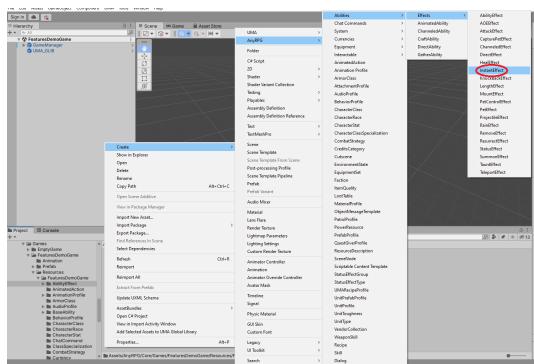
- Add a heal effect to an [Ability](#).
- Add a heal effect to another [Ability Effect](#) to chain them together.

# Instant Effect

An instant effect is a type of intermediate effect that casts other effects. It is most useful for spawning visual effects before casting other effects.

## Creation

To create an instant effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Abilities > Effects > InstantEffect`.



## Properties

Instant Effects do not have any properties other than the properties of its parent class, [Fixed Length Effect](#).

## Next steps

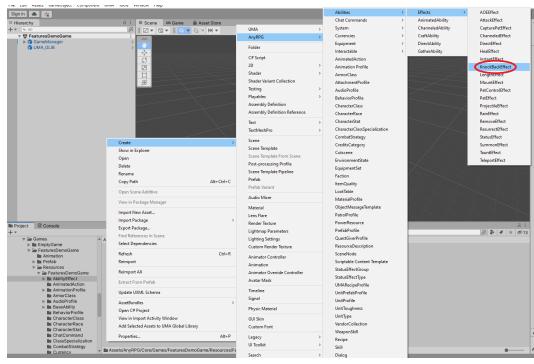
- Add an instant effect to an [Ability](#).
- Add an instant effect to another [Ability Effect](#) to chain them together.

# Knock Back Effect

A knock back effect knocks the character away from the caster, sending them flying backwards in the air.

## Creation

To create a knock back effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > KnockBackEffect*.



## Properties

In addition to all the properties of its parent class, [Fixed Length Effect](#), knock back effects have the following properties.

Name	Description
Knockback Type	<p>An enumeration of knockback types.</p> <p><b>Knockback</b> The knockback direction will be calculated from the caster to the target.</p> <p><b>Explosion</b> The knockback direction will be calculated from a point.</p>
Knock Back Velocity	The speed the character should be knocked back at.
Knock Back Angle	The angle the character should be knocked upwards at.
Explosion Radius	The radius from the center point point of the explosion where targets will be affected.
Explosion Force	The amount of force to apply to targets of the explosion.
Upward Modifier	The amount of upward force to apply to targets of the explosion.
Explosion Mask	The layers to hit when performing the explosion.

## Next steps

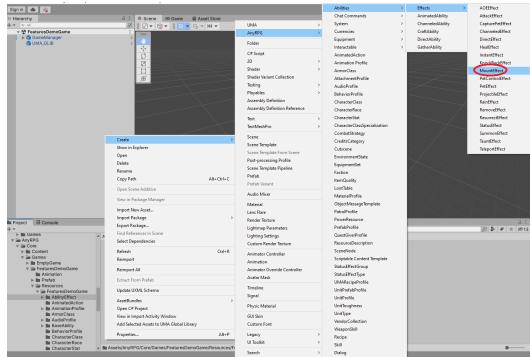
- Add a knock back effect to an [Ability](#).
- Add a knock back effect to another [Ability Effect](#) to chain them together.

# Mount Effect

A mount effect allows a character to summon and ride a mount.

## Creation

To create a mount effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > MountEffect*.



## Properties

In addition to all the properties of its parent class, [Status Effect](#), mount effects have the following properties.

Name	Description
Unit Profile Name	A <a href="#">Unit Profile</a> that will serve as the mount.

## Next steps

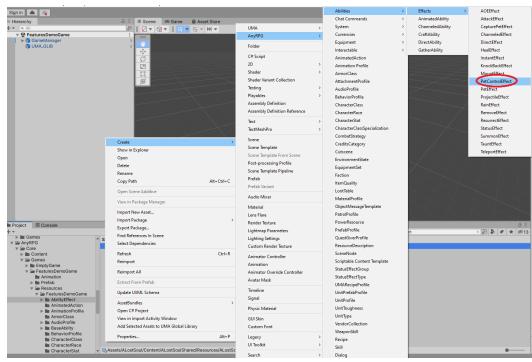
- Add a mount effect to an [Ability](#).
- Add a mount effect to another [Ability Effect](#) to chain them together.

# Pet Control Effect

A pet control effect is a special type of status effect that ensures that a character will automatically summon a pet whenever it does not have an active pet.

## Creation

To create a pet control effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > PetControlEffect*.



## Properties

In addition to all the properties of its parent class, [Status Effect](#), pet control effects have the following properties.

Name	Description
Pet Effect Names	A list of <a href="#">Pet Effects</a> that summon pets.

## Next steps

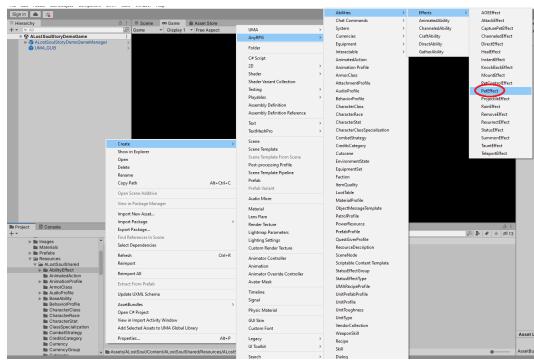
- Add a pet control effect to an [Ability](#).
- Add a pet control effect to another [Ability Effect](#) to chain them together.

# Pet Effect

A pet effect is a special type of status effect that includes an additional check to ensure the target is a capturable pet before putting it under the casters control.

## Creation

To create a pet effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Abilities > Effects > PetEffect`.



## Properties

Pet effects do not have any properties other than the properties of its parent class, [Status Effect](#).

## Next steps

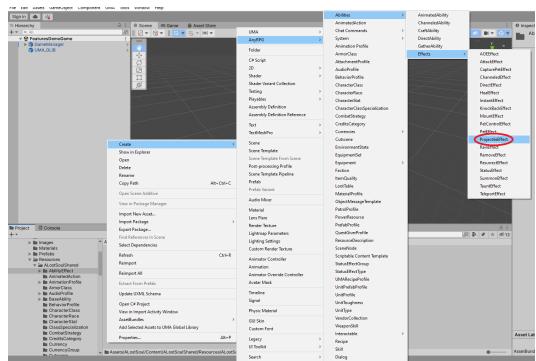
- Add a pet effect to an [Ability](#).
- Add a pet effect to another [Ability Effect](#) to chain them together.

# Projectile Effect

A projectile effect spawns a projectile which moves toward a target, and casts subsequent effects when it hits the target.

## Creation

To create a projectile effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Abilities > Effects > ProjectileEffect`.



## Properties

In addition to all the properties of its parent class, [Fixed Length Effect](#), projectile effects have the following properties.

Name	Description
Projectile Speed	The speed the projectile will travel while moving toward its target.
Flight Audio Profile Names	A list of <a href="#">Audio Profiles</a> containing audio clips to play while the projectile is traveling.
Random Flight Audio Profiles	If true, a random <a href="#">Audio Profile</a> from the <i>Flight Audio Profile Names</i> list will be played, instead of all of them.

## Next steps

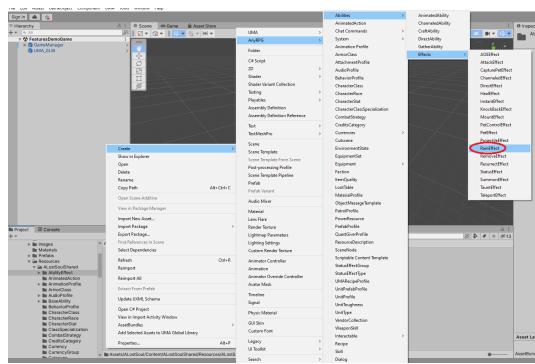
- Add a projectile effect to an [Ability](#).
- Add a projectile effect to another [Ability Effect](#) to chain them together.

# Rain Effect

A rain effect is a special type of aoe effect that targets subsequent ability effects toward the ground.

## Creation

To create a rain effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > RainEffect*.



## Properties

Rain Effects do not have any properties other than the properties of its parent class, [AOE Effect](#).

## Next steps

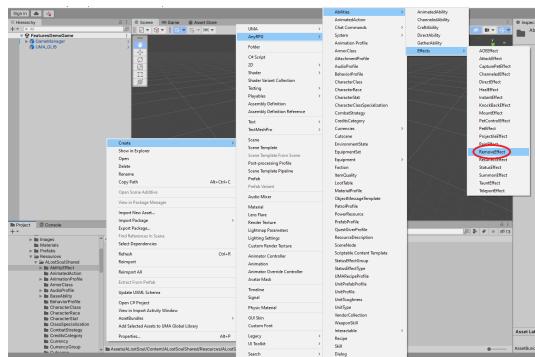
- Add a rain effect to an [Ability](#).
- Add a rain effect to another [Ability Effect](#) to chain them together.

# Remove Effect

A remove effect removes a status effect from the target.

## Creation

To create a remove effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Abilities > RemoveEffect`.



## Properties

In addition to all the properties of its parent class, [Fixed Length Effect](#), remove effects have the following properties.

Name	Description
Max Clear Effects	The maximum amount of <a href="#">Status Effects</a> to remove. 0 is unlimited.
Effect Type Names	A list of <a href="#">Status Effect Types</a> that this effect can remove.

## Next steps

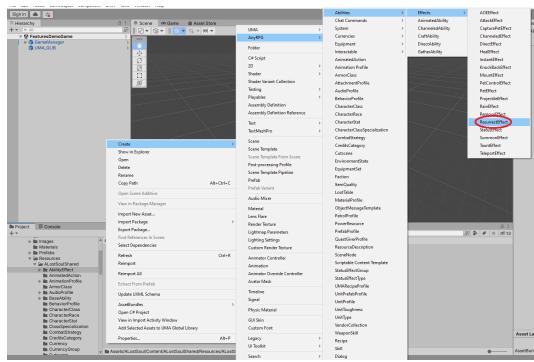
- Add a remove effect to an [Ability](#).
- Add a remove effect to another [Ability Effect](#) to chain them together.

# Resurrect Effect

A resurrect effect brings a dead character back to life.

## Creation

To create a resurrect effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > ResurrectEffect*.



## Properties

Resurrect Effects do not have any properties other than the properties of its parent class, [Fixed Length Effect](#).

## Next steps

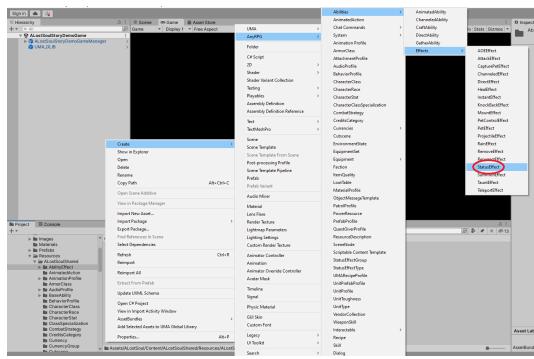
- Add a resurrect effect to an [Ability](#).
- Add a resurrect effect to another [Ability Effect](#) to chain them together.

# Status Effect

A status effect is an effect that is applied to a character for a certain time period (or indefinitely) and can be beneficial or harmful by restricting or enhancing their capabilities and powers.

## Creation

To create a status effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > StatusEffect*.



## Properties

In addition to all the properties of its parent class, [Length Effect](#), status effects have the following properties.

Name	Description
Status Effect Alignment	<p>An enumeration of values that determine if the effect is considered beneficial or harmful.</p> <p><b>None</b> The effect has no alignment, and can be removed at will by the player.</p> <p><b>Beneficial</b> The effect is considered beneficial, and can be removed at will by the player.</p> <p><b>Harmful</b> The effect is considered harmful, and can only be removed by an appropriate type of <a href="#">Remove Effect</a></p>
Status Effect Type Name	The <a href="#">Status Effect Type</a> , for the purposes of determining if a <a href="#">Remove Effect</a> can be used on it.
Status Effect Group Name	The <a href="#">Status Effect Group</a> , for the purposes of limiting how many effects of the same group can be active on a character at the same time.
Class Trait	If true, the effect is considered to be inherent, cannot be removed, and will not show on the UI status effect bars.
Required Level	If <i>Class Trait</i> is true, the character must be this level or higher for the effect to be applied.
Scene Names	A list of the names of <a href="#">Scenes</a> that this effect can be active in. If the character moves to another <a href="#">Scene</a> , the effect will be removed.
Require Out Of Combat	If true, the effect can only be active when the character is out of combat, and will be removed upon entering combat.
Limited Duration	If true, the effect will have a limited duration, and will be removed when the duration has passed.
Duration	If <i>Limited Duration</i> is true, the effect will last for this many seconds.
Max Stacks	The maximum number of stacks of this effect that can be on a character at once. When more than one stack is active, numerical properties are added together.
Stat Buff Type Names	The names of <a href="#">Character Stats</a> that will be added to and multiplied by the values in the <i>Stat Amount</i> and <i>Stat Multiplier</i> fields.

Stat Amount	Any <a href="#">Character Stats</a> in the <i>Stat Buff Type Names</i> field will have their value increased by this amount.
Stat Multiplier	Any <a href="#">Character Stats</a> in the <i>Stat Buff Type Names</i> field will have their value multiplied by this amount.
Secondary Stat Buff Types	The names of Secondary Stats that will be added and multiplied by the values in the <i>Secondary Stat Amount</i> and <i>Secondary Stat Multiplier</i> fields.
Secondary Stat Amount	Any Secondary Stats in the <i>Secondary Stat Buff Types</i> field will have their value increased by this amount.
Secondary Stat Multiplier	Any Secondary Stats in the <i>Secondary Stat Buff Types</i> field will have their value multiplied by this amount.
Outgoing Damage Multiplier	All damage the character does will be multiplied by this amount.
Incoming Damage Multiplier	All damage the character takes will be multiplied by this amount.
Faction Modifiers	<p>A list of modified <a href="#">Faction</a> relationships.</p> <p><b>Faction Name</b> The name of the <a href="#">Faction</a> which will have a modified relationship.</p> <p><b>Disposition</b> The amount of relationship value to add (or remove) for the <a href="#">Faction</a>.</p>
Stealth	If true, the character will appear partially invisible, and enemies will not be able to see them or agro them if they get within the normal agro range. Stealth is removed upon entering combat.
Can Fly	If true, the character can Fly while the effect is active.
Can Glide	If true, the character can Glide while the effect is active.
Disable Animator	If true, the character will be frozen and not animated while the effect is active.
Stun	If true, the character will be stunned and unable to move, attack, or cast abilities while the effect is active.
Levitate	If true, the character will be levitated above the ground, and unable to move, attack, or cast abilities.

Immune Disable Animator	while the effect is active. If true, the character will be immune to any effect that has <i>Disable Animator</i> set to true while the effect is active.
Immune Stun	If true, the character will be immune to any effect that has <i>Stun</i> set to true while the effect is active.
Immune Levitate	If true, the character will be immune to any effect that has <i>Levitate</i> set to true while the effect is active.
Control Target	If true, the character will become a temporary pet of the caster while the effect is active.
Reflect Ability Effect Names	A list of <a href="#">Ability Effects</a> that will be automatically cast on any character that lands an <a href="#">Attack Effect</a> on this character while the effect is active.
Weapon Hit Ability Effect Names	A list of <a href="#">Ability Effects</a> that will be automatically cast on any enemy when a weapon hit lands.
Save Effect	If true, the effect will be saved when the game is saved. It can be useful to disable this for effects you may want reset when loading a saved game, such as stealth.

## Next steps

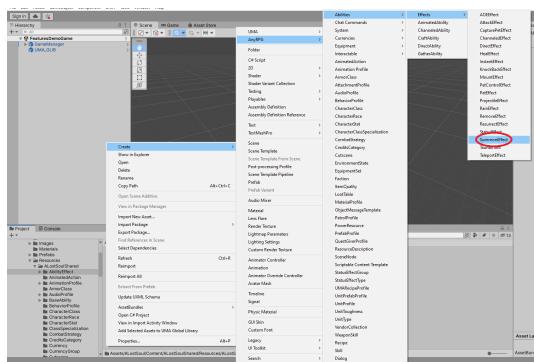
- Add a status effect to an [Ability](#).
- Add a status effect to another [Ability Effect](#) to chain them together.
- Add an [Attack Effect](#) to the *Tick Ability Effect Names* field to make an effect into a DOT (Damage Over Time) effect.
- Add a [Heal Effect](#) to the *Tick Ability Effect Names* field to make an effect into a HOT (Heal Over Time) effect.

# Summon Effect

A summon effect summons a character to act as a pet.

## Creation

To create a summon effect, find (or create) the *GameName/Resources/GameName/AbilityEffect* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > SummonEffect*.



## Properties

In addition to all the properties of its parent class, [Fixed Length Effect](#), summon effects have the following properties.

Name	Description
Unit Profile Name	The <a href="#">Unit Profile</a> of the character to be summoned as a pet.

## Next steps

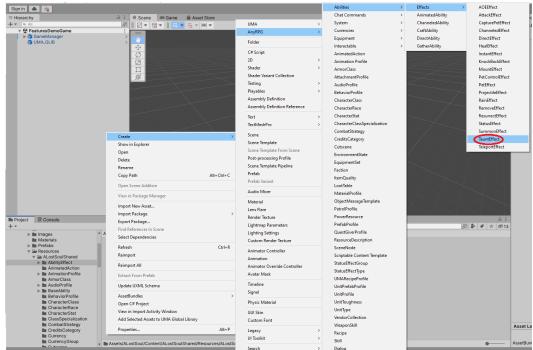
- Add a summon effect to an [Ability](#).
- Add a summon effect to another [Ability Effect](#) to chain them together.

# Taunt Effect

A taunt effect forces an AI enemy to target the caster for a specified amount of time.

## Creation

To create a taunt effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Abilities > Effects > TauntEffect*.



## Properties

Taunt Effects do not have any properties other than the properties of its parent class, [Status Effect](#).

## Next steps

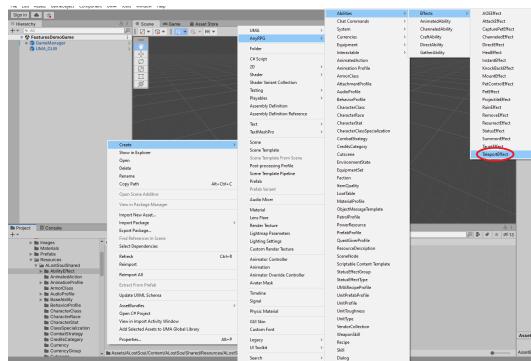
- Add a taunt effect to an [Ability](#).
- Add a taunt effect to another [Ability Effect](#) to chain them together.

# Teleport Effect

A teleport effect teleports the caster to another scene.

## Creation

To create a teleport effect, find (or create) the `GameName/Resources/GameName/AbilityEffect` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Abilities > Effects > TeleportEffect`.



## Properties

In addition to all the properties of its parent class, [Fixed Length Effect](#), teleport effects have the following properties.

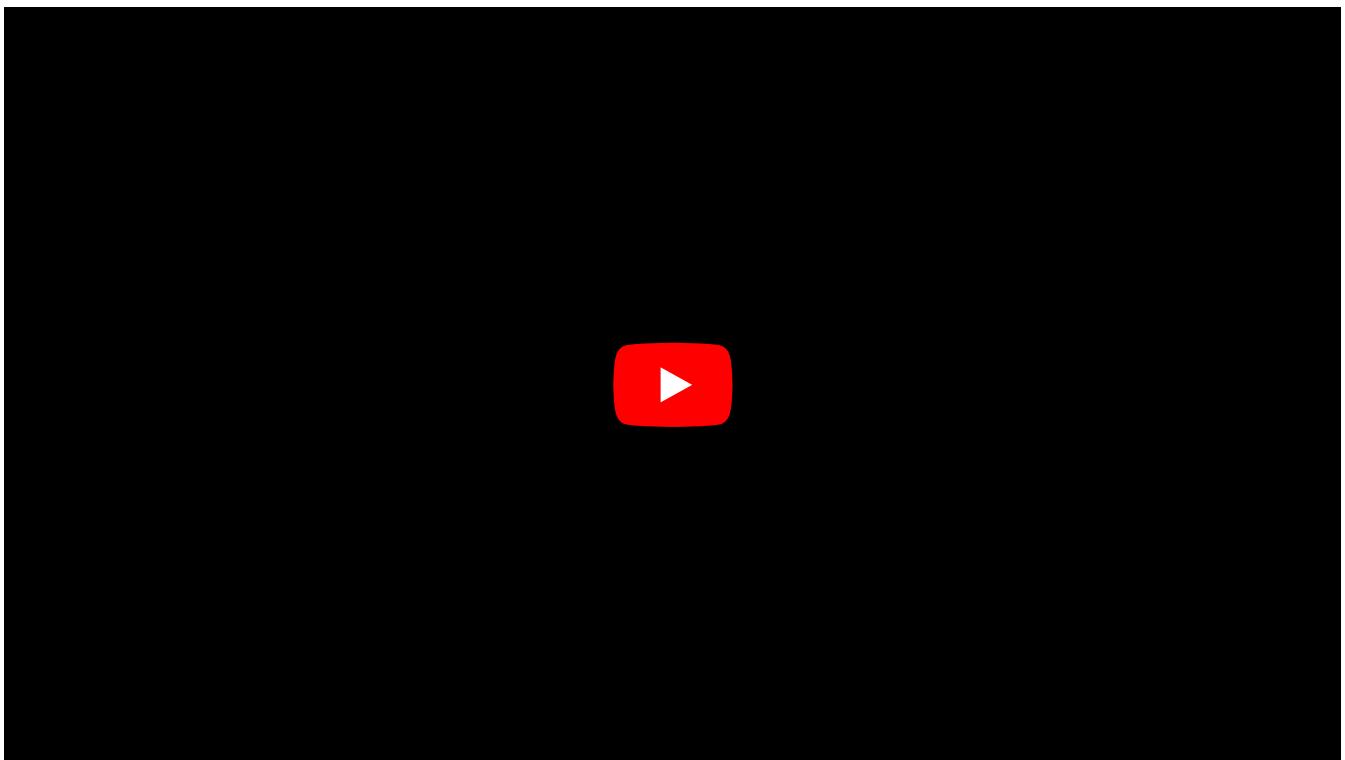
Name	Description
Level Name	The name of the <a href="#">Scene</a> to load.
Location Tag	The name of a tag to search for in the scene. If the tag is found, the player will spawn at the location of the <a href="#">GameObject</a> with the tag.
Override Spawn Location	If true, the player will spawn at the <a href="#">Vector3</a> location in the <i>Spawn Location</i> field.
Spawn Location	The <a href="#">Vector3</a> location the player will spawn at if the <i>Override Spawn Location</i> field is set to true.
Override Spawn Direction	If true the player will spawn with their forward direction set to the <a href="#">Vector3</a> direction in the <i>Spawn Forward Direction</i> field.
Spawn Forward Direction	The <a href="#">Vector3</a> direction that the player should be facing when they spawn if the <i>Override Spawn Direction</i> field is set to true.

## Next steps

- Add a teleport effect to an [Ability](#).
- Add a teleport effect to another [Ability Effect](#) to chain them together.

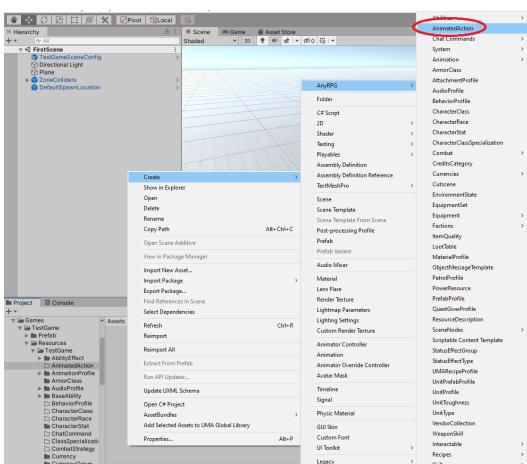
# Animated Action

Animated Actions allow the character to perform any animation.



## Creation

To create an animated action, find (or create) the *GameName/Resources/GameName/AnimatedAction* folder in the project tab and right click. Choose *Create > AnyRPG > AnimatedAction*.



## Properties

Name	Description
Animation Clip	The animation that the character will play when the action is performed.
Animation Profile Name	An animation profile containing animations. The character will play the first cast clip when the action is performed. This property is only used if the <i>AnimationClip</i> property is empty.
Casting Audio Profile	The name of an audio profile containing an audio file to play when the action is performed.
Holdable Object List	A List of prefab profiles to spawn when the action performed.

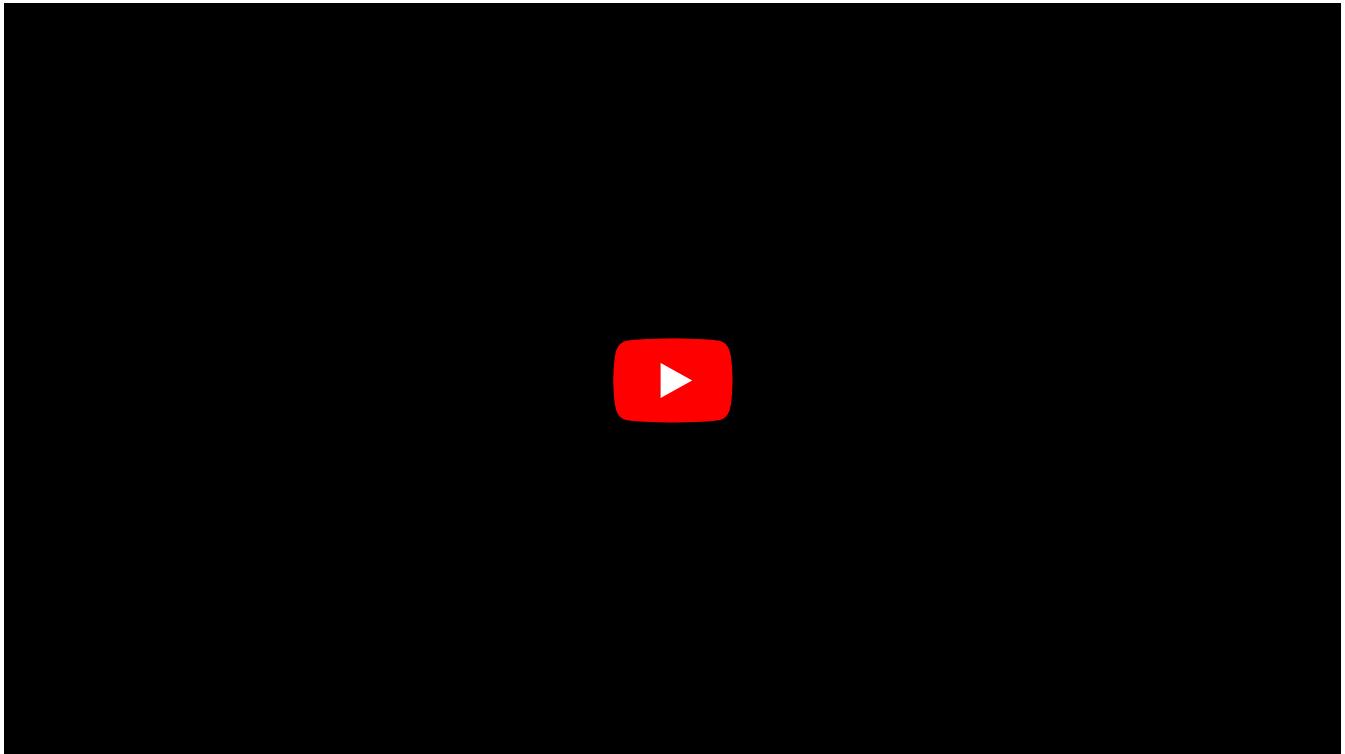
## Usage

Animated actions can be used in the following scriptable objects.

- [ActionEffectItem](#)
- [PowerResourcePotion](#)

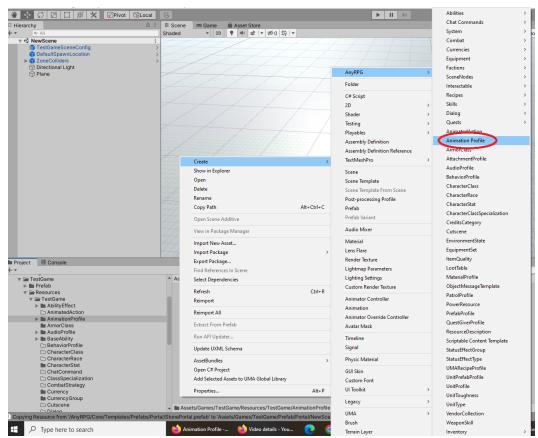
# Animation Profile

An animation profile stores a list of animations for re-use in unit prefab properties or weapons.



## Creation

To create an animation profile, find (or create) the *GameName/Resources/GameName/AnimationProfile* folder in the project tab and right click. Choose *Create > AnyRPG > Animation > Profile*.



## Properties

Name	Description
Use Root Motion	If true, root motion will be enabled on the character while the animation is playing, causing the player to move according to the position data in the animation.
Suppress Adjust Animator Speed	If true, the animations will play at their default speed no matter the movement speed or casting speed of the character being animated.
Attack Clips	A list of possible animations to play when the character is performing attacks that do not have their own animation profile assigned. If this animation profile is assigned to a special animate attack, then the list will only be applied to that attack.
Cast Clips	A list of possible animations to play when the character is casting spells that do not have their own animation profile assigned. If this animation profile is assigned to a specific spell, then the list will only be applied to that spell.
Take Damage Clips	Not yet implemented.
Out Of Combat Movement	Animations to play when the character is not in combat.
Full Combat Mirror	If true, the character will use the out of combat animations when they are in combat. This can be useful if a character has no specific in-combat animations included.
<Animation Name> Mirror	Each combat animation can instead use an out of combat animation if these boxes are true. This setting is useful when a character only includes a partial set of combat animations.
Combat <Animation Name> Clip	An animation clip to play for a specific state when in combat.
Death Clip	An animation clip to play when the character dies
Revive Clip	An animation clip to play when the character is being revived from dead.
Levitated Clip	An animation clip to play when the character is being levitated off the ground.
	An animation clip to play when the character is in

Swim Idle Clip	the water and not moving.
Swim Move Clip	An animation clip to play when the character is in the water and moving.
Fly Idle Clip	An animation clip to play when the character is flying, but not moving.
Fly Move Clip	An animation clip to play when the character is flying, and moving.

## Configuration

Not all available animations need to be assigned since any animation profile used for a character or weapon will only override the base animation profile in use.

If this animation profile will be used for an animated attack, the animation(s) should be placed in the *Attack Clips* list.

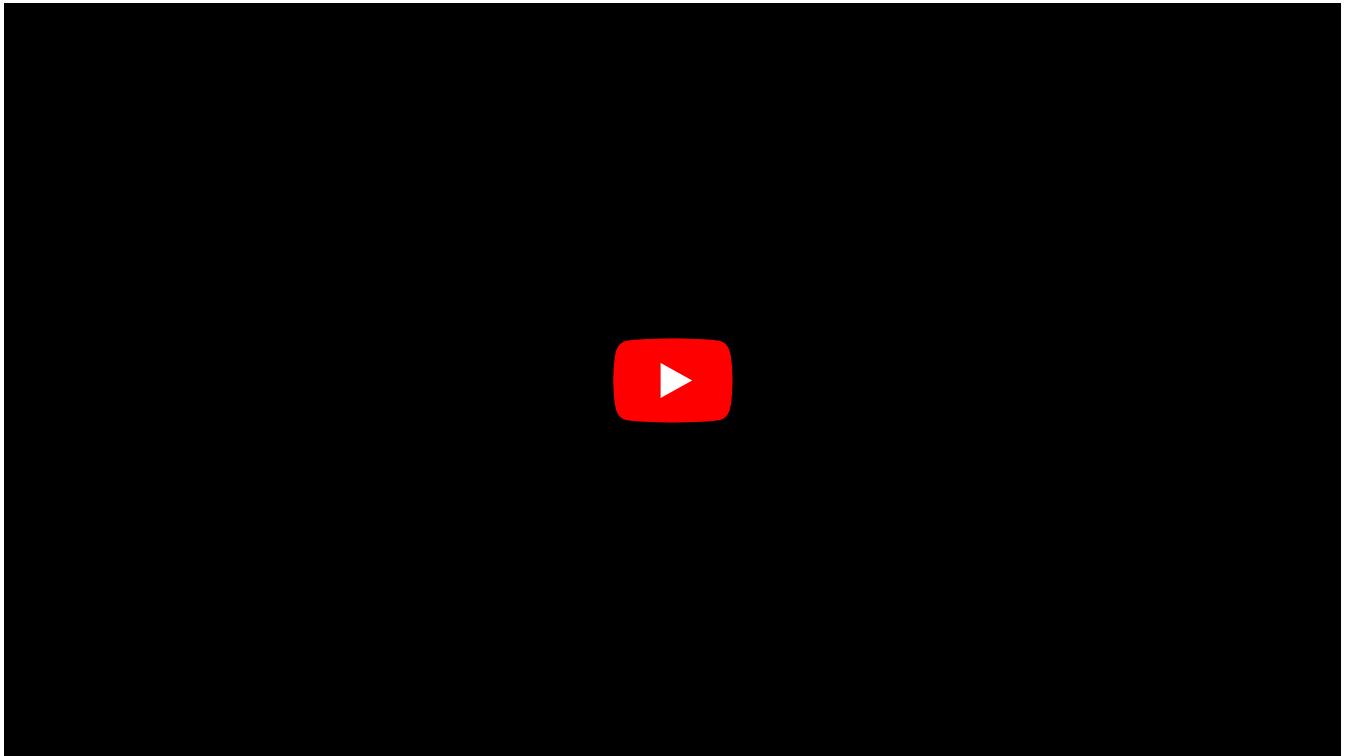
If this animation profile will be used for an ability (spell) the animation(s) should be placed in the *Cast Clips* list.

## Next Steps

- Assign the animation profile to a [Weapon](#) to override the movement and auto-attack animations used while that weapon is equipped.
- Assign the animation profile to a [Weapon Skill](#) to override the movement and auto-attack animations for any weapon with that weapon skill assigned while equipped.
- Assign the animation profile to an [Animated Ability](#) to use the Attack Clips for the attack animations.
- Assign the animation profile to an [Ability](#) to use the Cast Clips for casting animations.
- Assign the animation profile to a [Unit Prefab Profile](#), or *Unit Prefab Properties* on a [Unit Profile](#) to override the default system animations for that character.

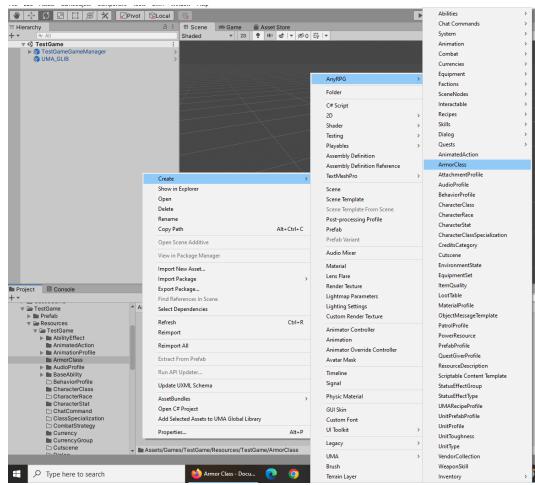
# Armor Class

An armor class defines how much armor equipment should receive, and optionally who can wear the equipment.



## Creation

To create an armor class, find (or create) the *GameName/Resources/GameName/ArmorClass* folder in the project tab and right click. Choose *Create > AnyRPG > ArmorClass*.



## Properties

Name	Description
Armor Per Level	<p>The total amount of armor value provided per level if all equipment slots have armor of this type equipped.</p> <p>The formula per piece of equipment is:</p> <pre>Item Level * Armor Per Level * Item Quality Multiplier * (1 / Total Armor Slots)</pre>

## Next Steps

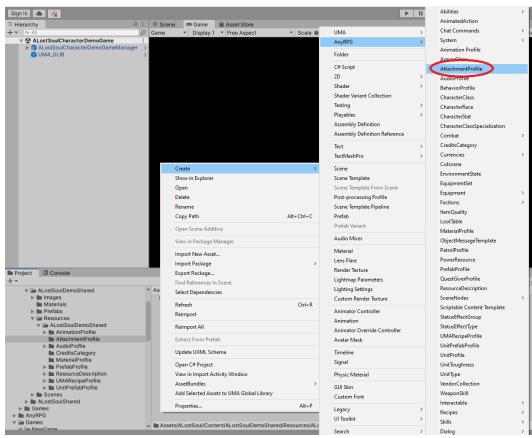
- Create [Armor](#) and assign this armor class to it.
- Configure a [Character Class](#) to be able to equip gear with this armor class assigned.
- Configure a [Character Race](#) to be able to equip gear with this armor class assigned.
- Configure a [Class Specialization](#) to be able to equip gear with this armor class assigned.
- Directly Configure a specific [Unit Profile](#) to be able to equip gear with this armor class assigned.
- Configure a [Unit Type](#) to be able to equip gear with this armor class assigned.
- Configure the Game Manager for your game so that all characters can equip gear with this armor class assigned.

# Attachment Profile

An attachment profile is a mapping of user-friendly bone names to actual bone names, and allows spell effects and equipment to be properly attached to characters with completely different bone names.

## Creation

To create an attachment profile, find (or create) the *GameName/Resources/GameName/AttachmentProfile* folder in the project tab and right click. Choose *Create > AnyRPG > AttachmentProfile*.



## Properties

Name	Description
Attachment Point Nodes	<p>A list of attachment point nodes, which map user friendly bone names to actual bone names.</p> <p><b>Node Name</b> The user friendly bone name which is referred to in the attachment node of the equipment, spell effect etc.</p> <p><b>Position</b> The position any object will be attached at, relative to the <i>Target Bone</i>.</p> <p><b>Rotation Is Global</b> If true, the rotation property will be relative to world space.</p> <p><b>Rotation</b> The rotation of the object being attached, relative to the target bone, or global if the <i>Rotation Is Global</i> property is true.</p> <p><b>Scale</b> The scale of the object being attached.</p> <p><b>Target Bone</b> The actual bone in the character/unit hierarchy that the object will be attached to.</p>

## Next Steps

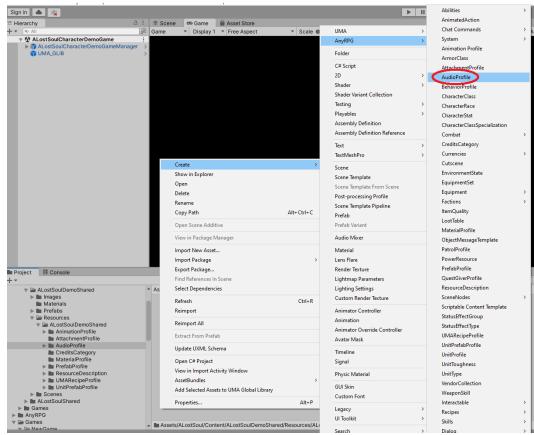
- Refer to an attachment profile in the *Ability Object List* field of an [Ability Effect](#).
- Refer to an attachment profile in the *Holdable Object List* field of an [Ability](#).
- Refer to an attachment profile in the *Holdable Object List* field of a piece of [Equipment](#).
- Refer to an attachment profile in the *Ability Animation Object List* or *Ability Object List* fields of a [Weapon Skill](#).

# Audio Profile

An audio profile contains a list of one or more audio clips to play, and can be used for many purposes, including music and sound effects.

## Creation

To create an audio profile, find (or create) the `GameName/Resources/GameName/AudioProfile` folder in the project tab and right click. Choose *Create > AnyRPG > AudioProfile*.



## Properties

Name	Description
Artist Name	A text field to enter the name of the artist that composed the audio file. Not currently used in the default UI.
Audio Clips	A list of audio files.

## Next Steps

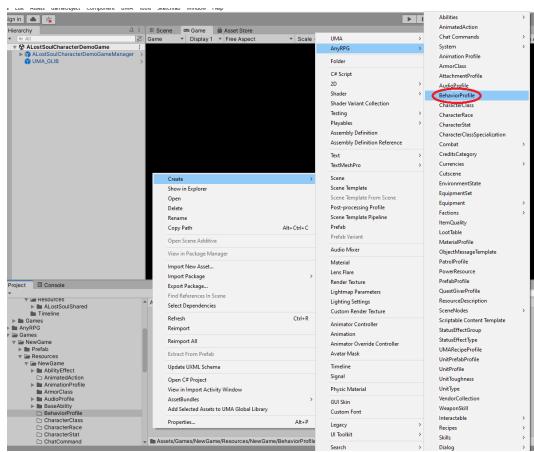
- Refer to an audio profile to be used as ambient sounds or background music from a [Scene Node](#).
- Refer to an audio profile to be used as the default hit sound for a [Weapon](#) in the [Default Hit Audio Profile](#) field.
- Refer to an audio profile to be used as the hit sound for a specific [Weapon Skill](#) in the [On Hit Audio Profiles](#) list.
- Refer to an audio profile to be used as the animation hit or casting audio for an [Ability](#).
- Refer to an audio profile to be used as the hit audio in the [On Hit Audio Profile Names](#) field of an [Ability Effect](#).

# Behavior Profile

A behavior profile is a list of commands that can be sent to a character unit at specified time intervals using Unity's SendMessage functionality.

## Creation

To create a behavior profile, find (or create) the `GameName/Resources/GameName/BehaviorProfile` folder in the project tab and right click. Choose *Create > AnyRPG > BehaviorProfile*.



## Properties

Name	Description
Behavior Nodes	A list of <a href="#">Behavior Nodes</a> .
Prerequisite Conditions	A list of <a href="#">Prerequisite Conditions</a> .
Automatic	If true, the object that is using this behavior profile will automatically play the behavior when activate
Allow Manual Start	If true, this behavior will appear on the list of interaction options for this character unit and can be manually started by the player.
Repeatable	If true, this behavior can be played more than once.
Looping	If true, this behavior will automatically play again when finished.

## Behavior Nodes

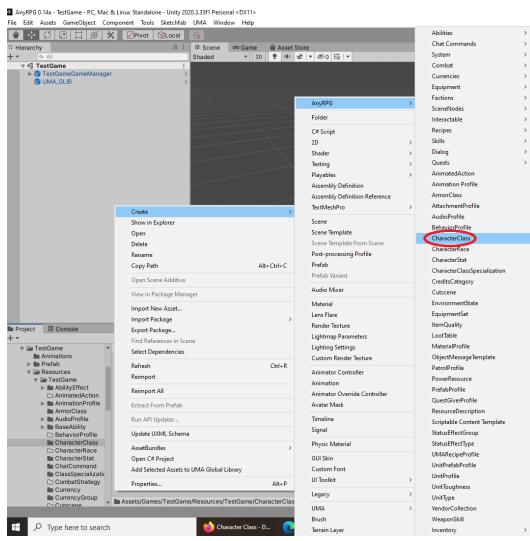
Name	Description
Start Time	The time, in seconds, when the behavior node should play.
Behavior Action Nodes	A list of behavior action nodes. <b>Behavior Method</b> The name of the method to call using Unity's SendMessage function. <b>Behavior Parameter</b> A string parameter to send as the parameter to the <i>Behavior Method</i> .

# Character Class

A character class gives characters access to abilities, traits, power resources, character stats, weapon skills, and armor skills.

## Creation

To create a character class, find (or create) the *GameName/Resources/GameName/CharacterClass* folder in the project tab and right click. Choose *Create > AnyRPG > CharacterClass*.



## Properties

Name	Description
New Game Option	If true, the character class can be chosen for new characters when starting a new game.
Equipment Names	A List of equipment that will be equipped by characters that choose the character class when starting a new game.
Capabilities	Lists of abilities, traits, weapon skills, and armor skills the character class provides. See <a href="#">Capabilities</a> for descriptions.
Unit Type Capabilities	Lists of <a href="#">Unit Types</a> and corresponding <a href="#">Capabilitie</a> Use this property to restrict certain capabilities to specific unit types.
Primary Stats	A List of <a href="#">Stat Scaling Nodes</a> that define primary st budgets per level and secondary stats and power resources granted by those primary stats.
Power Resources	A list of <a href="#">Power Resources</a> the character will have access to.
Valid Pet Types	A list of <a href="#">Unit Types</a> the character can keep as pets This property will only be used if the character class has an ability that allows them to capture a pet.

## Next Steps

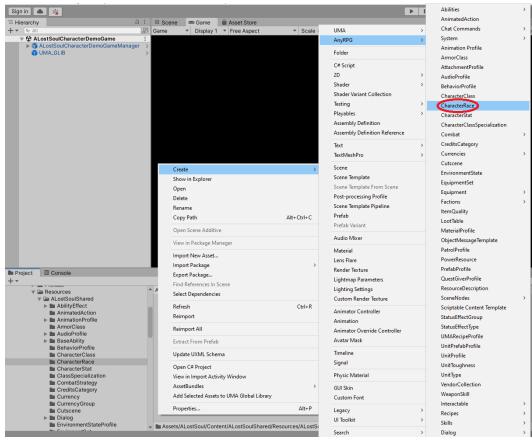
- Enable Character Class selection in the System Configuration Manager of a game.

# Character Race

A character race gives characters access to abilities, traits, power resources, character stats, weapon skills, and armor skills.

## Creation

To create a character race, find (or create) the *GameName/Resources/GameName/CharacterRace* folder in the project tab and right click. Choose *Create > AnyRPG > CharacterRace*.



## Properties

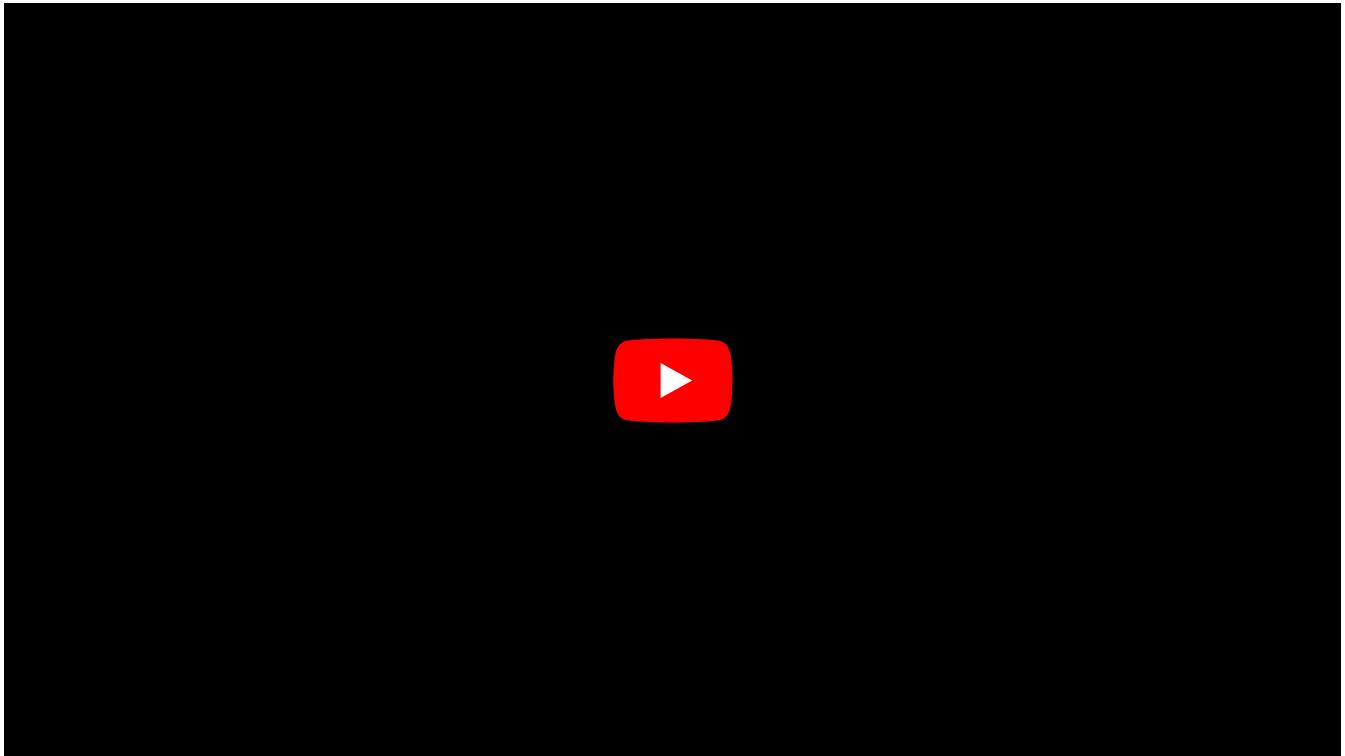
Name	Description
Equipment Names	A List of equipment that will be equipped by characters that choose the character class when starting a new game.
Default Hit Effects	A list of <a href="#">Ability Effects</a> to cast on the target when the character does not have a <a href="#">Weapon</a> equipped and does damage from a standard (auto) attack.
On Hit Effects	A list of <a href="#">Ability Effects</a> to cast on the target when the <a href="#">Weapon</a> does damage from any attack, including standard (auto) attacks.
Capabilities	Lists of abilities, traits, weapon skills, and armor skills the character class provides. See <a href="#">Capabilities</a> for descriptions.
Primary Stats	A List of <a href="#">Stat Scaling Nodes</a> that define primary stat budgets per level and secondary stats and power resources granted by those primary stats.
Power Resources	A list of <a href="#">Power Resources</a> the character will have access to.

## Next Steps

- Assign a character race to a [Unit Profile](#).

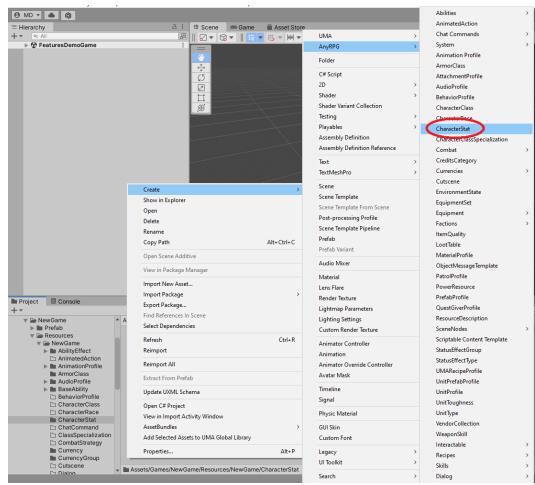
# Character Stat

Character stats are attributes that define a character's aptitudes and can affect secondary stats, power resource amounts, and power resource regeneration rates.



## Creation

To create a character stat, find (or create) the *GameName/Resources/GameName/CharacterStat* folder in the project tab and right click. Choose *Create > AnyRPG > Character Stat*.



## Specific Properties

These properties exist only in character stat scriptable objects.

Name	Description
Global Stat	If true, all characters will receive the stat.

## General Properties

These general properties exist anywhere primary stats are defined in other scriptable objects.

Name	Description
Budget Per Level	<p>The amount of the stat that a character will receive for every level.</p>
Primary To Secondary Conversion	<p>The amount of each secondary stat that a character will gain for each point of the primary stat.</p> <p><b>Secondary Stat Type</b></p> <p>A secondary stat.</p> <p><b>Conversion Ratio</b></p> <p>The number of points of each secondary stat that will be gained per point of primary stat.</p> <p><b>Rated Conversion</b></p> <p>A rated conversion is for stats that are percentage At level 1 you will need 100 points of this secondary stat for 100%, 200 points at level 2, etc The percent chance at any level is equal to this value multiplied by (Total Stat Amount / Current Level). This allows you to increase or decrease the 100 point requirement for 100% chance.</p>
Primary To Resource Conversion	<p>A list of <a href="#">Power Resources</a> and the number of points of that resource gained per point of the primary stat.</p> <p><b>Resource Name</b></p> <p>The name of the <a href="#">Power Resource</a> that will be increased.</p> <p><b>Resource Per Point</b></p> <p>The amount of the <a href="#">Power Resource</a> that will be gained per point of Character Stat.</p>
Regen	<p>A list of the amount of power resources that will be regenerated per tick per point of primary stat.</p> <p><b>Power Resource</b></p> <p>The name of the Power Resource that will be regenerated.</p> <p><b>Percent Per Tick</b></p> <p>The percentage of the Power Resource that will be regenerated per point of Character Stat every tick that the character is not in combat.</p> <p><b>Amount Per Tick</b></p> <p>The amount of the Power Resource that will be regenerated per point of Character Stat every tick that the character is not in combat.</p> <p><b>Combat Percent Per Tick</b></p> <p>The percentage of the Power Resource that will be regenerated per point of Character Stat every tick that the character is in combat.</p> <p><b>Combat Amount Per Tick</b></p> <p>The amount of the Power Resource that will be</p>

regenerated per point of Character Stat every tick  
that the character is not in combat

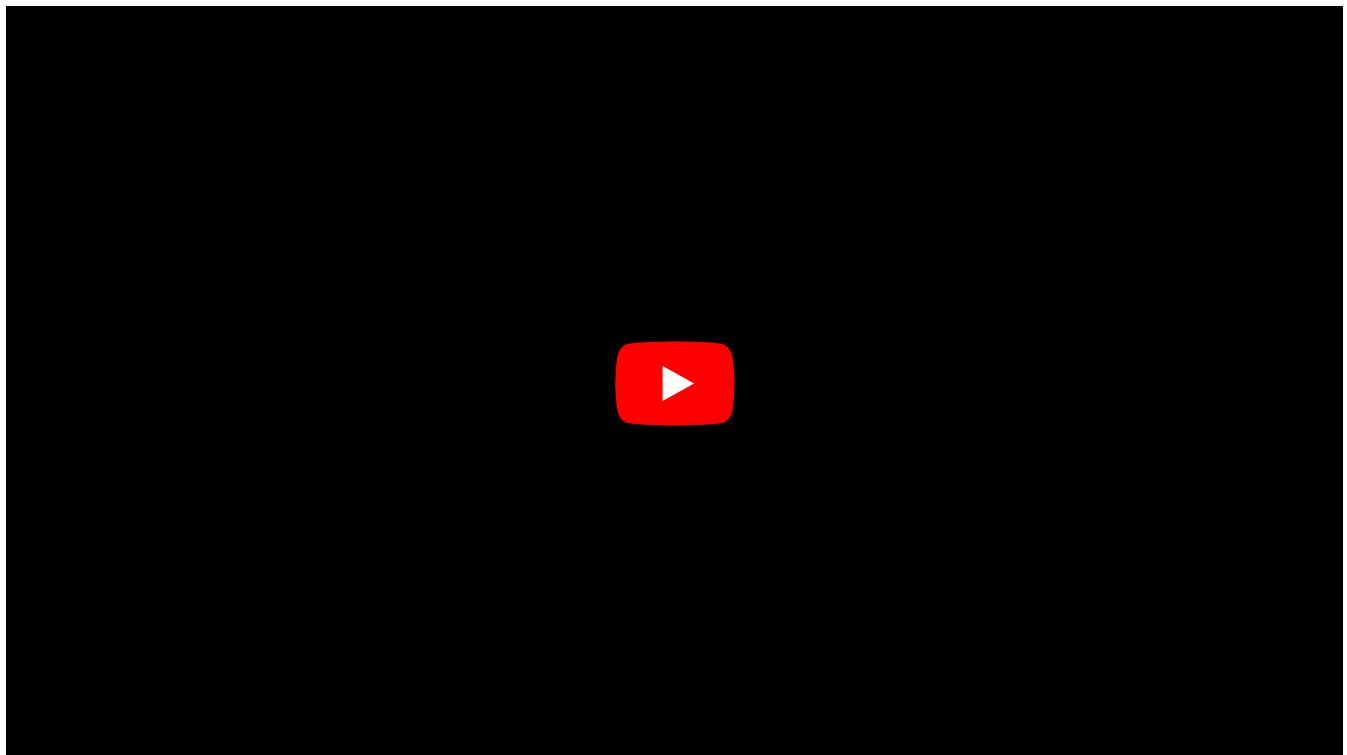
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## Next Steps

- Customize [Character Classes](#) by adding [Stat Scaling Nodes](#) that give them custom stat budgets, primary to secondary conversions, primary to resource conversions, and power resource regeneration rates.
- Customize [Character Races](#) by adding [Stat Scaling Nodes](#) that give them custom stat budgets, primary to secondary conversions, primary to resource conversions, and power resource regeneration rates.
- Customize [Class Specializations](#) by adding [Stat Scaling Nodes](#) that give them custom stat budgets, primary to secondary conversions, primary to resource conversions, and power resource regeneration rates.
- Customize [Unit Profiles](#) by adding [Stat Scaling Nodes](#) that give them custom stat budgets, primary to secondary conversions, primary to resource conversions, and power resource regeneration rates.
- Customize [Unit Types](#) by adding [Stat Scaling Nodes](#) that give them custom stat budgets, primary to secondary conversions, primary to resource conversions, and power resource regeneration rates.

# Chat Commands

Chat commands are special text strings that are typed into the chat box in the chat log that execute commands.



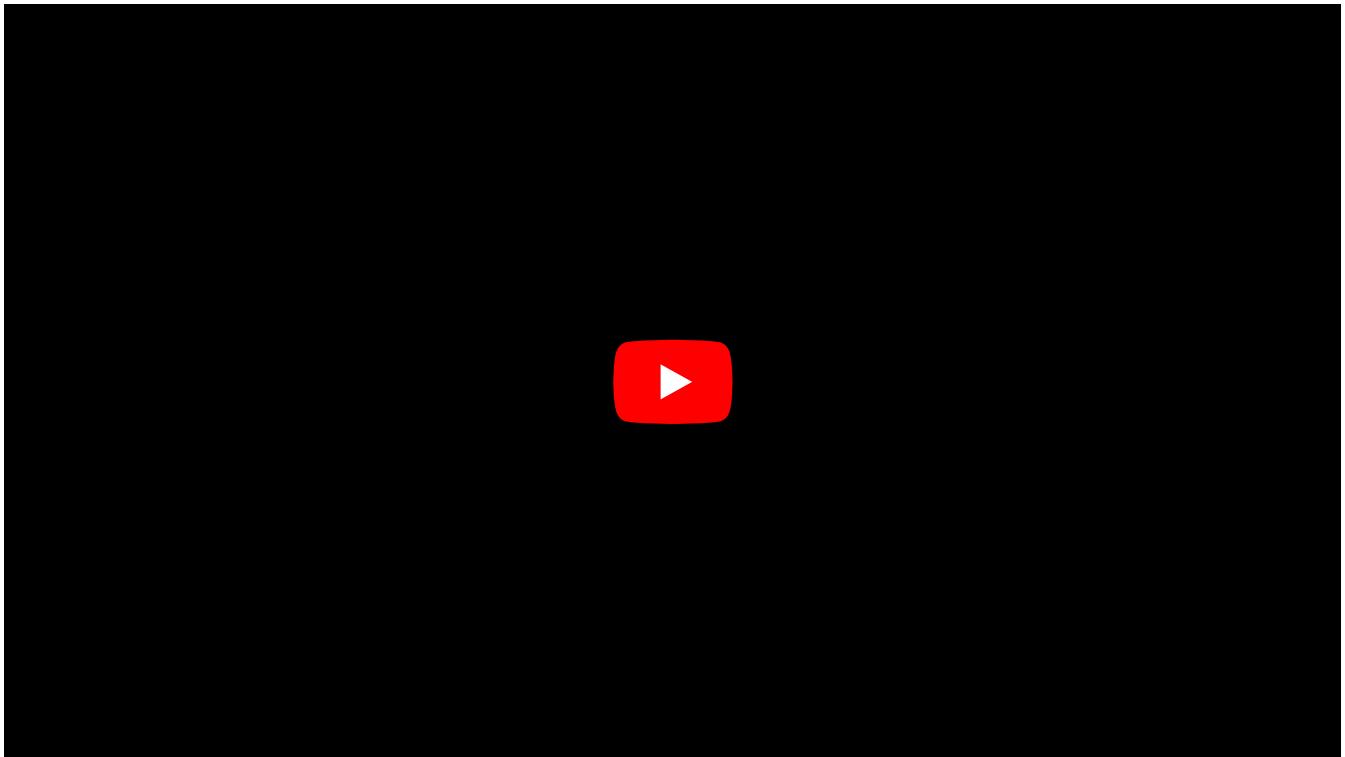
## Usage

To use a chat command, enter text into the chat box in the chat log that starts with the slash ("/") character, followed by a valid command and any parameters that command accepts. Press `Enter` or click the *Send* button to execute the command.



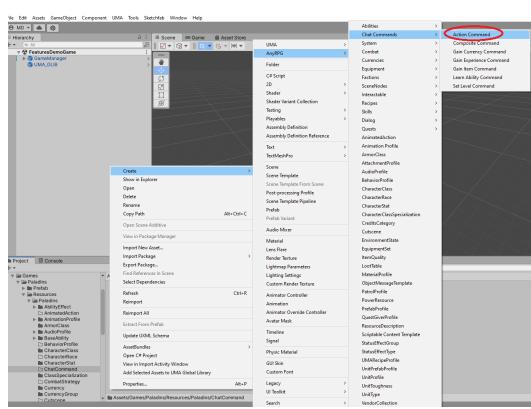
# Action Command

Action commands allow the player to perform animation actions.



## Creation

To create an action command, find (or create) the `GameName/Resources/GameName/ChatCommand` folder in the project tab and right click. Choose *Create > AnyRPG > Chat Commands > Action Command*.



## Properties

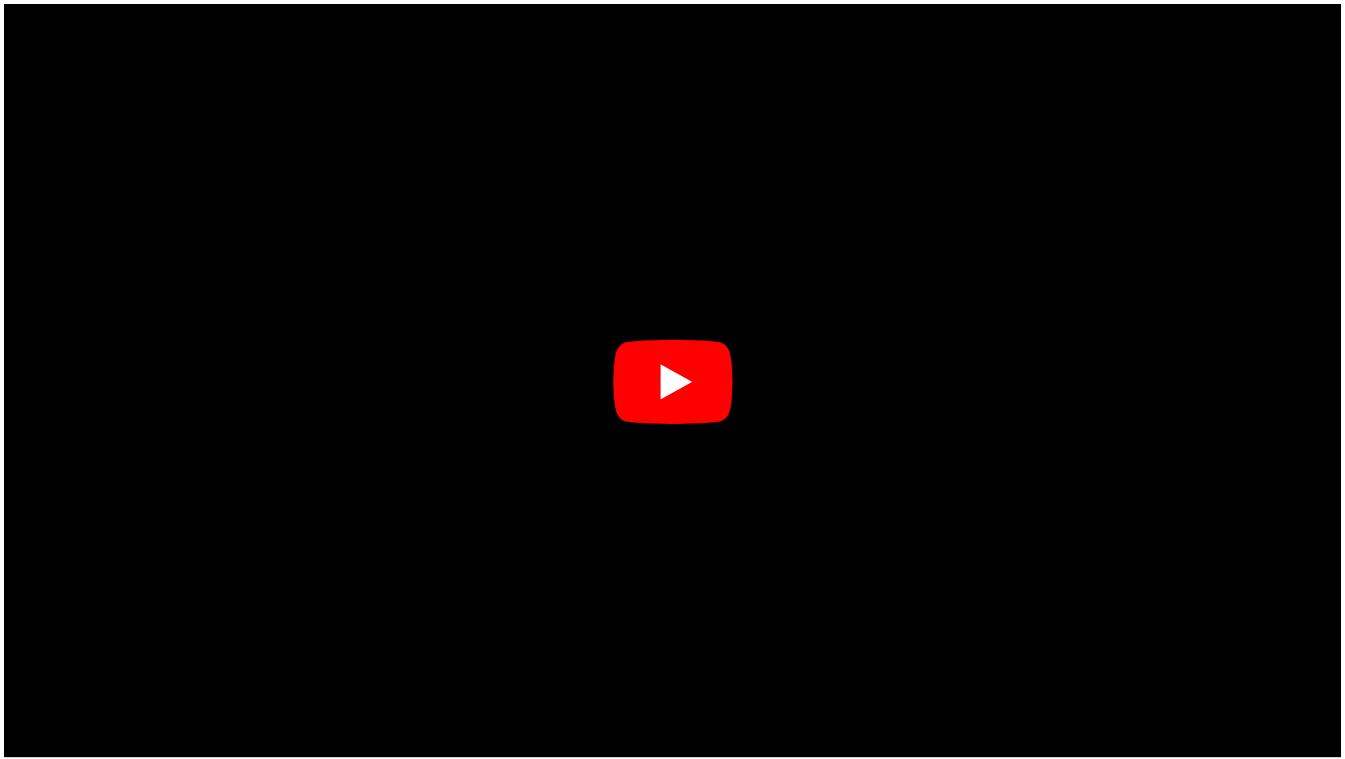
Name	Description
Action Properties	A list of <a href="#">Animated Action</a> properties

## Examples

Command	Effect
/dance	Perform a dance animation.

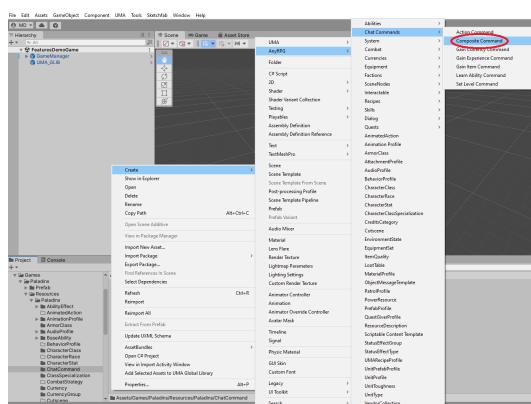
# Composite Command

Composite commands trigger one or more chat commands of any type.



## Creation

To create a composite command, find (or create) the *GameName/Resources/GameName/ChatCommand* folder in the project tab and right click. Choose *Create > AnyRPG > Chat Commands > Composite Command*.



## Properties

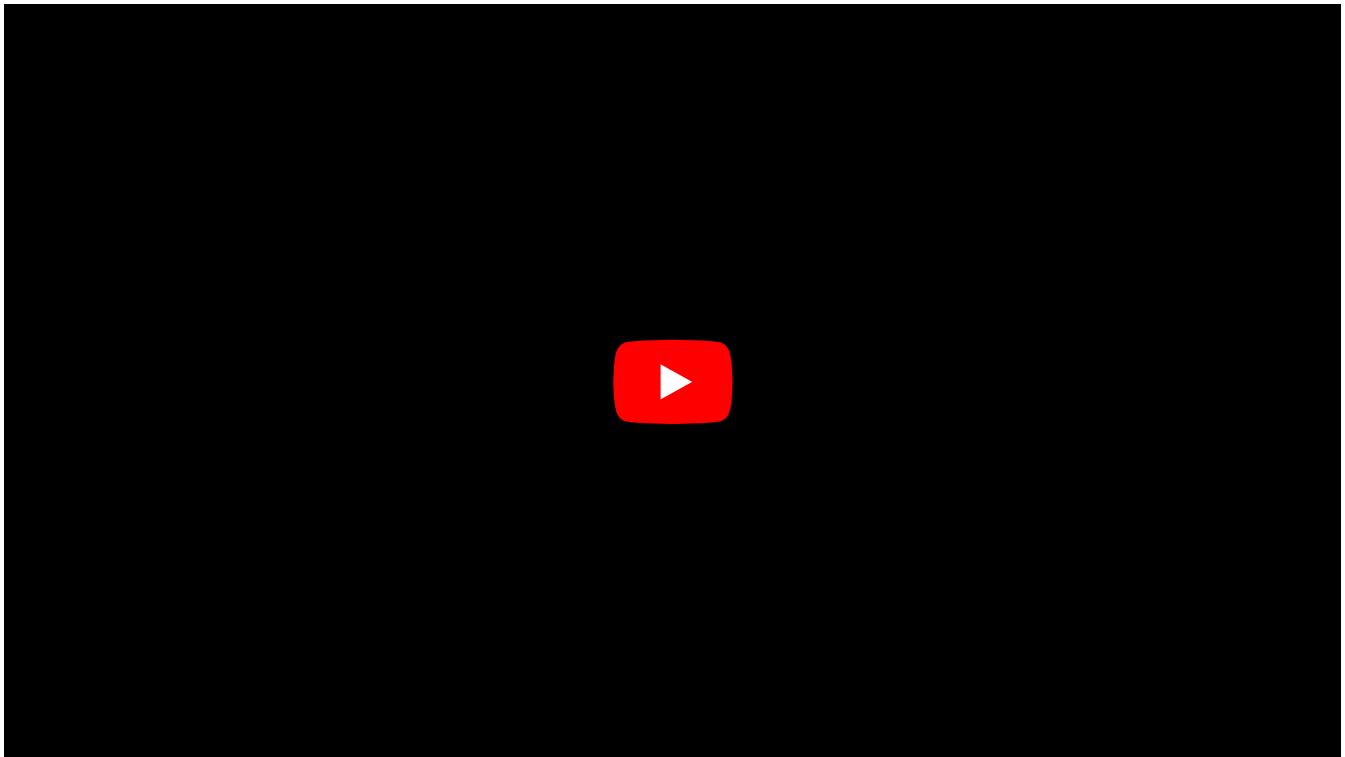
Name	Description
Chat Commands	A list of chat commands to trigger.

## Examples

Command	Effect
/learnwings	Triggers the commands: /learnability Red Wings /learnability Blue Wings
/boost	Triggers the commands: /setlevel 10 /gaicurrency gold 100

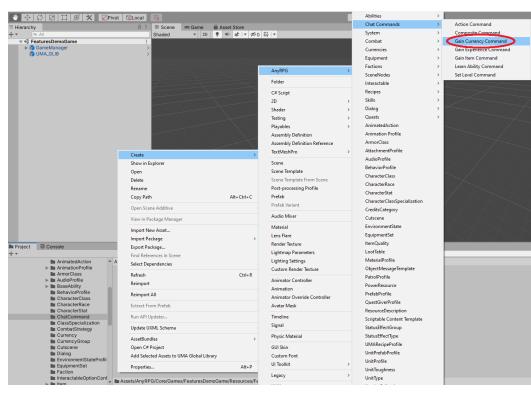
# Gain Currency Command

Gain currency commands provide the player character with currencies.



## Creation

To create a gain currency command, find (or create) the *GameName/Resources/GameName/ChatCommand* folder in the project tab and right click. Choose *Create > AnyRPG > Chat Commands > Gain Currency Command*.



## Properties

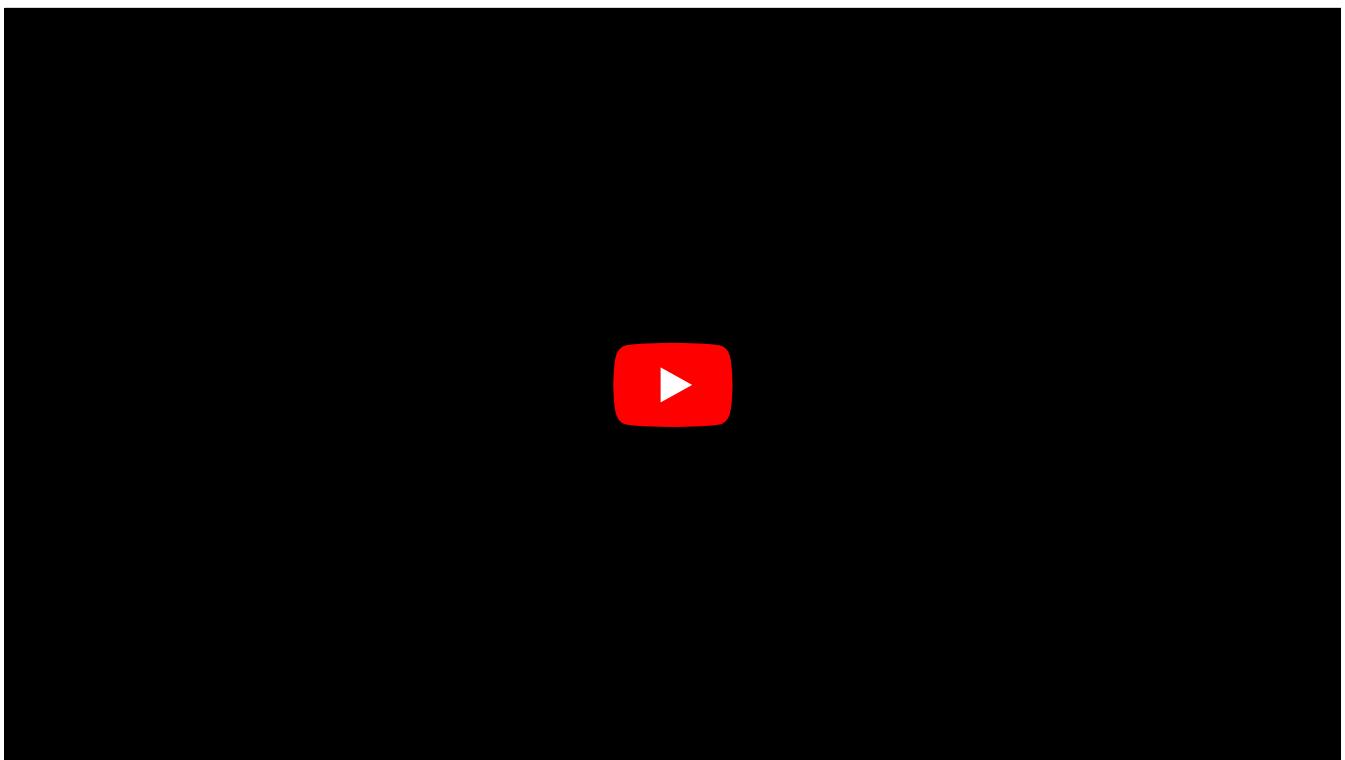
Name	Description
Fixed Currency	If true, the command will always provide the currency listed in the <i>Currency Name</i> property.
Currency Name	The name of the currency to be provided if <i>Fixed Currency</i> is true.
Fixed Amount	If true, the command will always provide the amount listed in the <i>Currency Amount</i> property.
Currency Amount	The amount of currency to be provided if <i>Fixed Amount</i> is true.

## Examples

Command	Effect
/gaingold	Gain a predetermined amount of the gold currency.
/gainercency silver	Gain a predetermined amount of the silver currency.
/gainercency 10 gold	Gain 10 gold.

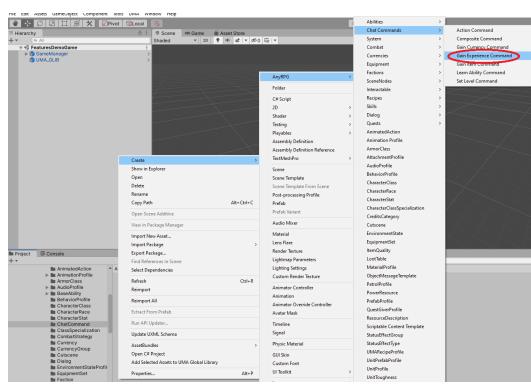
# Gain Experience Command

Gain experience commands increase the players experience points.



## Creation

To create a gain experience command, find (or create) the `GameName/Resources/GameName/ChatCommand` folder in the project tab and right click. Choose *Create > AnyRPG > Chat Commands > Gain Experience Command*.



## Properties

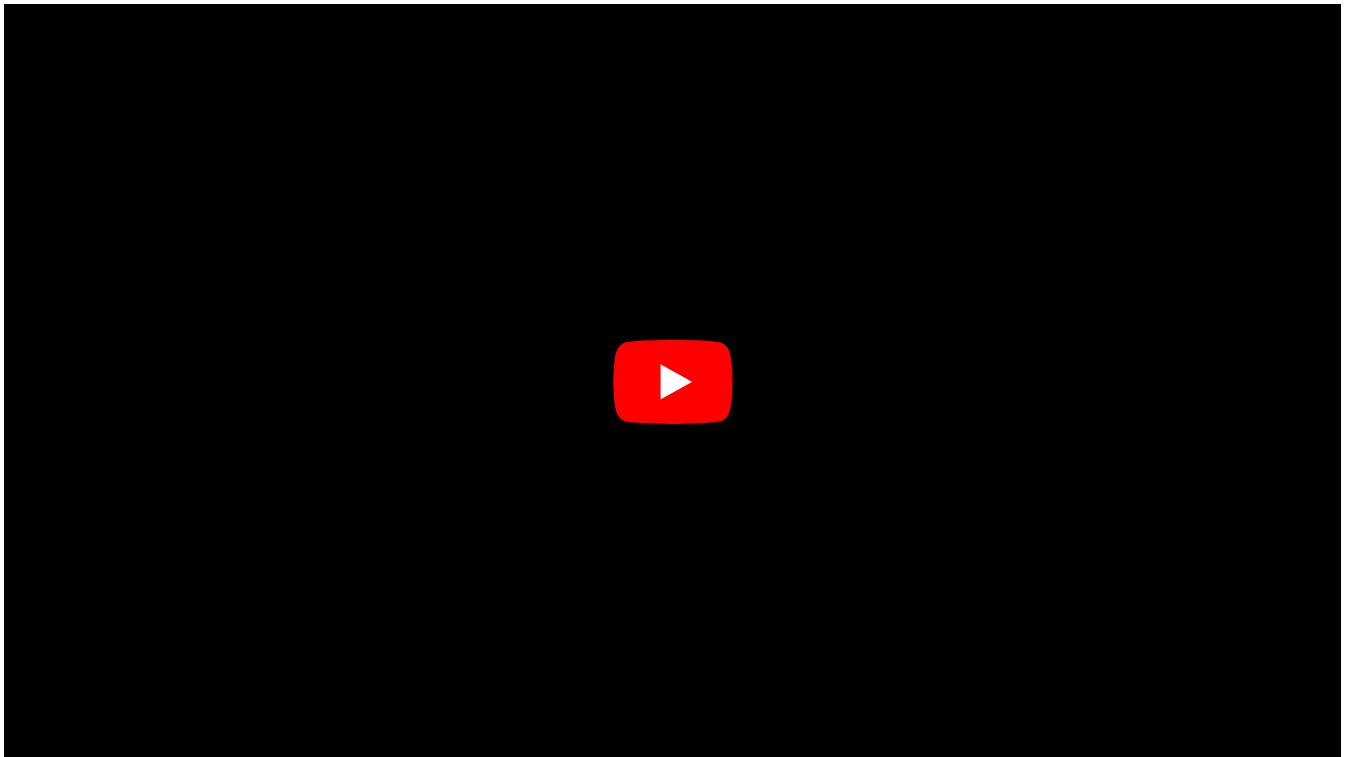
Name	Description
Fixed Experience	If true, the command will always provide the amount of experience listed in the <i>Experience Amount</i> property.
Experience Amount	The amount of experience to gain if the <i>Fixed Experience</i> property is true.

## Examples

Command	Effect
/gain100xp	Gain 100 experience.
/gainxp 500	Gain 500 experience.

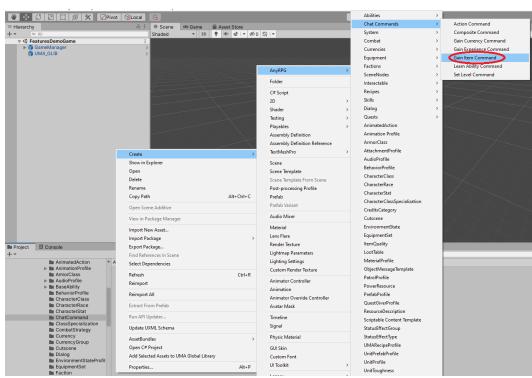
# Gain Item Command

Gain item commands add items to the players inventory.



## Creation

To create a gain item command, find (or create) the `GameName/Resources/GameName/ChatCommand` folder in the project tab and right click. Choose *Create > AnyRPG > Chat Commands > Gain Item Command*.



## Properties

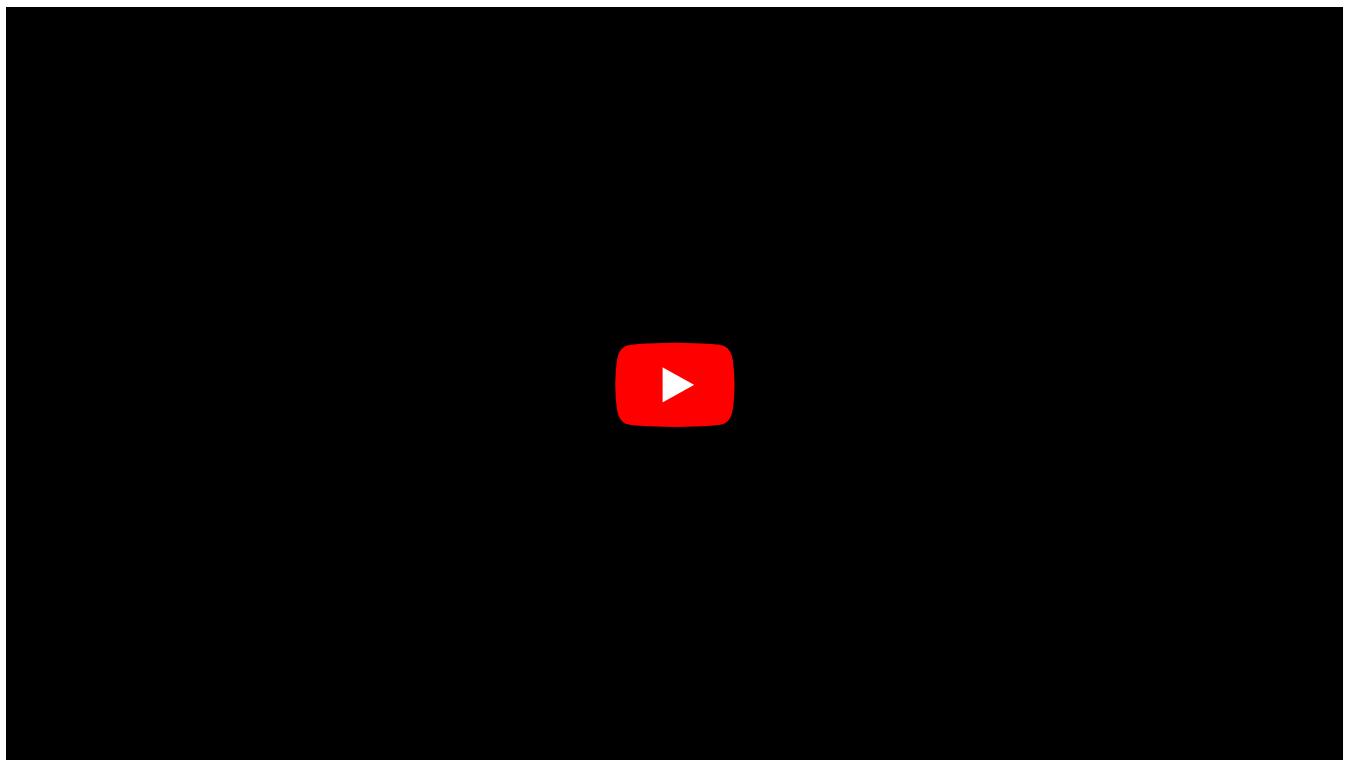
Name	Description
Fixed Item	If true, the item provided will be the item listed in the <i>Item Name</i> property.
Item Name	The name of the item to be provided if the <i>Fixed Item</i> property is true.

## Examples

Command	Effect
/gainsword	Gain the item defined in the Item Name property
/gainitem Basic One Hand Sword	Gain the item named <i>Basic One Hand Sword</i> .

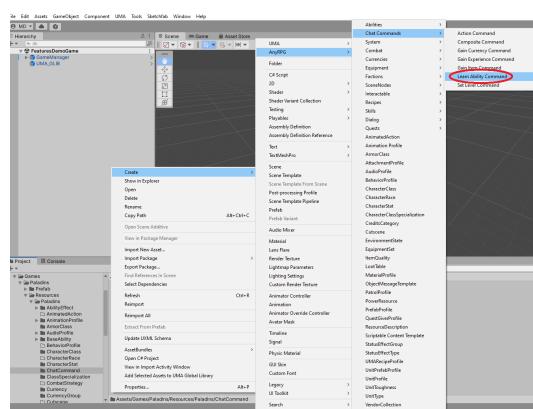
# Learn Ability Command

Learn ability commands allow the player to learn abilities.



## Creation

To create a learn ability command, find (or create) the `GameName/Resources/GameName/ChatCommand` folder in the project tab and right click. Choose *Create > AnyRPG > Chat Commands > Learn Ability Command*.



## Properties

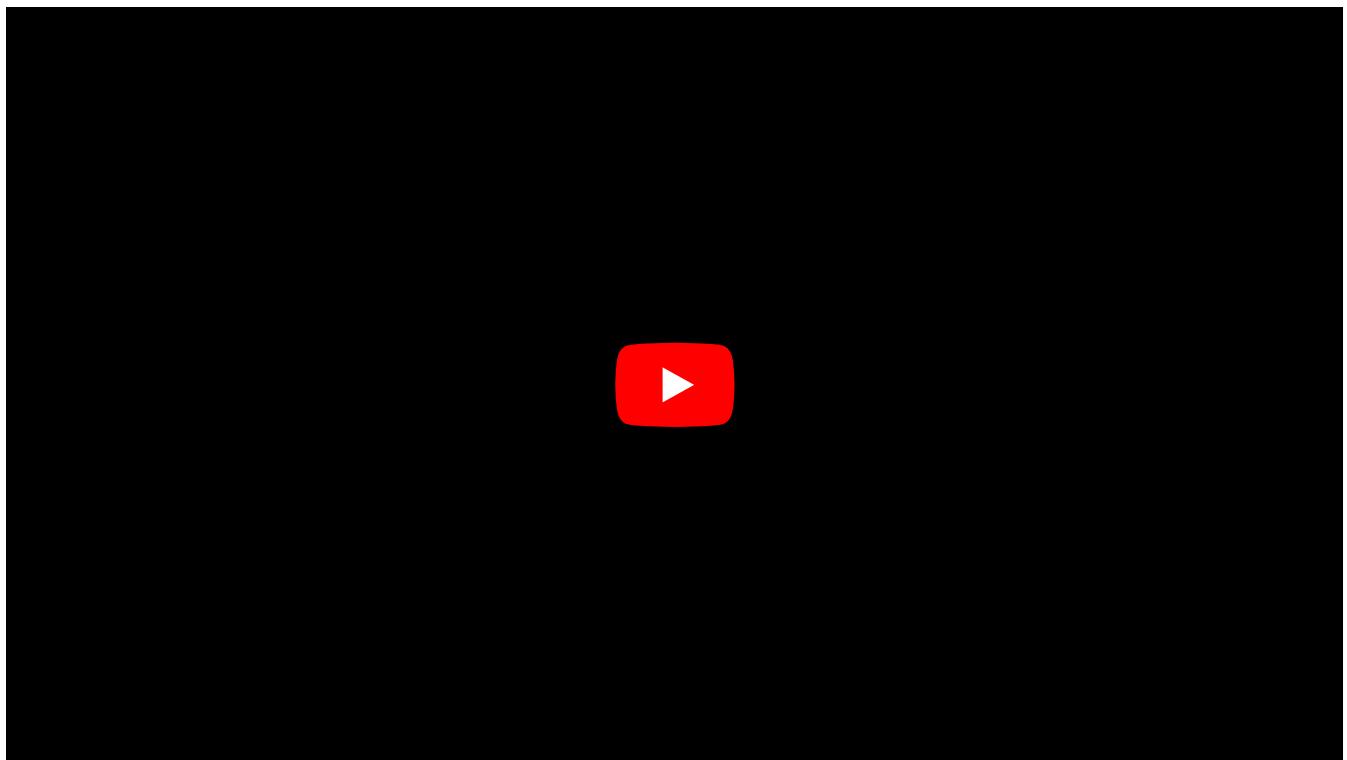
Name	Description
Fixed Ability	If true, this command will always learn the ability specified in the <i>Ability Name</i> field.
Ability Name	The ability to learn if the <i>Fixed Ability</i> field is set to true.

## Examples

Command	Effect
/learnability Red Wings	Learn the ability <i>Red Wings</i> .
/learnbluewings	Learn the ability <i>Blue Wings</i> .

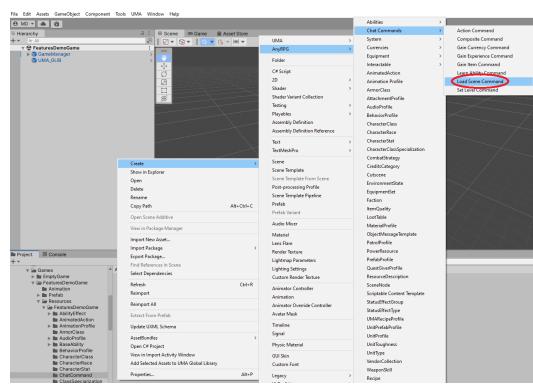
# Load Scene Command

Load scene commands immediately load a scene.



## Creation

To create a load scene command, find (or create) the *GameName/Resources/GameName/ChatCommand* folder in the project tab and right click. Choose *Create > AnyRPG > Chat Commands > Load Scene Command*.



## Properties

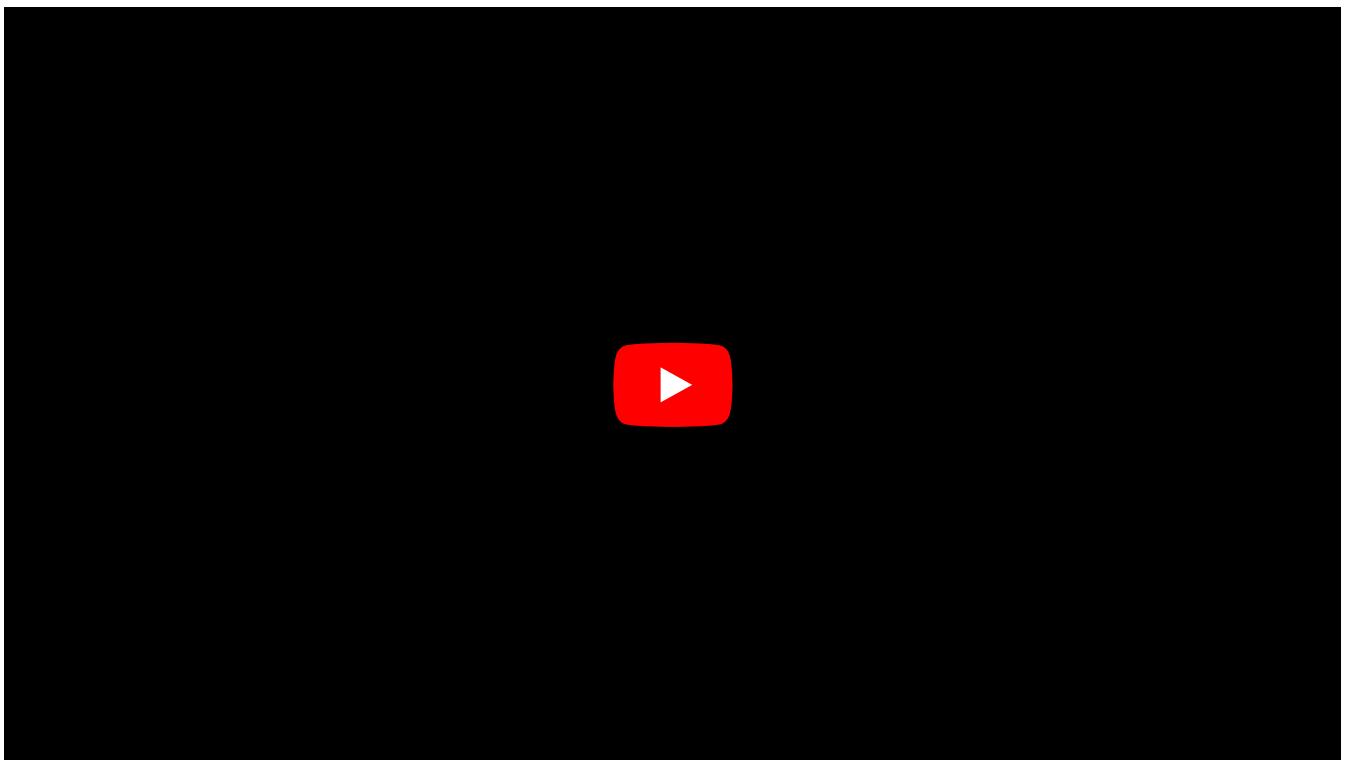
Name	Description
Fixed Scene	If true, the scene loaded will be the scene listed in the <i>Scene Name</i> property.
Scene Name	The name of the scene to be loaded if the <i>Fixed Scene</i> property is true.

## Examples

Command	Effect
/warp	Load a predefined scene.
/loadscene Soul Forge	Load the <i>Soul Forge</i> scene.

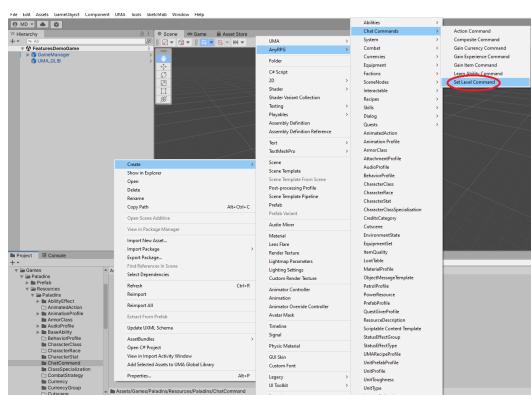
# Set Level Command

Set level commands set the player level.



## Creation

To create a set level command, find (or create) the `GameName/Resources/GameName/ChatCommand` folder in the project tab and right click. Choose *Create > AnyRPG > Chat Commands > Set Level Command*.



## Properties

Name	Description
Fixed Level	If true, the player level will always be set to the level specified in the <i>Level Number</i> field.
Level Number	If <i>Fixed Level</i> is set to true, this is the level the player will be set to.

## Examples

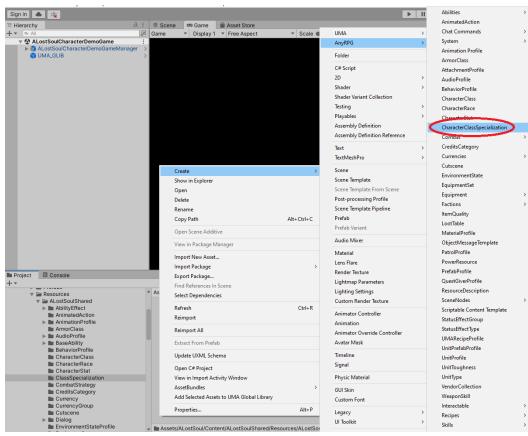
Command	Effect
/setlevel 10	Set the player to level 10.
/maxlevel	Set the player to level 50.

# Class Specialization

A class specialization gives characters access to abilities, traits, power resources, character stats, weapon skills, and armor skills.

## Creation

To create a class specialization, find (or create) the `GameName/Resources/GameName/ClassSpecialization` folder in the project tab and right click. Choose *Create > AnyRPG > CharacterClassSpecialization*.



## Properties

Name	Description
New Game Option	If true, the class specialization can be chosen for new characters when starting a new game.
Equipment Names	A list of <a href="#">Equipment</a> that will be equipped by characters that choose the character class when starting a new game.
Class Names	A list of <a href="#">Character Class</a> names. The character must be one of the classes in the list to choose the class specialization.
Capabilities	Lists of <a href="#">Abilities</a> , traits, <a href="#">Weapon Skills</a> , and armor skills the class specialization provides. See <a href="#">Capabilities</a> for descriptions.
Primary Stats	A List of <a href="#">Stat Scaling Nodes</a> that define primary stat budgets per level and secondary stats and power resources granted by those primary stats.
Power Resources	A list of <a href="#">Power Resources</a> the character will have access to.
Power Enhancer Stats	Deprecated. No longer in use.
Valid Pet Types	A list of <a href="#">Unit Types</a> the character can keep as pets. This property will only be used if the character has an ability that allows them to capture a pet.

## Next Steps

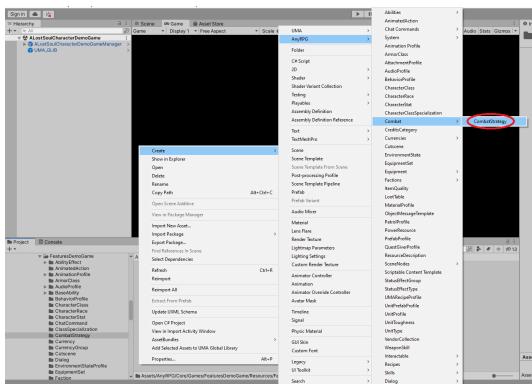
- Enable Character Class Specialization selection in the System Configuration Manager of a game.

# Combat Strategy

A combat strategy defines phases of a fight, which controls what abilities and buffs an AI character will use depending on their health.

## Creation

To create a class specialization, find (or create) the `GameName/Resources/GameName/CombatStrategy` folder in the project tab and right click. Choose *Create > AnyRPG > Combat > CombatStrategy*.



## Properties

Name	Description
Phase Nodes	A list of phases, defined by the health the AI has. <b>Max Health Percent</b> The phase will be started when the AI health drop to this level. <b>Min Health Percent</b> The phase will be ended when the AI health drop to this level. <b>Phase Music Profile Name</b> The <a href="#">Audio Profile</a> containing the links to the audio clips to play during the phase. <b>Maintain Buff Names</b> A list of <a href="#">Abilities</a> to cast to buff the AI. <b>Attack Ability Names</b> A list of attack <a href="#">Abilities</a> the AI will use against others during the phase.

## Next Steps

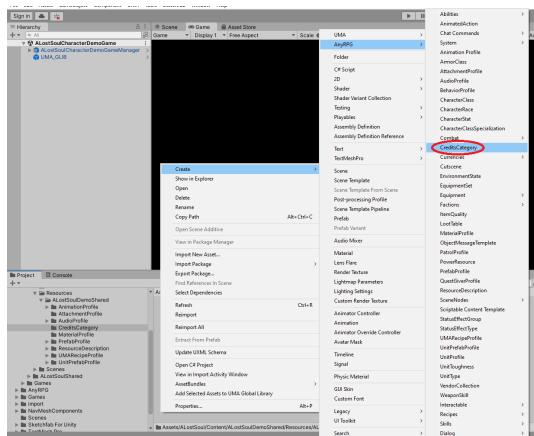
- Assign a combat strategy to a [Unit Profile](#).

# Credits Category

Credits categories contain credits and allow organizing them on the credits page in the engine.

## Creation

To create a credits category, find (or create) the `GameName/Resources/GameName/CreditsCategory` folder in the project tab and right click. Choose *Create > AnyRPG > CreditsCategory*.



## Properties

Name	Description
Category Name	The category name that the credits will appear under.
Credits Nodes	<p>A list of credits.</p> <p><b>Credit Name</b></p> <p>The item being credited.</p> <p><b>Credit Attribution</b></p> <p>The person or entity who supplied the item.</p> <p><b>Email</b></p> <p>Email address of the person or entity who supplied the item.</p> <p><b>User Url</b></p> <p>An HTTP URL that the web browser should open when the attribution text is clicked. This should lead to the user's main portfolio page or web site.</p> <p><b>Download Url</b></p> <p>An HTTP URL that the web browser should open when the credit name text is clicked. This should lead directly to the item being credited.</p>

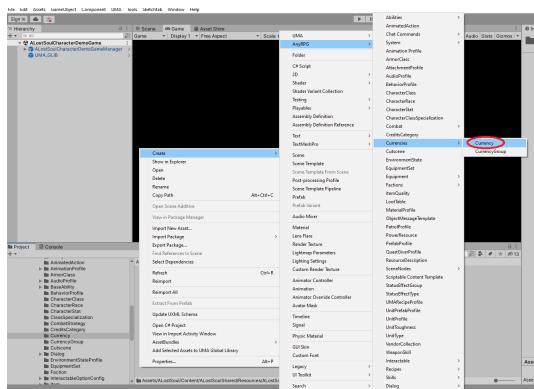


# Currency

Currencies are in-game money that can be given as quest rewards, and used when buying or selling items to/from vendors.

## Creation

To create a currency, find (or create) the *GameName/Resources/GameName/Currency* folder in the project tab and right click. Choose *Create > AnyRPG > Currencies > Currency*.



## Properties

Currency has no additional properties beyond the properties [shared](#) by all scriptable objects.

## Next Steps

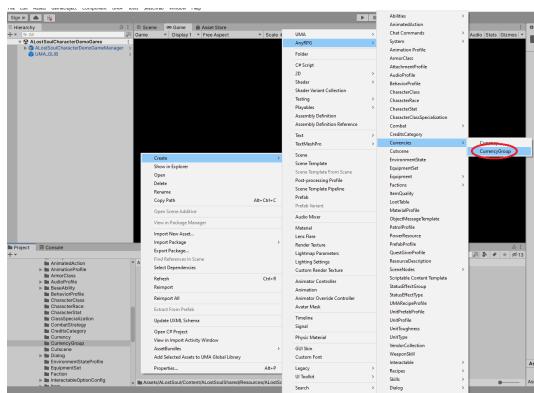
- Assign a currency to an [Item](#) so that it has a vendor buy and sell price.
- Use a currency as a [Quest](#) reward.
- Use a [Currency Item](#) as loot to provide this currency when defeating an enemy.
- Add a currency to a [Currency Group](#) to allow automatic conversion between larger and smaller units.

# Currency Group

A currency group is a collection of currencies that can be automatically converted using defined exchange rates, similar to dollars and cents in the real world.

## Creation

To create a currency group, find (or create) the `GameName/Resources/GameName/CurrencyGroup` folder in the project tab and right click. Choose `Create > AnyRPG > Currencies > CurrencyGroup`.



## Properties

Name	Description
Base Currency Name	The name of the smallest unit of <a href="#">Currency</a> in this group.
Base Currency	A direct link to the scriptable object that defines the smallest unit of <a href="#">Currency</a> in this group.
Currency Group Rates	<p>A list of currencies and exchange rates relative to the base <a href="#">Currency</a>.</p> <p><b>Currency Name</b> The name of the unit of currency.</p> <p><b>Currency</b> A direct link to the scriptable object that defines the unit of currency.</p> <p><b>Base Multiple</b> The number of units of the base <a href="#">Currency</a> that make up a single unit of this <a href="#">Currency</a>.</p>

## Next Steps

- Define a currency group as the default currency group in the System Configuration Manager which will

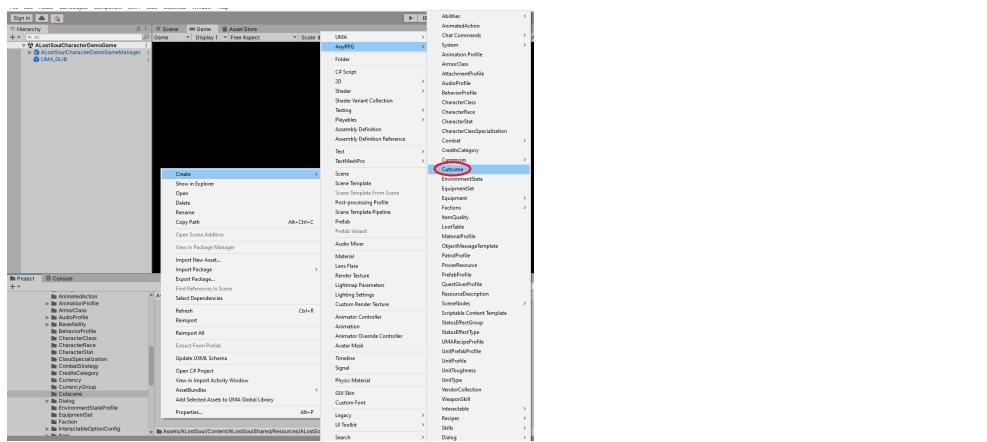
- Define a currency group as the default currency group in the System Configuration Manager, which will display that currency group in vendor windows when buying or selling items.

# Cutscene

A cutscene is a convenient way of displaying important events by moving the camera to predefined points, showing subtitles, and optionally triggering a timeline to make objects perform actions.

## Creation

To create a cutscene, find (or create) the `GameName/Resources/GameName/Cutscene` folder in the project tab and right click. Choose *Create > AnyRPG > Cutscene*.



## Properties

Name	Description
Repeatable	If true, this cutscene can be played more than once.
Require Player Unit Spawn	If true, the player unit must be spawned in the world for this cutscene to play.
Use Default Faction Colors	If true, player faction will be ignored, and default faction relationship colors will be used for health bars.
Timeline Name	The name of a Unity Timeline to trigger when this cutscene is played.
Load Scene Name	The name of a scene to load to play this cutscene.
Unload Scene On End	If true, the scene that was active before the cutscene played will be loaded when the cutscene ends.
Auto Advance Subtitles	If true, the subtitles will be played automatically. If false, the timeline will control the subtitles.
Subtitle Properties	<a href="#">Subtitle Properties</a>

## Subtitle Properties

Name	Description
Audio Profile Name	The name of an audio profile to play when the cutscene is started.
Subtitle Nodes	<p>A list of subtitle text and times.</p> <p><b>Start Time</b> The time, in seconds after the start of the cutscene to show the text.</p> <p><b>Show Time</b> The time, in seconds, that the text should be active after being shown.</p> <p><b>Description</b> The text to be shown.</p>

## Next Steps

- Configure a [Scene Node](#) to automatically play a cutscene when the scene loads.
- Configure a [Cutscene Interactable](#) option to play a cutscene when interacted with.

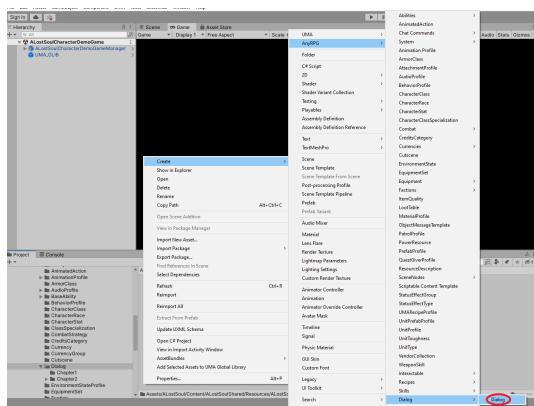


# Dialog

Dialogs allow AI characters to talk, either through a dialog window in conversation with a player character, or via a monologue that shows in a popup above the character's head.

## Creation

To create a dialog, find (or create) the *GameName/Resources/GameName/Dialog* folder in the project tab and right click. Choose *Create > AnyRPG > Dialog > Dialog*.



## Properties

Name	Description
Automatic	If true, this dialog will play in a speech bubble above a character's head, and advance automatically based on the timing in the <i>Dialog Nodes</i> .
Repeatable	If true, the dialog can be played more than once.
Audio Profile Name	The name of an audio profile that contains audio profiles to play for each <i>Dialog Node</i> .
Dialog Nodes	<p>A list of dialog text with optional timings for automatic play, and optional text defining what will show on the next button for manual dialogs.</p> <p><b>Start Time</b> The time, in seconds after the dialog is activated, that this dialog node should begin displaying, if the dialog is automatic.</p> <p><b>Show Time</b> The time, in seconds, that the dialog should remain active, if the dialog is automatic.</p> <p><b>Description</b> The text to show in the dialog window or speech bubble.</p> <p><b>Audio Clip</b> An audio clip to play when this dialog section is displayed.</p> <p><b>Next Option</b> If the dialog is manual, this text will show on the button that causes the dialog to proceed to the next <i>Dialog Node</i>.</p>
Prerequisite Conditions	A list of <a href="#">Prerequisite Conditions</a> .

## Next Steps

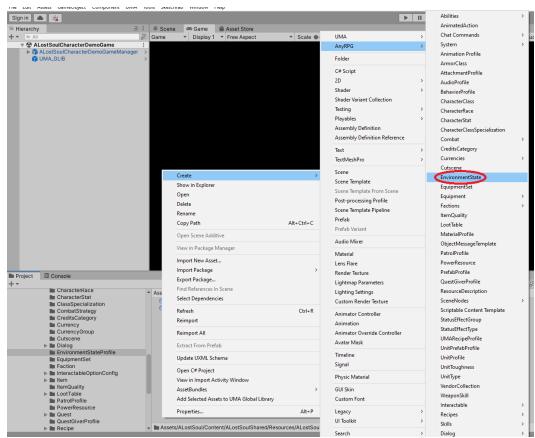
- Add a dialog to a [Dialog Interactable Option](#) so it can be started manually by the player.
- Configure a [Behavior](#) to play a dialog.

# Environment State Profile

An environment state profile references a skybox material profile and can be used to change the skybox from a timeline during a cutscene.

## Creation

To create an environment state profile, find (or create) the `GameName/Resources/GameName/EnvironmentStateProfile` folder in the project tab and right click. Choose *Create > AnyRPG > EnvironmentState*.



## Properties

Name	Description
Sky Box Material Profile Name	The name of a <a href="#">Material Profile</a> that contains a link to a skybox material.

## Next Steps

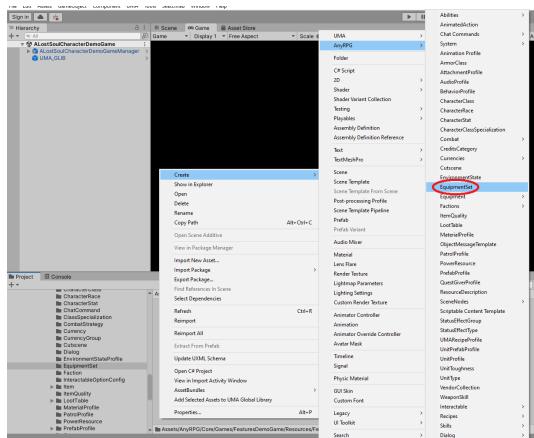
- Refer to an environment state profile in a [Scene Node](#).

# Equipment Set

An equipment set defines two or more pieces of equipment that when worn together, grant the user extra traits (ability effects).

## Creation

To create an equipment set, find (or create) the `GameName/Resources/GameName/EquipmentSet` folder in the project tab and right click. Choose *Create > AnyRPG > EquipmentSet*.



## Properties

Name	Description
Equipment Names	A list of <a href="#">Equipment</a> that comprises the set.
Trait Names	A list of <a href="#">Ability Effects</a> that will be automatically called on the character when they have a certain number of pieces of the set equipped.

## Next Steps

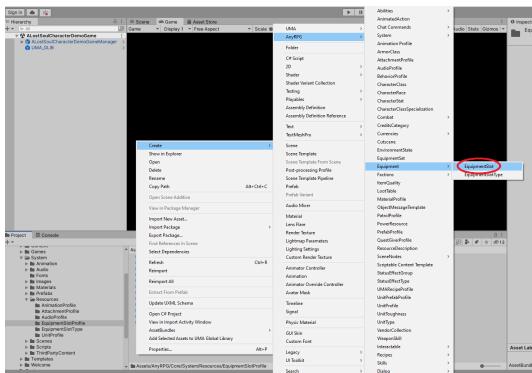
- Add the Equipment Set Property to the [Equipment](#) defined in this set.

# Equipment Slot Profile

An equipment slot profile defines a physical slot that equipment can be placed in when equipped on a character. Most games will probably not need to adjust these.

## Creation

To create an equipment set, find (or create) the `GameName/Resources/GameName/EquipmentSlotProfile` folder in the project tab and right click. Choose *Create > AnyRPG > Equipment > EquipmentSlot*.



## Properties

Name	Description
Main Weapon Slot	If true, the icon from any <a href="#">Item</a> equipped in this slot will be used for auto-attack <a href="#">Abilities</a> on action bars
Stat Weight	A weighted value to control distribution of <a href="#">Stats</a> among gear.
Equipment Slot Type List	A list of <a href="#">Equipment Slot Types</a> that can be equipped in this physical slot.
Set On Hit Audio	If true, items in this list will set on-hit audio sounds they have one. This is mostly useful for weapon slots.

## Next Steps

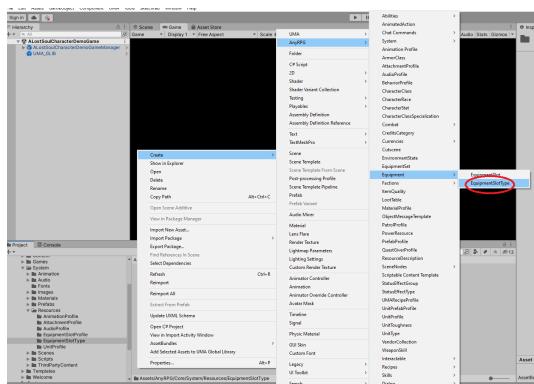
- If new equipment slot profiles are defined, a custom UI will need to be created that will display the new slots.

# Equipment Slot Type

An equipment slot type is an abstraction that allows the user to define multiple physical equipment slots that equipment can be equipped in.

## Creation

To create an equipment set, find (or create) the `GameName/Resources/GameName/EquipmentSlotType` folder in the project tab and right click. Choose *Create > AnyRPG > Equipment > EquipmentSlotType*.



## Properties

Name	Description
Stat Weight	A weighted value to control distribution of <a href="#">Stats</a> among gear.
Exclusive Slot Profiles	A list of <a href="#">Equipment Slot Profiles</a> that will be unequipped if equipment of this slot type is equipped.
Exclusive Slot Types	A list of equipment slot types that will be unequipped if equipment of this slot type is equipped.

## Next Steps

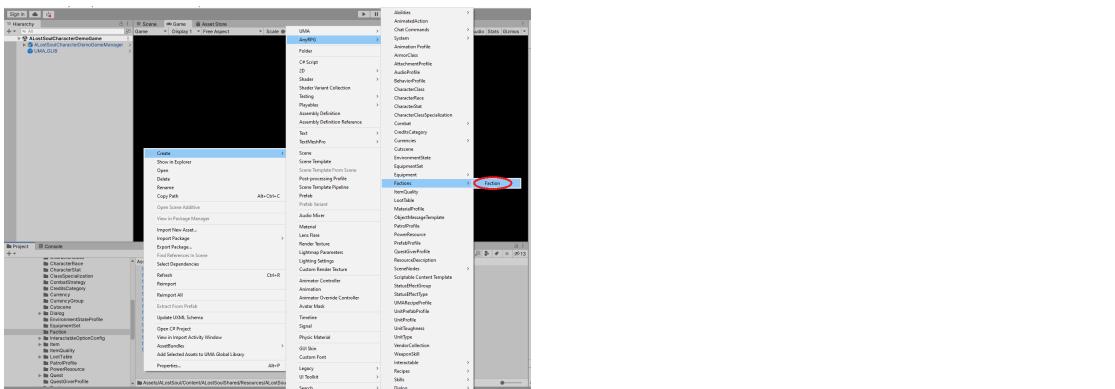
- Assign an equipment slot type to a piece of [Equipment](#).

# Faction

Factions allow for groups of characters to have the same relationship disposition toward other groups of characters.

## Creation

To create a faction, find (or create) the *GameName/Resources/GameName/Faction* folder in the project tab and right click. Choose *Create > AnyRPG > Factions > Faction*.



## Properties

Name	Description
New Game Option	If true, this faction can be chosen as the faction the player will be part of when starting a new game.
Default Starting Zone	The zone ( <a href="#">Scene</a> ) that new players will start in if this faction is chosen when starting a new game.
Default Starting Location Tag	If not empty, players starting as this faction will spawn at the transform with this tag.
Hide Default Profiles	If true, hide any default unit profiles when this faction is used.
Character Creator Profile Names	A list of <a href="#">Unit Profiles</a> that the player can choose from when starting as this faction.
Equipment Names	A list of <a href="#">Equipment</a> that will be worn by a new player when starting the game as this faction.
Default Disposition	The disposition (relationship) that this faction has toward any faction not specifically in its disposition list.
Disposition List	A list of factions and the dispositions that this faction will have toward them. <b>Faction Name</b> The name of a faction <b>Disposition</b> The disposition (relationship) that this faction will have toward them.
Capabilities	A list of <a href="#">Capabilities</a> that any character that is part of this faction will have.
Class Capability List	A list of character classes, and the capabilities that those classes will have. <b>Character Classes</b> A list of <a href="#">Character Classes</a> . <b>Capabilities</b> The specific <a href="#">Capabilities</a> that any <a href="#">Character Class</a> in the <i>Character Classes</i> list will have.

## Next Steps

- Configure the System Configuration Manager to allow choosing a faction when starting a new game.

# Interactable Option Configurations

Interactable option configurations are shared configurations that allow for the re-use of specific interactable settings among different NPCs.

## Properties

All interactable option configurations share the following common properties.

Name	Description
Interaction Panel Title	The text to display in the interaction panel window to activate the option. This will only be shown if there is more than one option available.
Interaction Panel Image	The image to display beside the text in the interaction panel window to activate the option. This will only be shown if there is more than one option available.
Name Plate Image	If there is no system option set in the System Configuration manager for the nameplate image or the interaction type, this image will be shown above the nameplate if the interaction is available.
Prerequisite Conditions	A list of <a href="#">Prerequisite Conditions</a> that must be satisfied for the interaction option to be available.

## Next Steps

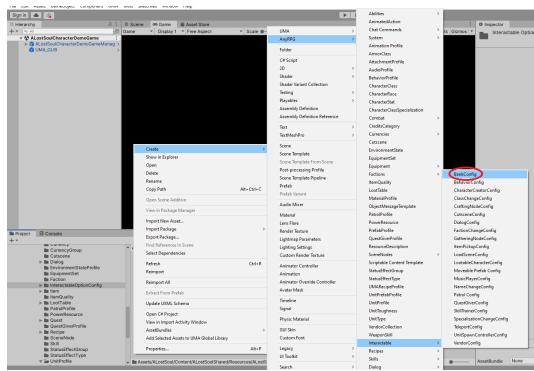
- Create shared interactable option configurations to be re-used among different NPCs.
- Use inline interactable option configurations in [Unit Profiles](#) if a specific interactable option is needed that will not be shared or re-used.

# Bank Config

A bank config creates a bank interactable option, which allows the character to store items.

## Creation

To create a bank config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > BankConfig*.



## Properties

A bank config does not have any properties other than the properties shared by all [Interactable Option Configs](#).

## Next Steps

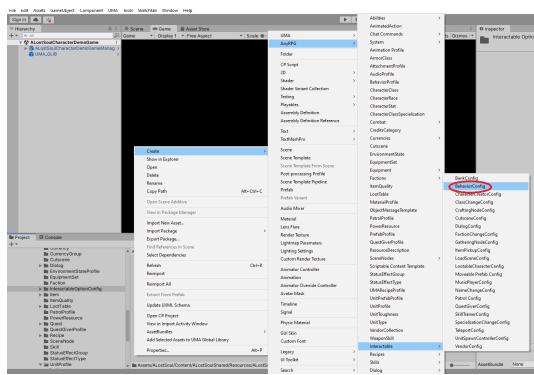
- Add a bank config to a [Unit Profile](#) to allow the character to serve as a bank.

# Behavior Config

A behavior config creates behavior interactable options, allowing automatic or player initiated behaviors to be run by a character.

## Creation

To create a behavior config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > BehaviorConfig*.



## Properties

Name	Description
Behavior Names	A list of <a href="#">Behavior Profiles</a> that can be run.

## Next Steps

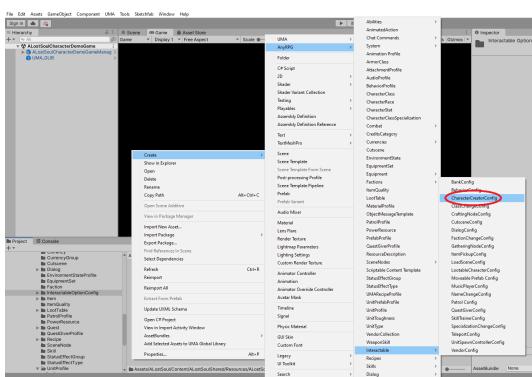
- Add a behavior config to a [Unit Profile](#) to allow the character to run behaviors.

# Character Creator Config

A character creator config creates a character creator interactable option, which allows a character to open the character creator window, giving the player the ability to change their appearance.

## Creation

To create a character creator config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > CharacterCreatorConfig*.



## Properties

A bank config does not have any properties other than the properties shared by all [Interactable Option Configs](#).

## Next Steps

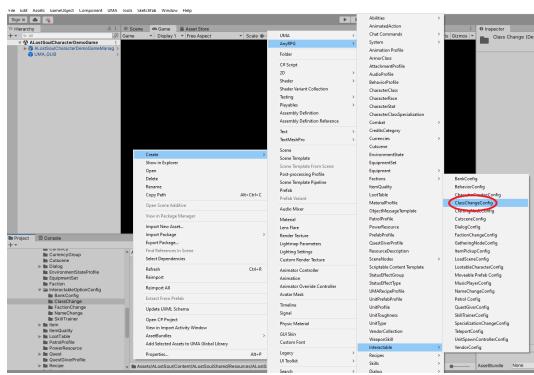
- Add a character creator config to a [Unit Profile](#) to allow the character to open the character creator window.

# Class Change Config

A class change config creates a class change interactable option, which opens the class change window, allowing the player to change their character class.

## Creation

To create a behavior config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > ClassChangeConfig*.



## Properties

Name	Description
Class Name	The name of the <a href="#">Character Class</a> the player can change to.

## Next Steps

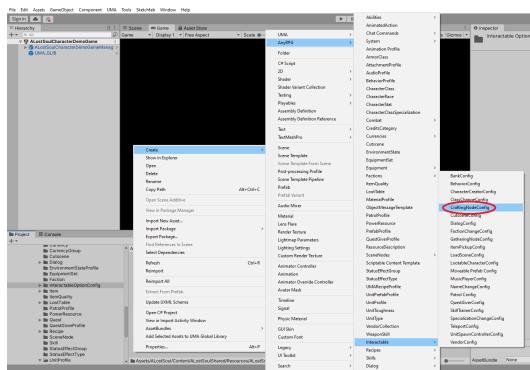
- Add a class change config to a [Unit Profile](#) to allow the character to open the class change window.

# Crafting Node Config

A crafting node config creates a crafting interactable option, allowing the player to open the crafting window and craft items.

## Creation

To create a crafting node config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > CraftingNodeConfig*.



## Properties

Name	Description
Ability Name	The name of the <a href="#">Craft Ability</a> the crafting window will support.

## Next Steps

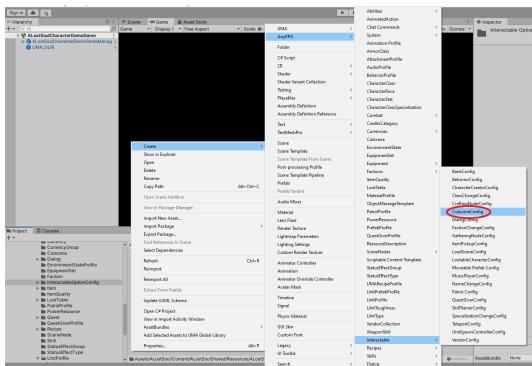
- Add a crafting node config to a [Unit Profile](#) to allow the character to open the crafting window and craft items.

# Cutscene Config

A cutscene config creates a cutscene interactable option, which loads and plays a cutscene.

## Creation

To create a cutscene config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > CutsceneConfig*.



## Properties

Name	Description
Cutscene Name	The name of the <a href="#">Cutscene</a> to play.

## Next Steps

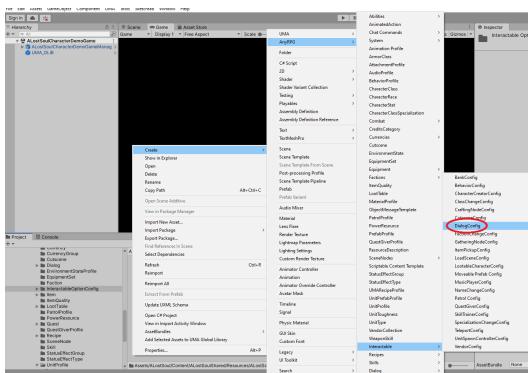
- Add a cutscene config to a [Unit Profile](#) to allow the character to play a cutscene.

# Dialog Config

A dialog config creates a dialog interactable option, allowing the player to open a dialog window and interact with it.

## Creation

To create a dialog config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > DialogConfig*.



## Properties

Name	Description
Dialog Names	A list of <a href="#">Dialogs</a> that can be launched.

## Next Steps

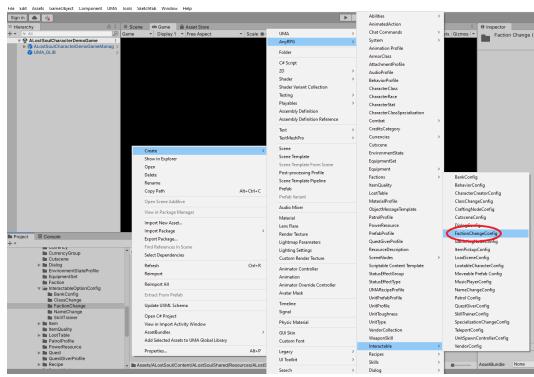
- Add a dialog config to a [Unit Profile](#) to allow the character to launch dialogs.

# Faction Change Config

A faction change config creates a faction change interactable option, allowing the player to open the faction change window and change their faction.

## Creation

To create a faction change config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > FactionChangeConfig*.



## Properties

Name	Description
Faction Name	A list of <a href="#">Dialogs</a> The name of the <b>Faction</b> the player can change to.

## Next Steps

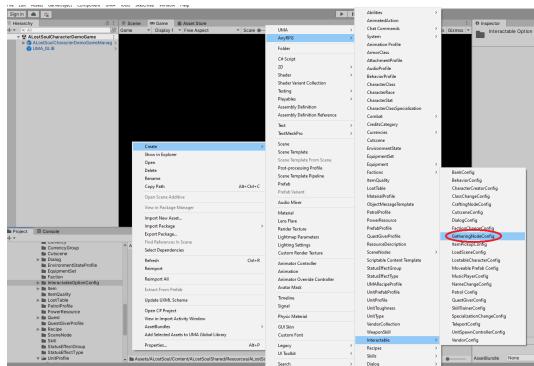
- Add a faction change config to a [Unit Profile](#) to allow the player to change their faction.

# Gathering Node Config

A gathering node config creates a gathering node interactable option, allowing the player to gather crafting resources.

## Creation

To create a gathering node config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > GatheringNodeConfig*.



## Properties

Name	Description
Loot Table Names	A list of <a href="#">Loot Tables</a> containing <a href="#">Items</a> this node can drop when gathering is performed.
Spawn Timer	The number seconds after all <a href="#">Items</a> have been looted before the node resets and spawns again.
Ability Name	The name of a <a href="#">Gather Ability</a> the player must know to interact with the gathering node.

## Next Steps

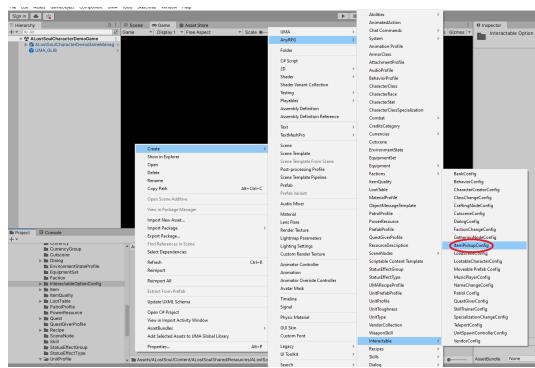
- Add a gathering node config to an Interactable to allow gathering from it.

# Item Pickup Config

An item pickup config creates an item pickup interactable option, allowing the player to loot items.

## Creation

To create an item pickup config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > ItemPickupConfig*.



## Properties

Name	Description
Loot Table Names	A list of <a href="#">Loot Tables</a> containing <a href="#">Items</a> this node can drop when gathering is performed.
Spawn Timer	The number seconds after all <a href="#">Items</a> have been looted before the node resets and spawns again.

## Next Steps

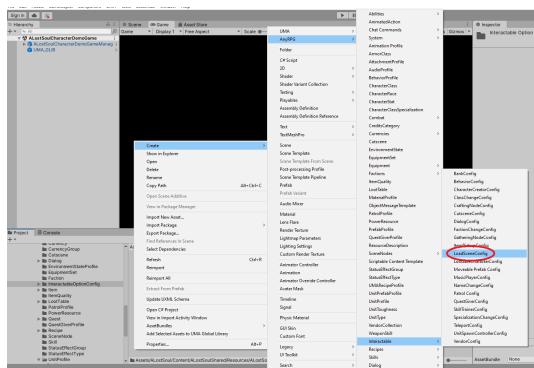
- Add an item pickup config to an Interactable to allow looting items from it.

# Load Scene Config

A load scene config creates a load scene interactable option, allowing the player to travel to another scene by interacting with it.

## Creation

To create a load scene config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > LoadSceneConfig*.



## Properties

Name	Description
Location Tag	The name of a tag to search for in the scene. If the tag is found, the player will spawn at the location of the GameObject with the tag.
Override Spawn Location	If true, the player will spawn at the Vector3 location in the <i>Spawn Location</i> field.
Spawn Location	The Vector3 location the player will spawn at if the <i>Override Spawn Location</i> field is set to true.
Override Spawn Direction	If true the player will spawn with their forward direction set to the Vector3 direction in the <i>Spawn Forward Direction</i> field.
Spawn Forward Direction	The Vector3 direction that the player should be facing when they spawn if the <i>Override Spawn Direction</i> field is set to true.
Scene Name	The name of the scene to load.

## Next Steps

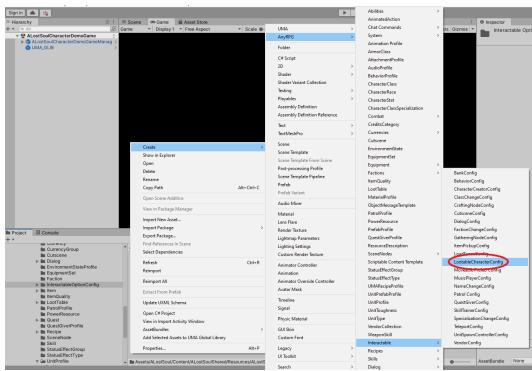
- Add a load scene config to an Interactable to allow the player to load a scene by interacting with it.

# Lootable Character Config

A lootable character config creates a lootable character interactable, allowing the player to loot the character when it dies.

## Creation

To create a lootable character config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > LootableCharacterConfig*.



## Properties

Name	Description
Automatic Currency	If true, when killed, this character will drop the system defined <a href="#">Currency</a> amount for its level and <a href="#">Toughness</a> .
Loot Table Names	The names of <a href="#">Loot Tables</a> containing <a href="#">Items</a> that can potentially drop when the character dies.

## Next Steps

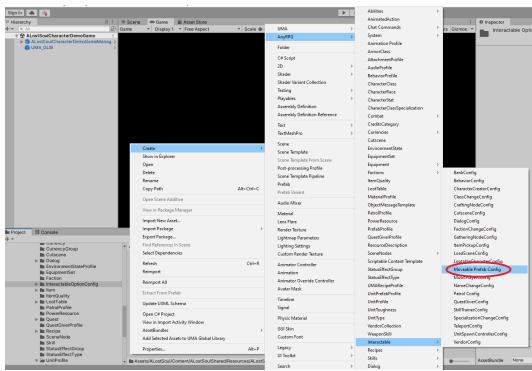
- Add a lootable character config to a [Unit Profile](#) to allow the player to collect loot from it when it dies.

# Moveable Prefab Config

A moveable prefab config creates a moveable prefab interactable option, which allows the prefab to be moved or rotated by interacting with a switch.

## Creation

To create a moveable prefab config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > MoveablePrefabConfig*.



## Properties

Name	Description
Movement Speed	The speed that the prefab will move at.
Rotation Speed	The speed that the prefab will be rotated at.
Loop	If true, the prefab will return to its starting position and rotation when done moving, and then continue its movement again.

## Next Steps

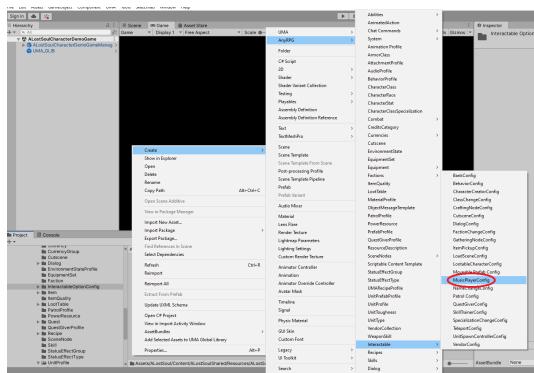
- Add a moveable prefab config to an Interactable to allow it to be moved with a switch.

# Music Player Config

A music player config creates a music player interactable option, allowing the player to open a window with a list of audio clips and play them.

## Creation

To create a music player config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > MusicPlayerConfig*.



## Properties

Name	Description
Audio Type	<p>The type of sound to play. This affects which audi source will be used.</p> <p><b>Music</b></p> <p>The sound will be played through the background music audio source.</p> <p><b>Ambient</b></p> <p>The sound will be played through the ambient sounds audio source.</p> <p><b>Effect</b></p> <p>The sound will be played through the sound effect audio source.</p>
Audio Profile Names	A list of the names of <a href="#">Audio Profiles</a> that contain lists of audio clips that can be played.

## Next Steps

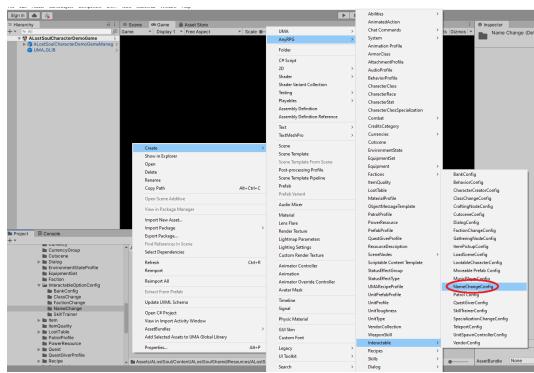
- Add a music player config to an Interactable to allow opening the music player window.

# Name Change Config

A name change config creates a name change interactable option, which allows the player to change their name.

## Creation

To create a name change config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > NameChangeConfig*.



## Properties

A name change config does not have any properties other than the properties shared by all [Interactable Option Configs](#).

## Next Steps

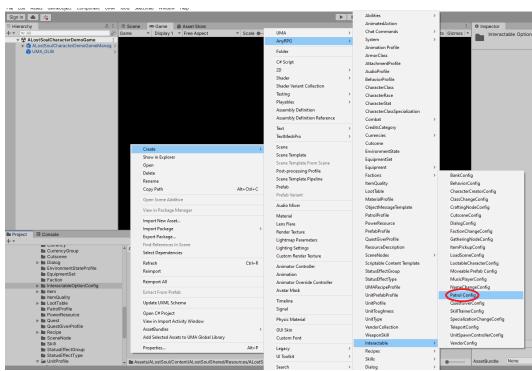
- Add a name change config to a [Unit Profile](#) to allow the character to serve as a name changer.

# Patrol Config

A patrol config creates a patrol interactable option, allowing the player to trigger patrols by interacting with the character.

## Creation

To create a patrol config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > Patrol/Config*.



## Properties

Name	Description
Patrol Properties	Properties of a <a href="#">Patrol Profile</a> .

## Next Steps

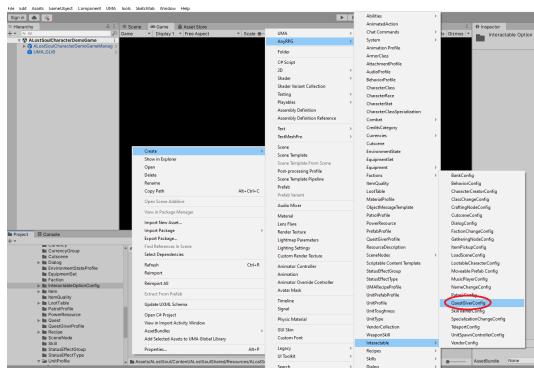
- Add a patrol config to a [Unit Profile](#) to allow triggering the patrol by interacting with the character.

# Quest Giver Config

A quest giver config creates a quest giver interactable option, allowing the player to start or turn in quests when they interact with the character.

## Creation

To create a quest giver config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > QuestGiverConfig*.



## Properties

Name	Description
Quests	A list of <a href="#">Quests</a> that can be started or turned in.
Quest Giver Profile Names	A list of names of <a href="#">Quest Giver Profiles</a> , which contain shared lists of <a href="#">Quests</a> that can be re-used across different quest givers.

## Next Steps

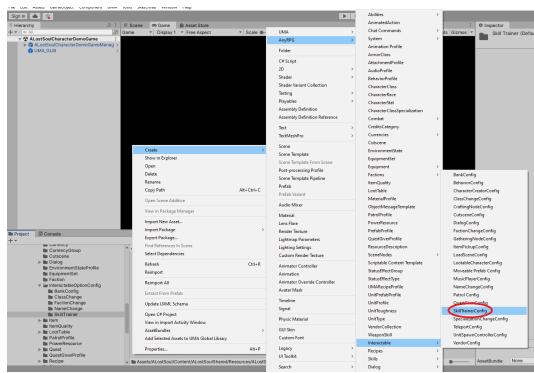
- Add a quest giver config to a [Unit Profile](#) to allow starting and turning in quests by interacting with the character.

# Skill Trainer Config

A skill trainer config creates a skill trainer interactable option, allowing the player to learn skills from the character.

## Creation

To create a skill trainer config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > SkillTrainerConfig*.



## Properties

Name	Description
Skill Names	A list of names of <a href="#">Skills</a> that the skill trainer can train the player in.

## Next Steps

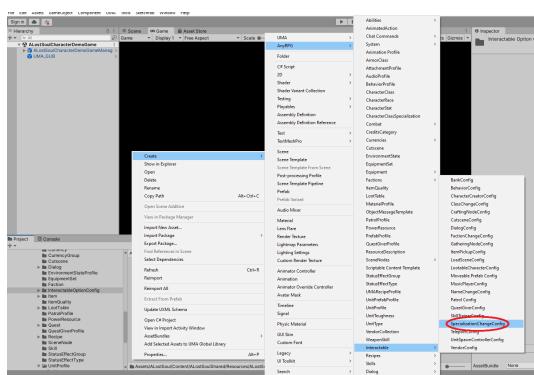
- Add a skill trainer config to a [Unit Profile](#) to allow the player to learn skills by interacting with the character.

# Specialization Change Config

A specialization change config creates a specialization change interactable option, allowing the player to change their class specialization by interacting with the character.

## Creation

To create a specialization change config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > SpecializationChangeConfig*.



## Properties

Name	Description
Specialization Name	The name of a <a href="#">Class Specialization</a> that the player can specialize in.

## Next Steps

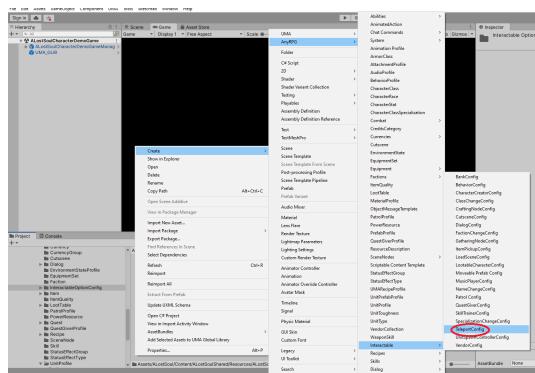
- Add a specialization change config to a [Unit Profile](#) to allow the player to change their class specialization by interacting with the character.

# Teleport Config

A teleport config creates a teleport interactable option, allowing the player to teleport to another scene by interacting with it.

## Creation

To create a teleport config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > TeleportConfig*.



## Properties

Name	Description
Location Tag	The name of a tag to search for in the scene. If the tag is found, the player will spawn at the location of the GameObject with the tag.
Override Spawn Location	If true, the player will spawn at the Vector3 location in the <i>Spawn Location</i> field.
Spawn Location	The Vector3 location the player will spawn at if the <i>Override Spawn Location</i> field is set to true.
Override Spawn Direction	If true the player will spawn with their forward direction set to the Vector3 direction in the <i>Spawn Forward Direction</i> field.
Spawn Forward Direction	The Vector3 direction that the player should be facing when they spawn if the <i>Override Spawn Direction</i> field is set to true.
Ability Name	The name of <a href="#">Teleport Ability</a> to cast.

## Next Steps

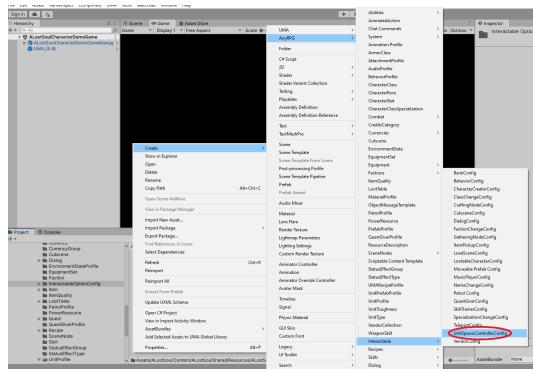
- Add a teleport config to an Interactable to allow the player to teleport to another scene by interacting with it.

# Unit Spawn Controller Config

A unit spawn controller config creates a unit spawn controller interactable option, allowing the player to spawn character units from a popup window.

## Creation

To create a unit spawn controller config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > UnitSpawnControllerConfig*.



## Properties

Name	Description
Unit Profile Names	A list of names of <a href="#">Unit Profiles</a> that can be spawned.
Unit Spawn Node List	A list of Unit Spawn Nodes where the character units will be spawned.

## Next Steps

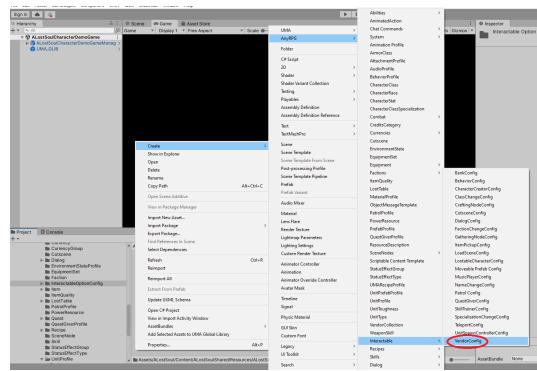
- Add a unit spawn controller config to an Interactable to allow spawning character units when interacting with it.

# Vendor Config

A vendor config creates a vendor interactable option, allowing the player to buy or sell items when interacting with the character.

## Creation

To create a vendor config, find (or create) the `GameName/Resources/GameName/InteractableOptionConfig` folder in the project tab and right click. Choose *Create > AnyRPG > Interactable > VendorConfig*.



## Properties

Name	Description
Vendor Collection Names	A list <a href="#">Vendor Collections</a> , which contain lists of <a href="#">Items</a> that can be purchased.

## Next Steps

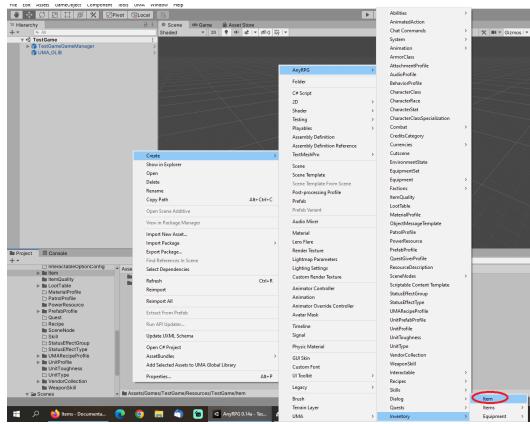
- Add a vendor config to a [Unit Profile](#) to allow buying and selling [Items](#) by interacting with the character.

# Items

Items are objects that can be placed in the character inventory.

## Creation

To create an item, find (or create) the *GameName/Resources/GameName/Item* folder in the project tab and right click. Choose *Create > AnyRPG > Inventory > Item*.

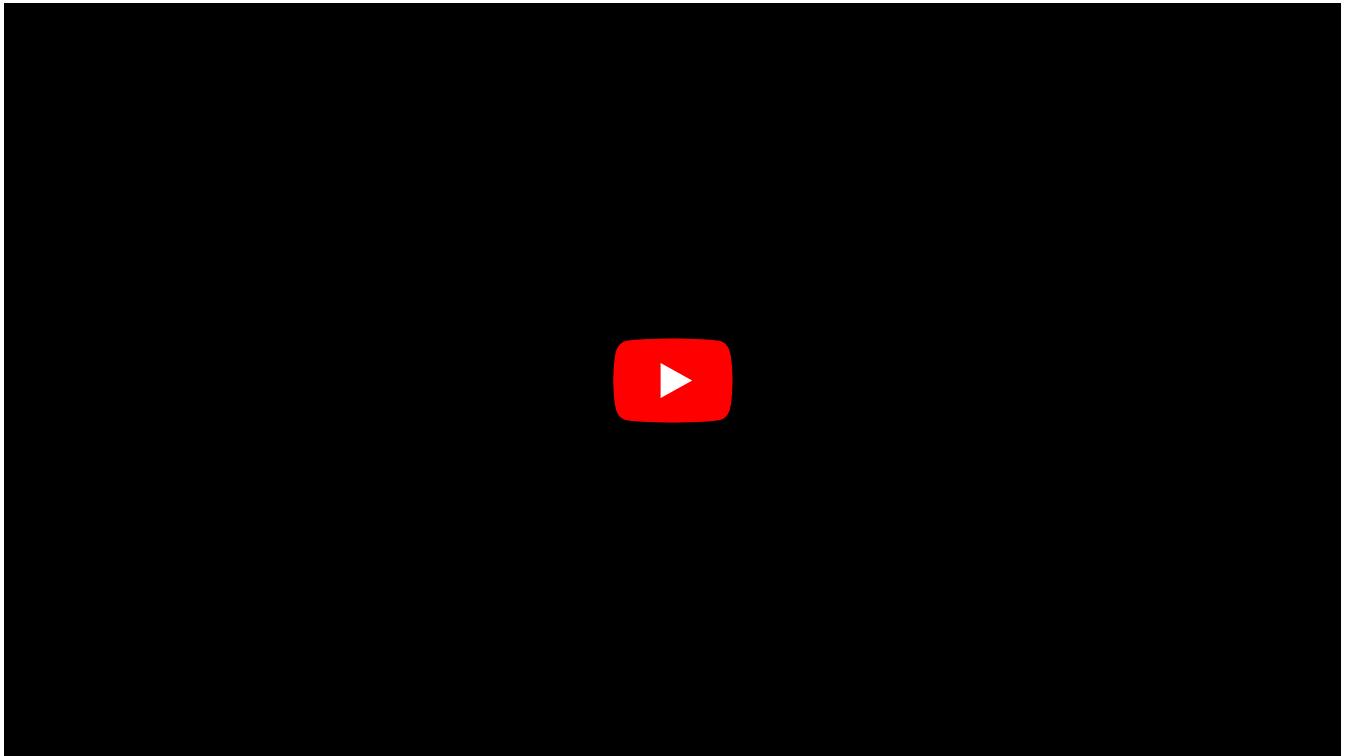


## Properties

Name	Description
Stack Size	The number of this type of item that can fit in a single inventory slot.
Item Quality	The quality of the item. See <a href="#">Item Quality</a> .
Random Item Quality	If true, this item will be assigned a random item quality when purchased, crafted, or looted.
Dynamic Level	If true, This item will scale in level so that it is the same level as the character.
Freeze Drop Level	If true, and the item also has dynamic level set to true, the item level will be frozen at whatever level was when purchased, crafted, or looted.
Level Cap	For dynamic level items, the maximum level it can scale up to. 0 means no limit.
Item Level	If the item is not dynamic level, then it will be fixed at this level.
Use Level	The level that the character has to be to use this item. This field does not apply to items that have no direct use, such as crafting ingredients.
Currency Name	The currency that is required to purchase the item See <a href="#">Currency</a> .
Dynamic Currency Amount	If true, the purchase and sale price will scale with level.
Price Per Level	If dynamic currency amount is true, this is the amount per level this item will cost.
Base Price	The base item price. If dynamic currency amount true, this price is added to the dynamic price.
Unique Item	If true, the character cannot have more than one of these items in their inventory or bank.
Character Class Requirement List	If this list is not empty, the character must be one of the listed character classes to use or equip this item, and for the item to be dropped if the loot table is configured to match this restriction. See <a href="#">Character Class</a> .

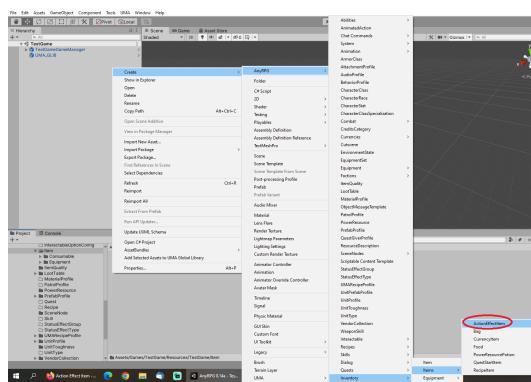
# Action Effect Item

Action effect items perform an animated action and cast an ability effect when used. They are commonly used as flasks and scrolls.



## Creation

To create an action effect item, find (or create) the `GameName/Resources/GameName/Item` folder in the project tab and right click. Choose *Create > AnyRPG > Inventory > Items > Action Effect Item*.



## Properties

Action effect Items are a type of item. See [Items](#) for their base properties.

Name	Description
Tool Tip	This text will appear in the tooltip "Use:" section and describes what the item does when used.
Cool Down	The time in seconds that must pass after using this item before another item of the same type can be used again.
Action Type	<p><b>None</b> This item will not cause the character to perform any action when used.</p> <p><b>Inline</b> The action properties will be defined directly.</p> <p><b>Named</b> The action properties defined by the named <a href="#">Animated Action</a> will be performed by the character.</p>
Action Name	The name of an <a href="#">Animated Action</a> the character will perform when the item is used.
Action Properties	<a href="#">Animated Action</a> properties defined directly on this item that the character will perform when the item is used.
Use Inline Effect	If true, the effect properties defined in the Inline Effect field will be cast.
Effect Name	If <i>Inline Effect</i> is false the Ability Effect with this name will be cast.
Inline Effect	Ability Effect properties to cast when the item is used if <i>Use Inline Effect</i> is true.

## Next Steps

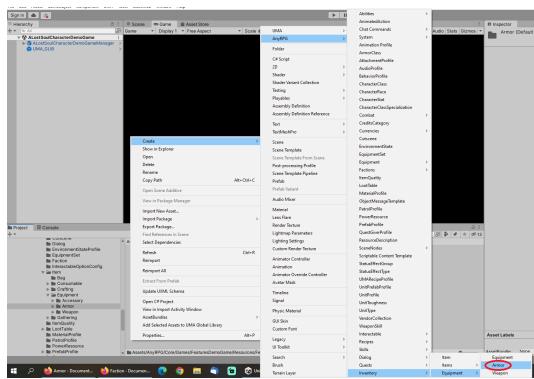
- Add an action effect item to a [Vendor Collection](#) so it can be purchased from a [Vendor](#).
- Add an action effect item to a [Loot Table](#) so that it can drop upon defeat of an enemy.
- Add an action effect item as an output to a [Recipe](#) so that it can be crafted.

# Armor

Armor is wearable equipment that can have an armor class associated with it, optionally restricting who can wear it based on their known armor skills.

## Creation

To create a faction, find (or create) the `GameName/Resources/GameName/Item/Equipment` folder (or any subfolder of that folder) in the project tab and right click. Choose `Create > AnyRPG > Inventory > Equipment > Armor`.



## Properties

In addition to the properties shared by all [Equipment](#), armor has the following unique properties.

Name	Description
Require Armor Class	If true, this armor can only be equipped if the character knows the <a href="#">Armor Class</a> in the <i>Armor Class Name</i> field.
Armor Class Name	The name of the <a href="#">Armor Class</a> that this armor gets its armor properties from.

## Next Steps

- Configure a [Init Profile's Equipment Name List](#) to provide this armor to newly created characters

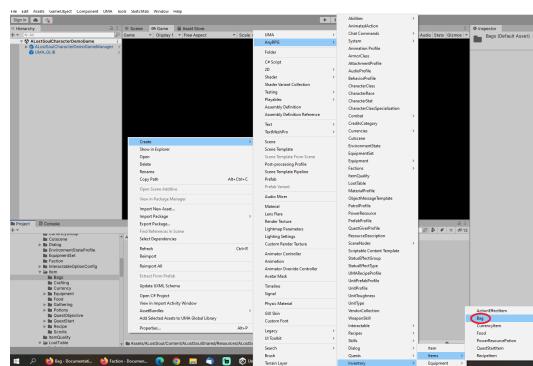
- Configure a [Character's Equipment Name List](#) to provide this armor to newly created characters.
- Configure a [Character Class](#)'s *Equipment Names* list to provide this armor to newly created characters of that class.
- Configure a [Character Race](#)'s *Equipment Names* list to provide this armor to newly created characters of that race.
- Configure a [Class Specialization](#)'s *Equipment Names* list to provide this armor to a newly created characters of that specialization.
- Add armor to a [Loot Table](#) so that it can drop when an enemy is defeated.
- Add armor to a [Vendor Collection](#) and make it available on a vendor.
- Add armor to an [Equipment Set](#) to give it unique set bonuses when one or more pieces of a set are equipped.
- Add armor as an output to a [Recipe](#) so that it can be crafted.

# Bag

A bag is a type of item that can expand a player's inventory space or bank space when equipped.

## Creation

To create a bag, find (or create) the *GameName/Resources/GameName/Item* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Inventory > Items > Bag*.



## Properties

In addition to the properties shared by all [Items](#), bags have the following unique properties.

Name	Description
Slots	The number of spaces the inventory (or bank) will be expanded by when this bag is equipped.

## Next Steps

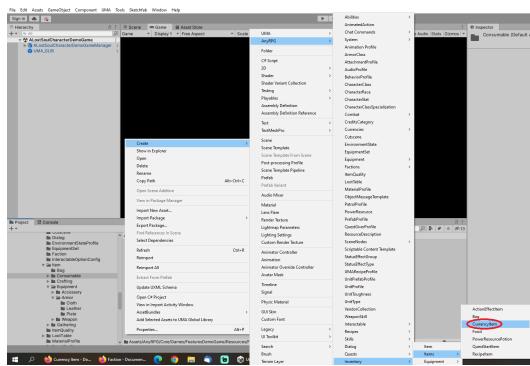
- Configure the *Default Backpack Item* field in the System Configuration Manager of a game to make this bag the default backpack for a new player.
- Add a bag to a [Vendor Collection](#) so it can be purchased from a [Vendor](#).
- Add a bag to a [Loot Table](#) so that it can drop upon defeat of an enemy.
- Add a bag as an output of a [Recipe](#) so it can be crafted.

# Currency Item

A currency item is an item that provides a specific amount of a specific currency to a player when used.

## Creation

To create a currency item, find (or create) the `GameName/Resources/GameName/Item` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Inventory > Items > Currency Item`.



## Properties

In addition to the properties shared by all [Items](#), currency items have the following unique properties.

Name	Description
Gain Currency Name	The name of the <a href="#">Currency</a> that will be gained upon use.
Gain Currency Amount	The amount of the <a href="#">Currency</a> that will be gained upon use.

## Next Steps

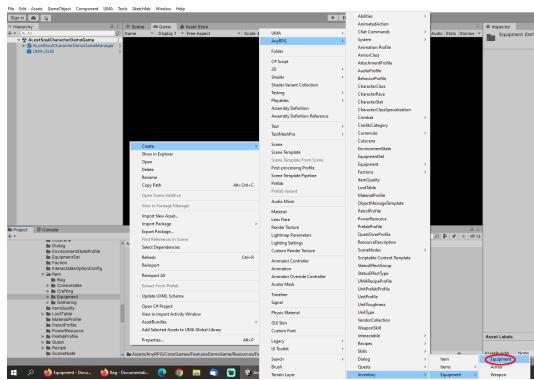
- Add a currency item to a [Vendor Collection](#) so it can be purchased from a [Vendor](#).
- Add a currency item to a [Loot Table](#) so that it can drop upon defeat of an enemy.

# Equipment

Equipment is any type of item that can be equipped on a character.

## Creation

To create equipment, find (or create) the *GameName/Resources/GameName/Item/Equipment* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Inventory > Equipment > Equipment*.



## Properties

In addition to the properties shared by all [Items](#), equipment has the following unique properties.

Name	Description
Equipment Slot Type	The <a href="#">Equipment Slot Type</a> of this equipment.
Equipment Set Name	The name of any <a href="#">Equipment Set</a> that this equipment belongs to.
Uma Recipe Profile Name	The name of a shared <a href="#">UMA Recipe Profile</a> for this equipment, which defines which UMA recipe(s) will be shown on a character when this equipment is equipped.
UMA Recipe Profile Properties	Properties of an <a href="#">UMA Recipe Profile</a> that only apply to this equipment, which define which UMA recipe(s) will be shown on a character when this equipment is equipped.
Holdable Object List	<p>A list of attachment nodes, which define any physical GameObjects that will be attached to the character when this equipment is equipped.</p> <p><b>Equipment Slot Profile Name</b>  The name of an <a href="#">Equipment Slot Profile</a></p> <p><b>Holdable Object Name</b>  The name of a <a href="#">Prefab Profile</a> which contains a link to a GameObject to show when the equipment is equipped in the <a href="#">Equipment Slot Profile</a> of the above property.</p> <p><b>Use Universal Attachment</b>  If true, ignore any attachment points in the <a href="#">Prefab Profile</a> and use the named attachments below.</p> <p><b>Primary Attachment Name</b>  The <i>Node Name</i> of an <a href="#">Attachment Point Node</a> in a <a href="#">Attachment Profile</a> to use when this equipment is equipped, but not held.</p> <p><b>Unsheathed Attachment Name</b>  The <i>Node Name</i> of an <a href="#">Attachment Point Node</a> in a <a href="#">Attachment Profile</a> to use when this equipment is equipped, and held.</p>
Use Armor Modifier	If true, this item will provide the wearer with armor.
Use Manual Armor	If true, the armor value must be input manually and will not be calculated based on armor class and item level.
Manual Value Is Scale	If true, the manual value is per level, instead of a total.
Armor Modifier	The amount of armor to provide if the manual settings were used.

Primary Stats	<p>A list of <a href="#">Character Stats</a> and values that this armor will provide when equipped.</p> <p><b>Stat Name</b></p> <p>The name of a <a href="#">Character Stat</a> to provide when equipped.</p> <p><b>Use Manual Value</b></p> <p>If true, the stat value entered in the <i>Manual Modifier Value</i> field will be used instead of an automatically scaled value, based on item level and <a href="#">Item Quality</a>.</p> <p><b>Manual Modifier Value</b></p> <p>If <i>Use Manual Value</i> is true, the value in this field will be used.</p>
Random Secondary Stats	<p>If true, the Secondary Stats will be chosen randomly up to a limit defined by the <a href="#">Item Quality</a> in the <i>Item Quality</i> field.</p>
Secondary Stats	<p>A list of secondary stats and amounts of those stats that will be provided when the equipment is equipped.</p> <p><b>Secondary Stat</b></p> <p>The secondary stat to provide when the equipment is equipped.</p> <p><b>Base Amount</b></p> <p>An amount of the <i>Secondary Stat</i> to provide that is constant and does not scale with level.</p> <p><b>Amount Per Level</b></p> <p>An amount of the <i>Secondary Stat</i> to provide per level.</p> <p><b>Base Multiplier</b></p> <p>After amount values are added together, they will be multiplied by this number.</p>
On Equip Status Effect	<p>A <a href="#">Status Effect</a> that will be cast on the character when the item is equipped.</p>
Learned Ability Names	<p>A list of names of <a href="#">Abilities</a> that will be learned when the equipment is equipped, and unlearned when the equipment is unequipped.</p>

## Next Steps

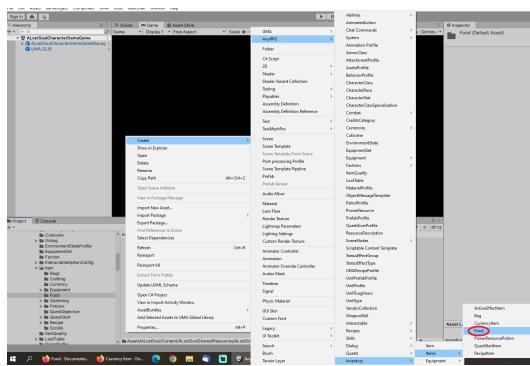
- Configure a [Unit Profile](#)'s *Equipment Name List* to provide this equipment to newly created characters.
- Configure a [Character Class](#)'s *Equipment Names* list to provide this equipment to newly created characters of that class.
- Configure a [Character Race](#)'s *Equipment Names* list to provide this equipment to newly created characters of that race.
- Configure a [Class Specialization](#)'s *Equipment Names* list to provide this equipment to a newly created characters of that specialization.
- Add equipment to a [Loot Table](#) so that it can drop when an enemy is defeated.
- Add equipment to a [Vendor Collection](#) and make it available on a vendor.
- Add equipment to an [Equipment Set](#) to give it unique set bonuses when one or more pieces of a set are equipped.
- Add equipment as an output to a [Recipe](#) so that it can be crafted.

# Food

Food is a type of resource that is consumed on use and can restore power resources and cast status effects to buff the user.

## Creation

To create food, find (or create) the `GameName/Resources/GameName/Item` folder (or any subfolder) in the project tab and right click. Choose `Create > AnyRPG > Inventory > Items > Food`.



## Properties

In addition to the properties shared by all [Items](#), food has the following unique properties.

Name	Description
Consumption Verb	The verb to use in the casting tip.
Holdable Object List	<p>A list of <a href="#">PrefabProfiles</a> that contain links to GameObjects that will be held while the food is being consumed.</p> <p><b>Holdable Object Name</b> The name of a <a href="#">PrefabProfile</a> that contains a link to a GameObject.</p> <p><b>Use Universal Attachment</b> If true, attachment points from the <a href="#">PrefabProfile</a> will be ignored, and the universal attachment in the <i>Attachment Name</i> field will be used.</p> <p><b>Attachment Name</b> The <i>Node Name</i> field from one of the <i>Attachment Point Nodes</i> in an <a href="#">Attachment Profile</a>.</p>
Animation Clip	An animation clip to play while the food is being consumed.
Animation Profile Name	The name of an <a href="#">Animation Profile</a> that contains an animation clip to play while the food is being consumed.
Casting Audio Clip	An audio clip to play while the food is being consumed.
Casting Audio Profile Name	The name of an <a href="#">Audio Profile</a> that contains an audio clip to play while the food is being consumed.
Tick Rate	The number of seconds that should elapse between each tick, where <a href="#">Power Resources</a> from the <i>Resource Amounts</i> list are restored while eating.
Resource Amounts	<p>A list of <a href="#">Power Resources</a> and the amounts to restore while eating.</p> <p><b>Resource Name</b> The name of a <a href="#">Power Resource</a>.</p> <p><b>Min Amount</b> If the amount is lower than this value, it will be raised to this value.</p> <p><b>Base Amount</b> Amount not scaled by level.</p> <p><b>Max Amount</b> If the amount is higher than this value, it will be lowered to this value. 0 is unlimited.</p>

Status Effect

A [Status Effect](#) to cast on the user when the food is completely consumed.

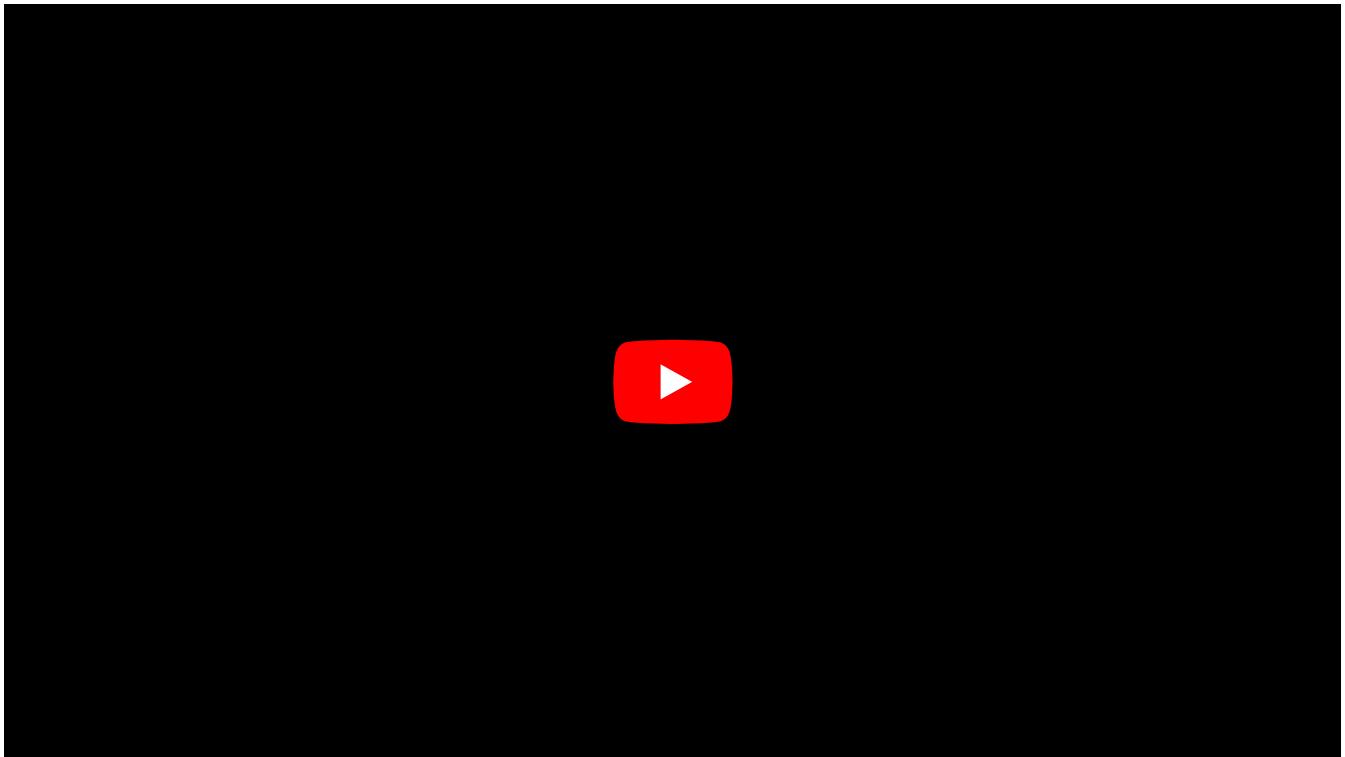
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## Next Steps

- Add food to a [Vendor Collection](#) so it can be purchased from a [Vendor](#).
- Add food to a [Loot Table](#) so that it can drop upon defeat of an enemy.
- Add food as an output to a [Recipe](#) so that it can be crafted.

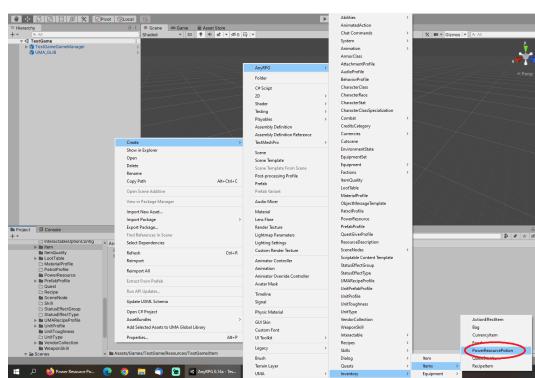
# Power Resource Potion

Power resource potions refill power resources and perform animated actions.



## Creation

To create a power resource potion, find (or create) the `GameName/Resources/GameName/Item` folder in the project tab and right click. Choose *Create > AnyRPG > Inventory > Items > Power Resource Potion*.



## Properties

Power resource potions are a type of item. See [Items](#) for their base properties.

Name	Description
Tool Tip	This text will appear in the tooltip "Use:" section and describes what the item does when used.
Cool Down	The time in seconds that must pass after using this item before another item of the same type can be used again.
Action Type	<p><b>None</b>  This item will not cause the character to perform any action when used.</p> <p><b>Inline</b>  The action properties will be defined directly.</p> <p><b>Named</b>  The action properties defined by the named <a href="#">Animated Action</a> will be performed by the character.</p>
Action Name	The name of an <a href="#">Animated Action</a> the character will perform when the item is used.
Action Properties	<a href="#">Animated Action</a> properties defined directly on this item that the character will perform when the item is used.
Resource Amounts	A list of <a href="#">Power Resources</a> and the amounts of each that will be refilled when this item is used.

## Next Steps

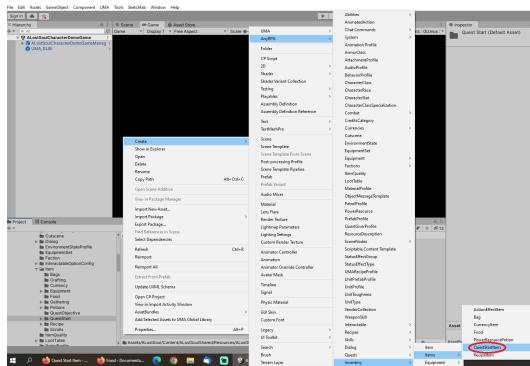
- Add a power resource potion to a [Vendor Collection](#) so it can be purchased from a [Vendor](#).
- Add a power resource potion to a [Loot Table](#) so that it can drop upon defeat of an enemy.
- Add a power resource potion as an output to a [Recipe](#) so that it can be crafted.

# Quest Start Item

A quest start item is an item that can start a quest when used.

## Creation

To create a quest start item, find (or create) the `GameName/Resources/GameName/Item` folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Inventory > Items > QuestStartItem*.



## Properties

In addition to the properties shared by all [Items](#), quest start items have the following unique properties.

Name	Description
Quests	<p>A list of <a href="#">Quests</a> that the item can start.</p> <p><b>Start Quest</b></p> <p>This should always be true to allow the item to start the <a href="#">Quest</a> in the <a href="#">Quest Name</a> field.</p> <p><b>End Quest</b></p> <p>If true, the <a href="#">Quest</a> can be auto-completed upon starting.</p> <p><b>Quest Name</b></p> <p>The name of the <a href="#">Quest</a> to start when the item is used.</p>

## Next Steps

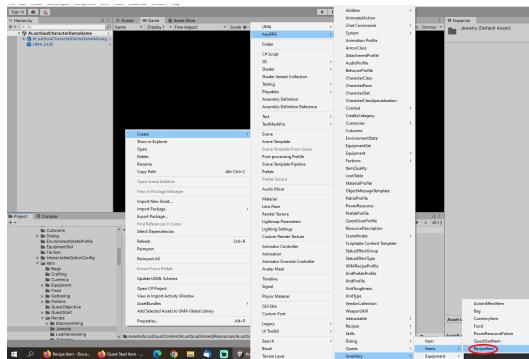
- Add a quest start item to a [Vendor Collection](#) so it can be purchased from a [Vendor](#).
- Add a quest start item to a [Loot Table](#) so that it can drop upon defeat of an enemy.

# Recipe Item

A recipe item is an item that reaches the player a recipe when used.

## Creation

To create a recipe item, find (or create) the `GameName/Resources/GameName/Item` folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Inventory > Items > RecipeItem*.



## Properties

In addition to the properties shared by all [Items](#), recipe items have the following unique properties.

Name	Description
Recipe Name	The name of a <a href="#">Recipe</a> to learn when the item is used.

## Next Steps

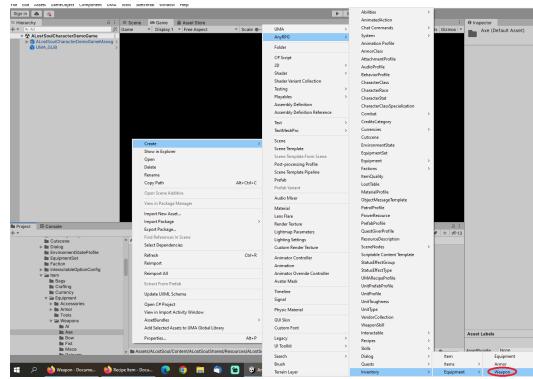
- Add a recipe item to a [Vendor Collection](#) so it can be purchased from a [Vendor](#).
- Add a recipe item to a [Loot Table](#) so that it can drop upon defeat of an enemy.

# Weapon

A weapon is a type of equipment that does damage to an enemy when used.

## Creation

To create a weapon, find (or create) the *GameName/Resources/GameName/Item/Equipment* folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > Inventory > Equipment > Weapon*.



## Properties

In addition to the properties shared by all [Equipment](#), weapons have the following unique properties.

Name	Description
Require Weapon Skill	If true, the character must have a skill that matches the name in the <i>Weapon Type</i> field to use or equip this weapon.
Weapon Type	The name of a <a href="#">Weapon Skill</a> . This filled in, the weapon can get some default properties from the skill. If <i>Require Weapon Skill</i> is true, the character will need to know this skill to equip and use the weapon.
Default Hit Effects	A list of <a href="#">Ability Effects</a> that will be cast on the target when the weapon does damage from a standard (auto) attack.
On Hit Effects	A list of <a href="#">Ability Effects</a> that will be cast on the target when the weapon does damage from any attack, including a standard (auto) attack.
Animation Profile Name	An <a href="#">Animation Profile</a> that can overwrite default animations to match the weapon.
Default Hit Audio Profile	An <a href="#">Audio Profile</a> that contains a link to an audio clip that can be played whenever any physical <a href="#">Ability</a> is cast while this weapon is equipped.
Use Weapon Type Objects	If true, any objects in the <i>Ability Animation Object List</i> and <i>Ability Object List</i> from the <i>Weapon Type</i> will be shown (held) when using this weapon to perform an attack.
Ability Animation Object List	<p>A list of physical prefabs to attach to the character unit when this weapon is being animated during an attack. This could be arrows, special spell or glow effects, etc.</p> <p><b>Holdable Object Name</b>  The name of a <a href="#">PrefabProfile</a> that contains a link to a <a href="#">GameObject</a>.</p> <p><b>Use Universal Attachment</b>  If true, attachment points from the <a href="#">PrefabProfile</a> will be ignored, and the universal attachment in the <i>Attachment Name</i> field will be used.</p> <p><b>Attachment Name</b>  The <i>Node Name</i> field from one of the <i>Attachment Point Nodes</i> in an <a href="#">Attachment Profile</a>.</p>
	A list of physical prefabs to use when this weapon is being used after the animation phase of an attack. This could be arrows, special spell or glow effects, etc.

Ability Object List	<p><b>Holdable Object Name</b></p> <p>The name of a <a href="#">PrefabProfile</a> that contains a link to a <a href="#">GameObject</a>.</p> <p><b>Use Universal Attachment</b></p> <p>If true, attachment points from the <a href="#">PrefabProfile</a> will be ignored, and the universal attachment in the <i>Attachment Name</i> field will be used.</p> <p><b>Attachment Name</b></p> <p>The <i>Node Name</i> field from one of the <i>Attachment Point Nodes</i> in an <a href="#">Attachment Profile</a>.</p>
Add Scaled Damage Per Second	If true, automatic damage per second is added to any attack, based on the item level, item quality, and Weapon DPS Per Second setting in the Game Manager.
Base Damage Per Second	Base weapon damage per second, unscaled.

## Next Steps

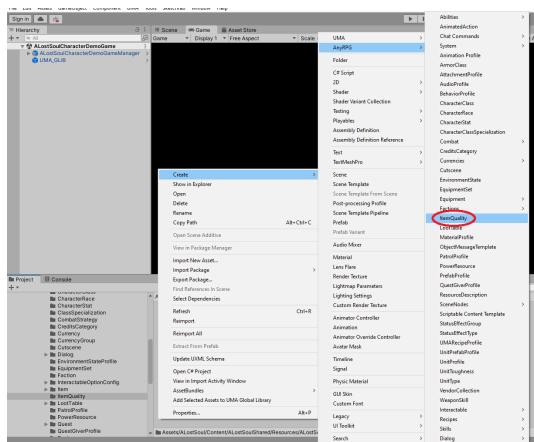
- Configure a [Unit Profile](#)'s *Equipment Name List* to provide this weapon to newly created characters.
- Configure a [Character Class](#)' *Equipment Names* list to provide this weapon to newly created characters of that class.
- Configure a [Character Race](#)'s *Equipment Names* list to provide this weapon to newly created characters of that race.
- Configure a [Class Specialization](#)'s *Equipment Names* list to provide this weapon to a newly created characters of that specialization.
- Add a weapon to a [Loot Table](#) so that it can drop when an enemy is defeated.
- Add a weapon to a [Vendor Collection](#) and make it available on a vendor.
- Add a weapon to an [Equipment Set](#) to give it unique set bonuses when one or more pieces of a set are equipped.
- Add a weapon as an output to a [Recipe](#) so that it can be crafted.

# Item Quality

An item quality can be assigned to an item, allowing that item to share similar settings with other items of the same quality like stat multipliers, icon background colors, and more.

## Creation

To create an item quality, find (or create) the *GameName/Resources/GameName/ItemQuality* folder in the project tab and right click. Choose *Create > AnyRPG > ItemQuality*.



## Properties

Name	Description
Stat Multiplier	When an <a href="#">Item</a> does not have manual stats enable multiply the base automatic stats by this amount.
Allow Random Items	If true, random <a href="#">Items</a> of this quality can be created
Random Weight	When a random item quality is chosen, all weights are added up before a number is chosen. This controls the chance an <a href="#">Item</a> of this quality will be created. A larger number in relation to other numbers of other item qualities will give a higher chance.
Random Quality Prefix	If not empty, and an <a href="#">Item</a> of this quality is created randomly, this prefix will be added to the <a href="#">Item</a> name.
Random Stat Count	If an <a href="#">Item</a> of this quality is created with random stats, this is the number of random stats that will be chosen.
Dynamic Item Level	If true, any <a href="#">Item</a> of this quality will automatically scale their level, regardless of whether they individually have level scaling enabled.
Buy Price Multiplier	Multiply the base purchase price of any <a href="#">Item</a> of this quality by this amount.
Sell Price Multiplier	Multiply the base vendor sell price of any <a href="#">Item</a> with this quality by this amount.
Require Sell Confirmation	If true, a popup window will appear asking the player to confirm any time they try to sell an <a href="#">Item</a> with this quality.
Quality Color	The color that will be used for text and image backgrounds whenever an <a href="#">Item</a> of this quality is displayed in the UI.
Tint Background Image	If true, the background image if an <a href="#">Item</a> displayed in the UI will have its color set to this color, instead of black.

## Next Steps

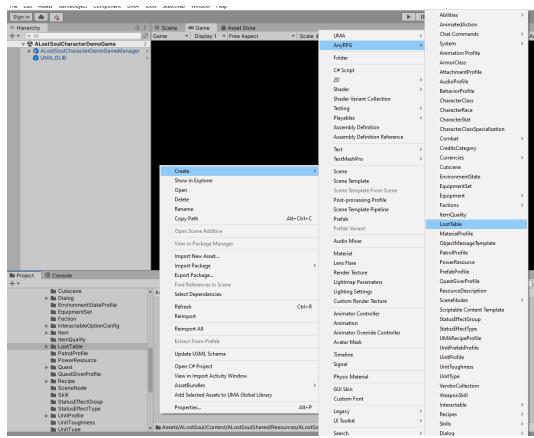
- Assign this item quality to an [Item](#).

# Loot Table

A loot table is a list of items that can drop from any lootable source such as characters, item pickups, and gathering nodes.

## Creation

To create a loot table, find (or create) the `GameName/Resources/GameName/LootTable` folder in the project tab and right click. Choose *Create > AnyRPG > LootTable*.



## Properties

Name	Description
Ignore Global Drop Limit	Any lootable source can have a global limit on the number of items dropped, no matter how many loot tables it has. If this option is true, that limit will be ignored, and the drop limit from this loot table will be used instead when rolling loot from this table.
Drop Limit	If <i>Ignore Global Drop Limit</i> is true, this number will be the limit of the number of <a href="#">Items</a> dropped from this table.
Loot Groups	A list of <a href="#">Loot Groups</a> that shares drop chance and limit settings.

## Loot Groups

Name	Description
Guaranteed Drop	If true, the number of <a href="#">Items</a> defined in the <i>Drop List</i> field for this group will be guaranteed to drop, using their <i>Drop Chance</i> as weights.
Group Chance	The chance this group will attempt to drop <a href="#">Items</a> .
Drop Limit	The amount of <a href="#">Items</a> that can drop from this list. 0 is unlimited.
Unique Limit	The limit to the number of times the same <a href="#">Item</a> can drop. 0 is unlimited.
Ignore Global Drop Limit	If true, the <a href="#">Items</a> on this list will ignore any parent drop limits.
Loot	A list of <a href="#">Items</a> that can drop.

## Loot

Name	Description
Item Name	The name of an <a href="#">Item</a> that can drop.
Drop Chance	The percentage chance that this <a href="#">Item</a> can drop.
Min Drops	The minimum number of this <a href="#">Item</a> that will drop.
Max Drops	The maximum number of this <a href="#">Item</a> that will drop.
Match Item Restrictions	If true, <a href="#">Character Class</a> restrictions on the item must match for it to drop. This is useful to prevent items from dropping that do not match the player's current class.
Prerequisite Conditions	A list of <a href="#">Prerequisite Conditions</a> that must be met for this item to drop.

## Next Steps

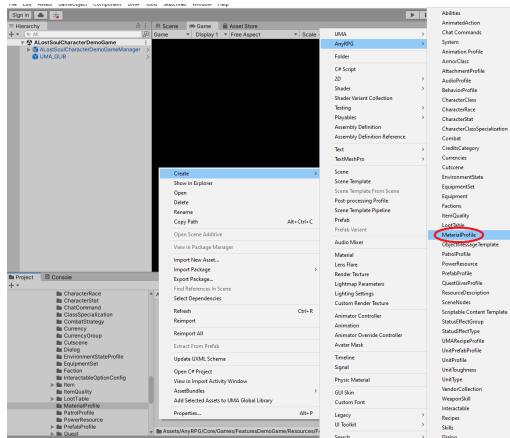
- Add a loot table to a [Unit Profile](#).
- Add a loot table to Gathering Node.
- Add a loot table to an Item Pickup.
- Add a loot table to a [Scene Node](#).

# Material Profile

A material profile stores a link to a Unity material on disk.

## Creation

To create a material profile, find (or create) the `GameName/Resources/GameName/MaterialProfile` folder in the project tab and right click. Choose *Create > AnyRPG > MaterialProfile*.



## Properties

Name	Description
Effect Material	A link to a Unity material on disk.

## Next Steps

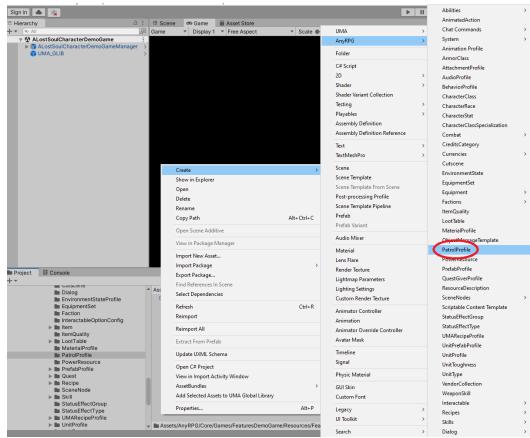
- Use a material profile to configure a skybox in an [Environment State Profile](#).
- Use a material profile in an [Ability Effect](#) to change the target material temporarily.

# Patrol Profile

A patrol profile defines where and how a character will patrol, including locations, timing, and speed.

## Creation

To create a material profile, find (or create) the *GameName/Resources/GameName/Patrol/Profile* folder in the project tab and right click. Choose *Create > AnyRPG > Patrol/Profile*.



## Properties

A patrol profile contains a single property, *Patrol Properties*, which consists of the following properties.

Name	Description
Auto Start	If true, a character unit that uses this patrol will start the patrol automatically upon spawning or entering the patrol state.
Destination List	A list of Vector3 coordinates that the unit will patrol to.
Use Tags	If true, the unit will patrol to the destinations in the Destination Tag List instead of the destination list. This is useful if the level geometry will change because it doesn't require re-creating the destination list.
Destination Tag List	A list of tags. The current scene will be searched for these tags, and the unit will patrol to the location of the tags.
Random Destinations	If true, destinations will be chosen randomly from the active destination list, rather than visited sequentially in order.
Loop Destinations	If true, the patrol will continue indefinitely, re-starting at the first destination when the last destination is reached.
Despawn On Completion	If true, the unit will despawn when the last destination is reached.
Max Destinations	If set to any number other than 0 (infinite), the patrol will end after that number of destinations have been reached.
Max Distance From Spawn Point	If the destination list is empty, and <i>Random Destinations</i> is set to true, a random location that is less than or equal to this number of meters from the spawn point will be chosen.
Destination Pause Time	The amount of time, in seconds, that a unit will pause at each destination before continuing to the next destination.
Movement Speed	The speed, in meters per second, that the unit will travel at when patrolling.
Save Position At Destination	If true, the unit will attempt to save its position when it reaches a destination. The next time a saved game is loaded, the unit will start at the saved position, instead of its usual spawn point.

## Next Steps

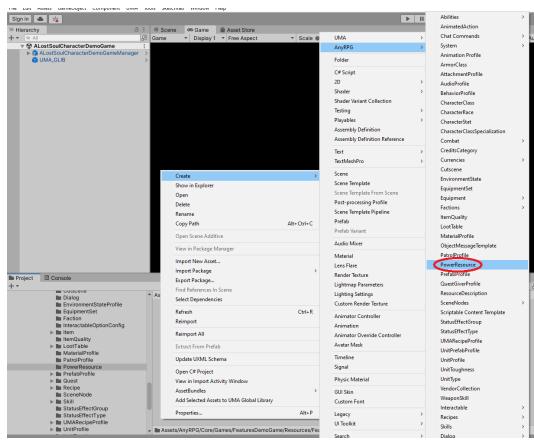
- Assign a Patrol Profile to a [Unit Profile](#).

# Power Resource

A power resource is any resource a character can use to cast abilities. This includes health, since it is possible to configure an ability to use up health upon casting.

## Creation

To create a power resource, find (or create) the `GameName/Resources/GameName/PowerResource` folder in the project tab and right click. Choose *Create > AnyRPG > PowerResource*.



## Properties

Name	Description
Display Color	A color that will be used when displaying this resource in unit frames.
Base Amount	A base amount that all characters with this resource will receive.
Amount Per Level	Every character with this resource will have their maximum amount increased by this much for every level they gain.
Tick Rate	The number of seconds that should elapse between each regeneration of this resource.
Amount Per Tick	When not in combat and regeneration occurs, this amount will be restored (or used if the value is negative).
Percent Per Tick	When not in combat and regeneration occurs, this percentage of the maximum possible current value will be restored.
Combat Amount Per Tick	When in combat and regeneration occurs, this amount will be restored (or used if the value is negative).
Combat Percent Per Tick	When in combat and regeneration occurs, this percentage of the maximum possible current value will be restored.
Maximum Amount	If this amount is greater than zero, the resource has a fixed maximum amount that will not change based on character level.
Is Health	If true, this is considered to be a health resource. When all of a character's health resources reach zero, they will die. Multiple health resources are allowed.
Fill On Reset	If true, when the character evades, levels up, or spawns, this resource will be filled to its maximum amount.

## Next Steps

- Assign a power resource to a [Init Profile](#)

- Assign a power resource to a [Unit Type](#).

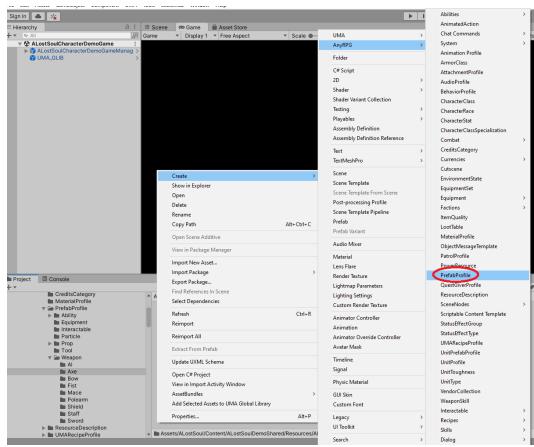
- Assign a power resource to a [Character Class](#).
- Assign a power resource to a [Class Specialization](#).
- Assign a power resource to a [Unit Type](#).
- Assign a power resource to a [Character Race](#).
- Assign a power resource to the System Configuration Manager, making it globally available to all characters.

# Prefab Profile

A prefab profile contains a link to a Unity Prefab and information about how to position and scale it relative to its parent.

## Creation

To create a prefab profile, find (or create) the `GameName/Resources/GameName/PrefabProfile` folder in the project tab and right click. Choose `Create > AnyRPG > PrefabProfile`.



## Properties

Name	Description
Prefab	A link to a Unity Prefab to spawn.
Position	The Vector3 position of the <i>Prefab</i> relative to its parent, when held (unsheathed).
Rotation Is Global	If true, the value in the <i>Rotation</i> property will be considered global, rather than local (relative to the parent).
Rotation	The Vector3 rotation of the <i>Prefab</i> when held (unsheathed).
Scale	The Vector3 scale of the <i>Prefab</i> relative to the parent when held (unsheathed).
Target Bone	The GameObject in the hierarchy to attach the <i>Prefab</i> to when held (unsheathed).
Unsheath Audio Profile name	The name of an <a href="#">Audio Profile</a> that contains a link to an audio clip to play when the <i>Prefab</i> is moved to the unsheathed position.
Sheathed Position	The Vector3 position of the <i>Prefab</i> relative to its parent, when sheathed.
Sheathed Rotation	The Vector3 rotation of the <i>Prefab</i> when sheathed.
Sheathed Scale	The Vector3 scale of the <i>Prefab</i> relative to the parent when sheathed.
Sheathed Target Bone	The GameObject in the hierarchy to attach the <i>Prefab</i> to when sheathed.
Sheath Audio Profile Name	The name of an <a href="#">Audio Profile</a> that contains a link to an audio clip to play when the <i>Prefab</i> is moved to the sheathed position.
Use Item Pickup	If true, the following values will be used for item pickups instead of the default (sheathed) values.
Pickup Position	The Vector3 position of the <i>Prefab</i> relative to its parent, when used as an item pickup.
Pickup Rotation	The Vector3 rotation of the <i>Prefab</i> when used as an item pickup.
Pickup Scale	The Vector3 scale of the <i>Prefab</i> relative to the parent when used as an item pickup.

## Next Steps

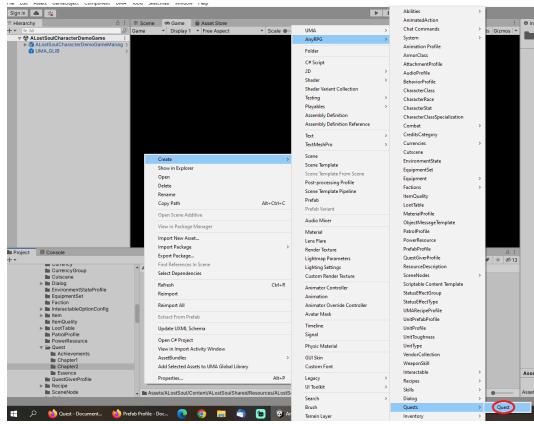
- Use prefab profile for an [Equipment](#) model.
- Use a prefab profile for a [Weapon](#) model.
- Use a prefab profile for an [Armor](#) model.
- Use a prefab profile for a character model of a [Unit Profile](#).
- Use a prefab profile for a [Gathering Node](#).
- Use a prefab profile for a [Mount](#).
- Use a prefab profile for a [Projectile](#).
- Use a prefab profile for a [Status Effect](#).
- Use a prefab profile for a casting effect of an [Ability](#).

# Quest

A quest is a type of mission that a player can undertake in order to complete objectives to gain experience, currency, or other types of rewards.

## Creation

To create a quest, find (or create) the *GameName/Resources/GameName/Quest* folder in the project tab and right click. Choose *Create > AnyRPG > Quests > Quest*.



## Properties

Name	Description
Is Achievement	If true, this quest will be automatically tracked invisibly without appearing in the quest log, and appear in the achievements UI window when complete.
Repeatable Quest	If true, the quest can be accepted and completed more than once.
Has Opening Dialog	If true, a Dialog with the same name as the quest will be used (if found) and will be required to be completed before the quest can be accepted.
Experience Level	The level that is considered appropriate for the quest. This value is used to calculate experience reward reduction if the player is a higher level than this value.
Dynamic Level	If true, the quest will always be considered to be the same level as the player.
Extra Levels	If dynamic level is true, this value can be used to make the quest a higher level than the player.
Base Experience Reward	The base experience for the quest, not scaled by level, and in addition to any automatic quest xp configured at the game level (in the System Configuration Manager).
Experience Reward Per Level	The experience for the quest, scaled by level, and in addition to any automatic quest xp configured at the game level (in the System Configuration Manager).
Automatic Currency Reward	If true, the quest will reward <a href="#">Currency</a> based on the system quest currency reward settings (in the System Configuration Manager).
Reward Currency Name	The name of a <a href="#">Currency</a> that will be rewarded to the player when the quest is complete.
Base Currency Reward	The base <a href="#">Currency</a> reward for the quest, not scaled by level, and in addition to any automatic currency reward configured at the game level (in the System Configuration Manager).
Currency Reward Per Level	The <a href="#">Currency</a> rewarded for completing the quest, scaled by level, and in addition to any automatic <a href="#">Currency</a> reward configured at the game level (in the System Configuration Manager).
	The maximum number of <a href="#">Item</a> rewards that can be

Max Item Rewards	chosen, if there is more than one possible <b>Item</b> reward.
Item Reward Names	The names of <b>Items</b> that will be given as rewards for completing the quest.
Max Faction Rewards	The maximum number of <b>Faction</b> rewards that can be chosen, if there is more than one possible <b>Faction</b> reward.
Faction Rewards	A list of <b>Faction</b> names and values that will be given as rewards for completing the quest. <b>Faction Name</b> The name of the <b>Faction</b> whom the player will receive increased reputation with. <b>Reputation Amount</b> The amount of reputation to receive.
Max Ability Rewards	The maximum number of <b>Ability</b> rewards that can be chosen, if there is more than one possible <b>Ability</b> reward.
Ability Reward Names	The names of <b>Abilities</b> that will be given as rewards for completing the quest.
Max Skill Rewards	The maximum number of <b>Skill</b> rewards that can be chosen, if there is more than one possible <b>Skill</b> reward.
Skill Reward Names	The names of <b>Skills</b> that will be given as rewards for completing the quest.
Steps	A list of steps, with <b>Objectives</b> for each step, that must be completed in order to finish the quest.
Prerequisite Conditions	A list of <b>Prerequisite Conditions</b> that must be met to start the quest.
Turn In Items	If true, any items that are part of an Item Objective will be removed from the player inventory when the quest is turned in.
Allow Raw Complete	If true, the player can complete the quest directly, without having the quest in the quest log.

## Quest Objectives

There are many different types of quest objectives which will be covered below. They all share the following properties.

Name	Description
Amount	The amount of the specific objective that must be completed for the objective to be complete.
Override Display Name	By default, the name of the specific objective will be shown in the quest log. If this field is not empty, the text shown in this field will be displayed instead.

### Ability Objective

Name	Description
Ability Name	The name of an <a href="#">Ability</a> that must be learned.
Require Use	If true, the <a href="#">Ability</a> must be used, instead of learned

### Collect Objective

Name	Description
Item Name	The name of an <a href="#">Item</a> that must be collected.
Partial Match	If true, the <i>Item Name</i> can be a substring of a long name and does not have to match the exact name and length.

### Dialog Objective

Name	Description
Dialog Name	The name of a <a href="#">Dialog</a> that must be completed.

### Kill Objective

Name	Description
Target Name	The name of an enemy that must be killed. This can match a character name or <a href="#">Faction</a> .

### Quest Quest Objective

Name	Description
Quest Name	The name of another <a href="#">Quest</a> that must be completed.

### Trade Skill Objective

Name	Description
Skill Name	The name of a <a href="#">Skill</a> that must be learned.

### Use Interactable Objective

Name	Description
Interactable Name	The name of an <a href="#">Interactable</a> that must be used (interacted with).
Require Completion	If true, and the interactable is of the type that open a popup window, the function the window provides must be used.

### Visit Zone Objective

Name	Description
Zone Name	The name of a <a href="#">Scene</a> that must be visited.

## Next Steps

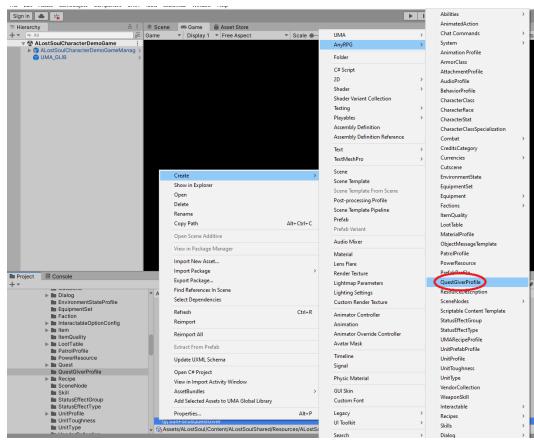
- Add a quest to a [Quest Start Item](#).
- Add a quest to a [Quest Giver](#).

# Quest Giver Profile

A quest giver profile is a shared configuration that allows multiple quest givers to have the same set of quests.

## Creation

To create a quest giver profile, find (or create) the `GameName/Resources/GameName/QuestGiverProfile` folder in the project tab and right click. Choose *Create > AnyRPG > QuestGiverProfile*.



## Properties

Name	Description
Quests	<p>A list of <a href="#">Quests</a> that the <a href="#">Quest Giver</a> can start or end.</p> <p><b>Start Quest</b> If true, the <a href="#">Quest</a> can be started at the <a href="#">Quest Giver</a> using this profile.</p> <p><b>End Quest</b> If true, the <a href="#">Quest</a> can be turned in at the <a href="#">Quest Giver</a> using this profile.</p> <p><b>Quest Name</b> The name of the <a href="#">Quest</a> that can be started or turned in.</p>

## Next Steps

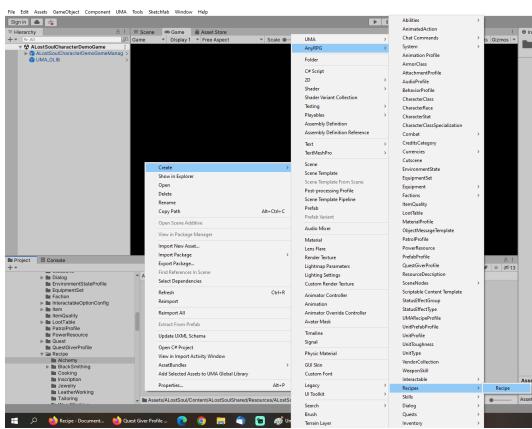
- Add a quest giver profile to a [Quest Giver](#).

# Recipe

A recipe is a list of inputs (ingredients) and outputs (finished products) that will be produced when crafting items.

## Creation

To create a recipe, find (or create) the *GameName/Resources/GameName/Recipe* folder in the project tab and right click. Choose *Create > AnyRPG > Recipes > Recipe*.



## Properties

Name	Description
Auto Learn	If true, this recipe is automatically learned at the appropriate level, defined in the <i>Required Level</i> field.
Required Level	The level the character must have reached to learn this recipe.
Crafting Materials	A list of <a href="#">Items</a> required for the recipe. <b>Item Name</b> The name of an <a href="#">Item</a> that will be used up when crafting this recipe. <b>Count</b> The number of <a href="#">Items</a> that are required.
Item Output Name	The name of the new <a href="#">Item</a> that will be created upon completing crafting.
Output Count	The number of new <a href="#">Items</a> that will be created upon completing crafting.
Craft Ability Name	The name of a <a href="#">Craft Ability</a> that must be known to craft this recipe.
Holdable Object List	A list of <a href="#">PrefabProfiles</a> that contain links to GameObjects that will be held while the <a href="#">Item</a> is being crafted. <b>Holdable Object Name</b> The name of a <a href="#">PrefabProfile</a> that contains a link to a GameObject. <b>Use Universal Attachment</b> If true, attachment points from the <a href="#">PrefabProfile</a> will be ignored, and the universal attachment in the <i>Attachment Name</i> field will be used. <b>Attachment Name</b> The <i>Node Name</i> field from one of the <i>Attachment Point Nodes</i> in an <a href="#">Attachment Profile</a> .

## Next Steps

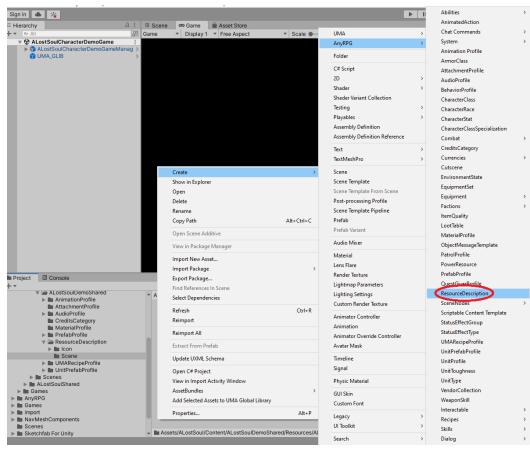
- Create [Items](#) to be used as inputs or outputs to crafting recipes.

# Resource Description

A Resource Description is a multi-purpose file that can be used to overwrite the display names and icons of other types of scriptable objects. It can also be used to support different languages.

## Creation

To create a resource description, find (or create) the *GameName/Resources/GameName/ResourceDescription* folder in the project tab and right click. Choose *Create > AnyRPG > ResourceDescription*.



## Properties

Name	Description
Resource Name	This field is generally used as the lookup name (database key) when looking up a resource description.
Display Name	The text in this field will override the <i>Display Name</i> field of whatever scriptable object this resource description is being used for.
Icon	The image linked in this field will override the <i>Icon</i> field of whatever scriptable object this resource description is being used for.
Icon Background Image	The image linked in this field will override the <i>Icon Background Image</i> field of whatever scriptable object this resource description is being used for.
Description	The text in this field will override the <i>Description</i> field of whatever scriptable object this resource description is being used for.

## Next Steps

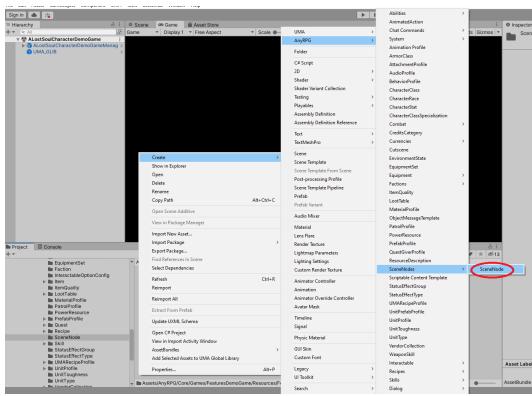
- Use a resource description to override settings in [Items](#).
- Use a resource description to override settings in [Abilities](#).
- Use a resource description to override the display name of a scene file.

# Scene Node

A scene node contains configuration information for a scene file, including background music and many other settings.

## Creation

To create a scene node, find (or create) the `GameName/Resources/GameName/SceneNode` folder in the project tab and right click. Choose `Create > AnyRPG > SceneNodes > SceneNode`.



## Properties

### Scene File

Name	Description
Use Regional File	If true, look for the resource description with the same name as the resource, plus the string 'Scene' and use the <i>Display Name</i> field as the file name.
Scene File	The name of the scene file, without a path, as it is found in the Unity Build Settings.

### Scene Audio

Name	Description
Day Ambient Sounds Profile	The name of an <a href="#">Audio Profile</a> that contains a link to an audio clip to play in the background during the day while the scene is active.
Day Ambient Sounds Audio	A link to an audio clip to play in the background during the day while the scene is active. This will override any <a href="#">Audio Profile</a> chosen.
Night Ambient Sounds Profile	The name of an <a href="#">Audio Profile</a> that contains a link to an audio clip to play in the background during the night while the scene is active.
Night Ambient Sounds Audio	A link to an audio clip to play in the background during the night while the scene is active. This will override any <a href="#">Audio Profile</a> chosen.
Background Music Profile	The name of an <a href="#">Audio Profile</a> that contains a link to an audio clip to be used as the background music when this scene is loaded.

## Movement Audio

Name	Description
Movement Loop Profile Name	The name of an <a href="#">Audio Profile</a> that contains a link to an audio clip to be used as the movement loop (footstep loop) when this scene is loaded.
Movement Hit Profile Name	The name of an <a href="#">Audio Profile</a> that contains a link to an audio clip to be used as the footstep hit sounds when this scene is loaded.
Foot Step Profiles	A list of audio profiles containing footstep sounds to play in response to <code>FootStep()</code> animation events, depending on what terrain layer the character is moving on. The list index is matched to the terrain layers index. Eg: list item one will be played when the character is over terrain layer one.

## Scene Options

Name	Description
Allow Mount	If true, the character can ride a mount in this scene.
Suppress Character Spawn	If true, the player will not be automatically spawned when this scene is loaded.
Suppress Main Camera	If true, the main camera will not active when this scene is loaded. This is useful if the scene will be used for a <a href="#">Cutscene</a> and there is already a <a href="#">Cutscene</a> camera in the scene.
Auto Play Cutscene Name	The name of a <a href="#">Cutscene</a> to play automatically when this scene is loaded.

## Environmental Settings

Name	Description
Environment State Names	The names of <a href="#">Environment State Profiles</a> that can apply to this scene.

## Time Of Day Settings

Name	Description
Sun Rotation Mode	<p><b>None</b> Do not rotate the sun.</p> <p><b>Sun</b> Rotate the sun. Best if the skybox already includes a sun.</p> <p><b>Parent</b> Rotate the gameobject that is the parent of the sun. Best if the sun is a physical object in the scene.</p>
Use Default Sun Angle	If true, the default sun angle from the System Configuration Manager will be used instead of the value below.
Sun Angle	The number of degrees around the X axis that the sun will be rotated compared to world space. 0 is pointing directly North, 90 is pointing straight down (directly over the player head), 180 is pointing directly South.
Rotate Sun Color	If true, the color of light the sun emits will be changed over time.
Use Default Sun Gradient	If true, the Sun Gradient from the System Configuration Manager will be used instead of the gradient below.
Sun Gradient	A color gradient to use for the sun color. The ends represent midnight, and the center is noon. The alpha value controls sun light intensity and skybox blending.
Blended Skybox	If true, the skybox is assumed to be using the BlendedSkybox shader, and will change based on the alpha property of the sunGradient over time.
Rotate Skybox	If true, the skybox will be rotated as time passes.
Skybox Rotation Offset	The offset rotation required to position the skybox so the sun is in the correct position at midnight.
Reverse Skybox Rotation	If true, the skybox will be rotated counter clockwise. This should be used for sun angles between 0 and 90 degrees.

Weather Settings

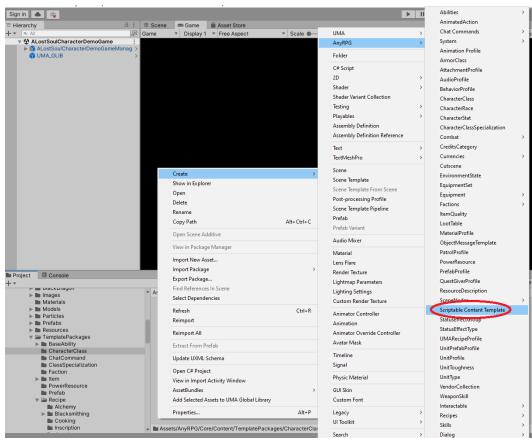
Name	Description
Min Weather Length	The minimum number of in-game seconds a certain weather type should last for.
Max Weather Length	The maximum number of in-game seconds a certain weather type should last for.
No Weather Weigh	A weighted value that determines the chance that clear weather will be chosen when the weather changes.
Weather Weights	<p>A weighted list of potential weather that can be chosen when the weather changes.</p> <p><b>Weather</b> A Weather Profile that defines the weather setting</p> <p><b>Weight</b> A weighted value that determines the chance this weather is chosen.</p>

# Scriptable Content Template

A scriptable content template is a list of scriptable objects, prefabs, and other scriptable content templates that can be installed in a new game using a wizard to save time.

## Creation

Unlike most scriptable objects, a scriptable content template itself is not loaded into memory because it contains configuration information for installing content. This means it can be created in any folder and should definitely not be located in a *Resources* folder or any subfolder of a resources folder. To create one, setup a folder that is not a child of a *Resources* folder and right click. Choose *Create > AnyRPG > Scriptable Content Template*.



## Properties

Name	Description
Resources	A list of links to scriptable objects that will be installed in a game when the wizard is used to install this template. If the word 'Template' exists in their file name, it will be removed when they are installed.
Prefabs	A list of links to prefabs that will be installed in a game when the wizard is used to install this template. If the word 'Template' exists in their file name, it will be removed when they are installed.
Dependencies	A list of links to other scriptable content templates that will be installed in a game when the wizard is used to install this template. The use of dependencies is a convenience feature to allow reusing common sets of scriptable objects and prefabs between multiple templates.

## Next Steps

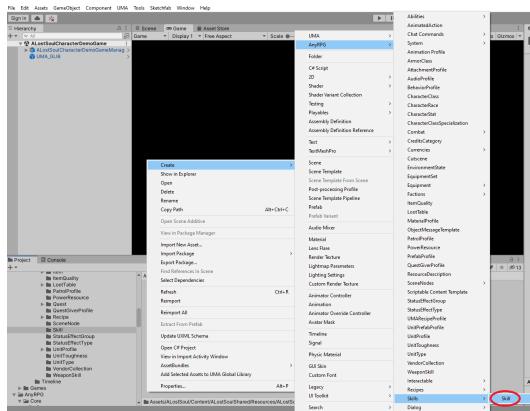
- Use the *Template Content Wizard*, found under the *Menu Tools > AnyRPG > Wizard > Template Content Wizard* to install template content in a new game.

# Skill

A skill allows you to learn abilities that let you gather or craft items.

## Creation

To create a skill, find (or create) the `GameName/Resources/GameName/Recipe` folder in the project tab and right click. Choose *Create > AnyRPG > Skills > Skill*.



## Properties

Name	Description
Required Level	The minimum level which the character must reach to learn this skill.
Auto Learn	If true, this skill will be automatically learned upon reaching the <i>Required Level</i> .
Ability Names	A list of <a href="#">Abilities</a> that will be learned when the skill is learned. These should generally be <a href="#">Gathering Abilities</a> or <a href="#">Crafting Abilities</a> , but that is a suggestion, not a hard requirement.

## Next Steps

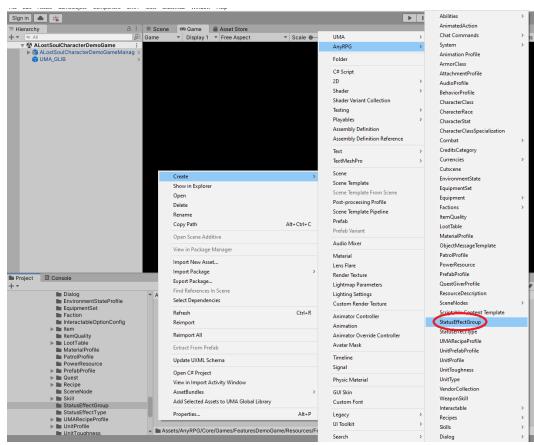
- Add a skill as a reward for completing a [Quest](#).
- Add a skill to a [Skill Trainer](#) so the trainer can teach it.

# Status Effect Group

A status effect group defines similar status effects, and prevents a character from having more than one effect from the group active at the same time.

## Creation

To create a status effect group, find (or create) the `GameName/Resources/GameName/StatusEffectGroup` folder in the project tab and right click. Choose *Create > AnyRPG > StatusEffectGroup*.



## Properties

Name	Description
Exclusive Option	An enumeration of options controlling how <a href="#">Status Effects</a> are blocked or overwritten. <b>Last</b> The most recent effect always overwrites any earlier effects. <b>First</b> The first effect blocks any other effects from being applied.

## Next Steps

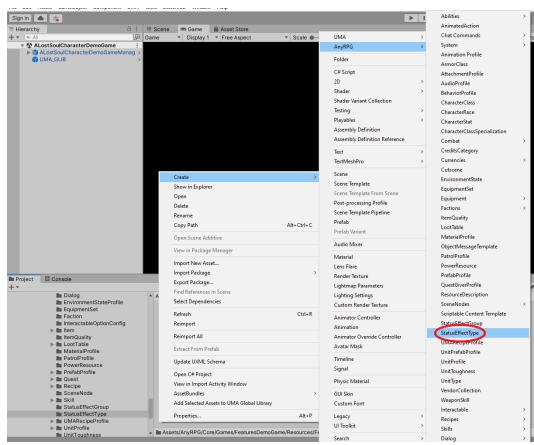
- Add a [Status Effect](#) to a group by filling in its *Status Effect Group* field.

# Status Effect Type

A status effect type classifies status effects into categories for the purpose of defining which type of remove effect can remove them.

## Creation

To create a status effect type, find (or create) the `GameName/Resources/GameName/StatusEffectType` folder in the project tab and right click. Choose *Create > AnyRPG > StatusEffectType*.



## Properties

Status effect types do not contain any additional properties beyond the basic [Scriptable Object](#) properties shared by all AnyRPG data.

## Next Steps

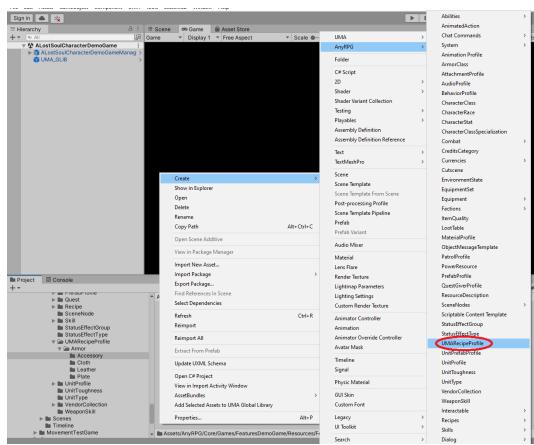
- Define a [Status Effect](#)'s type by filling in its *Status Effect Type* field.

# UMA Recipe Profile

An UMA recipe profile contains information about how UMA gear will be displayed, including which UMA recipes to show, and what shared colors to use.

## Creation

To create an UMA recipe profile, find (or create) the `GameName/Resources/GameName/UMARecipeProfile` folder (or any subfolder) in the project tab and right click. Choose *Create > AnyRPG > UMARecipeProfile*.



## Properties

An UMA recipe profile contains a single property, *UMA Recipe Profile Properties*, with the following fields.

Name	Description
UMA Recipes	A list of UMA recipes that can potentially be displayed. The recipes that match the target unit's UMA race will be displayed. If multiple recipes that match the race can be applied to the same slot, the last one will always be used.
Shared Colors	A list of UMA shared color data defining which colors will be shown for each defined shared color name that exists on the UMA recipe. <b>Shared Colorname</b> The name of an UMA shared color. <b>Color</b> A color to be used.

## Next Steps

- Add an UMA recipe profile to anv [Equipment](#)

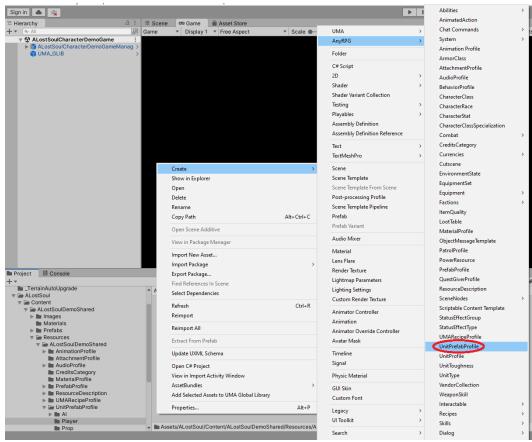
- Add an [existing recipe](#) from the [Equipment](#)

# Unit Prefab Profile

A unit prefab profile contains information needed to configure the GameObject prefab that represents the character model for any character.

## Creation

To create a unit prefab profile, find (or create) the *GameName/Resources/GameName/UnitPrefabProfile* folder in the project tab and right click. Choose *Create > AnyRPG > UnitPrefabProfile*.



## Properties

Name	Description
Unit Prefab	A link to a prefab that will be used for the character unit. The unit prefab does not have to, but can optionally, include a model.
Model Prefab	A link to a prefab that will be used for the character model if the model is separate from the <i>Unit Prefab</i> .
Animation Profile Name	The name of an <a href="#">Animation Profile</a> that will be used for the model animations.
Use Inline Animation Props	If true, the <i>Animation Props</i> field will be used for animation properties, instead of a shared <a href="#">Animation Profile</a> .
Animation Props	Inline properties of an <a href="#">Animation Profile</a> .
Rotate Model	If true, the model will be rotated to face in the direction of travel. This option should be used if no strafe animations exist for the model.
Name Plate Props	Nameplate, unit frame, and unit preview settings. See <a href="#">Name Plate Properties</a> .
Position	If being used as a mount, the Vector3 position in relation to the <i>Target Bone</i> the character will be mounted to when riding.
Rotation Is Global	If true, and being used as a mount, the value in the <i>Rotation</i> field will be considered global (relative to world space) instead of local.
Rotation	If being used as a mount, the Vector3 rotation in relation to the <i>Target Bone</i> the character will be mounted to when riding.
Scale	If being used as a mount, the Vector3 scale of the character when riding.
Target Bone	If being used as a mount, the bone the character will be attached to when riding.
Attachment Profile Name	The <a href="#">Attachment Profile</a> used to lookup actual bone names when attaching prefabs (holdable objects) to the character model.
Float Height	When floating in water, the height from the bottom of the character that the water line will sit at.
	If true, the height of the <i>Float Transform</i> will be added to the <i>Float Height</i> . If false, the <i>Float</i>

Add Float Height To Transform	<i>Transform height will replace the <i>Float Height</i> if the <i>Float Transform</i> is found.</i>
Float Transform	The name of a bone that should be used for the water line when floating.

## Name Plate Properties

Name	Description
Display Name	The name that is printed on the nameplate above the character model. This value will also override whatever is set for the interactable mouseover display name.
Suppress Name Plate	If true, no nameplate will be shown above this character.
Suppress Faction	If true, the faction will not be shown on the nameplate.
Override Nameplate Position	If true, the nameplate position will be shown at the manual value in the <i>Name Plate Position</i> field.
Unit Frame Target	The name of a bone that the camera will look at when taking a snapshot for the unit frame.
Unit Frame Camera Look Offset	Any Vector3 offset that the camera will look at relative to the <i>Unit Frame Target</i> .
Unit Frame Camera Position Offset	The position of the unit frame camera relative to the <i>Unit Frame Target</i> .
Unit Preview Target	The name of a bone that the camera will look at displaying the character in a full body unit preview window.
Unit Preview Camera Look Offset	Any Vector3 offset that the camera will look at relative to the <i>Unit Preview Target</i> .
Unit Preview Camera Position Offset	The position of the unit preview camera relative to the <i>Unit Preview Target</i> .

## Next Steps

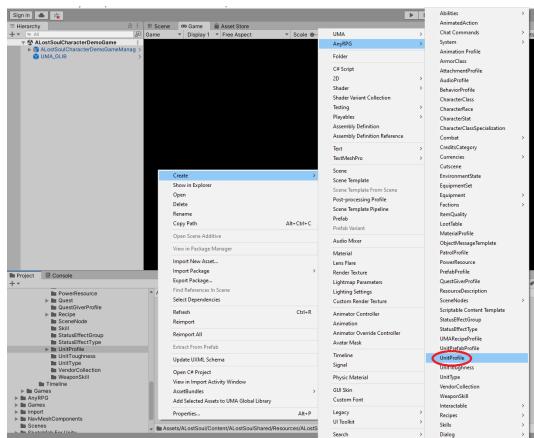
- Add a unit prefab profile to a [Unit Profile](#).

# Unit Profile

A unit profile defines all the information related to a character, including both the character configuration, and properties of the physical model.

## Creation

To create a unit profile, find (or create) the `GameName/Resources/GameName/UnitProfile` folder in the project tab and right click. Choose *Create > AnyRPG > UnitProfile*.



## Properties

The default properties of a character unit are listed below. Some of these properties can be overridden if this character is used as a player.

### Unit Prefab

Name	Description
Automatic Prefab Profile	If true, the unit prefab is loaded by searching for a <a href="#">UnitPrefabProfile</a> with the same name as this resource.
Prefab Profile Name	The name of the prefab profile that contains the prefab that represents this unit. Only used if <i>Automatic Prefab Profile</i> and <i>Use Inline Prefab Props</i> are not true.
Use Inline Prefab Props	If true, the unit prefab is loaded from the inline <i>Unit Prefab Props</i> field.
Unit Prefab Props	<a href="#">Unit Prefab Profile</a> properties.

## Unit Settings

Name	Description
Is UMA Unit	Deprecated, not currently used.
Is Pet	If true, this unit can be captured and kept as a pet.
Flight Capable	If true, this unit can fly.
Glide Capable	If true, this unit can glide.

## Character

Name	Description
Character Name	The name of the character, which will be shown in unit frames and nameplates.
Title	A title that will be shown below the name in the nameplate.
Faction Name	The name of the <a href="#">Faction</a> that this character belongs to.
Unit Type Name	The name of the <a href="#">Unit Type</a> of this character.
Character Race Name	The name of the <a href="#">Character Race</a> of this character.
Character Class Name	The name of the <a href="#">Character Class</a> of this character
Class Specialization Name	The name of the <a href="#">Class Specialization</a> of this character.
Spawn Dead	If true, the character will spawn dead.
Prevent Auto Despawn	If true, the character will not despawn when it does.
Default Toughness	The name of a <a href="#">Unit Toughness</a> that defines how tough the character is.

## Voice

Name	Description
Voice Profile	A <a href="#">Voice Profile</a> that contains voice audio clips to play.
Use Inline Voice Props	If true, the <a href="#">Voice Profile</a> is loaded from the inline settings below, instead of the shared voice profile above.
Voice Props	If <i>Use Inline Voice Props</i> is true, the <a href="#">Voice Profile Properties</a> here will be used instead of the shared <a href="#">Voice Profile</a> above.

## Configuration

Name	Description
Capabilities	<a href="#">Capabilities</a> the character has.
Primary Stats	A list of <a href="#">Character Stat General Properties</a> .
Power Resources	A list of <a href="#">Power Resources</a> the character has.
Use Provider Equipment	By default NPCs only equip the <a href="#">Equipment</a> listed the <i>Equipment Name List</i> . If true, NPCs will equip all <a href="#">Equipment</a> from any provider, including <a href="#">Character Class</a> , <a href="#">Faction</a> , etc.
Equipment Name List	A list of <a href="#">Equipment</a> that the character will have equipped by default.

## Combat

Name	Description
Is Aggressive	If true, the unit will attack anything in its aggro radius, based on the <a href="#">Faction</a> relationship.
Aggro Radius	The radius of the aggro sphere around this unit. Set to 0 to disable aggro.
Automatic Combat Strategy	If true, a <a href="#">Combat Strategy</a> matching the unit name will be looked up, and used if found.
Combat Strategy Name	The name of a <a href="#">Combat Strategy</a> to use.
Default Hit Effects	<a href="#">Ability Effects</a> to cast on the target when the performing an unarmed standard (auto) attack.

## Movement

Name	Description
Is Mobile	If true, the character can move.
Footstep Type	<p><b>None</b> Do not play footsteps.</p> <p><b>Unit</b> Play the footsteps configured below. <a href="#">Environment</a> Play the footsteps based on the terrain.</p> <p><b>UnitFallback</b> Try environment, then fallback to unit if no environment sound available.</p> <p><b>Both</b> Play environment and unit sounds at the same time.</p>
Play On Footstep	If true, individual footstep sounds will play when the foot hits the ground, instead of playing a repeating footsteps loop when moving.
Movement Audio Profile Names	A list of <a href="#">Audio Profiles</a> that contain audio clips that will be played when the unit is in motion. If <i>Play On Footstep</i> is true, the audio clips will be cycled through as the feet hit the ground.

## Patrol

Name	Description
Use Inline Patrol	If true, the patrol defined in the <i>Patrol Config</i> field will be used.
Patrol Config	<a href="#">Patrol</a> properties.
Patrol Names	The names of <a href="#">Patrol Profiles</a> to use.

## Interaction

Name	Description
Face Interaction Target	If true, and the character is an NPC, it will turn and face any player that interacts with it.
Interaction Max Range	The maximum range at which this character can be interacted with if it is an NPC.
Interactable Options	A list of named <a href="#">Interactable Options</a> that define which <a href="#">Interactables</a> this character has, if it is an NPC.
Inline Interactable Options	<a href="#">Interactable Option Configurations</a> that define which <a href="#">Interactables</a> this character has, if it is an NPC.

## Object Persistence

Name	Description
Persist Object Position	If true, the object position is saved so that the object will spawn at the saved location next time a game is loaded. This requires at least one of Save On Level Unload, Save On Game Save, or a save setting in a <a href="#">Patrol</a> to be true.
Save On Level Unload	If true, the position will be saved when a level is unloaded.
Save On Game Save	If true, the position will be saved when the game is saved.
Overwrite Unit UUID	If true, the automatic UUID assigned to the unit will be overwritten with the UUID in the <i>UUID</i> field.
UUID	An automatically created Universally Unique Identifier used to ensure that all objects with saved position data do not overwrite another object's data.

## Next Steps

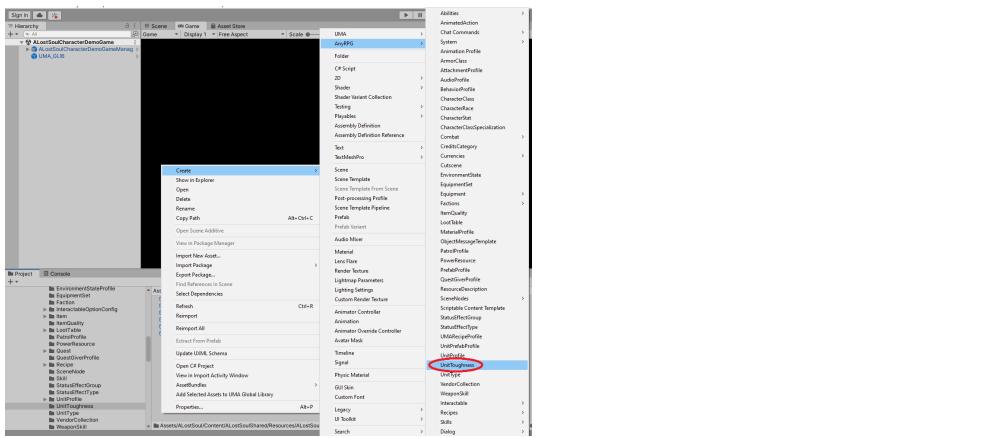
- Add a unit profile to the *Default Player Unit Profile Name* field in the System Configuration Manager to make this unit the default when a new game is started.
- Add a unit profile to the *Character Creator Profile Names* list in the System Configuration Manager to allow a player to choose this unit from a list of units when starting a new game.
- Add a unit profile to the *Character Creator Profile Names* list in a [Faction](#) to allow a player to choose this unit from a list of units when starting a new game as a specific [Faction](#).

# Unit Toughness

Unit Toughness defines which properties should be multiplied and by how much when scaling the base properties of a character to make it tougher.

## Creation

To create a unit toughness, find (or create) the *GameName/Resources/GameName/UnitToughness* folder in the project tab and right click. Choose *Create > AnyRPG > UnitToughness*.



## Properties

Name	Description
Focus Projector Override Map	<p>A list of properties that will override the default highlight circle shown on the ground when a character is highlighted.</p> <p><b>Source Color</b> If the <a href="#">Faction</a> relationship color matches this color then the settings in this list element will be used.</p> <p><b>Projector Material</b> The material to replace the default highlight image material.</p> <p><b>Tint Material</b> If true, the <i>Projector Material</i> will also be tinted with the color.</p>
Currency Multiplier	The amount that the total currency gained from a kill will be multiplied by.
Experience Multiplier	The amount that the total experience gained from kill will be multiplied by.
Default Resource Multiplier	All <a href="#">Power Resources</a> will be multiplied by this value.
Resource Multipliers	<p>A list of specific <a href="#">Power Resources</a> to multiply.</p> <p><b>Resource Name</b> The name of a <a href="#">Power Resource</a> to multiply.</p> <p><b>Value Multiplier</b> The amount to multiply the <a href="#">Power Resource</a> by.</p>
Default Primary Stat Multiplier	The amount to multiply all <a href="#">Character Stats</a> by.
Primary Stat Multipliers	<p>A list of specific <a href="#">Character Stats</a> to multiply.</p> <p><b>Stat Name</b> The name of a <a href="#">Character Stat</a> to multiply.</p> <p><b>Stat Multiplier</b> The amount to multiply the <a href="#">Character Stat</a> by.</p>

## Next Steps

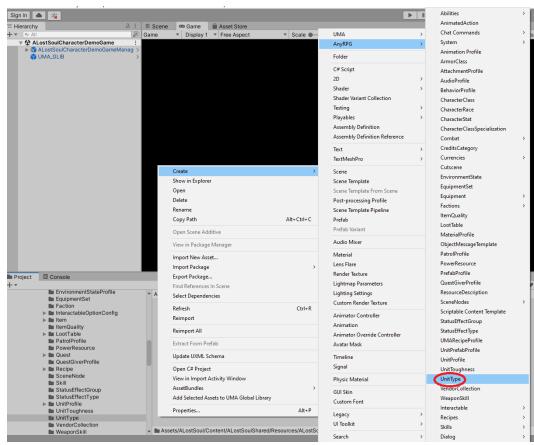
- Add a unit toughness value to a [Unit Profile](#) to make it tougher.

# Unit Type

A unit type is a way of defining a species, and assigning specific capabilities, stats, and power resources to characters of that type.

## Creation

To create a unit type, find (or create) the `GameName/Resources/GameName/UnitType` folder in the project tab and right click. Choose *Create > AnyRPG > UnitType*.



## Properties

Name	Description
Capabilities	A list of <a href="#">Capabilities</a> the unit type have.
Primary Stats	A list of <a href="#">Primary Stat General Properties</a> , defining which primary stats the unit type will use and how they scale and provide secondary resources.
Power Resources	A list of <a href="#">Power Resources</a> the unit type will use.

## Next Steps

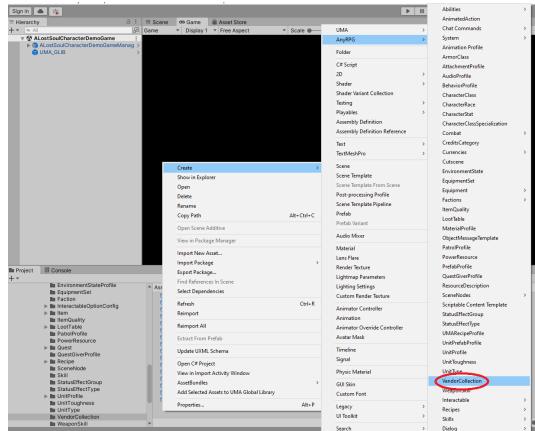
- Define a character's unit type in its [Unit Profile](#).

# Vendor Collection

A vendor collection is a list of items that can be sold by a vendor.

## Creation

To create a vendor collection, find (or create) the `GameName/Resources/GameName/VendorCollection` folder in the project tab and right click. Choose *Create > AnyRPG > VendorCollection*.



## Properties

Vendor Collections have a single property, *Vendor Items*, which is a list with each element having the following fields.

Name	Description
Item Name	The name of an <a href="#">Item</a> that can be purchased.
Quantity	The amount of this <a href="#">Item</a> that can be purchased. This field is ignored if <i>Unlimited</i> is true.
Unlimited	If true, there is no limit to the number of this <a href="#">Item</a> that can be purchased.
Item Quality Name	The name of an <a href="#">Item Quality</a> . If this field is not empty, the <a href="#">Item</a> purchased will be of this quality instead of its default quality.

## Next Steps

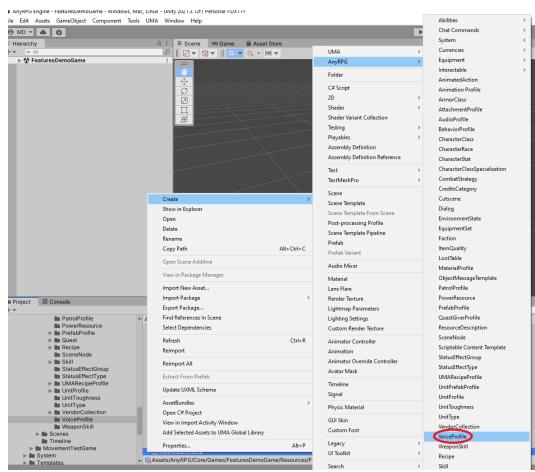
- Add a vendor collection to a [Vendor](#).

# Voice Profile

A voice profile contains lists of audio clips to play in response to certain actions being performed by a character.

## Creation

To create a voice profile, find (or create) the *GameName/Resources/GameName/VoiceProfile* folder in the project tab and right click. Choose *Create > AnyRPG > VoiceProfile*.



## Properties

Name	Description
Aggro	List of sound files to choose from when an NPC that is not in combat aggros other characters.
Attack	List of audio clips to choose from when character performs an attack on other characters.
Damage	List of audio clips to choose from when character takes damage.
Jump	List of audio clips to choose from when character jumps.
Fall Damage	List of audio clips to choose from when character takes fall damage.
Death	List of audio clips to choose from when character dies.
Victory	List of audio clips to choose from when the character kills another character.
Start Interact	List of audio clips to choose from when the character starts interacting.
Start Vendor Interact	List of audio clips to choose from when the character starts interacting with a vendor.
Stop Interact	List of audio clips to choose from when the character stops interacting (closes an interaction window).
Stop Vendor Interact	List of audio clips to choose from when the character stops interacting with a vendor (closes the vendor window).

## Next Steps

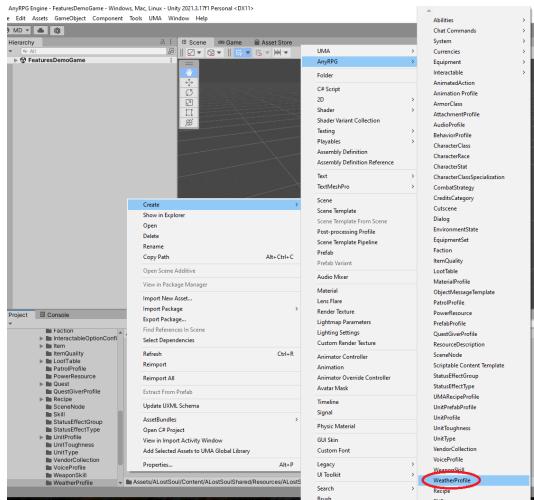
- Add a voice profile to a [Unit Profile](#) to allow that character to use the audio clips.

# Weather Profile

A weather profile contains settings that define a certain type of weather.

## Creation

To create a weather profile, find (or create) the *GameName/Resources/GameName/WeatherProfile* folder in the project tab and right click. Choose *Create > AnyRPG > WeatherProfile*.



## Properties

Name	Description
Prefab Profile	A prefab profile containing a weather prefab to spawn.
Suppress Ambient Sounds	If true, regular day/night ambient sounds will not be played while this weather effect is active.
Ambient Sounds Profile	Ambient sounds to play in the background while this weather is active. These will override any normal ambient sounds for the scene.
Ambient Sounds Audio	Ambient sounds to play in the background while this weather is active. This will override any audio profile chosen as well as any normal ambient sounds for the scene.
Shadow Strength	This number will be multiplied by the default shadow strength of the sun to give a relative shadow strength while the weather is active.
Fog Settings	<p>Settings that will override the default environment fog settings for the scene.</p> <p><b>Use Fog</b> If true, fog will be turned on.</p> <p><b>Fog Color</b> The color of the fog.</p> <p><b>Fog Density</b> The density of the fog.</p>

## Next Steps

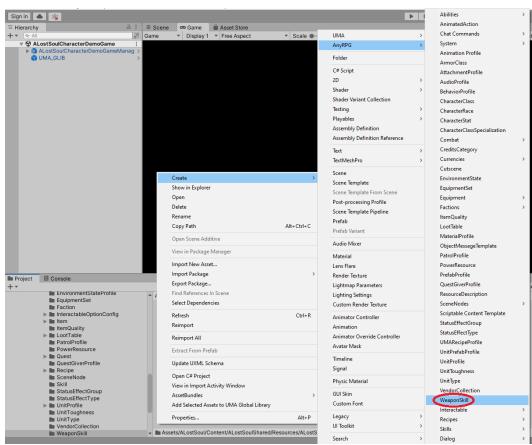
- Add a weather profile to a [Scene Node](#) to allow the weather to play in that scene.

# Weapon Skill

A weapon skill defines common properties for weapons of the same type. It can also be optionally required that a character knows it in order to equip or use weapons of that type.

## Creation

To create a weapon skill, find (or create) the *GameName/Resources/GameName/WeaponSkill* folder in the project tab and right click. Choose *Create > AnyRPG > WeaponSkill*.



## Properties

Name	Description
Default Weapon Skill	If true, this skill is considered to be in use by an unarmed character.
Attack Speed	Attacks with animations shorter than this value will be calculated to have taken this long. Auto-attacks cannot happen more often than this number of seconds.
Default Hit Effects	A list of <a href="#">Ability Effects</a> that will be cast on the target when the weapon does damage from a standard (auto) attack.
On Hit Effects	A list of <a href="#">Ability Effects</a> that will be cast on the target when the weapon does damage from any attack, including a standard (auto) attack.
Animation Profile Name	An <a href="#">Animation Profile</a> that can overwrite default animations to match the weapon.
On Hit Audio Profiles	An <a href="#">Audio Profile</a> that contains a link to an audio clip that can be played whenever any physical <a href="#">Ability</a> is cast while the weapon is equipped.
Animation Event Audio	If the animation has StartAudio() events while it is playing, this <a href="#">Audio Profile</a> will be played in response to those events.
Play Attack Voice	If true, the character will play their attack voice clip when animated abilities are used.
Ability Animation Object List	<p>A list of physical prefabs to attach to the character unit when a weapon is being animated during an attack. This could be arrows, special spell or glow effects, etc.</p> <p><b>Holdable Object Name</b>  The name of a <a href="#">PrefabProfile</a> that contains a link to a GameObject.</p> <p><b>Use Universal Attachment</b>  If true, attachment points from the <a href="#">PrefabProfile</a> will be ignored, and the universal attachment in the <i>Attachment Name</i> field will be used.</p> <p><b>Attachment Name</b>  The <i>Node Name</i> field from one of the <i>Attachment Point Nodes</i> in an <a href="#">Attachment Profile</a>.</p>
	A list of physical prefabs to use when the weapon is being used after the animation phase of an attack. This could be arrows, special spell or glow effects, etc.

## Ability Object List

effects, etc.

### **Holdable Object Name**

The name of a [PrefabProfile](#) that contains a link to a [GameObject](#).

### **Use Universal Attachment**

If true, attachment points from the [PrefabProfile](#) will be ignored, and the universal attachment in the *Attachment Name* field will be used.

### **Attachment Name**

The *Node Name* field from one of the *Attachment Point Nodes* in an [Attachment Profile](#).

## Next Steps

- Add a weapon skill to a [Weapon](#) to allow it to use these shared properties.
- Add a weapon skill to [Capabilities](#), allowing any character with those capabilities to wield weapons that require the skill.

# MONOBEHAVIOURS

# Monobehaviours Introduction

[Unity Monobehaviours](#) are scripts that can be added to Prefabs and GameObjects to control their behavior.

AnyRPG makes use of nearly 300 Monobehaviours as part of the engine; however, most of those are part of system objects and the UI, and do not need to be edited or have their serialized properties updated under normal circumstances.

This section describes the usage of Monobehaviours that are meant to be edited by game creators.

The most important monobehaviour scripts included in AnyRPG are added through the included [Wizards](#) and template prefabs, but any that are meant to be edited can easily be manually added to GameObjects by following their documentaton.

# Scene Config

An Scene Config is a special type of system script used to allow pressing play from any scene, and having resource selectors work in any scene.

## Usage

A Scene Config Prefab will be automatically added to any scene created with the [New Scene Wizard](#). It is not necessary to add one manually unless a scene is added manually, and not using the wizard. Even then it is optional if you do not desire the ability to press play from that scene or use resource selectors in that scene.

## Properties

Name	Description
System Configuration Manager	A link to the Game Manager prefab on disk that should be used when building a database for resource selectors to work, or determining which scene is the correct loading scene for the game.
Load Game On Play	If true, the game can be loaded from the current scene by pressing play in the Unity editor.

## Dependencies

- A properly configured Game Manager prefab is needed for the Scene Config to work. The Game Manager prefab is added to any game created with the [New Game Wizard](#).

# Channeled Object Script

A channeled object script is attached to a prefab that should be used as a lightning bolt that travels from the caster to the target while channeling an ability.

## Properties

Name	Description
Start Object	The game object where the lightning will emit from. If null, StartPosition is used.
Start Position	The start position where the lightning will emit from. This is in world space if StartObject is null, otherwise this is offset from StartObject position.
End Object	The game object where the lightning will end at. If null, EndPosition is used.
End Position	The end position where the lightning will end at. This is in world space if EndObject is null, otherwise this is offset from EndObject position.
Generations	How many generations? Higher numbers create more line segments.
Duration	How long each bolt should last before creating a new bolt. In ManualMode, the bolt will simply disappear after this amount of seconds.
Chaos Factor	How chaotic should the lightning be? (0-1)
Manual Mode	In manual mode, the trigger method must be called to create a bolt.
Rows	The number of rows in the texture. Used for animation.
Columns	The number of columns in the texture. Used for animation.
Animation Mode	The animation mode for the lightning.

## Dependencies

- A line renderer must be attached to the same prefab using a material with a sprite sheet of a lightning

- A *Lightning* must be attached to the same prefab, using a material with a sprite sheet of a lightning bolt.
- If *Start Object* and *End Object* are used, the prefab should have 2 gameobjects as children (with no components on them) that will serve as the start and end point of the lightning bolt.

# Channeled Cylinder Script

A channeled cylinder script is attached to a prefab that should be used as a laser beam that travels from the caster to the target while channeling an ability.

## Properties

Name	Description
Start Object	The game object where the lightning will emit from. If null, StartPosition is used.
Start Position	The start position where the lightning will emit from. This is in world space if StartObject is null, otherwise this is offset from StartObject position.
End Object	The game object where the lightning will end at. If null, EndPosition is used.
End Position	The end position where the lightning will end at. This is in world space if EndObject is null, otherwise this is offset from EndObject position.

## Dependencies

- A channeled cylinder script should be used on a Unity cylinder.

# Edible Object

An Edible Object Script is used on an object that should appear to be eaten or drunk by swapping out 3d models over a certain time period.

## Usage

An Edible Object has no 3d model attached directly to the GameObject. Instead it has multiple 3d models as child GameObjects. The first object should be the model to use when the object is full. As many objects as are desired can be added after that to represent the different stages of eating or drinking until the last object, representing a fully eaten or used up model.

The first object should be active in the heirarchy by default, and all others should be non active. The active status of each will be managed by the script as it progresses through showing them.

## Properties

Name	Description
Interval	The time in seconds between changing to the next object.
Keep Last Visible	If true, the last object will stay visible after its interval.

## Dependencies

- One or more child GameObjects should exist for the script to cycle through as the object is consumed.

# Projectile Script

A projectile script is attached to a prefab that will travel through the air toward a target such as fireballs, arrows, tornadoes, etc.

## Properties

Name	Description
Audio Source	A link to an audio source that will be used to play sound while the projectile is in motion.

## Dependencies

- A Collider marked as a trigger, and a Rigidbody marked as Kinematic are both required on the same GameObject in order for the projectile to detect a collision with a target.
- An Audio Source is required to play a sound while travelling toward a target.

# Cutscene Camera Controller

A cutscene camera controller is attached to a prefab that will serve as a camera for a cutscene.

## Properties

A cutscene camera controller has no properties.

## Usage

A cutscene camera prefab should be placed in a scene that will play a cutscene and be active.

## Dependencies

- Camera and Audio Listener components should be attached to the same prefab.

# Playable Director Controller

A playable director controller is attached to a prefab that contains a Playable Director component with a Unity Timeline, and is responsible for playing the timeline.

## Properties

A playable director controller has no properties.

## Usage

A playable director will be triggered to play its timeline when the name of the timeline matches the *TimeLine Name* field in a [Cutscene](#). The [Cutscene](#) can be started automatically upon loading the scene by the [Scene Node](#), or triggered manually through a [Cutscene Interactable](#).

## Dependencies

- A PlayableDirector component should be attached to the same prefab.

# Spawnable

The Spawnable monobehaviour allows spawning and despawning of other Prefabs based on Prerequisite Conditions being satisfied.

## Usage

Spawnables are the way AnyRPG deals with the need for physical objects in the world to appear or disappear as the game story progresses. There is no limitation to what can be spawned, from small things like shrubs or trees, up to entire buildings.

## Properties

Name	Description
Prefab Profile Name	A <a href="#">Prefab Profile</a> containing a link to a Prefab that will be spawned.
Spawn Delay	The amount of seconds to delay spawning the prefab once all the <a href="#">Prerequisites</a> are met and the object can be spawned.
Spawn Reference	If the Interactable does not spawn any objects, but instead is always visible, link the GameObject in this field.
Despawn Object	If true, and there is an object spawned, and the <i>Prerequisite Conditions</i> are no longer met, despawn it.
Prerequisite Conditions	<a href="#">Prerequisite Conditions</a> that must be satisfied for the object to spawn.

## Dependencies

- Spawnable does not have any dependencies, and can be placed on a Prefab with no other components.

# Interactable

The Interactable monobehaviour is required on any Prefab that the player will be able to interact with. It is also required on Prefabs that are remotely controlled by switches.

## Usage

Interactable inherits from the base class, [Spawnable](#). All Interactables can have one or more interactable options. The Interactable component allows the object to be interacted with, and the Interactable Options provide unique functionality and interaction options.

## Properties

In addition to the properties of the base class, [Spawnable](#), Interactable has the following properties.

Name	Description
Show Tooltip	If true, a UI tooltip will be shown when the mouse hovers over the object.
Interactable Name	The name of the object that will be shown in the mouseover tooltip.
Glow On Mouse Over	If true, the material of the object will be replaced with a glowing material while the mouse is hovering over it.
Light Emission	If true, the glow emits light on objects around it.
Glow Flash Speed	The time period in seconds between high and low intensity of the glow strength.
Glow Min Intensity	The minimum intensity the object should glow with.
Glow Max Intensity	The maximum intensity the object should glow with.
Glow Color	The color of light to emit when glowing.
Temporary Material	The glow material that should replace any normal materials on this object while glowing.
Interaction Tooltip Text	Set this value to override the default 'Interact' option for the gamepad interaction tooltip
Not Interactable	Set this value to prevent direct interaction from the player. This can be useful for interactables that only need to be activated with control switches.
Interact With Any	Set this to true to allow triggering interaction with anything that has a collider, not just players.
Interact On Exit	Set this to true to cause the interaction to trigger once something exits the collider.
Is Trigger	If true, interaction is triggered by a collider, and not by clicking with the mouse
Suppress Interaction Window	Set this to true to automatically activate the first interactable instead of opening the interaction window and presenting the player with interaction options.
Interaction Max Range	For everything except character unit interactions, the interactor must be within this range of this objects collider. This does not apply to interactions triggered by switches.

Check Options To Spawn	If set to true, all interactable options must have <a href="#">Prerequisites</a> met, in addition to the interactable prerequisites, in order to spawn.
Spawn Requires Valid Option	Require a valid interactable option in addition to any <a href="#">Prerequisites</a> . For example, quests on a questgiver, a class changer, and dialogs.
Despawn Requires No Valid Options	Require no valid interactable options in addition to any <a href="#">Prerequisites</a> . For example, quests on a questgiver, a class changer, and dialogs.
Component Controller	Reference to local component controller prefab with nameplate target, speakers, etc.
Unit Component Controller	Reference to local component controller prefab with nameplate target, speakers, etc.

## Dependencies

- Any interactable that will be directly interacted with needs a Collider component, so that it can be clicked on.
- One or more Interactable Option Components must be present for any interactions to be possible.

# Interactable Options

Interactable Options are individual types of interactions that an Interactable can provide.

## Usage

An Interactable Option provides unique functionality and interaction options to an [Interactable](#). As many interactable options as are desired can be placed on the same Prefab as the Interactable.

## Properties

All Interactable Options have a common set of [Interactable Option Configuration Properties](#).

# Animated Object

An Animated Object Interactable Option is responsible for triggering an animation on an Animation component.

## Properties

Name	Description
Switch Only	If true, this option can only be interacted with via a switch.
Animation Component	A link to an Animation Component containing animations to play.
Open Animation Clip	A link to an Animation Clip to play when changing to the open position.
Open Audio Clip	A link to an Audio Clip to play when changing to the open position.
Open Audio Profile	The name of an <a href="#">Audio Profile</a> containing a link to an Audio Clip to play when changing to the open position.
Close Animation Clip	A link to an Animation Clip to play when changing to the closed position.
Close Audio Clip	A link to an Audio Clip to play when changing to the closed position.
Close Audio Profile	The name of an <a href="#">Audio Profile</a> containing a link to an Audio Clip to play when changing to the closed position.

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.
- An Animated Object triggers animations on an Animation Component, so an Animation Component is required. The Animation Component is linked from a [property](#), so it does not need to be on the exact same GameObject as the Animation Object Monobehaviour.

# Bank

A Bank creates the same Interactable Option as a Bank Config.

## Properties

A Bank does not have any properties other than the properties shared by all [Interactable Option Configs](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Behavior Interactable

A Behavior Interactable creates the same Interactable Option as a Behavior Config.

## Properties

A Behavior Interactable has [Behavior Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Character Creator Interactable

A Character Creator Interactable creates the same Interactable Option as a Character Creator Config.

## Properties

A Character Creator Interactable has [Character Creator Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Class Change Interactable

A Class Change Interactable creates the same Interactable Option as a Class Change Config.

## Properties

A Class Change Interactable has [Class Change Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Click Switch

An Click Switch can be activated locally (by the player) or remotely (by another switch) and is responsible for activating other Interactable Options.

## Properties

Name	Description
Control Objects	A list of links to other Interactable Options in the same scene.
Switch Group	A list of other Switch-type Interactable Options. A of the other options must be in the Open Position for this switch to activate its <i>Control Objects</i> .

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.
- For a click switch to do anything, it needs to have links to at least one other valid Interactable Option in the same scene.

# Crafting Node

A Crafting Node creates the same Interactable Option as a Crafting Node Config.

## Properties

A Crafting Node has [Crafting Node Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Cut Scene Interactable

A Cut Scene Interactable creates the same Interactable Option as a Cutscene Config.

## Properties

A Cut Scene Interactable has [Cutscene Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Dialog Interactable

A Dialog Interactable creates the same Interactable Option as a Dialog Config.

## Properties

A Dialog Interactable has [Dialog Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Faction Change Interactable

A Faction Change Interactable creates the same Interactable Option as a Faction Change Config.

## Properties

A Faction Change Interactable has [Faction Change Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Gathering Node

A Gathering Node creates the same Interactable Option as a Gathering Node Config.

## Properties

A Gathering Node has [Gathering Node Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Item Pickup

An Item Pickup creates the same Interactable Option as an Item Pickup Config.

## Properties

An Item Pickup has [Item Pickup Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Load Scene Interactable

A Load Scene Interactable creates the same Interactable Option as a Load Scene Config.

## Properties

A Load Scene Interactable has [Load Scene Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Lootable Character

A Lootable Character creates the same Interactable Option as a Lootable Character Config.

## Properties

A Lootable Character has [Lootable Character Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Moveable Object

An Moveable Object Interactable Option moves and/or rotates an object between its initial position in the scene and a defined position.

## Properties

Name	Description
Switch Only	If true, this option can only be interacted with via a switch.
Moveable Object	A link to the prefab which will be moved and/or rotated.
Movement Speed	The speed, in meters per second, the object will move at.
Rotation Speed	The speed, in degrees per second, the object will rotate at.
Delay Time	The amount of seconds to delay inbetween open and close actions when looping.
Loop	If true, the object should continue moving and rotating between the start and end positions until the Interactable Option is interacted with again.
Target Position	The Vector3 target position to move to.
Target Rotation	The Vector3 target rotation to rotate to.
Open Audio Clip	A link to an Audio Clip to play when changing to the open (starting) position.
Close Audio Clip	A link to an Audio Clip to play when changing to the closed (ending) position.

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.
- An Moveable Object moves a prefab, so a prefab that is intended to be moved must be present in the scene. This can be any prefab and does not have to be in the same heirarchy as the Moveable Object Monobehaviour.



# Moveable Prefab

A Moveable Prefab creates the same Interactable Option as a Moveable Prefab Config.

## Properties

A Moveable Prefab has [Moveable Prefab Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Music Player

A Music Player creates the same Interactable Option as a Music Player Config.

## Properties

A Music Player has [Music Player Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Name Change Interactable

A Name Change Interactable creates the same Interactable Option as a Name Change Config.

## Properties

A Name Change Interactable has [Name Change Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Pressure Switch

An Pressure Switch is a type of switch that is activated when a RigidBody with a certain weight moves into its collider.

## Properties

Name	Description
Control Objects	A list of links to other Interactable Options in the same scene.
Switch Group	A list of other Switch-type Interactable Options. A of the other options must be in the Open Position for this switch to activate its <i>Control Objects</i> .
Activation Limit	The number of times this switch can be activated. is unlimited.
Minimum Weight	The minimum weight a RigidBody must have to activate this switch.

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.
- For a pressure switch to do anything, it needs to have links to at least one other valid Interactable Option in the same scene.

# Quest Giver

A Quest Giver creates the same Interactable Option as a Quest Giver Config.

## Properties

A Quest Giver has [Quest Giver Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Skill Trainer

A Skill Trainer creates the same Interactable Option as a Skill Trainer Config.

## Properties

A Skill Trainer has [Skill Trainer Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Specialization Change Interactable

A Specialization Change Interactable creates the same Interactable Option as a Specialization Change Config.

## Properties

A Specialization Change Interactable has [Specialization Change Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Teleport Interactable

A Teleport Interactable creates the same Interactable Option as a Teleport Config.

## Properties

A Teleport Interactable has [Teleport Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# Unit Spawn Controller Interactable

A Unit Spawn Controller Interactable creates the same Interactable Option as a Unit Spawn Controller Config.

## Properties

A Unit Spawn Controller Interactable has [Unit Spawn Controller Config Properties](#).

## Dependencies

- An Interactable Monobehavior must be on the same GameObject.

# **Vendor**

A Vendor creates the same Interactable Option as a Vendor Config.

## **Properties**

A Vendor has [Vendor Config Properties](#).

## **Dependencies**

- An Interactable Monobehavior must be on the same GameObject.

# Environmental Effect Area

An environmental effect area is an area where any player that enters will have some type of environmental effect applied to him, such as lightning damage, lava damage, poison damage, etc.

## Properties

Name	Description
Tick Rate	The number of seconds that should elapse between each tick of <a href="#">Ability Effects</a> .
Ability Effect Names	A list of <a href="#">Ability Effects</a> to apply to any characters inside the area on every tick.

## Dependencies

- A box collider is required on the same GameObject as the script. It should be marked as a trigger so that it can detect when a character enters the area.

# Movement Sound Area

A Movement Sound Area changes the sound of footsteps for any character in motion in the area. This can be used to change default footsteps to water splashes, gravel crunches, grass swishing etc.

## Properties

Name	Description
Movement Loop Profile Name	The name of an <a href="#">Audio Profile</a> containing a looping audio clip that will be played while the a character is in motion.
Movement Hit Profile Name	The name of an <a href="#">Audio Profile</a> containing a list of footstep hit sounds that will be played whenever a characters feet hit the ground in response to <code>PlayFootStep</code> or <code>PlayStep</code> animation events.

## Dependencies

- A collider marked as a trigger is required on the same GameObject as the script so that it can detect when a character enters the area.

# Persistent Object

A Persistent Object will have its position saved, so when a game is loaded, the object appears in the last place it moved to, instead of its default position in the scene.

## Properties

A Persistent Object contains a single property, *Persistent Object Component*, with the following properties.

Name	Description
Persist Object Position	If true, the object position is saved so that the object will spawn at the saved location next time a game is loaded. This requires at least one of <i>Save On Level Unload</i> , or <i>Save On Game Save</i> .
Save On Level Unload	If true, the position will be saved when a level is unloaded.
Save On Game Save	If true, the position will be saved when the game is saved.

## Dependencies

- A UUID script is required, which is automatically added upon adding the Persistent Object script.

# Respawn Area

A Respawn Area is designed to be placed below a scene, covering its entire horizontal area, for the purpose of preventing infinite falling if a character falls through the bottom of a scene.

## Usage

A Respawn Area is included in the system template prefab, ZoneColliders, which is added to any new scene created with the New Scene Wizard, but can also be added manually to any GameObject.

## Properties

A Respawn Area has no properties.

## Dependencies

- A Collider marked as a trigger is required in order to detect characters as they enter the Respawn Area.

# **Unit Spawn Node**

A Unit Spawn Node is responsible for spawning character units in a scene.

## **Properties**

Name	Description
Unit Profile Names	<a href="#">Unit Profiles</a> of characters that will be spawned.
Dynamic Level	If true, the spawned characters will be the same level as the player, instead of the default level set in the <i>Unit Level</i> field.
Unit Level	The level the characters will be set to, if <i>Dynamic Level</i> is false.
Extra Levels	If <i>Dynamic Level</i> is true, the characters will have this many more levels than the player. This is used to guarantee some characters are always tougher than the player.
Default Toughness	The <a href="#">Toughness</a> the spawned characters will be.
Spawn Timer	Spawn time for regular mob spawns, such as when <a href="#">Prerequisites</a> are updated, or the spawner supports multiple units and they should not all spawn at once.
Spawn Delay	An additional delay to add to the timer, meant to allow an offset for multiple spawners of the same type.
Despawn Delay	An extra delay from the time the <code>Destroy GameObject</code> call is made before it is actually destroyed.
Respawn Timer	A separate spawn timer for when mob despawns are detected to give players longer to move away before a mob attacks them again. -1 disables respawning of despawned units.
Respawn On	<p>An enumeration of options that controls when respawns will happen.</p> <p><b>Despawn</b> Respawns will happen when a character despawns.</p> <p><b>Loot</b> Respawns will happen as soon as a character is looted.</p> <p><b>Death</b> Respawns will happen immediately upon a character dying.</p> <p>The maximum number of simultaneous units that can be spawned. If this number is reached,</p>

Max Units	additional spawns will be prevented until the number of active characters falls below this number. Set to -1 to do infinite spawns.
Suppress Auto Spawn	Set to true to allow for <a href="#">Unit Spawn Control Panels</a> to use this node.
Trigger Based	If true, ignore spawn timers and use trigger instead.
Trigger Limit	The number of times this object can be triggered. -1 is unlimited.
Spawn Density	In area mode, the number of mobs per square meter to spawn.
Point Based	If true, units will spawn at the pivot of the Unit Spawn Node.
Force Despawn Units	If true, and there are units spawned, and the <a href="#">Prerequisite Conditions</a> are no longer met, despawn them.
Prerequisite Conditions	<a href="#">Prerequisite Conditions</a> that must be met for units spawn.

## Dependencies

- If *Trigger Based* is set to true, then a Collider marked as a trigger is required on the same GameObject in order to detect when players enter the area.

# Water Body

A Water Body is an enclosed area the player can float and swim within.

## Properties

Name	Description
My Collider	A link to a Collider.
Use Fog	If true, fog will be enabled when the camera is within the bounds of the collider to give a realistic under water effect by limiting the distance that the player can see.
Fog Color	The color of the fog to be used when the camera is in the water.
Fog Density	The density of the fog. More dense fog means the distance a player can see is smaller.
Enter Water Audio Profile Name	An <a href="#">Audio Profile</a> containing a link to an audio clip to play for a splash sound when entering the water.
Swim Loop Audio Profile Name	An <a href="#">Audio Profile</a> containing a link to an audio clip to loop when the player is swimming on the surface of the water.
Swim Hits Audio Profile Name	An <a href="#">Audio Profile</a> containing a link to audio clip to play whenever the players hands hit the water when the player is swimming on the surface of the water.

## Dependencies

- A collider is required on the same GameObject as the Water Body so that players can be detected when they enter the water.

# Architecture

# Ability System

The ability system is separated into 2 parts: abilities and ability effects.

Abilities are relatively simple and are mostly responsible for determining when an effect is able to be cast.

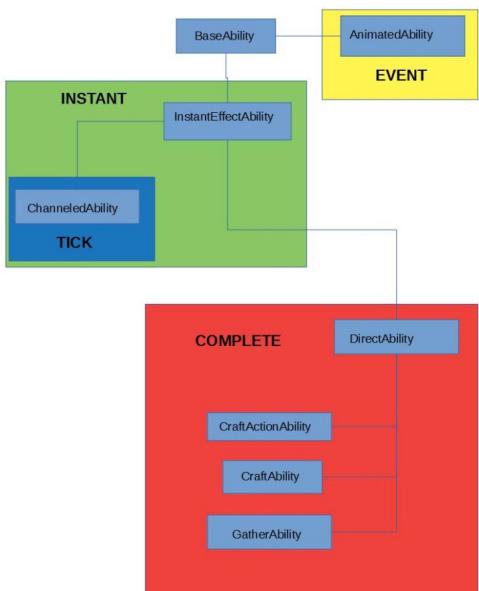
Effects are the part of the system that are responsible for performing actions, and can call other effects to chain together pieces of functionality and build complex spells from simple components.

Both abilities and ability effects make heavy use of class inheritance to maximize the re-use of common code and minimize any code duplication to ensure predictable and reliable behavior when chaining effects together to build spells and abilities.

# Abilities

Abilities have 3 basic ways to determine when it is time to cast an effect:

1. Event based abilities are triggered by events in animations, and can be triggered multiple times by the same animation if that animation has multiple events configured.
2. Instant abilities cast their effect right away, and in the case of channeled abilities, instantly on each tick of the channel.
3. Complete abilities cannot cast their effect until a cast reaches the end of its cast timer and completes successfully.



# Ability Effects

Ability Effects are separated into small pieces of related functionality, and can be chained together like building blocks to build up quite complex spells. The 3 main groups of functionality are:

1. Attached effects are tracked by the CharacterStats class on the actual character, have a length that can be extended or refreshed, and are capable of both directly affecting a character's stats, and performing additional effects over their lifetime.
2. Targeting and timing effects are responsible for deciding when and where to trigger additional effects. They may choose valid targets from a group of targets, direct the motion of physical prefabs, and determine how long spell effects remain in the game before they are destroyed. They cannot perform any direct action on a character, but can call any other effect, including effects which can perform actions on characters.
3. Action effects perform actions on characters. Current action capabilities include resurrection, teleportation, healing, and damage dealing.



# Project Settings

This section lists the required settings and configuration for the AnyRPG Engine to work in Unity.

# Layers

The table below lists the required layers and their purpose.

Layer	Name	Source	Usage
0	Default	Unity	Projectors will shine on this layer. Invector controller requires anything walkable to use this layer.
1	TransparentFX	Unity	
2	Ignore Raycast	Unity	Player Nameplate uses this layer to prevent accidental highlight of player unit.
3		Unity	
4	Water	Unity	
5	UI	Unity	
6		Unity	
7		Unity	
8	Player	Invector/AnyRPG	Used to allow camera to ignore anything that is not the player in player unit frame and character panel. Many packages like Invector also rely on this player being set to this layer so they can find it.
9	Enemy	Invector	
10	CompanionAI	Invector	
11	Triggers	Invector	
12	StopMove	Invector	
13	Action	Invector	
14	HeadTrack	Invector	
15	BodyPart	Invector	
16	BlockAIRayCast	Invector	

17	Equipment	AnyRPG	Set anything attached to the player to this layer to prevent it from interfering with ground detection or projector. Unused. This was probably from an import of a VFX package.
18	FireLayer	Package	
19	PlayerPreview	AnyRPG	Used by the load game screen to allow the camera to ignore anything that is not a player preview.
20	SpellEffects	AnyRPG	Used to ignore raycasts, collision, and all but the main camera rendering spell effects.
21	Minimap	AnyRPG	Anything on this layer will only be rendered by the minimap camera. Used for interactable icons such as questgiver shown on the minimap.
22	CharacterUnit	AnyRPG	CharacterUnit is the layer that all characters should be placed on. This allows them to show in unit frames and is required for an AOE ability to target anything to avoid spending time processing hits again the ground, props, etc.
23	UnitPreview	AnyRPG	Unit previews such as unit spawn control panels will place their targets on this layer so other cameras don't render them.
			Pet previews such as pet journals will place

24	PetPreview	AnyRPG	their targets on this layer so other camera don't render them.
25	Interactable	AnyRPG	Used to render non character units in Uni frames without rendering the environment.
26		Unused	
27		Unused	
28		Unused	
29		Unused	
30		Unused	
31	AlwaysVisible	Package	The Sun Temple uses this layer to make certain things in the background always visible regardless of culling distances.

# Tags

AnyRPG uses certain tags for different functionality.

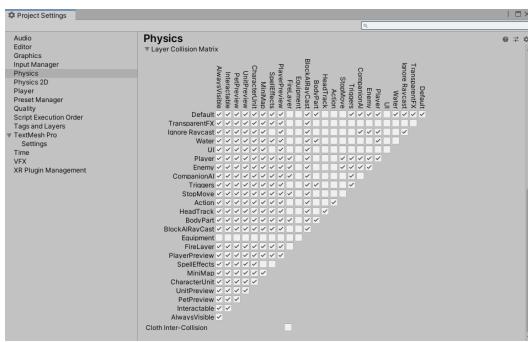
Name	Source	Usage
DefaultSpawnLocation	AnyRPG	Tag an object with this and the player will spawn at that point if there is no specific spawn location set in the scene node.
NorthEntrance		An easy tag that can be used for a spawn point when travelling between zones in the 4 main compass directions.
SouthEntrance		An easy tag that can be used for a spawn point when travelling between zones in the 4 main compass directions.
WestEntrance		An easy tag that can be used for a spawn point when travelling between zones in the 4 main compass directions.
EastEntrance		An easy tag that can be used for a spawn point when travelling between zones in the 4 main compass directions.

# Physics Settings

The most important settings are:

- Equipment should never collide with anything or weapons can interfere with character movement.
- Spell Effects should never collide with themselves or things like meteors could blow each other up instead of reaching the character or ground.

The full settings matrix is below.



# Shared Properties

# Capabilities

Capabilities are lists of abilities, traits, and equipment skills that a character gains access to from capability providers.

## Properties

Name	Description
Ability Names	A list of <a href="#">abilities</a> the character can cast.
Trait Names	A list of inherent <a href="#">status effects</a> that will always be active on the character, and will not show on the status effect bars.
Armor Class List	A list of <a href="#">armor classes</a> that the character can equip.
Weapon Skills	A list of <a href="#">weapon types</a> the character can equip.
Valid Pet Types	A list of <a href="#">unit types</a> that the character can capture as pets.
Starting Pets	A list of <a href="#">unit profiles</a> that the character will be able to summon as pets by default, without needing to first capture them.

# Prerequisite Conditions

Prerequisite conditions are lists of conditions that must be satisfied, and can be used to gate objects from spawning or interactable options from being available.

## Properties

Name	Description
Require Any	If true, only one condition needs to be satisfied for the prerequisite to be met.
Reverse Match	If true, the prerequisites will use NOT logic, and must be false to be met.
Level Prerequisites	A list of level prerequisites that must be met. <b>Required Level</b> The character must be at or above this level for the prerequisite to be met.
Character Class Prerequisites	A list of <a href="#">Character Class</a> prerequisites that must be met. <b>Required Character Class</b> The character class that the character must be for the prerequisite to be met.
Quest Prerequisites	A list of <a href="#">Quest</a> prerequisites that must be met. <b>Prerequisite Name</b> The name of the quest. If Require Complete and Require Turned In are false, the character must have the quest in their quest log. <b>Step Index</b> For multi-step quests, the step of the quest that must be active. <b>Require Complete</b> If true, the quest must be marked complete. <b>Require Turned In</b> If true, the quest must be turned in.
Dialog Prerequisites	A list of <a href="#">Dialog</a> prerequisites that must be met. <b>Prerequisite Name</b> The name of the <a href="#">Dialog</a> that must be completed.
Visit Zone Prerequisites	A list of visit zone prerequisites that must be met. <b>Prerequisite Name</b> The name of the Scene that must have been visited for the prerequisite to be met.
Trade Skill Prerequisites	A list of trade skill prerequisites that must be met. <b>Prerequisite Name</b> The name of the <a href="#">Trade Skill</a> the character must know for the prerequisite to be met.
Ability Prerequisites	A list of ability prerequisites that must be met. <b>Prerequisite Name</b> The name of the <a href="#">Ability</a> that must be known for the prerequisite to be met.
	A list of faction prerequisites that must be met.

Faction Prerequisites

**Prerequisite Name**

The name of the faction the character must have reputation with.

**Prerequisite Disposition**

The amount of reputation the character must have

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# Stat Scaling Nodes

Stat Scaling Nodes define primary stats and their budget per level. Each point of primary stat can provide direct or rated amounts of secondary stats as well as direct amounts of power resources.

## Properties

Name	Description
Stat Name	A <a href="#">Character Stat</a> .
Budget Per Level	The number of points of the stat that a character will gain for each level.
Primary To Secondary Conversion	The amount of each secondary stat that a character will gain for each point of the primary stat. See <a href="#">Character Stat Properties</a> for field description
Primary To Resource Conversion	A list of <a href="#">Power Resources</a> and the number of points of that resource gained per point of the primary stat. See <a href="#">Character Stat Properties</a> for field description
Regen	A list of the amount of <a href="#">Power Resources</a> that will be regenerated per point of primary stat every tick. See <a href="#">Character Stat Properties</a> for field description