

Eadon RPG for Invector

Eadon RPG for Invector TPC

Version 3.0.0

Table of Contents

Introduction.....	5
Changelog.....	6
Prerequisites.....	8
Configuration.....	14
Stats.....	14
Skills.....	14
Races.....	14
Stat Modifiers.....	15
Skill Modifiers.....	15
Race Resistances.....	15
Classes.....	15
Stat Modifiers.....	16
Skill Modifiers.....	16
Class Resistances.....	16
Alignments.....	16
Alignment Resistances.....	16
Damage Types.....	16
Talents.....	16
Eadon RPG Defaults.....	17
Eadon RPG Character Configuration.....	20
Character Creation.....	21
General steps.....	21
RPG Character Data.....	22
Invector & UI.....	22
Condition Effects.....	22
Character.....	22
Creating a character.....	22
AnimationController setup.....	28
Inventory setup.....	28
Spell Creation.....	29
Eadon Projectile.....	33
Eadon Buff Spell.....	34
Eadon Area Buff Spell.....	34
Eadon Targeted Buff Spell.....	35
Eadon Healing Spell.....	35
Eadon Area Healing Spell.....	36
Eadon Damage Shield Spell.....	36
Eadon Charm Person Spell.....	37

Eadon Hold Person Spell.....	38
Eadon Area Freeze Spell	38
Eadon Stop Healing Spell	39
Eadon Polymorph Spell	39
Eadon Push Spell.....	41
Eadon Area Push Spell.....	41
General notes on spells	41
Equipment	43
NPC Creation.....	43
Vendor System.....	44
Clothing System	52
Masking System.....	56
Synty Studios' Modular Fantasy Hero support.....	58
Clothing Extractor	60
Setting up clothing	62
Clothing Manager	62
Clothing Item Scriptable Object	63
Clothing Sets.....	65
Clothing Holder List.....	66
Changes to inventory code	67
Workflow for Character Creation 3	67
Support for Eadon Survival for Invector.....	68
Talent enhancements.....	68
Race enhancements	68
Class enhancements.....	68
Buff spells enhancements.....	69
Equipment attributes enhancements.....	69
Survival protections	70
Stash System.....	71
Creating a Stash	72
Global Stashes	73
Saving And Loading Stashes.....	73
Random Collectables and Random Loot	74
Support for Eadon AI.....	78
Preferred RPG Targets.....	78

Switchable RPG characters	78
<i>Integration with Clothing Culler</i>	79
<i>License</i>	80

Introduction

Eadon RPG is an add-on for Invector's Third Person Controller asset for the Unity game engine. The goal of this asset is to provide a framework for implementing RPG games in Unity.

The asset does not make any assumptions on the type of role playing games, allowing for a wide range of game styles.

The following functionalities are implemented:

- Stats
- Skills
- Stat and Skill tests
- Armour and damage reduction
- Magic
- Magic damage and reduction
- Spells
- Clothing system
- Vendor system

This add-on is currently compatible with Invector TPC version 2.5.3 and higher (Melee and Shooter) and tested on Unity 2018.4.30 and higher.

Changelog

V 1.0	Initial release
V 1.01	Bug fixes
V 1.02	Bug fixes and support for HAP 4.2.3
V 1.1	Masking system for clothing, Synty Modular Fantasy Hero support
V 1.2	Bug fixes and support for clothing that just changes a material on main mesh
V 1.2.1	Bug fixes and added destroy on collision to EadonProjectile
V 1.2.2	Bug fixes and added vendor creation wizard
V1.3	Bug fixes and improvement to clothing system (clothing sets and multicharacter clothing items)
1.3.1	Bug fixes, support for Eadon Advanced Crafting, save/load of clothing configuration
1.4	Bug fixes, support for multislot clothing items and addition of events before/after equipping clothes
1.5	Bug fixes
1.6	Bug fixes and support for HAP 4.2.6
1.7	Compatibility with Invector 2.6.0
1.8	Compatibility with Invector 2.6.1
1.9	Bug fixes and improved support for Eadon Survival for Invector
2.0	Bug fixes for RPG NPCs and addition of stash system
2.1	Bug fixes for magical damage, addition of charm and hold person spells and improved installation process
2.2	Changed how clothing manager works: now instead of being unique in Resources folder is per character
2.3.0	Bug fixes New spell types Enhanced integration with Eadon AI
2.4.0	Bug fixes New spell types RPG preferred targets when using Eadon AI
2.4.1	Support for Clothing Culler Bug fixes

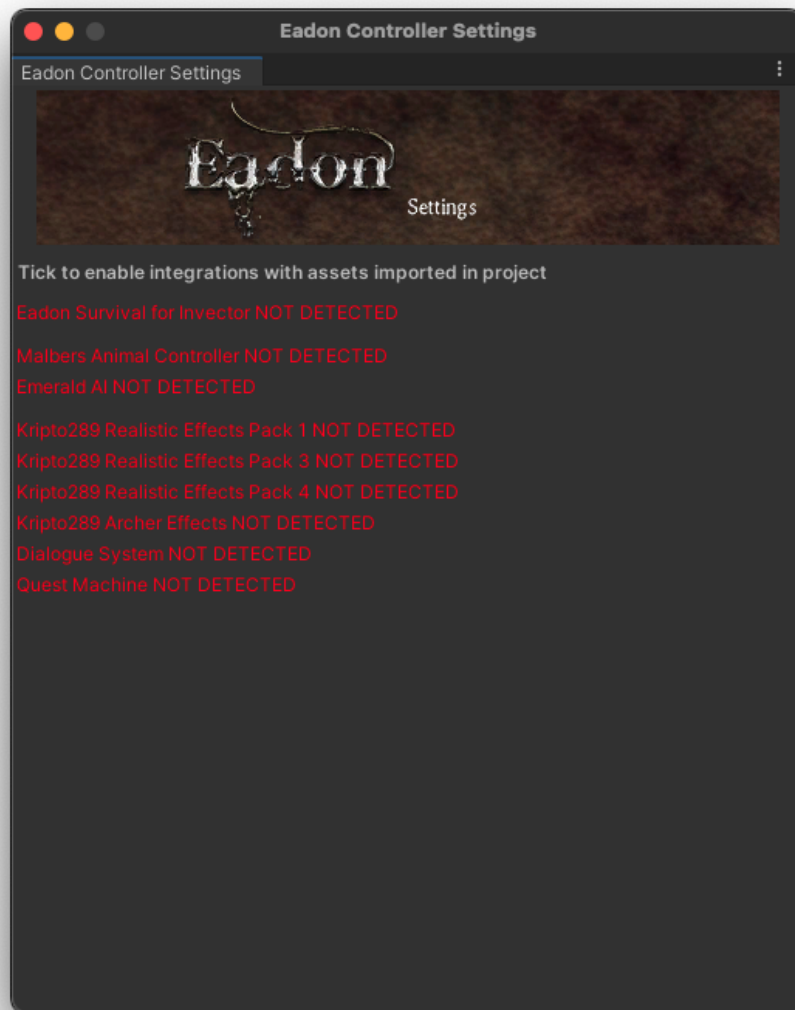
2.5	Stash saving support Random loot pickups Bug fixes
2.6	Update to Invector 2.6.4
3.0	New project structure

Prerequisites

Eadon RPG contains support for the following packages:

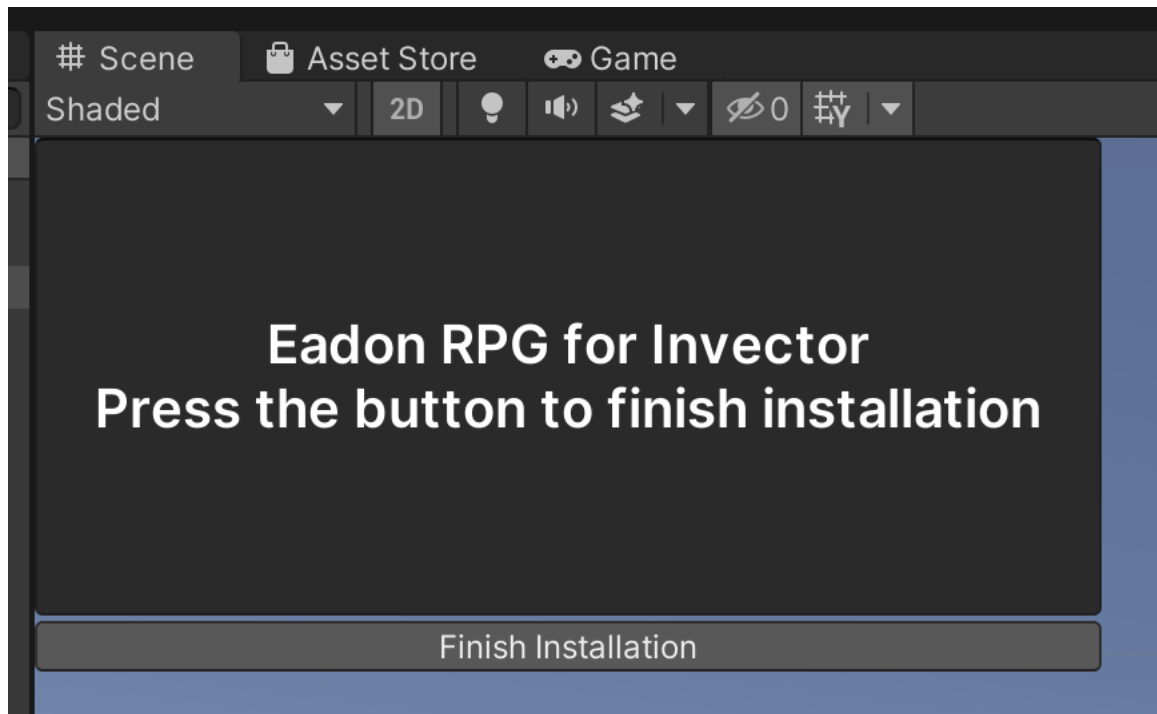
- Eadon Survival for Investor (<https://assetstore.unity.com/packages/tools/game-toolkits/eadon-survival-for-invector-tpc-201861>)
(<https://store.cogsandgoggles.com/products/eadon-survival-for-invector>)
Eadon AI (<https://assetstore.unity.com/packages/tools/ai/eadon-ai-behaviour-trees-for-eadon-invector-and-malbers-201708>)
(<https://store.cogsandgoggles.com/products/eadon-ai>)
- Malbers Animations' Horse Animset Pro
(<https://assetstore.unity.com/packages/3d/characters/animals/horse-animset-pro-riding-system-79902>)
Emerald AI
(<https://assetstore.unity.com/packages/tools/ai/emerald-ai-3-0-203904>)
- Malbers Animations' Animal Controller
(<https://assetstore.unity.com/packages/tools/animation/animal-controller-148877>)
- Kripto289's Magic Effect Pack 1
(<https://assetstore.unity.com/packages/vfx/particles/spells/magic-effects-pack-1-99856>)
- Kripto289's Realistic Effect Pack 3
(<https://assetstore.unity.com/packages/vfx/particles/spells/realistic-effects-pack-3-27523>)
- Kripto289's Realistic Effect Pack 4
(<https://assetstore.unity.com/packages/vfx/particles/spells/realistic-effects-pack-4-85675>)
- Kripto289's Archer Effects Pack 1
(<https://assetstore.unity.com/packages/vfx/particles/spells/archer-effects-pack-1-124474>)
- Dialogue System (<https://assetstore.unity.com/packages/tools/ai/dialogue-system-for-unity-11672>)
- Quest Machine (<https://assetstore.unity.com/packages/tools/game-toolkits/quest-machine-39834>)
- Clothing Culler (<https://assetstore.unity.com/packages/tools/utilities/clothing-culler-203672>)

Support for these assets can be enabled by going to the Invector/Eadon RPG/Settings menu and ticking the relative checkboxes to enable conditional compilation of support for the assets:



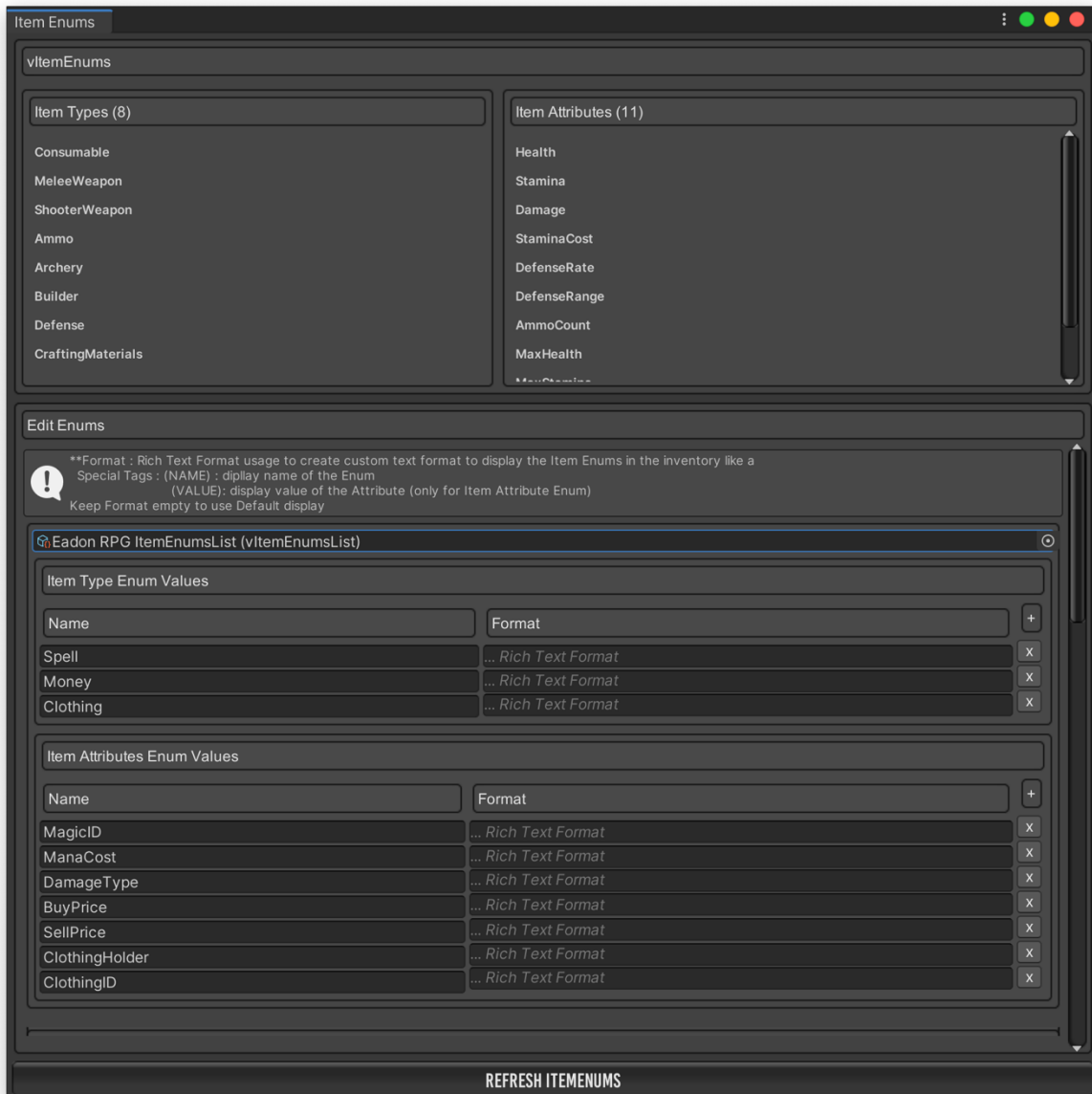
Enabling support for an asset which is not present in the project will generate errors. Integration with Emerald AI and Malbers' Animal Controller will allow spells to damage NPCs built with around these systems.

Starting with version 2.1, when you import the project you will see this in the scene view:

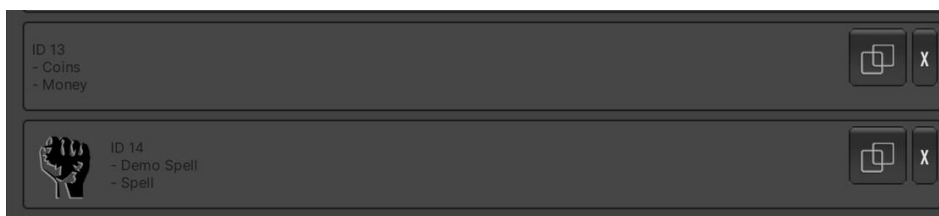


Press the button to complete the installation, which will automatically rebuild your [vItemEnums](#) and set a scripting define.

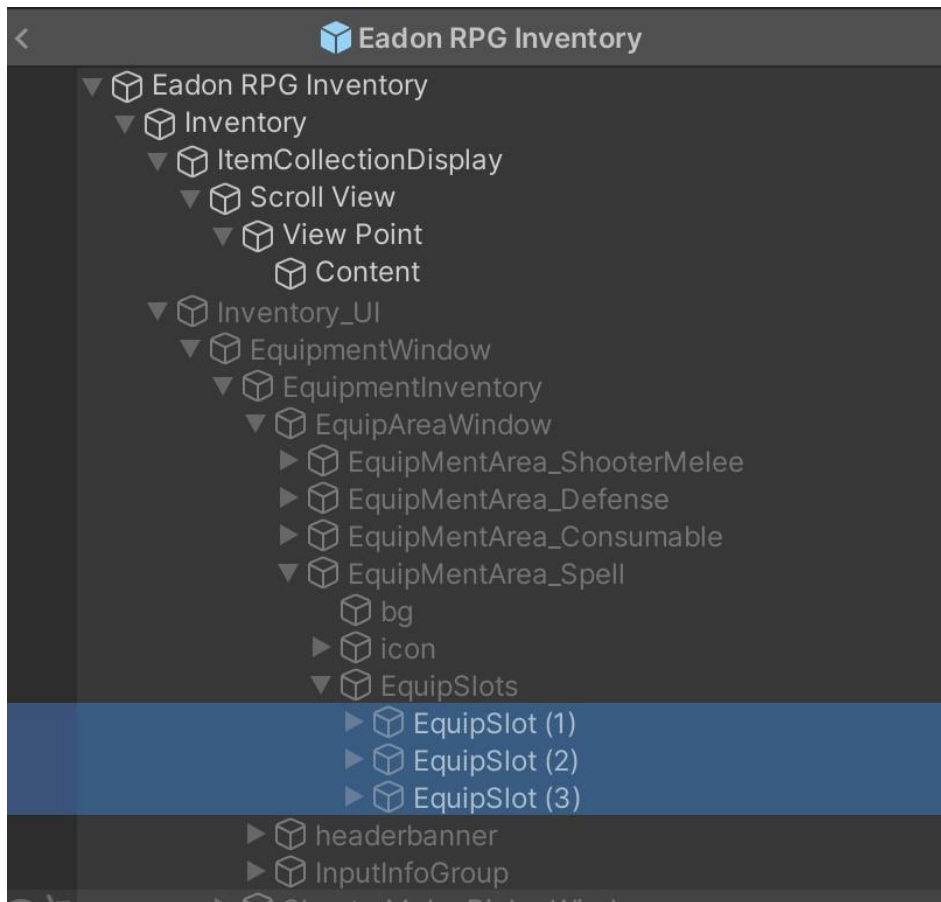
If you copy the scripts manually to another project, you might encounter several errors which will appear as soon as the add-on is imported because the code relies on the presence of three `vItemType` and seven `vItemAttributes`. In order to fix this error, you need to go to `Invector/Inventory/Item Enums/Open ItemEnums Editor` and click on "REFRESH ITEMENUMS" at the bottom and add the `EADON_RPG_INVECTOR` to the scripting defines in the Player section of the Project Settings.



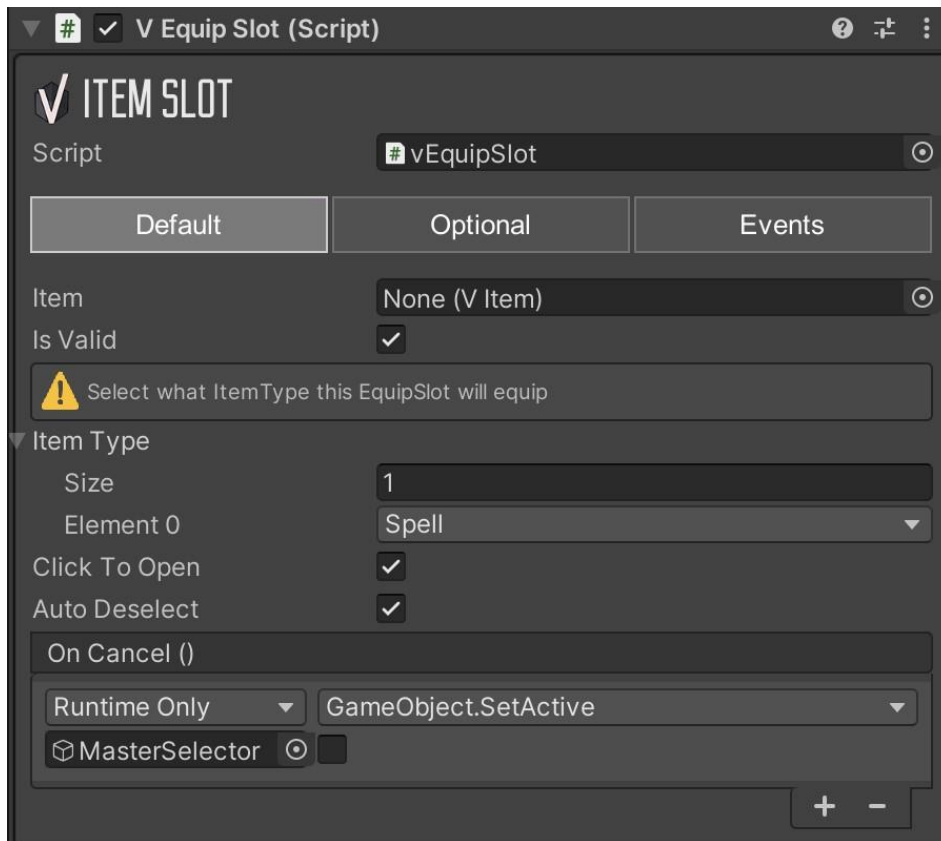
In order to run the demo scene correctly, please make sure the following items in the Eadon RPG Demo vItemList have the correct item type as in the picture below:



Check also all the items in the demo vItemList as some might have ended up with different item types. Also, make sure that the EquipSlots in the Spell Equipment Area



Look like the following picture:



All this is due to the fact that if you have any add-ons or different versions of Inventory, the order of item types might change.

Configuration

Before a character can be created, the RPG system must be configured. Eadon RPG is configured through a set of ScriptableObjects that determine what exists in the system. All Eadon RPG ScriptableObjects can be created using commands found under the **Assets -> Create -> Eadon RPG** menu.

Stats

Every character stat in the system need to be defined in a ScriptableObject asset. The asset contains the definition of the stat:

Field name	Purpose
Stat Name	A string containing the stat name
Min Value	The minimum value of the stat
Max Value	The maximum value of the stat
Affects HP	A boolean indicating if the stat affects hit points
Affects Stamina	A boolean indicating if the stat affects stamina
Affects Mana	A boolean indicating if the stat affects mana
Affects Weight Limits	A boolean indicating if the stat affects weight limits
Affects Spell Scale	A boolean indicating if the stat affects spell scale
Affects Damage	A boolean indicating if the stat affects damage

Skills

Every skill in the system need to be defined in a ScriptableObject asset. The asset contains the definition of the skill:

Field name	Purpose
Skill Name	A string containing the skill name
Min Value	The minimum value of the skill
Max Value	The maximum value of the skill
Related Stat	A field for the reference to the Stat Scriptable Object that defines the Stat the skill depends on
Affects Damage	A boolean indicating if the skill affects damage
Add Stat Bonus To Skill	A boolean indicating if the stat bonus adds to the skill

Races

Every race in the system need to be defined in a ScriptableObject asset. The asset contains the definition of the race:

Field name	Purpose
Race Name	A string containing the race name

Stat Modifiers	An array of modifiers to the character Stats. See below for details
Skill Modifiers	An array of modifiers to the character Skills. See below for details
Race Resistances	An array of modifiers to the character resistances. See below for details
Race Talents	An array of talents that are granted by the race at character creation
Base Armour	A field for the natural armour value for the race

Stat Modifiers

Stat modifiers have two fields. The first is a reference to the Stat ScriptableObject for the stat to modify, the second is an int for the actual modifier. Modifiers can be positive (to increase the value) or negative (to decrease the value).

Skill Modifiers

Like Stat modifiers, Skill modifiers have two fields. The first is a reference to the Skill ScriptableObject for the Skill to modify, the second is an int for the actual modifier. Modifiers can be positive (to increase the value) or negative (to decrease the value).

Race Resistances

Race resistances have two fields. The first is the damage type, a placeholder for a DamageType ScriptableObject (see below). The second is the actual resistance value.

Classes

Every class in the system need to be defined in a ScriptableObject asset. The asset contains the definition of the class:

Field name	Purpose
Class Name	A string containing the race name
Stat Modifiers	An array of modifiers to the character Stats. See below for details
Skill Modifiers	An array of modifiers to the character Skills. See below for details
Class Resistances	An array of modifiers to the character resistances. See below for details
Base Armour	A field for the natural armour value for the race
Damage Bonus	A field for the class damage bonus
Magic Resistance Multiplier	A field for a multiplier to magical resistance values
AI Attack At Range	A Boolean to indicate that an AI character can attack at range

Class Talents	An array of talents that are granted by the class at character creation
----------------------	---

Stat Modifiers

Stat modifiers are exactly like race stat modifiers

Skill Modifiers

Skill modifiers are exactly like race skill modifiers

Class Resistances

Class resistances are damage resistances exactly like Race resistances.

Alignments

Every alignment in the system need to be defined in a ScriptableObject asset. The asset contains the definition of the alignment:

Field name	Purpose
Alignment Name	A string containing the alignment name
Alignment Resistances	An array of modifiers to the character resistances. See below for details

Alignment Resistances

Alignment resistances are damage resistances exactly like Race resistances.

Damage Types

Every damage type in the system need to be defined in a ScriptableObject asset. The asset contains the definition of the damage type:

Field name	Purpose
Damage Type	A string containing the damage type name
Condition Effect	(Optional) a prefab for a condition effect (i.e. a particle effect) to be activated when the character is affected by the damage type

Damage types are needed for damage mitigation (specific resistances from race, class or equipment). It's entirely optional, except that at least one damage type ("Physical") needs to be defined for normal melee/shooting damage to work.

Talents

Talents are special abilities or bonuses that a character can acquire every x levels.

Field name	Purpose
------------	---------

Talent Name	The name of the talent
Talent Description	The description of the talent
Icon	The icon to use in the UI
Talent Type	The type of talent. Choice of Stat Bonus, Skill Bonus, Resistance Bonus, Spell-like ability, Extra Damage, Extra Armour, Extra Life, Extra Life Regeneration, Extra Mana, Extra Mana Regeneration, Extra Stamina, Extra Weight Capacity, Add Items, Charm Resistance, Hold Resistance
Stat/Skill/Resistance	The Stat, Skill or Resistance to modify
Bonus	The value of the bonus
Prerequisites	A list of all the prerequisites for the talent. Leave empty for no prerequisite. If you add prerequisites, ALL of them need to be satisfied

Talent prerequisites offer the choice of:

- Must Be Race
- Must Not Be Race
- Must Be Class
- Must Not Be Class
- Must Be Alignment
- Must Not Be Alignment
- Has Talent
- Does Not Have Talent
- Has Skill At Min Value
- Has Stat At Min Value
- Min Level

[Eadon RPG Defaults](#)

This is a ScriptableObject containing the default values for the whole system. The values are as follows:

Field name	Purpose	Default
Base Hp	The base HP for a character	36
HP Per Level	The HP increase per level	4
Base Mana	The base Mana for a character	100
Mana Per Int	The mana increase per point of stat	6
Base Stamina	The base Stamina for a character	150
Resistance Per Level	Resistance gained per level	0.05
Damage Per Level	Bonus damage gained per level	2
Level Up XP Base	Baseline XP needed to level up, see below	1000
Level Up XP Band	Band Cost XP, see below	250

Armour Reduction	Damage reduction per point of Armour	0.05
Spell Power Scale	Spell Power Scale (1 + bonus stats * scale)	0.01
Spell Power Max	Spell scale limit	3
Spell Scale Increase Per Level	How much the Spell Scale Increases per level	0.1
Max Level	Level cap	999
Stat Min Value	Minimum value for a stat	3
Stat Max Value	Maximum value for a stat	99
Stat Initial Value	Default initial value for a stat	8
Level Up Stat Points	How many stat points are earned on level up	4
Initial Unspent Stat Points	Initial additional stat points to allocate at character creation	0
Skill Max Value	Maximum value for a skill	99
Skill Initial Value	Default initial value for a skill	0
Level Up Skill Points	How many skill points are earned on level up	4
Initial Unspent Skill Points	Initial additional skill points to allocate at character creation	0
Initial Talents	Initial "free" talents for the character to pick	1
Base Weight Limit	How much character a base character can carry	20
Weight Increase Per Stat Point	How much extra weight can be carried per point of stat affecting weight capacity	2
Stat Bonus Tiers	Stat bonus tiers list (see below)	

XP calculations follow this formula:

$$\text{Level Up XP Base} * \text{level} + \text{Level Up XP Band Cost} * \text{level} * (\text{level} - 1)$$

This gives the following progression:

Level	Xp To next level
1	1000
2	2500
3	4500
4	7000
5	10000
6	13500
7	17500
8	22000
9	27000

10	32500
11	38500
12	45000
13	52000
14	59500
15	67500
16	76000
17	85000
18	94500
19	104500
20	115000
21	126000
22	137500
23	149500
24	162000
25	175000
26	188500
27	202500
28	217000
29	232000
30	247500
...	...

In the Cogs And Goggles/Eadon RPG For Invector folder you can find an Excel worksheet (XP Calculations) in which you can play with the values and adjust the XP levels to your liking.

Stats can provide a bonus to skills, if desired. If that is the case, please define tiers in the Stat Bonus Tiers list. These are (stat value, bonus) pairs. The way the system works is as follows. A skill will receive a bonus (or penalty if the bonus is negative) equal to the highest bonus that is below the stat value. Given the following Bonus Tiers list, for example:

1	-1
10	0
15	+1

A skill would receive a penalty of -1 if the associated stat is between 1 and 9, would receive no bonus if the stat is between 10 and 14 and receive a bonus of +1 if the stat is 15 or greater. The lowest tier should be linked to the minimum value of a stat.

Eadon RPG Character Configuration

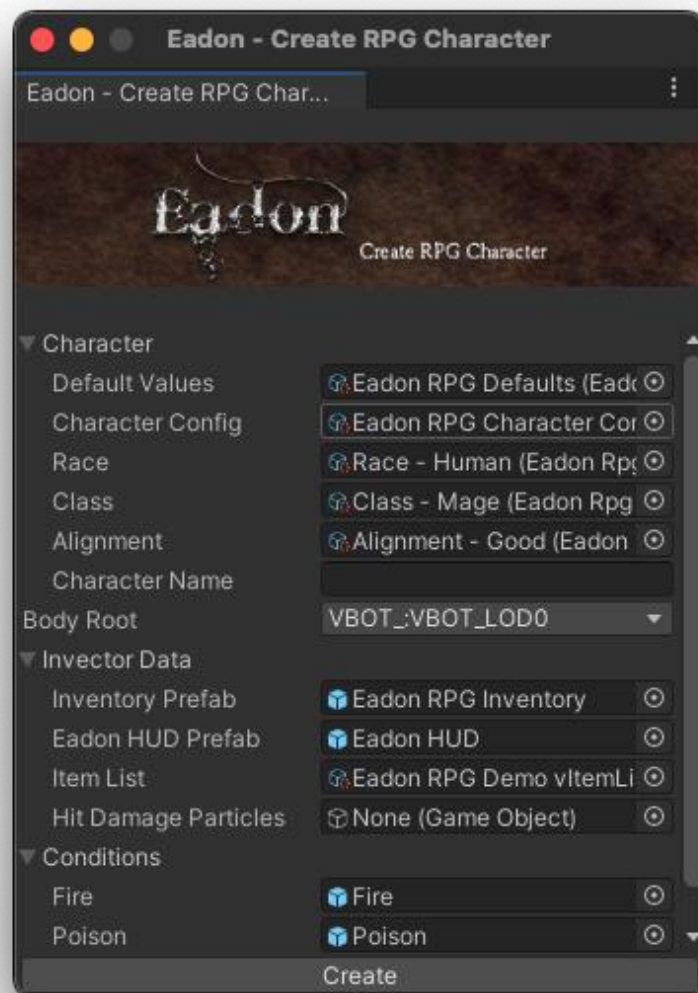
The final type of configuration ScriptableObject is the character configuration. This Scriptable object contains a series of arrays to ScriptableObjects listing all the stats, skills, races, classes, damage types, alignments and talents available.

Character Creation

Eadon RPG characters are an addition to standard Invector characters, therefore an Invector controller needs to be created first. The RPG Character template can be added to any type of Invector controller (Basic Locomotion, Melee and Shooter). Since the RPG add-on depends on changes to the Invector inventory prefab, please do not add an Invector inventory to your controller. It will be added through the wizard. If you do not add a vItemManager to the character, the wizard will do it for you.

General steps

Once an Invector character is created, select “Create RPG Character” from the “Eadon RPG” menu. The window that opens is already prefilled with default values from the sample configuration that comes with the add-on.



If you have changed the location of the add-on from the default location or if you have deleted or renamed some of the elements, the fields will be empty.

The window is split into sections:

RPG Character Data

This section has fields for the default values and character configuration for the system and three fields for the character race, class and alignment.

All the fields accept instances of the ScriptableObjects that make up the configuration of the Eadon RPG system.

Inventory & UI

This section has fields for the inventory prefab, the vItemDataList and the hit damage particle effect. The Inventory is the default Eadon RPG Inventory (a modification of Invector default inventory) and the vItemDataList contains sample data for Eadon RPG.

Condition Effects

This section lists all the condition effects defined in the various DamageType objects present in the system, and allow for an override of the default particle effects.

Character

A dropdown menu allows for selection of the actual character mesh, to which the condition parent GameObject will be attached.

Creating a character

When all the mandatory fields have a value, the “Create” button is active. A red error message indicates what needs to be fixed if something is wrong. Pressing the button will add two components to the character (**Eadon Character Instance** and **Eadon Magic Settings**), setup events listeners, add the inventory prefab to the character and add to the root the conditions prefabs and the magic spawn point.

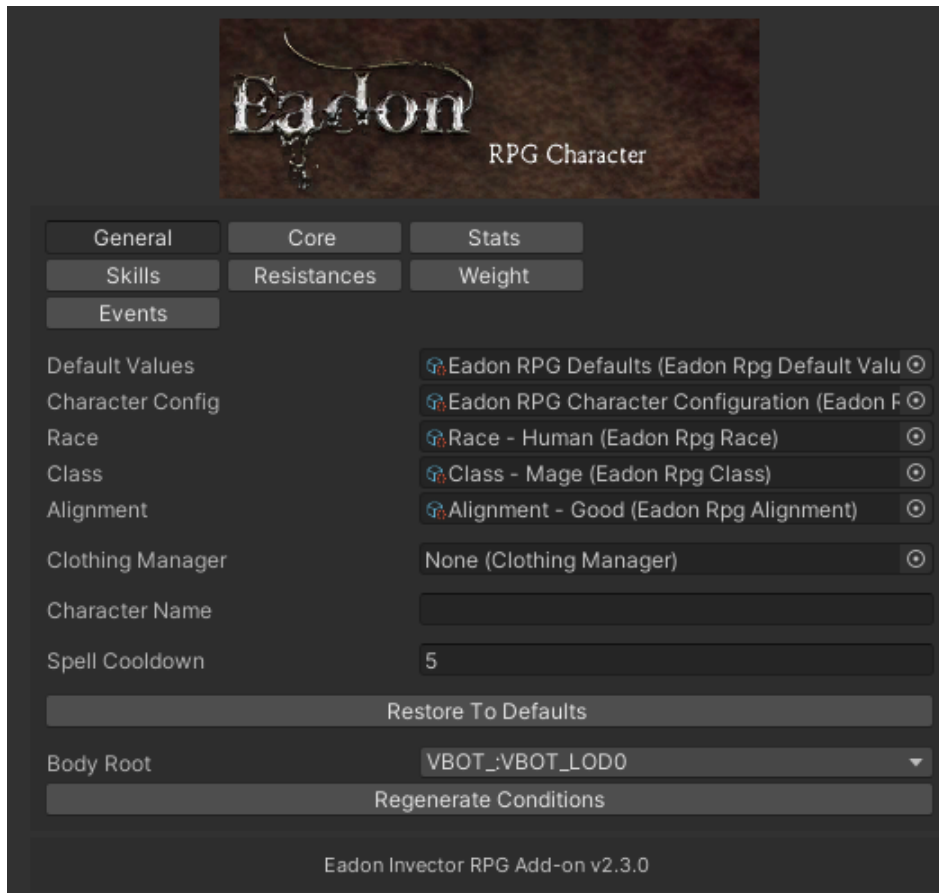
The first component, Eadon Character Instance, is the container for the stats, skills and resistances for the character. It will override the values defined in the Invector TPC for health and stamina with new values based on the values defined in the RPC defaults, the character stats, skills, race, class and level.

A range of controls allows for customization of the character, such as adding/removing levels, raising/lowering skills and stats, change resistances. There’s a button to restore the character to defaults, which means reset the character to first level and default values for skills, stats, etc.

Note that if you change the configuration of Eadon RPG, for example adding new skills or changing a class/race definition, you will need to restore to defaults or you will not see your changes applied.

If your changes end up “breaking” the component, you can delete them and add them again either through running the wizard again. Be aware that the wizard will add another inventory, magic spell point and conditions, so you should delete them before running the wizard.

The General tab contains the configuration of the character:

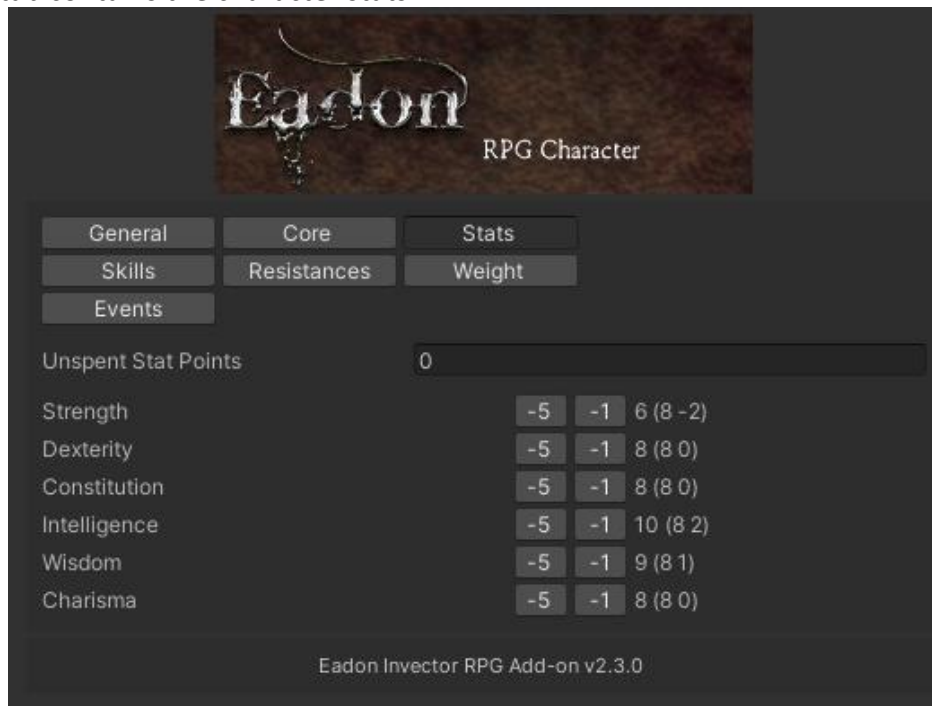


If you change the configuration of the conditions (i.e. if you add new damage types or if you change the VFX prefabs), press the Regenerate Conditions button to recreate them based on the new setup.

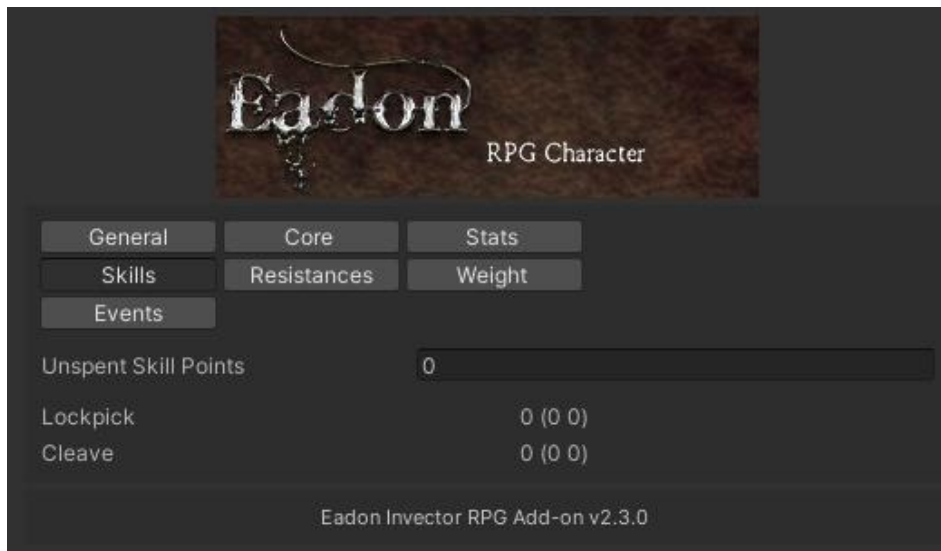
The Core tab contains core values for the character:



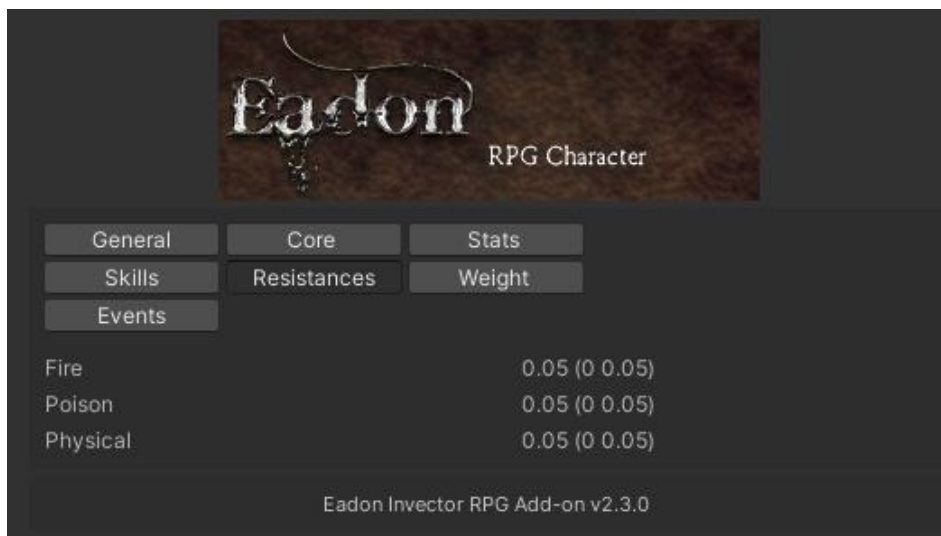
The Stats tab contains the character stats:



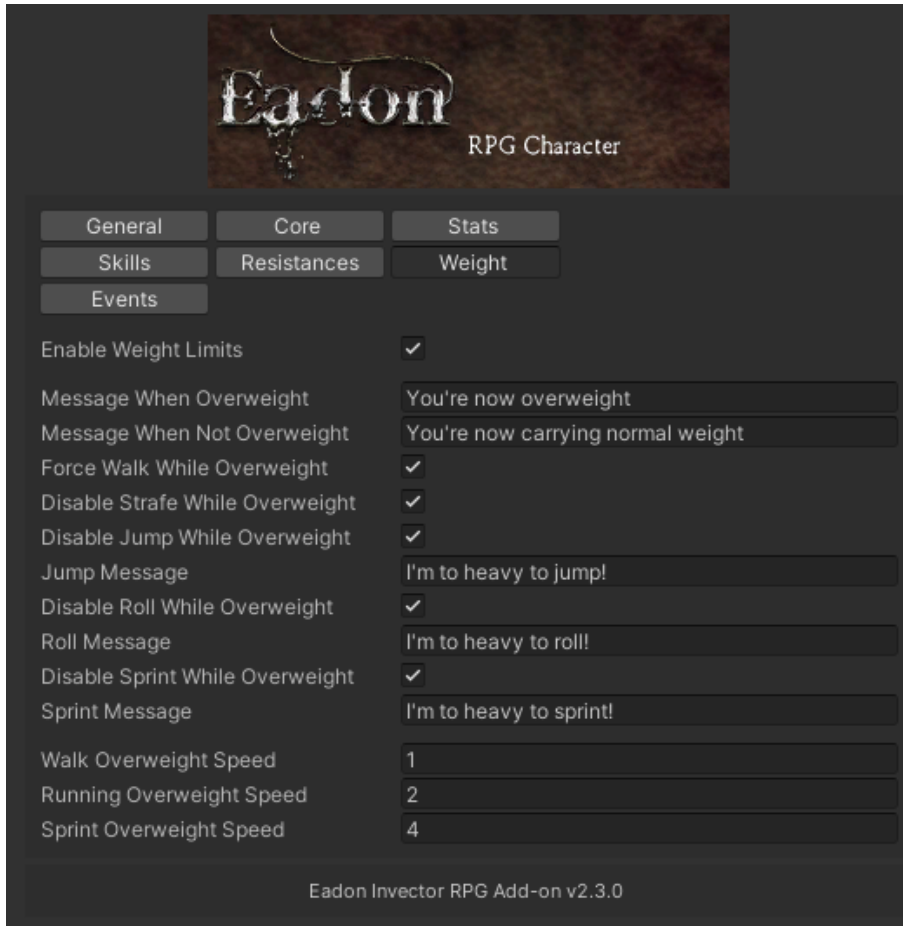
The Skills tab contains the skills:



The Resistances tab contains the resistances:

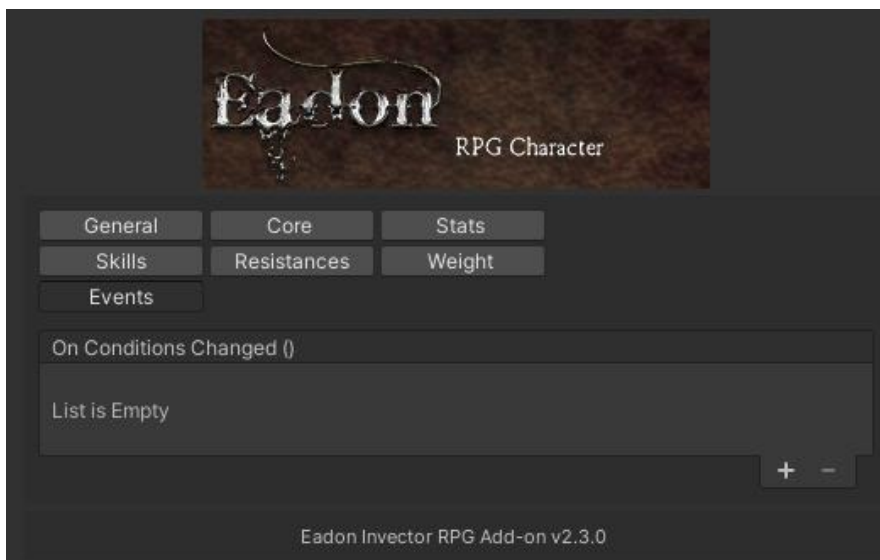


The Weight tab contains the configuration of the weight management:

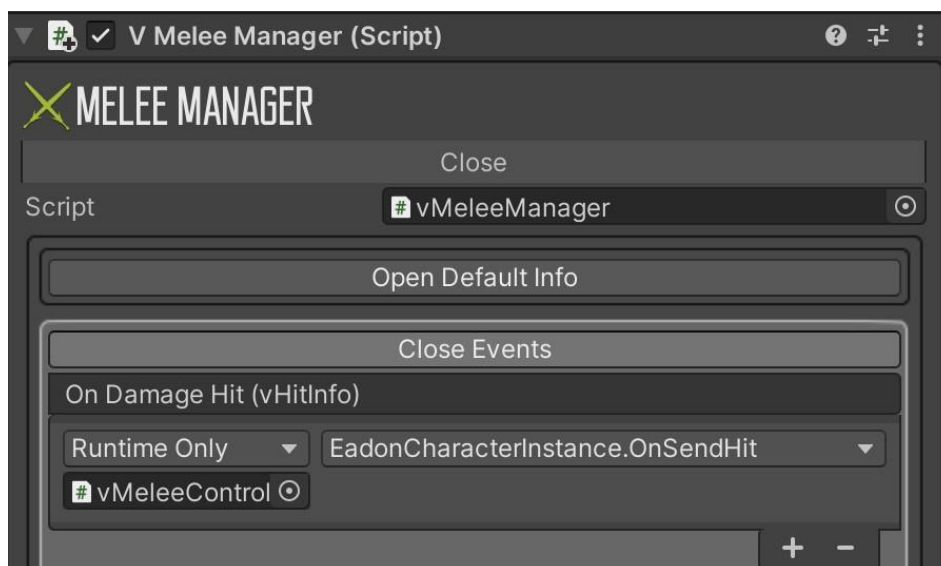
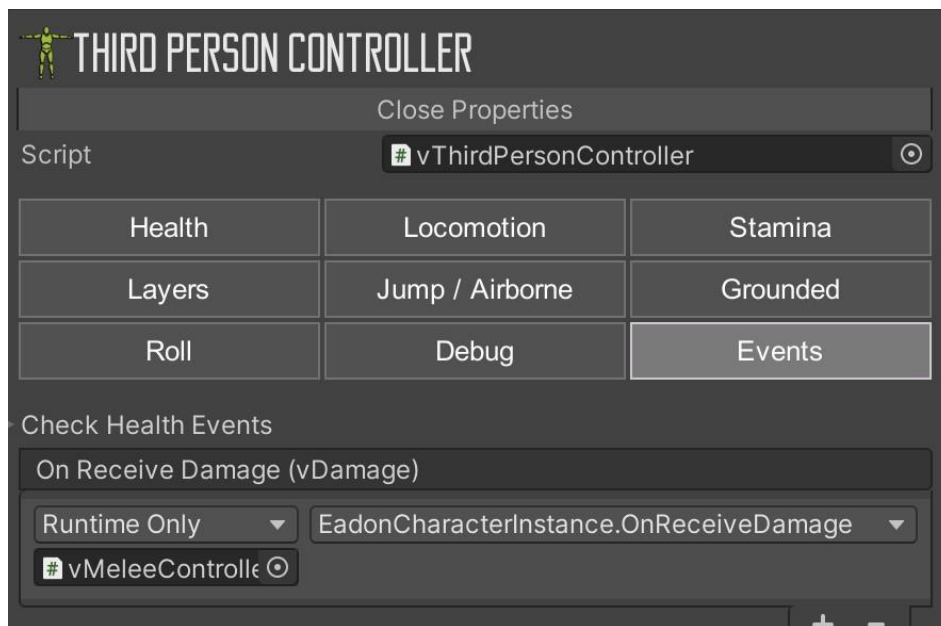


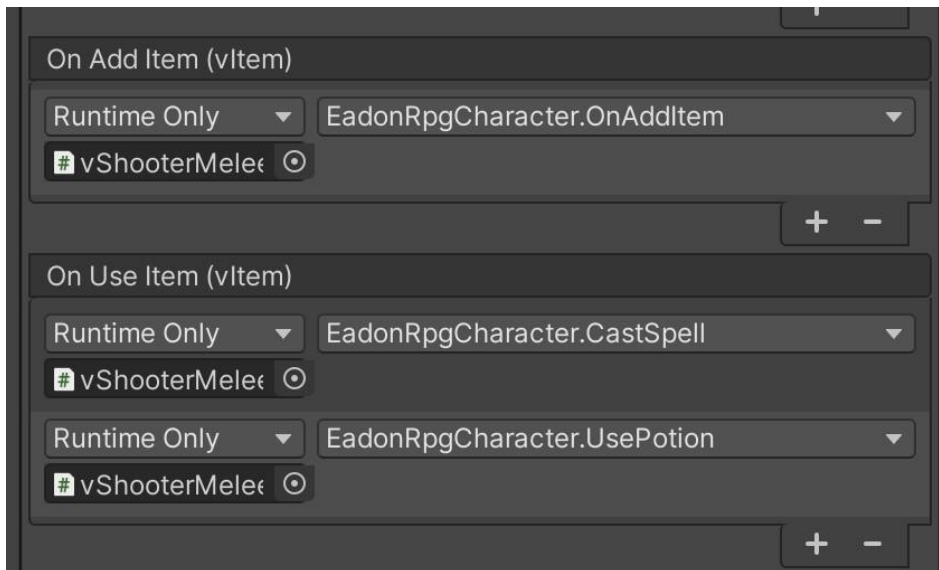
The weight system, if enabled, handles what happens when the character is overweight.

Finally, the Events tab contains events raised by the component:



The events set up by the wizards are the following:





The last ones are on vItemManager.

[AnimationController setup](#)

Eadon RPG uses the standard Invector animator controller, or any other modification you might have made to it. The Spellbook tool to create animations can add data to the animator so, as always, it's advised to make a backup copy of your animator controller before using it. For more information, please see the chapter on Spell Creation.

[Inventory setup](#)

The Eadon RPG inventory is derived from Invector TPC standard inventory, with the following modifications:

- The script changes from vInventory to EadonInventory. EadonInventory extends vInventory with support for spells and clothing
- The EquipAreaWindow (under Inventory_UI->EquipmentWindow>EquipmentInventory) has an additional EquipMentArea (called EquipMentArea_Spells) to handle the Spell quick slot. This is accompanied by its own picker window, called SpellPickerWindow and set up to accept only items of type Spell
- The EquipmentDisplayArea has a fourth EquipDisplay, called EquipDisplay_Spells, which is placed on top of the standards three from stock Invector inventory. This is configured similarly to the standard three:



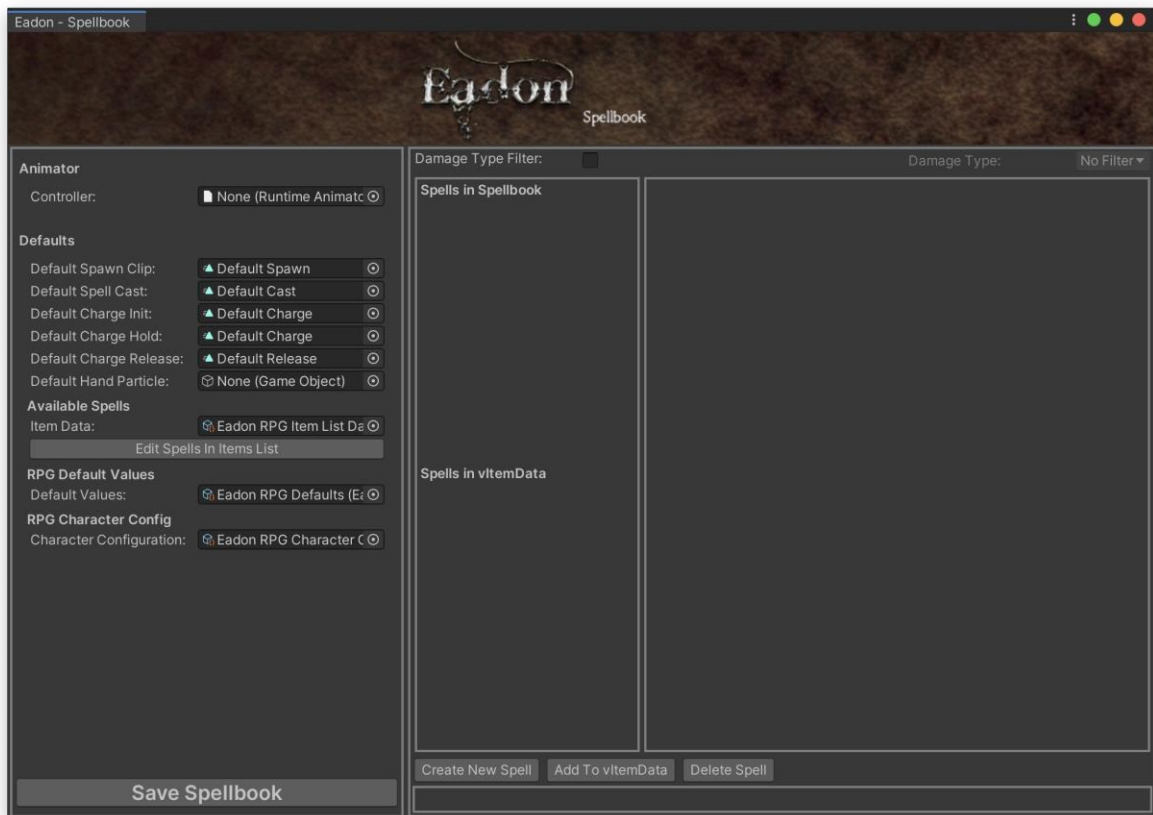
Spell Creation

Spells in the Eadon RPG System are instances of `vItem` of type `Spell`, with three attributes:

MagicID	The ID of the spell
ManaCost	The mana cost of casting the spell
DamageType	The damage type of the spell (fire, cold, etc)

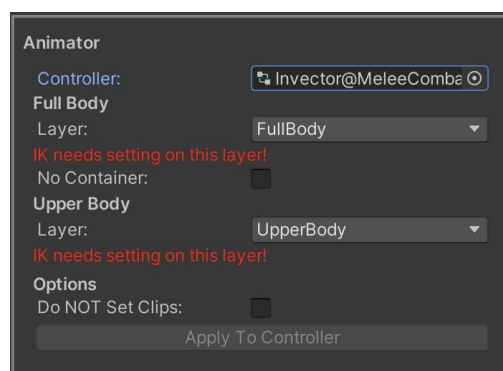
At the same time, a spell represents a collection of other information, such as particles, projectiles, animations, etc.

Spells in Eadon RPG are created through the Spellbook, a single editor for all aspects of a spell:



The Spellbook is split in two sections. The section on the left contains a link to an animator controller, references to default values and a save button.

Selecting an animator controller, the section changes to include two pop up menus to select the **Full Body** and the **Upper Body** layers (highlighting if they do not have IK enabled):



Once all conditions are satisfied, the **Apply To Controller** button becomes active. Pressing the button will generate all the animation states in the animation controller based on information entered in the right section.

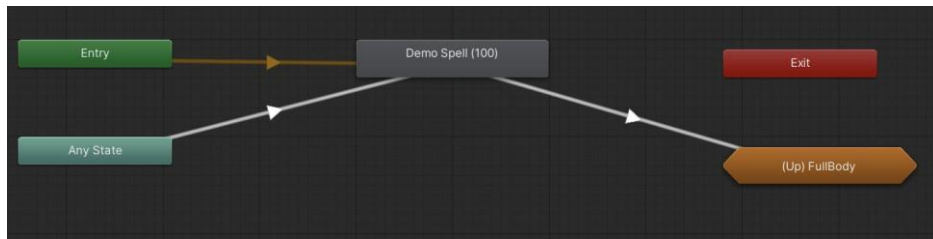
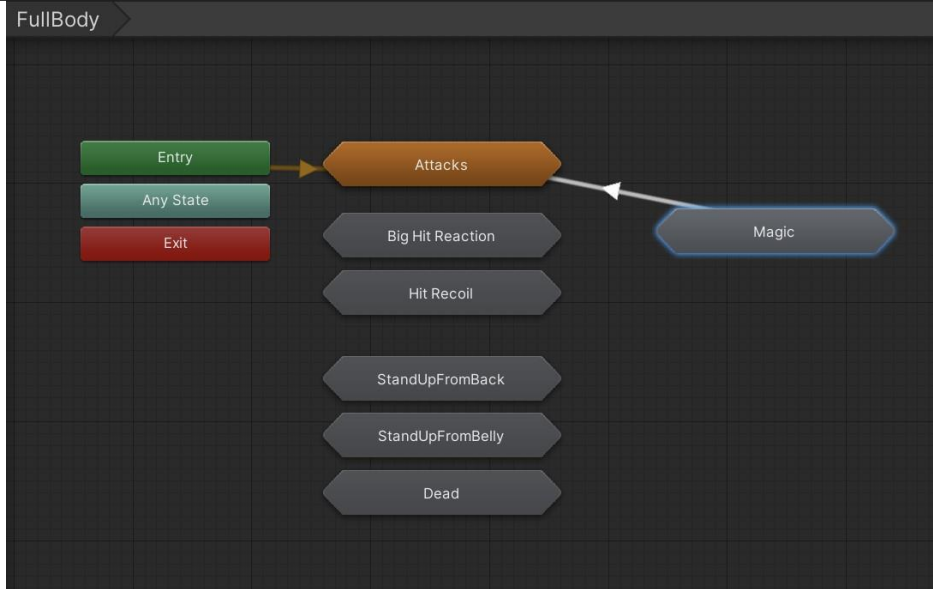
Pressing the **Create New Spell** button opens up the spell creation wizard:

The screenshot shows a dark-themed spell creation wizard. At the top left is a fist icon. The main form contains the following fields and sections:

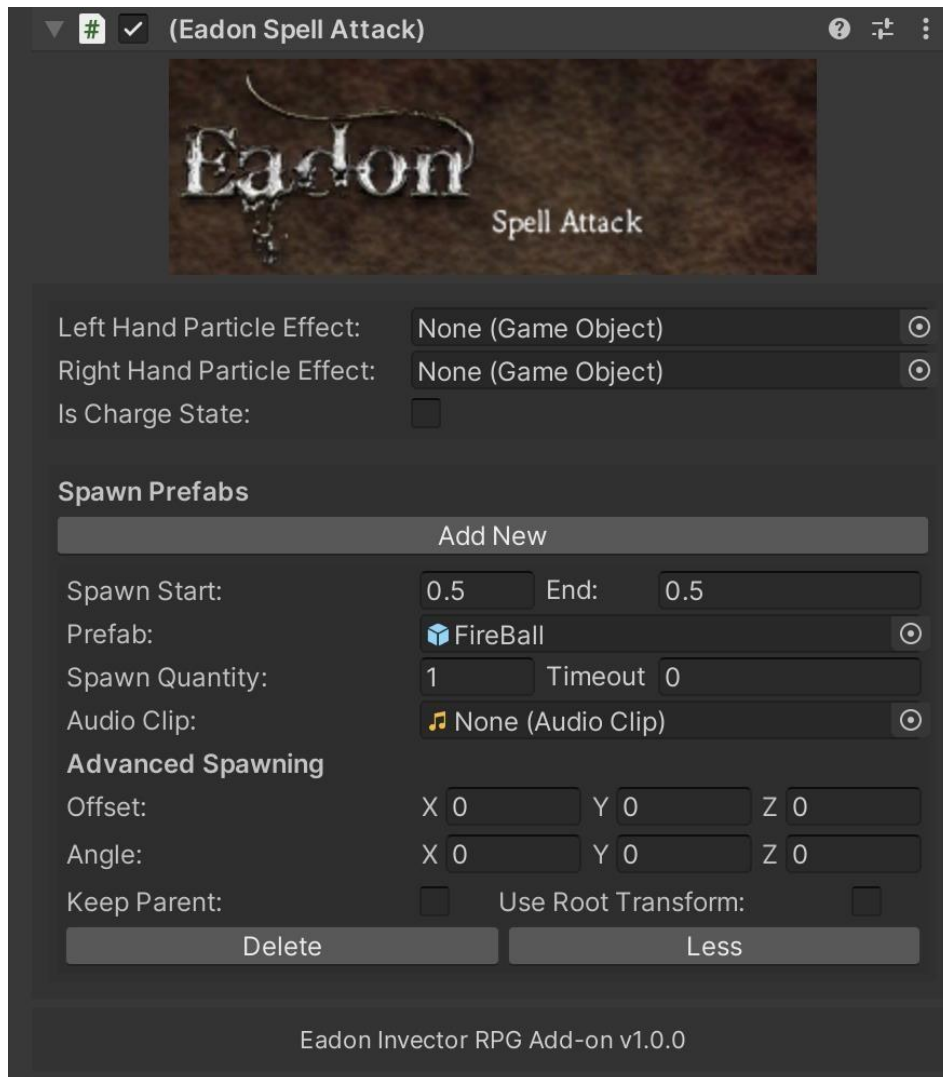
- Spell Name:** Demo Spell
- Magic ID:** 100
- Mana Cost:** 10
- Icon:** unarmedlcon
- Base Damage Name:** Fire
- Upper Body Only:**
- Animator Section:**
 - Spell Cast Clip:** None (Animation Clip)
 - Mirror:** **Speed:** 1
 - Foot IK:** **Cycle Offset:** 0
- Hand Particles Section:**
 - Left Hand:** None (Game Object)
 - Right Hand:** None (Game Object)
- Spawn Prefabs Section:**
 - Add Spawn Prefab:** (button)
 - Prefab:** FireBall
 - Spawn Start:** 0.5 **End:** 0.5
 - Number To Spawn:** 1 **Destruction Timeout:** 0
 - Audio Clip:** None (Audio Clip)
 - Audio Source:** None (Audio Source)
- Advanced Spawning Section:**
 - Offset:** X 0, Y 0, Z 0
 - Angle:** X 0, Y 0, Z 0
 - Keep Parent:** **Use Root Transform:**
- Delete:** (button)

Once a spell is created, and a valid Animator Controller is selected, pressing the Apply To Controller will configure the controller. Parameters will be added if missing and states and transitions will be created:

= MagicAttack
 = MagicCharge
 = MagicID



The spell state will be configured with an **Eadon Spell Attack** behaviour for the actual spell casting:

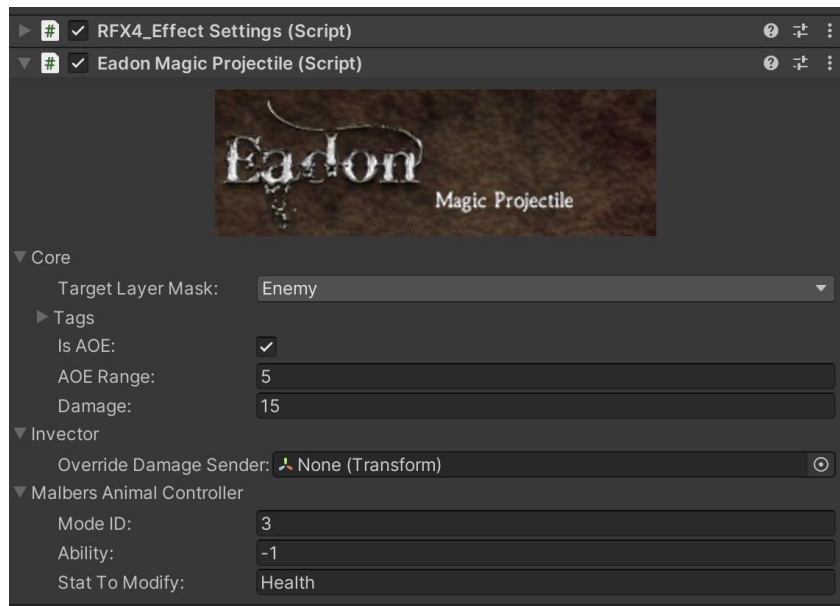


Eadon RPG System does not come with scripts for projectile movement, instead it relies on integration with other assets such as Kripto289's Realistic Effects Packs.

The following spell types are available in Eadon RPG.

[Eadon Projectile](#)

This spell handles damage dealing for projectiles:



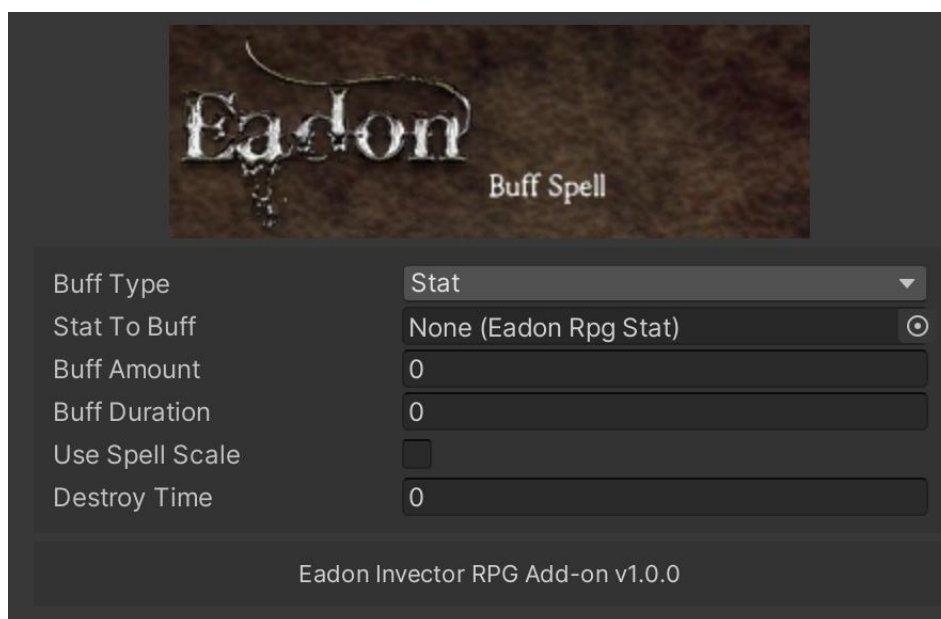
In the picture above, it's attached to a stock RFX4 prefab and used to deal damage. To use it with any other systems, just attach it to a prefab and invoke the following method on collision:

```
public void Hit(GameObject target, Vector3 hitPoint)
```

where hitPoint is the collision point (used for Area of Effect damage).

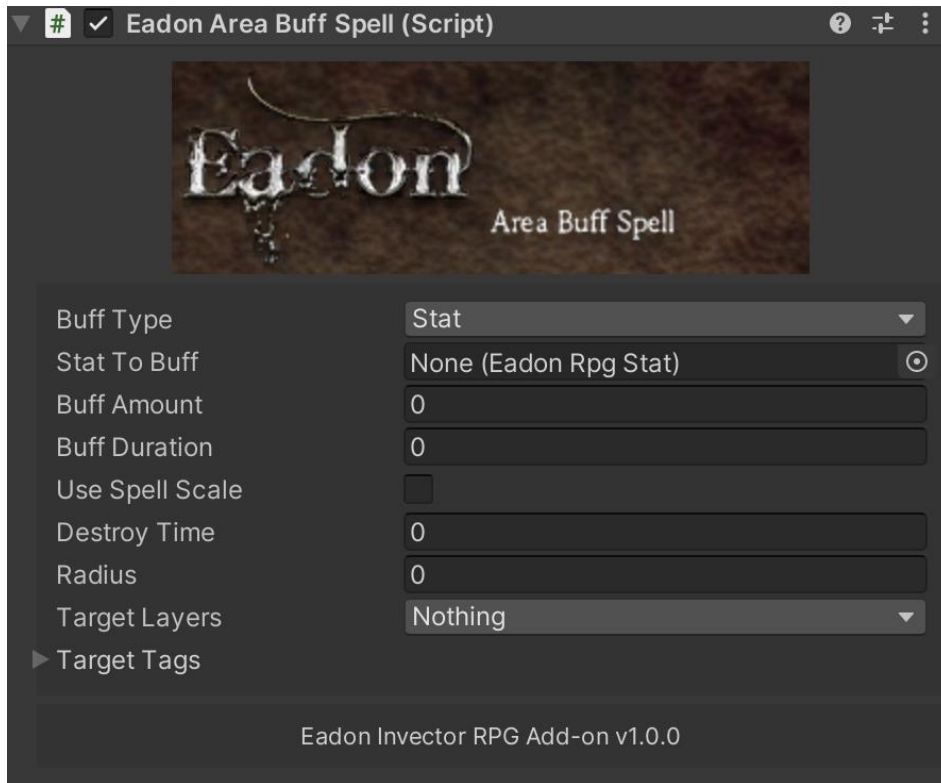
Eadon Buff Spell

This spell handles buffs to a character stat, skill, resistance or armor:



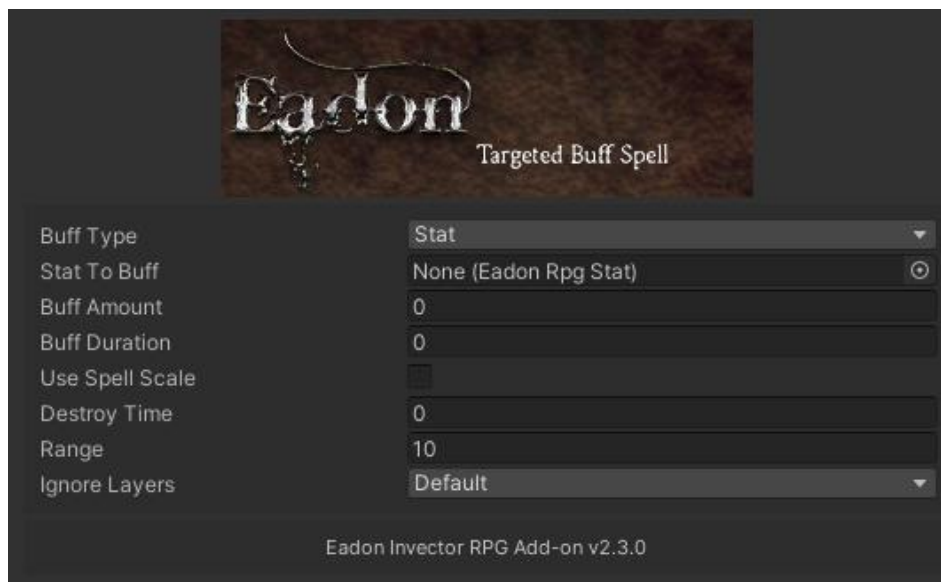
Eadon Area Buff Spell

Like the previous one, but with additional fields for radius, target layers and tags:



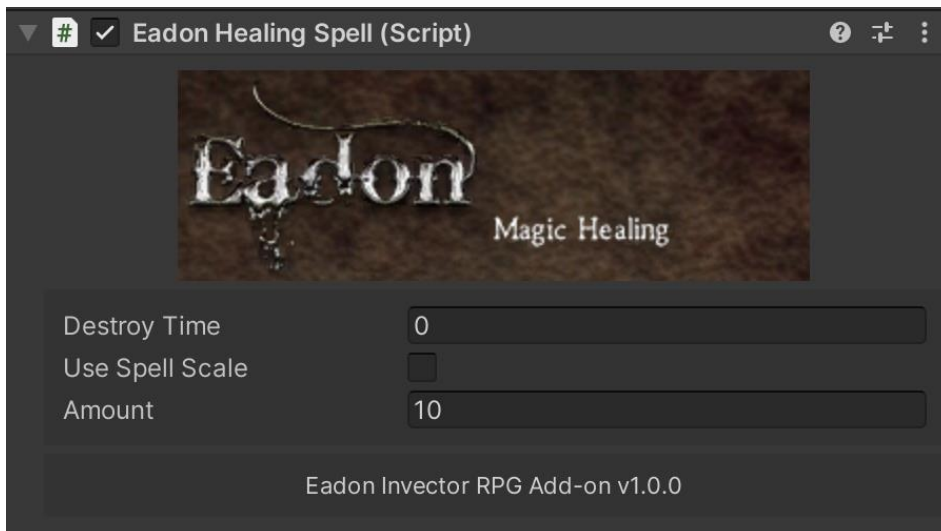
Eadon Targeted Buff Spell

This spell buffs/debuffs the first target in front of the character:



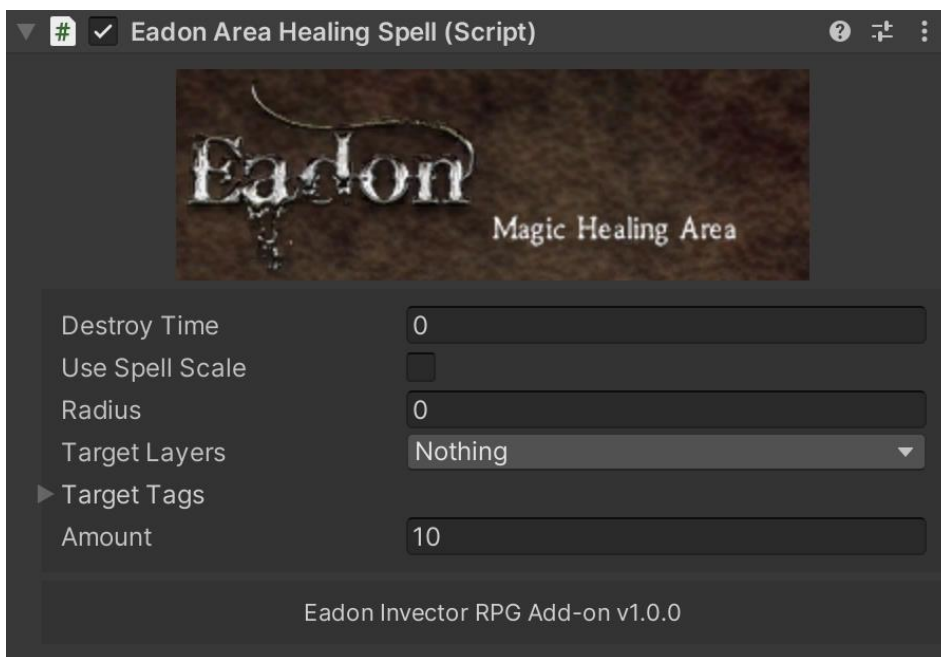
Eadon Healing Spell

This spell heals the character:



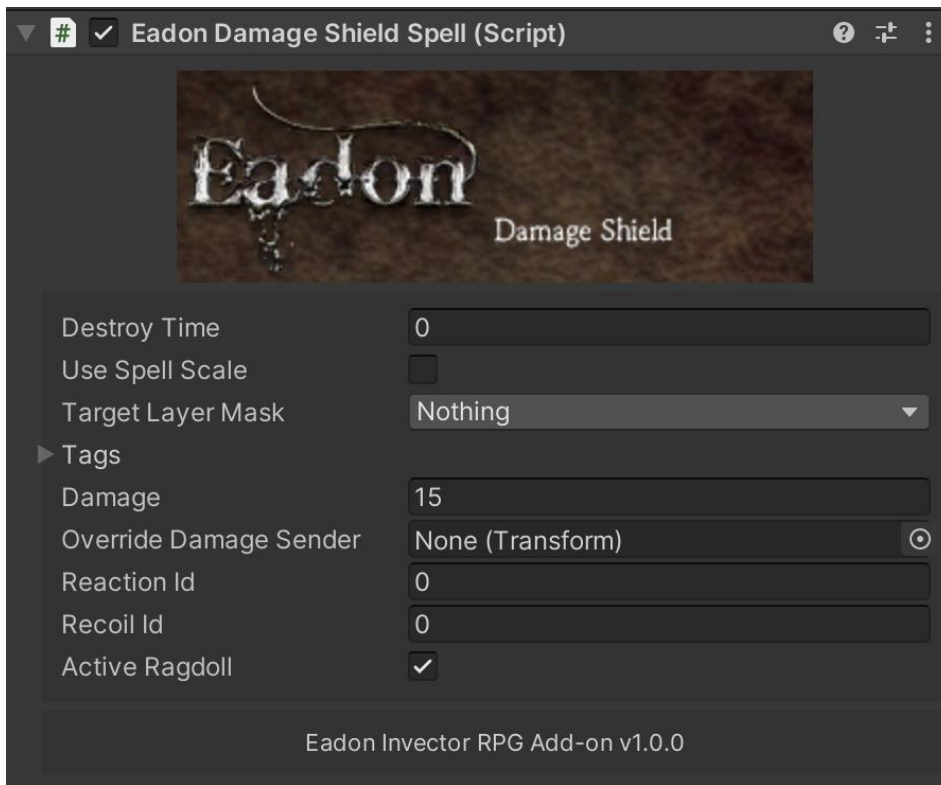
Eadon Area Healing Spell

Like the previous one, but with additional fields for radius, target layers and tags:



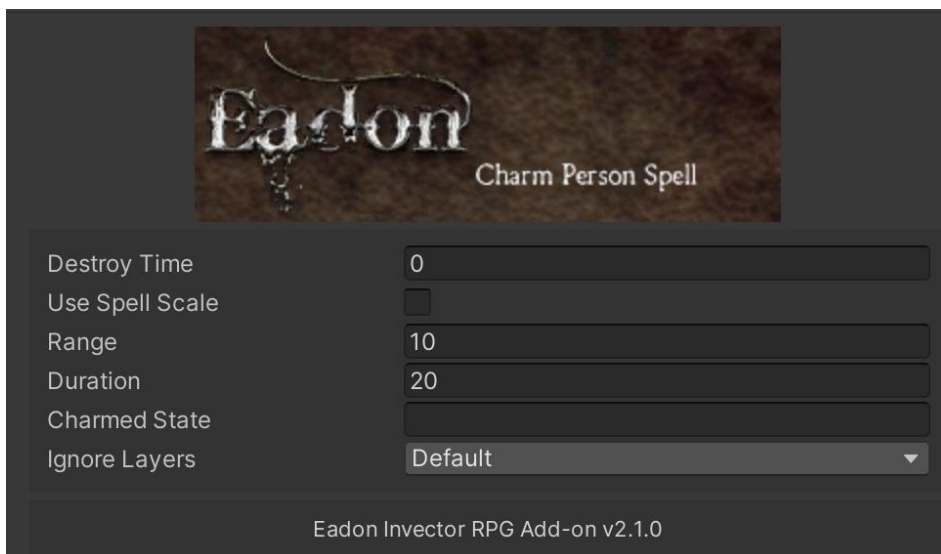
Eadon Damage Shield Spell

This spell deals damage on contact with a collider:



Eadon Charm Person Spell

This requires Eadon AI to be installed in the project, it has no effect otherwise. It works by projecting a sphere cast in front of the character up to the specified range and will switch the first target to the player group, for a specified duration. The AI NPC will switch to the state specified below for the same duration, after which it will switch back to the previous state:

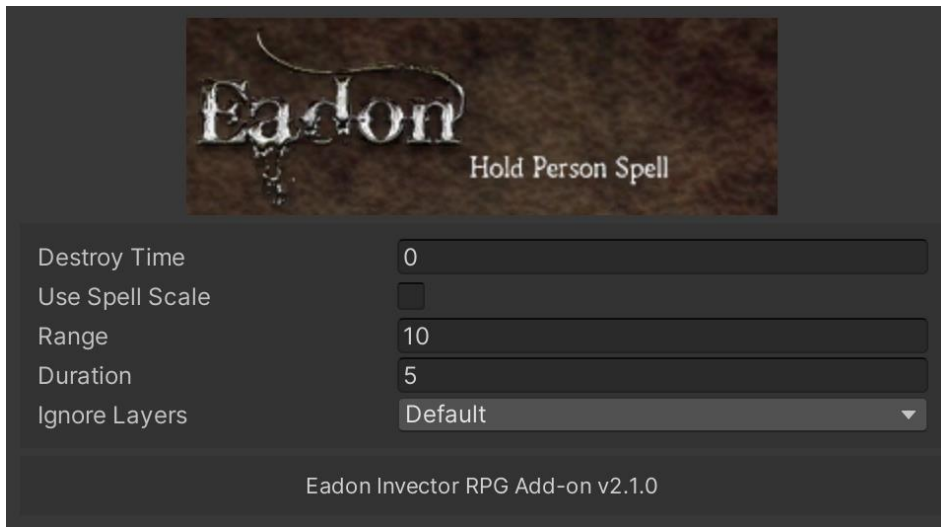


Adjust the layers to make sure only the enemy layers are ignored. Range and duration are affected by spell scale.

Charm effects can be resisted if the character has charm resistance, acquired either via talents or equipped items.

Eadon Hold Person Spell

This spell paralyzes a target. The target needs to have the [EadonRPGCharacter](#) component or any of the NPC versions. It works by projecting a sphere cast in front of the character up to the specified range and stop the animator, set the rigid body to kinematic and stop the behaviour (FSM for [FSM AI](#), behaviour tree for [Eadon AI](#) and supports also [vSimpleMeleeAI_Controller](#)) for a specified duration:

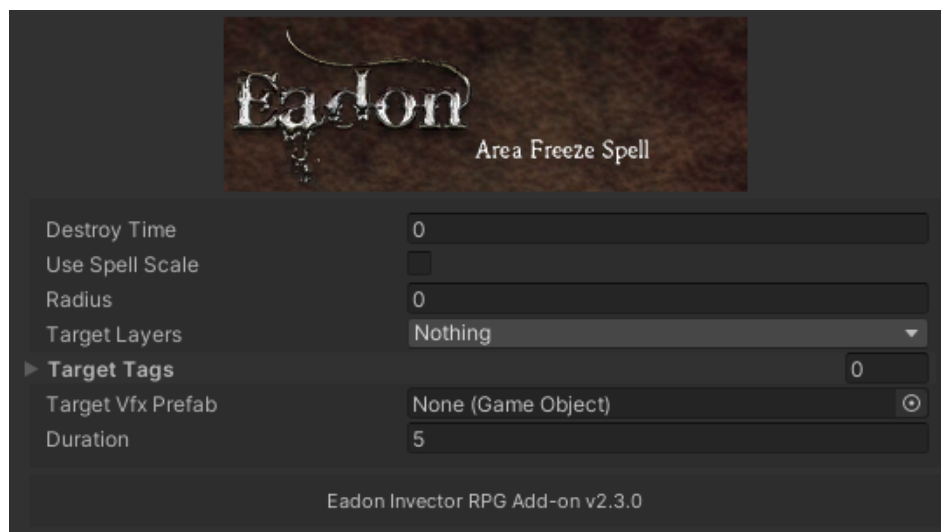


Adjust the layers to make sure only the enemy layers are ignored. Range and duration are affected by spell scale.

Hold effects can be resisted if the character has hold resistance, acquired either via talents or equipped items.

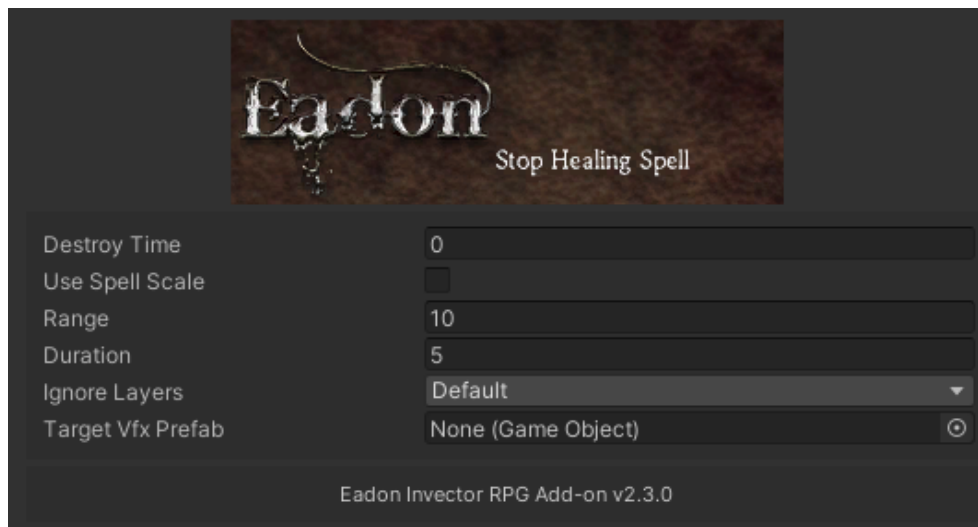
Eadon Area Freeze Spell

This spell is an area version of the Hold Person spell:



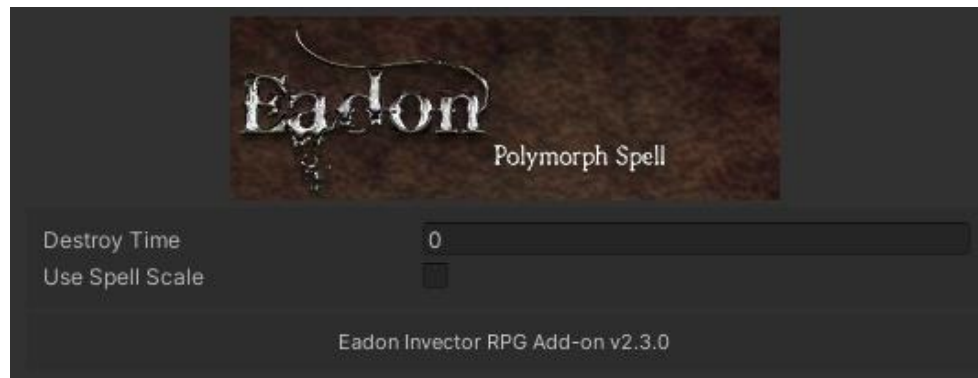
Eadon Stop Healing Spell

This prevents the first target in front of the character from healing for a period of time:



Eadon Polymorph Spell

This spell changes the player character into another prefab for a period of time:



In order to use it, create a new Invector character, add this component to it and spawn it as a spell prefab:


Root in Prefab Asset

Polymorphed Controller Static

Tag Layer

Checkout

- Transform ?
- Animator ?
- Capsule Collider ?
- Rigidbody ?
- V Third Person Controller (Script) ?
- V Melee Combat Input (Script) ?
- V Melee Manager (Script) ?
- V Foot Step (Script) ?
- V Head Track (Script) ?
- V Hit Damage Particle (Script) ?
- V Weapon Holder Manager (Script) ?
- V Ladder Action (Script) ?
- V Generic Action (Script) ?
- V Lock On (Script) ?
- V Draw Hide Melee Weapons (Script) ?
- V Item Manager (Script) ?
- Eadon Polymorph Spell (Script) ?




Eadon
Polymorph Spell

Destroy Time

Use Spell Scale

Eadon Investor RPG Add-on v2.3.0



Eadon
Spell Attack

Left Hand Particle Effect:

Right Hand Particle Effect:

Is Charge State:

Spawn Prefabs

Add New

Spawn Start: End:

Prefab:

Spawn Quantity: Timeout:

Audio Clip:

Advanced Spawning

Offset: X Y Z

Angle: X Y Z

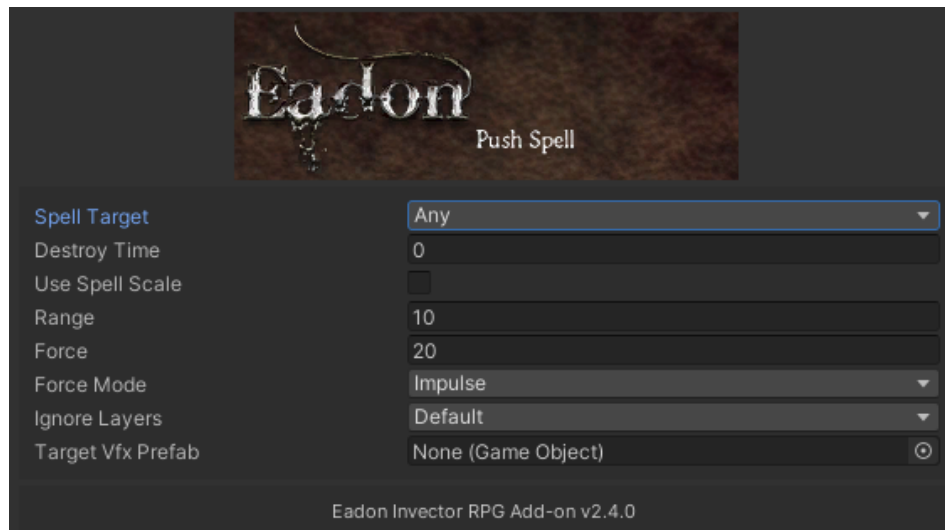
Keep Parent: Use Root Transform:

Eadon Investor RPG Add-on v2.3.0

At the end of the spell, the original character will reappear in the last position of the spawned controller.

Eadon Push Spell

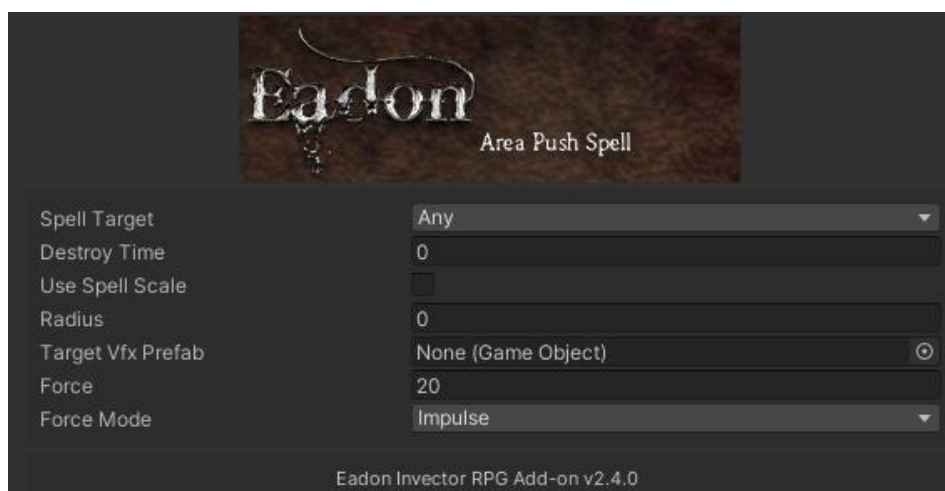
This spell pushes a target away from the spell caster. The target needs to have a rigidbody component. This spell can affect characters or inanimate objects:



Adjust the layers to according to what you want to affect.

Eadon Area Push Spell

This spell is an area version of the Push spell, affecting all rigidbodies in a radius around the spell caster. Every target will be pushed away from the caster:



General notes on spells

All spells have a Destroy Time field. This is the number of seconds after which the spell selfdestructs. This is useful to prevent spells from lingering around in memory and lowering

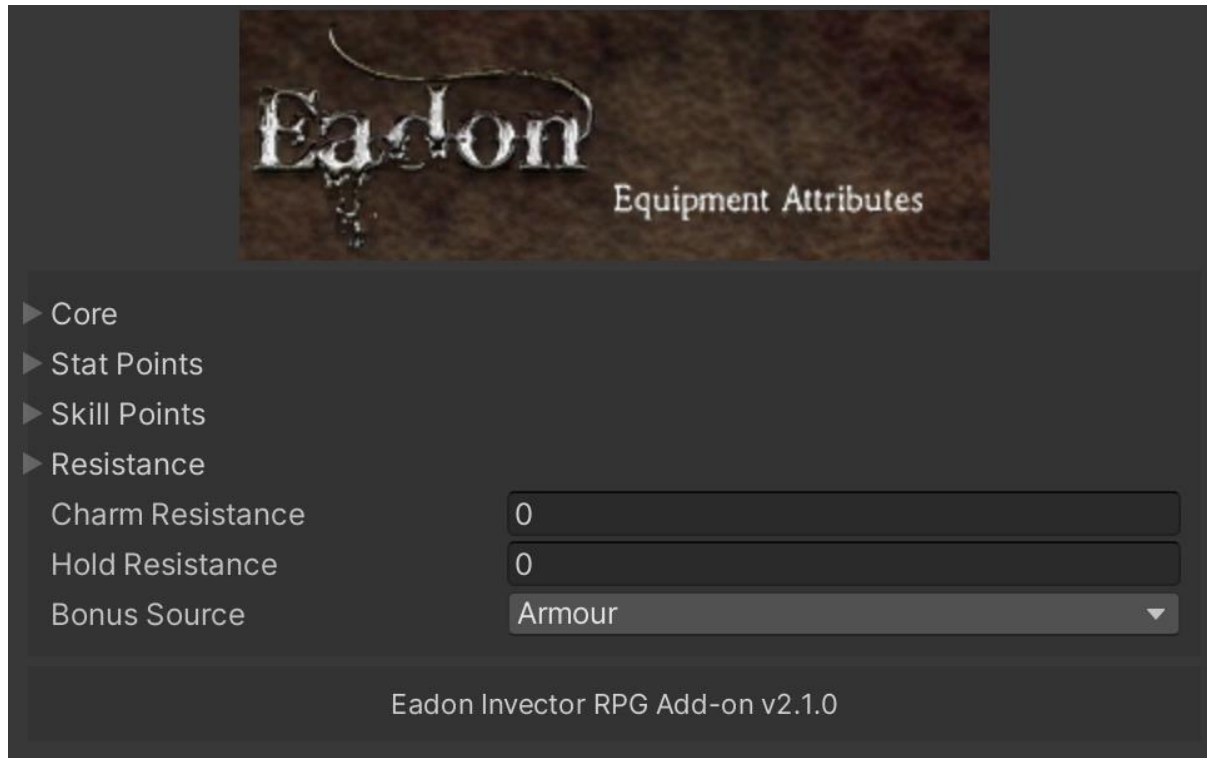
performance. This should NOT be left at 0, otherwise the spell will be destroyed immediately.

It should be set to a value that relates to the length of the spell VFX.

The other value of note, common to all spells is Use Spell Scale. If this checkbox is ticked, the spell duration and damage/healing amounts will be multiplied by the spell scale, which increases with levels, stat values or talents.

Equipment

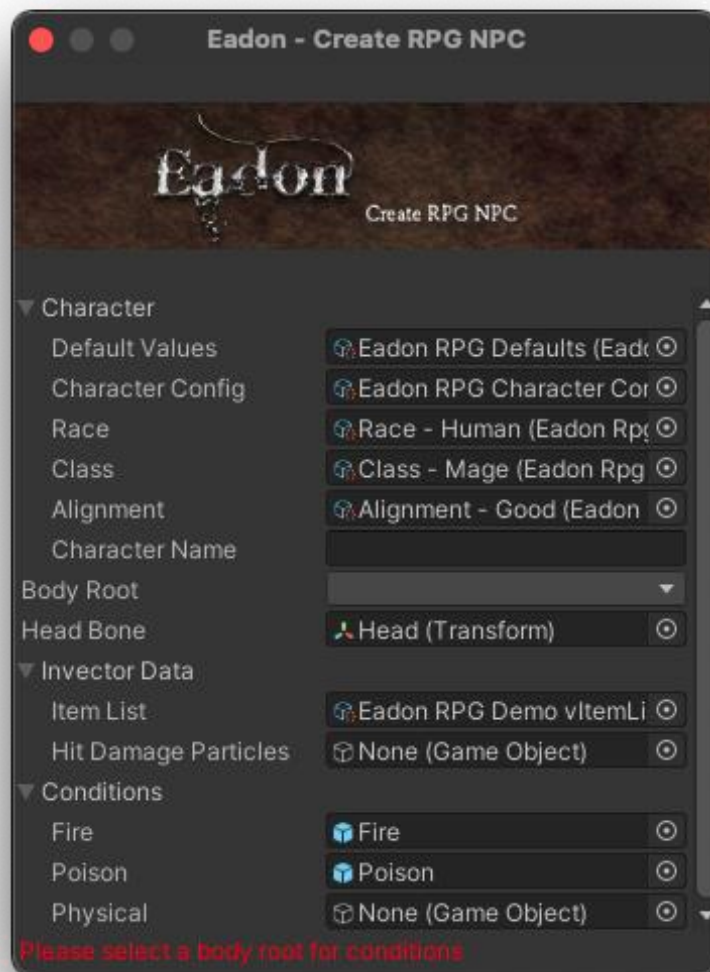
Equipment in Eadon RPG System can increase character stats, skills, core stats (health, stamina, etc) and resistances. This is done through this component:



Once this component is attached to a piece of equipment (for example to a sword) it will automatically apply the bonuses when equipped (i.e. attached to the player game object as a child) and remove them when disabled.

NPC Creation

Creating NPCs is a process very similar to creating a character. Once you have an Invector AI (either a FSM AI or the default vAIController) in the hierarchy, select Invector/Eadon RPG/Create RPG NPC from the menu. This will open the NPC creation wizard:



This will work exactly like the character creation and will let you create NPCs with race, class, etc.

Vendor System

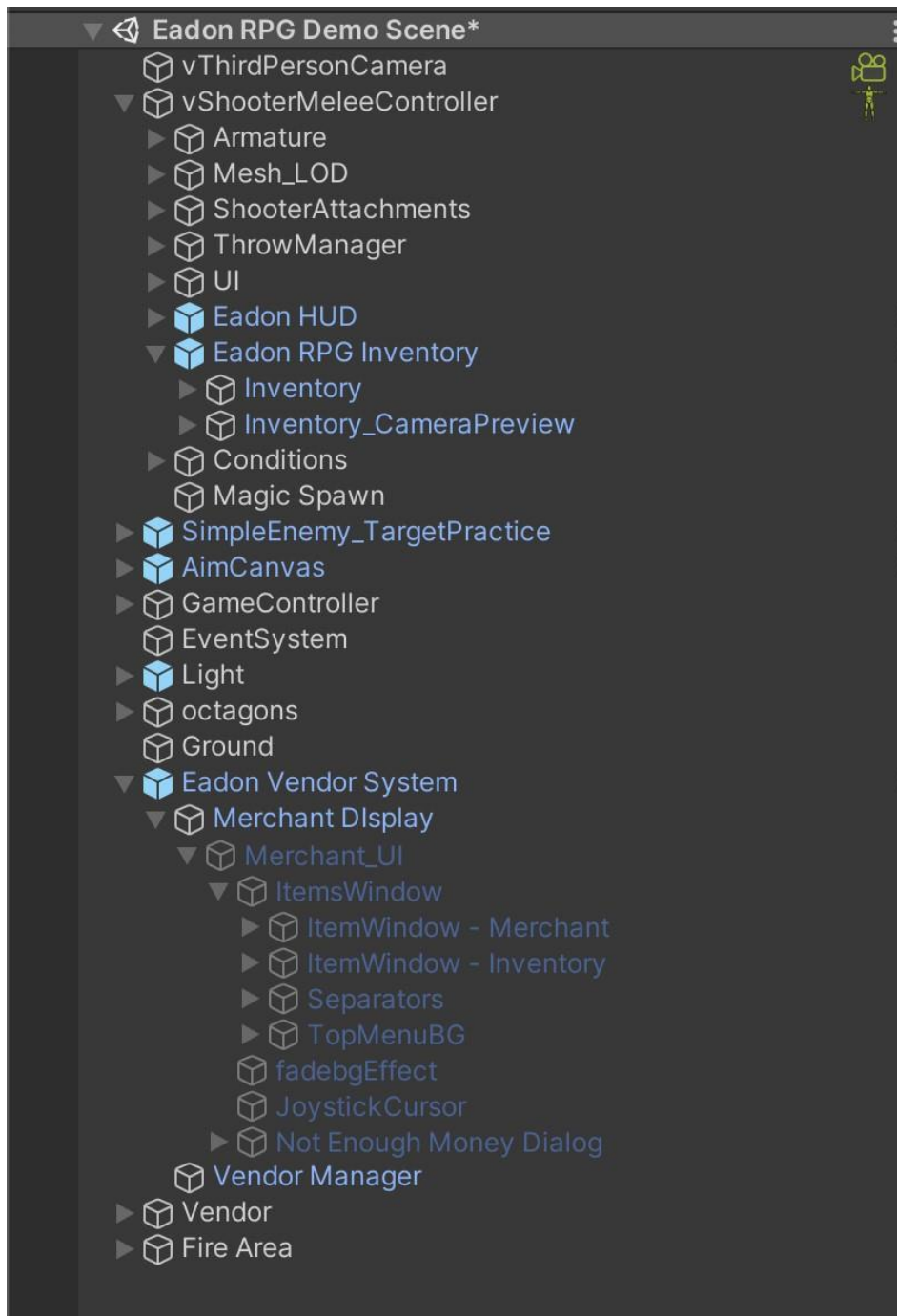
In order for the vendor system to work, the first step is to define a vItem of type **Money**. This will represent the currency in the game. Currently only one type of currency is supported.

The second step is to add to the character a **Eadon Money Manager** component. This component is a shortcut to the vItemManager to handle money, with convenience methods for getting, adding and removing coins to the character. This is used for transactions with a vendor, and it needs to be added to every vendor or NPC with which can have commercial transactions with the player even without going through the inventory. For example, if a

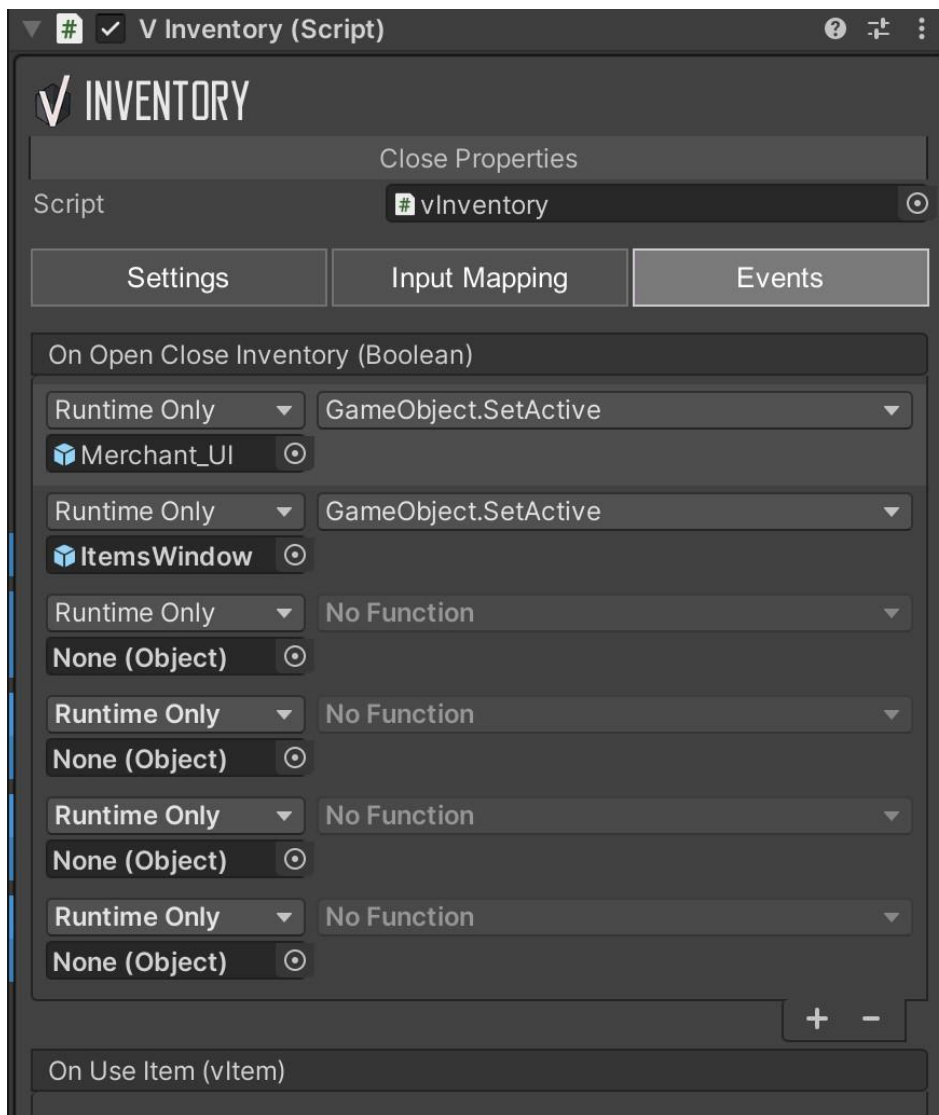
guard asks for 5 coins to let the player through a gate at night, this can be handled directly in the dialogue by manipulating coins through the money manager.

A prerequisite for the money manager to work is that every character (player and NPC) needs to have a `vItemManager` with a `vItemListData` containing an item of type `Money` (not necessarily the same, because the Eadon Money Manager has a field for the ID of the coins item allowing for transactions using an abstraction).

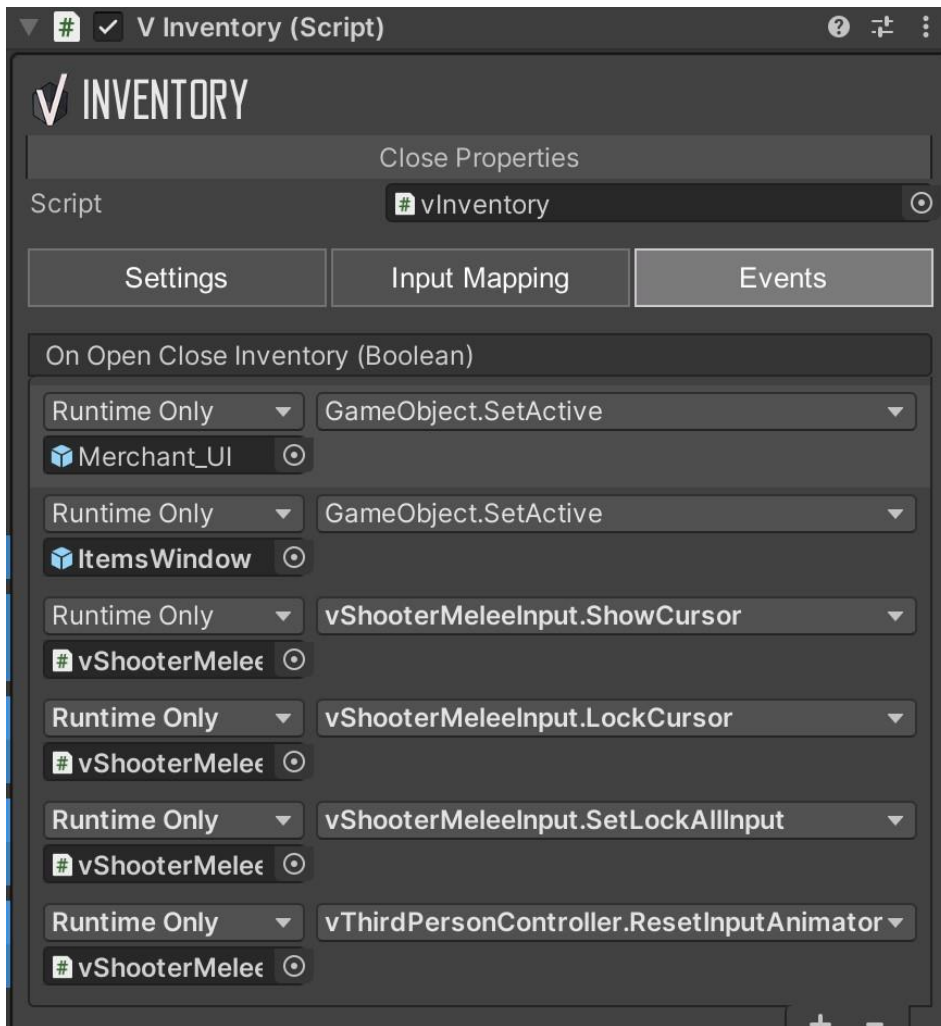
In order to use the vendor system, simply drag into the scene the Eadon Vendor System prefab (located in `/Assets/Eadon/Rpg/Prefabs/Invector`), expand it and select the Merchant Display:



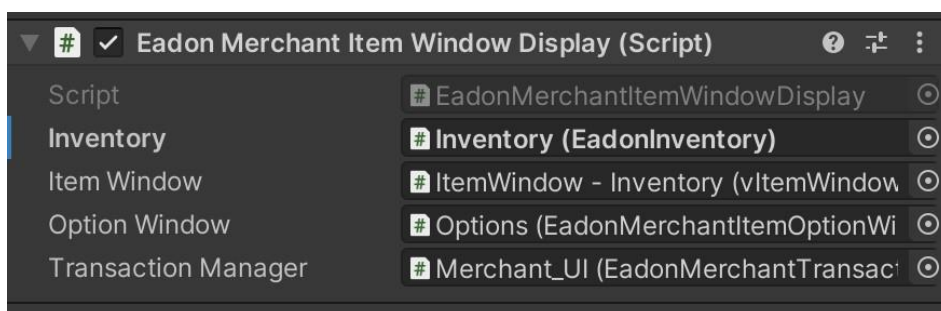
It will appear like this, with four "broken" events:



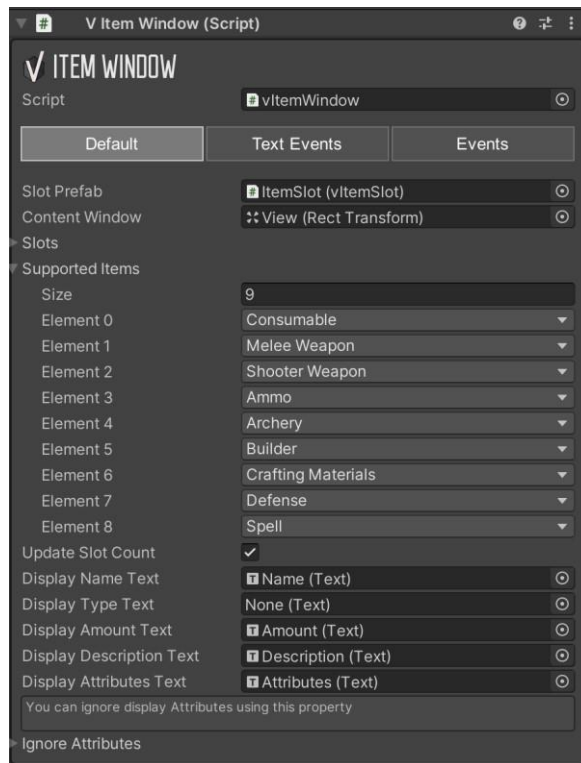
Those need to be set like this:



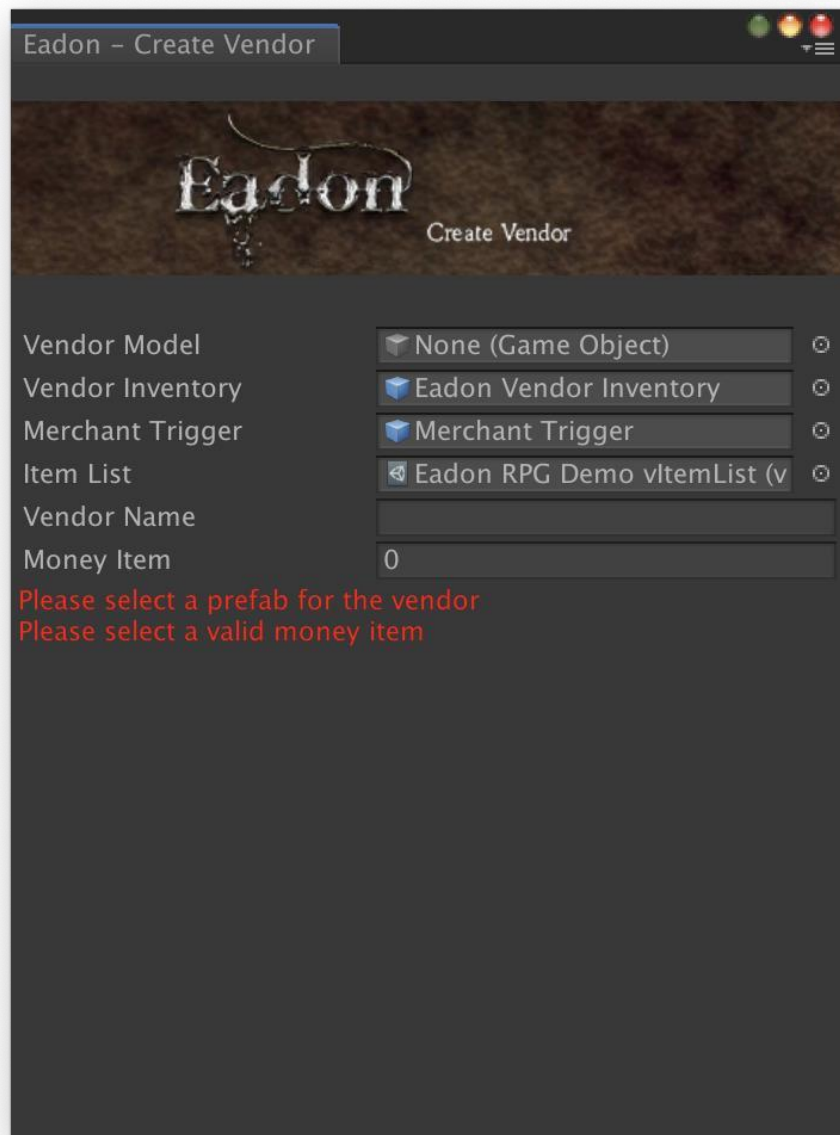
The next step is to select in the hierarchy the ItemWindow – Inventory and add a reference to the actual player inventory object (located under Eadon RPG Inventory):



If you want to limit what can be bought/sold, change the Supported Items lists in the two vItemWindows (ItemWindow – Merchant and ItemWindow – Inventory):

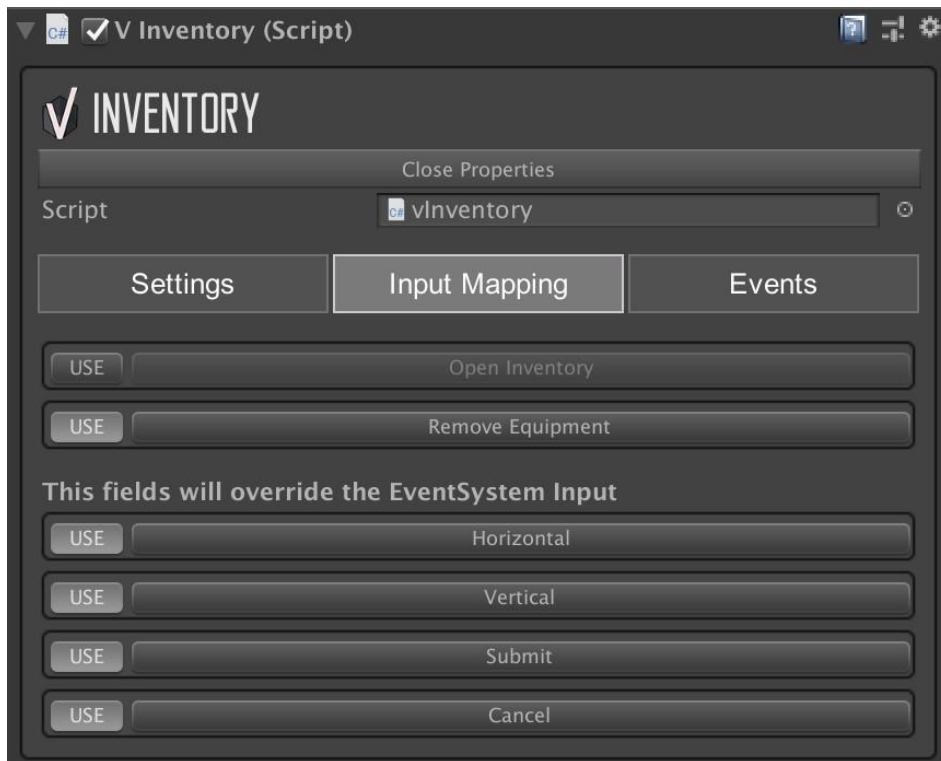


In order to create a vendor, the simplest way is to use the Create Vendor wizard which automates all the steps:



The wizard performs the below activities:

- 1) Add a `vItemManager` to the vendor
- 2) Add the Eadon Vendor Inventory (it will never be used but without it `vItemManager` will throw errors). If you add your own inventory prefab, make sure the open Inventory input is disabled:



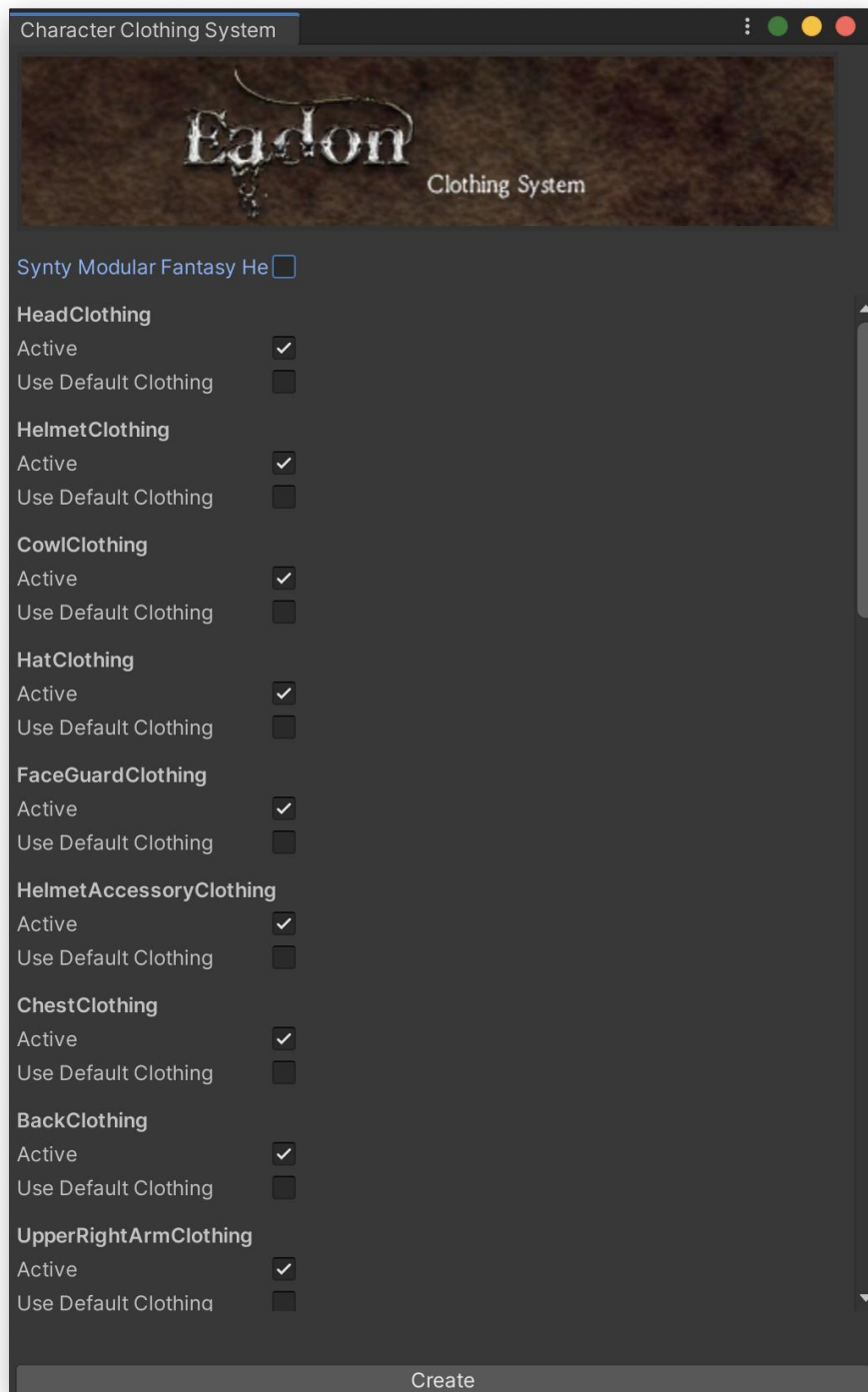
- 3) Add to the merchant `vItemManager` the items you want the merchant to sell. Ideally, the same `vItemList` should be shared between all participants. If that's not the case items will transfer from one to the other based on their id, causing misalignment in the data.
- 4) Add the Eadon Money Manager component and set the Money item
- 5) Add a merchant trigger

The merchant trigger is responsible for actually opening the merchant UI. If you want to use a different way to start interaction with the vendor, you need to interact with the Vendor Manager singleton (part of the Eadon Vendor System prefab. Opening the UI is a two step process:

- 1) Set the current merchant by setting `EadonVendorManager.Instance.currentMerchant` to the game object of the merchant. This can be done, for example, in an `OnTriggerEvent` when the player approaches the merchant. There is a convenience component for this called `EadonVendor`
- 2) Invoke `EadonVendorManager.OpenMerchantGui()` to open the GUI

Clothing System

Eadon RPG comes with a clothing system. In order to activate the clothing system, you need to select your character in the hierarchy and use the **Eadon/Create/Add Character Clothing System** menu. This will open the following window:



In the window you'll find a checkbox to enable support for Synty Studios' Modular Fantasy Hero asset, followed by a list of all the possible clothing system locations, with a checkbox to determine if you want it active for the character and a dropdown menu through which you can select the default clothing item mesh for that location among all the skinned mesh

renderers present on the character game object. Selecting any option different from “None” will make two new fields appear for that location. These fields let you specify whether the location default clothing item needs to be hidden when new clothing is worn in that location and which is the default **ClothingItem** asset.

Pressing the “Create” button will spawn all the **ClothingEquipmentHolder** game objects attached to the character skeleton. Clothing Equipment Holders look like this:



The fields are as follows:

Holder	Parent Bone
Holder Name	Link to the body part for this holder, used to link to the vItem (see below)
Hide Default When Adding New	A flag to determine if the default item should be hidden when adding a new one to this location
Current Equipped Clothing	Set at runtime with the clothing attached to this location
Default Equipped Clothing	Set at runtime with the default clothing attached (if present)
Default Clothing Item	The default for this location, will be worn at start

The default holders and their locations are:


Holder	Parent Bone
Head Clothing	Head
Chest Clothing	Upper Chest
Back Clothing	Upper Chest

Upper Right Arm Clothing	Right Shoulder
Lower Right Arm Clothing	Right Lower Arm
Upper Left Arm Clothing	Left Shoulder
Lower Left Arm Clothing	Left Lower Arm
Right Hand Clothing	Right Hand
Left Hand Clothing	Left Hand
Both Hands Clothing	Hips
Legs Clothing	Hips
Left Foot Clothing	Left Foot
Right Foot Clothing	Right Foot
Both Feet Clothing	Hips
Right Shoulder Attachment	Right Shoulder
Left Shoulder Attachment	Left Shoulder
Right Elbow Attachment	Right Lower Arm
Left Elbow Attachment	Left Lower Arm
Right Knee Attachment	Right Lower Leg
Left Knee Attachment	Left Lower Leg
Belt Attachment	Hips

The holders for “Both Feet” and “Both Hands” are intended to be used with character clothing (such as often is the case when exporting from Reallusion Character Creator) which have a single mesh for both hands and both feet.

Adding the clothing system to a character will add also the **CharacterAppearance** component. There are two versions of the component, one for normal characters and one for Synty Studios’ Modular Fantasy Hero. The normal one has support for maskable textures on the character body (to hide parts of the body in order to prevent the skin from poking through the clothing). This requires the character body to have a material using the Eadon Masked (or the Eadon Masked Dual Sided) shader. See below for how to set it up and use it. The normal **CharacterAppearance** component looks like this:

✓ Eadon Character Appearance (Script)
🔍 ⚙️



▼ Clothing Equipment Holders

Size	31
Element 0	HeadClothing (ClothingEquipmentHol
Element 1	HelmetClothing (ClothingEquipmentHi
Element 2	CowlClothing (ClothingEquipmentHol
Element 3	HatClothing (ClothingEquipmentHolde
Element 4	FaceGuardClothing (ClothingEquipme
Element 5	HelmetAccessoryClothing (ClothingEq
Element 6	ChestClothing (ClothingEquipmentHol
Element 7	BackClothing (ClothingEquipmentHol
Element 8	UpperRightArmClothing (ClothingEqui
Element 9	LowerRightArmClothing (ClothingEqui
Element 10	BothUpperArmClothing (ClothingEquip
Element 11	UpperLeftArmClothing (ClothingEquip
Element 12	LowerLeftArmClothing (ClothingEquip
Element 13	BothLowerArmClothing (ClothingEquip
Element 14	RightHandClothing (ClothingEquipme
Element 15	LeftHandClothing (ClothingEquipment
Element 16	BothHandsClothing (ClothingEquipme
Element 17	LegsClothing (ClothingEquipmentHol
Element 18	RightFootClothing (ClothingEquipmen
Element 19	LeftFootClothing (ClothingEquipment
Element 20	BothFeetClothing (ClothingEquipment
Element 21	RightShoulderAttachment (ClothingEq
Element 22	LeftShoulderAttachment (ClothingEqui
Element 23	BothShoulderAttachment (ClothingEq
Element 24	RightElbowAttachment (ClothingEquip
Element 25	LeftElbowAttachment (ClothingEquipr
Element 26	BothElbowAttachment (ClothingEquipr
Element 27	RightKneeAttachment (ClothingEquipr
Element 28	LeftKneeAttachment (ClothingEquipm
Element 29	BothKneeAttachment (ClothingEquipm
Element 30	BeltAttachment (ClothingEquipmentHe
Main Body	None (Skinned Mesh Renderer)
Main Body Material Index	0
Prefab Tag	

Events

Before Equipping Clothing (Int32)

List is Empty

+ -

After Equipping Clothing (Int32)

List is Empty

+ -

Before Unequipping Clothing (Int32)

List is Empty

+ -

After Unequipping Clothing (Int32)

List is Empty

+ -

Eadon Investor RPG Add-on v1.4

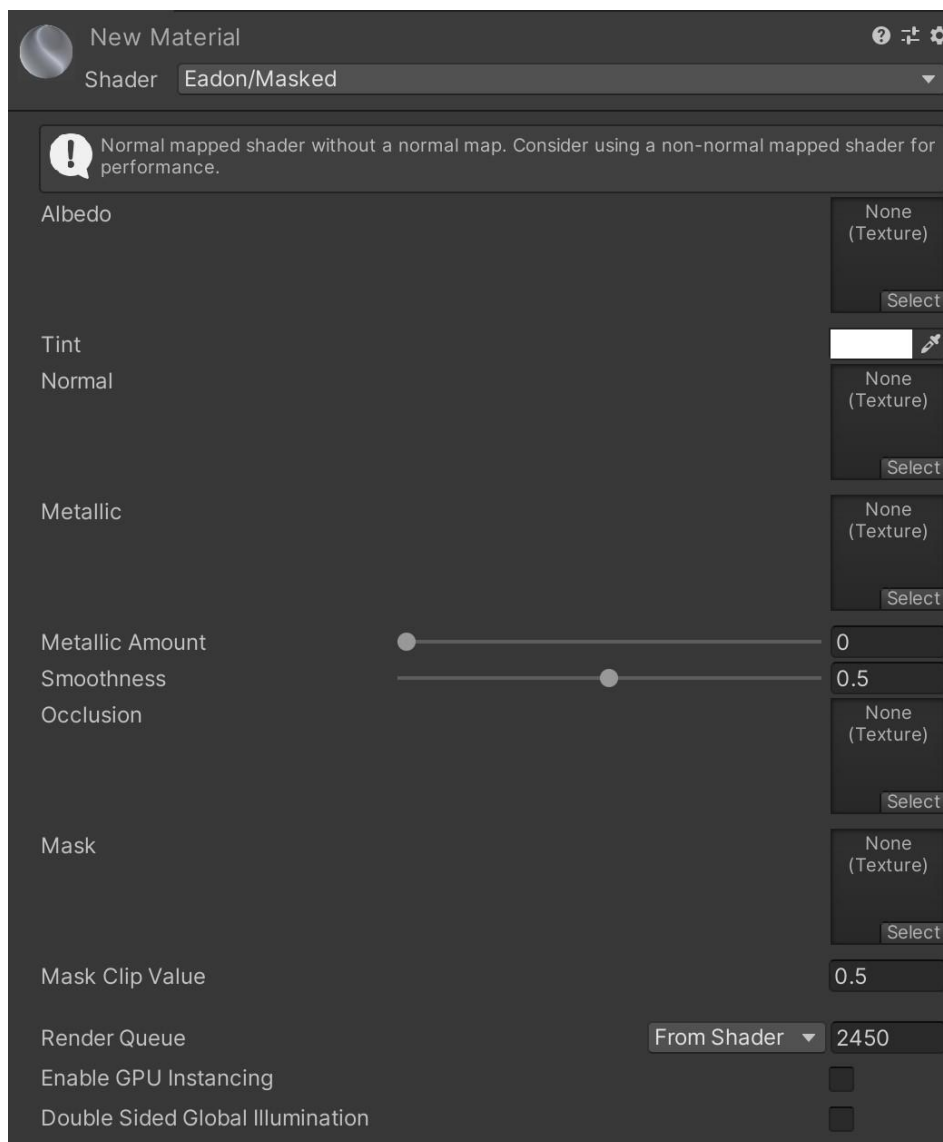
The clothing holders list is filled at creation time. Main Body and Main Body Material Index are used for the masking system (see below). Prefab Tag is used to determine which prefab, among all the prefabs listed in a clothing item is used for this character.

The four events at the bottom are invoked before and after equipping or unequipping a clothing item. The parameter is the clothing id of the item (see below).

Masking System

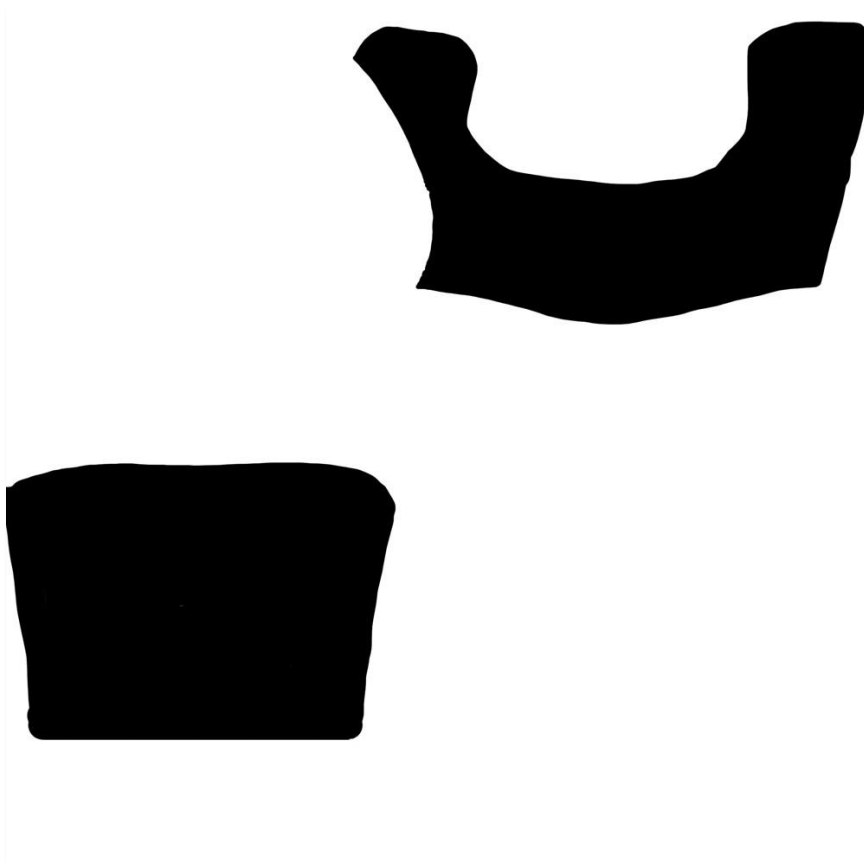
In order to use the masking system, drag the body skinned mesh renderer to the Main Body field of the [EadonCharacterAppearance](#) component and specify the material index (leave at zero if the body has a single material or the material is the first one, set to 1 to indicate the second material, etc).

The body material needs to use the Eadon Masked shader (it's included in /Assets/Cogs & Goggles/Shaders, with URP and HDRP support packages also in the same directory).



This shader behaves exactly like the standard shader with the addition of a mask texture. Masks are black and white textures which determine which parts of the mesh will be rendered (white areas) and which will not (black areas). The material needs to have a fully white mask, and at runtime all the masks for all the worn clothes are combined into a single mask, which gets updated dynamically when your character changes clothes. The process of creating masks is strictly dependent on the model you're going to use. Basically, if your body texture looks like the following example, you will need to paint over a copy of this texture in order to generate a mask covering the areas you need:





The example mask is for a long sleeved shirt.

IMPORTANT

The resolution of the mask is not fixed, you can use a small or large image, but all masks need to have the exact same size, or you will get errors at runtime. This also includes the initial all white mask that needs to be on the material for the system to work

Synty Studios' Modular Fantasy Hero support

If you tick the “Synty Modular Fantasy Hero” checkbox when adding the clothing system, the [SyntyCharacterAppearance](#) component will be attached to your character. The component is split into multiple parts. The first field lets you replace the material on the character and all the clothing parts.

The second block lets you configure your character in the editor, with drop down menus for each body part. This section ends with a button to update the character starting equipment. If you have changes which are not saved with that button, you will see a red message notifying you of unsaved changes. Changes not saved will disappear once you enter play mode.

The final button is the “Create Clothing Items” button. This **needs to be pressed only once** in your project, and is the equivalent of the clothing extractor: it will generate all the

[ClothingItem](#) objects and add them to the [ClothingManager](#). You will need to then configure the clothing id and add the ones you want to your vItemList.

Character Part	Selected Item
Override Material	None (Material)
Gender	Male
Head	Chr_Head_Male_16
Ears	None
Hair	Chr_Hair_05
Facial Hair	Chr_FacialHair_Male_08
Eyebrows	None
Helmet	None
Cowl	None
Hat	None
Face Guard	None
Helmet Acc	None
Both Shoulders	None
Left Shoulder	None
Right Shoulder	None
Chest	Chr_Torso_Male_06
Cape	None
Waist	Chr_Hips_Male_15
Belt Acc	None
Both Sleeves	Chr_ArmUpperLeft_Male_06
Left Sleeve	Chr_ArmUpperLeft_Male_06
Right Sleeve	Chr_ArmUpperRight_Male_06
Both Elbow Acc	None
Left Elbow Acc	None
Right Elbow Acc	None
Both Wrists	Chr_ArmLowerLeft_Male_00
Left Wrist	Chr_ArmLowerLeft_Male_00
Right Wrist	Chr_ArmLowerRight_Male_00
Both GLoves	Chr_HandLeft_Male_00
Left GLove	Chr_HandLeft_Male_00
Right Glove	Chr_HandRight_Male_00
Both Knee Acc	None
Left Knee Acc	None
Right Knee Acc	None
Both Boots	Chr_LegRight_Male_04
Left Boot	Chr_LegRight_Male_04
Right Boot	Chr_LegLeft_Male_04

Update Starting Equipment

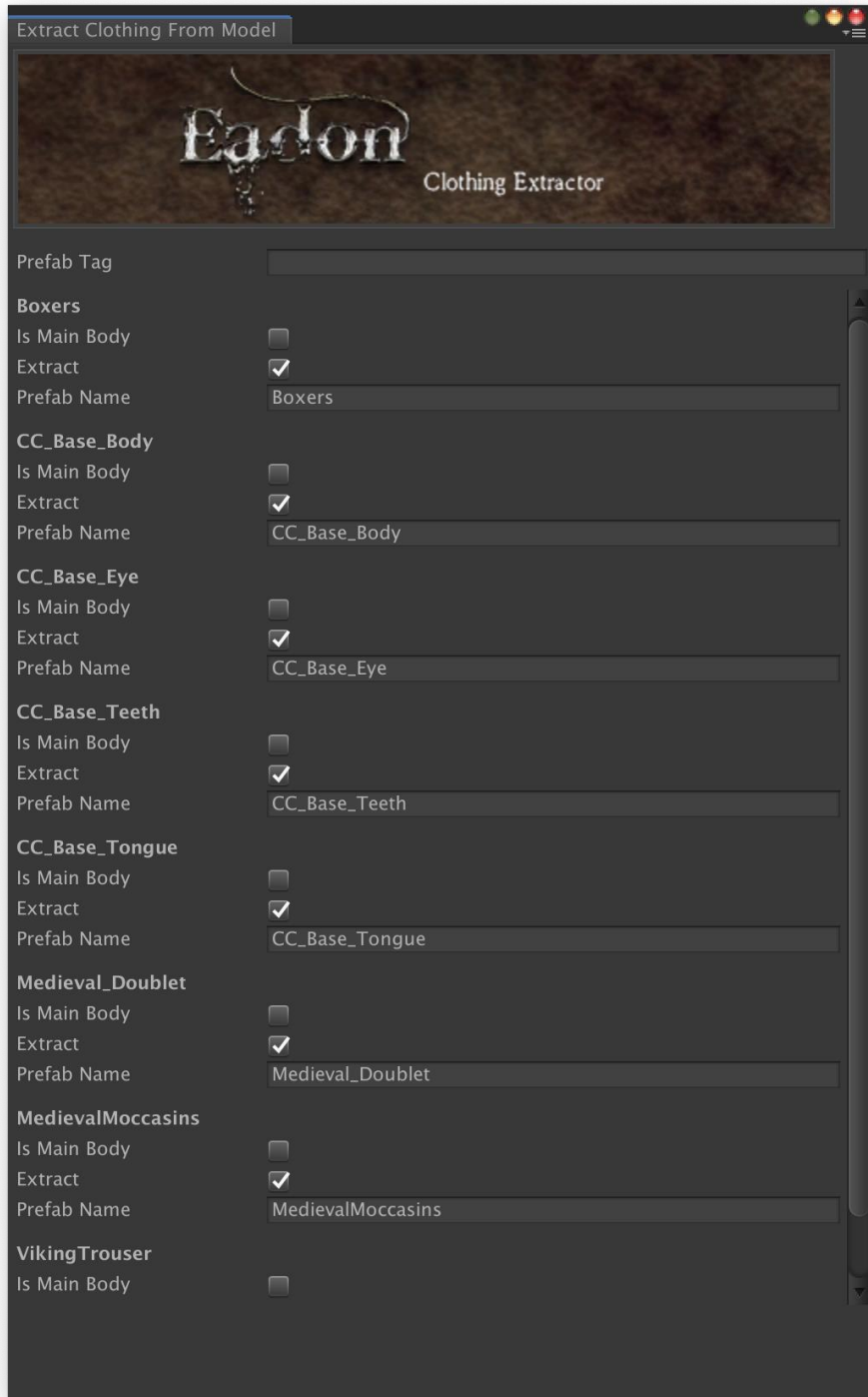
Create Clothing Items

Clothing Extractor

Eadon Controller comes with an utility to extract clothing meshes from imported models. When exporting from Reallusion Character Creator 3, for example, a model will be imported with all the clothing meshes attached to the root game object. For example:



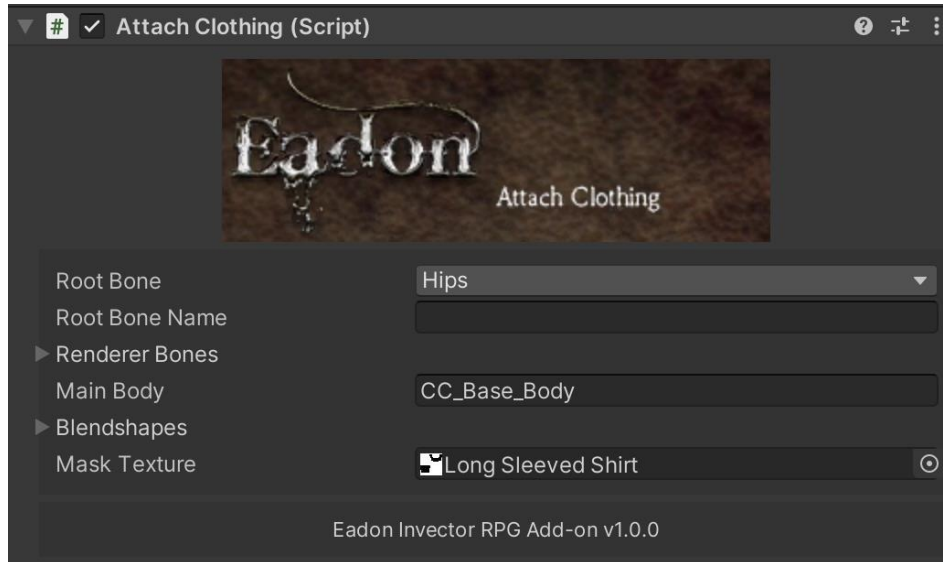
If you want to extract the clothing from the mesh and create clothing prefabs and ClothingItem ScriptableObjects, drag the model prefab into an empty scene. Selecting the **Eadon/Tools/Extract Clothing From Model** menu will open the clothing extraction window:



The first field is a Prefab Tag used to identify the character for which this item applies (see below). This window will list all Skinned Mesh Renderers found in the model. For every one of them, select whether they need to be extracted and the name for the prefabs to be saved (by default it is the same as the mesh). As soon as “Is Main Body” is selected on one item, the “Create” button is enabled. Pressing the button will prompt you for a folder (in the project) to save all data. Three folders will be created in the selected folder (if they don’t exist already) for **Inventory Items**, **Meshes** and **Prefabs**.

ClothingItems look like this (see below for how to use and configure them):

All the clothing prefabs will be created with an **AttachClothing** component:



This component is responsible for reassigning the skeleton and the bones to the clothing mesh Skinned Mesh Renderer based on the skeleton and bones of the game object whose name is in the Main Body field.

It also contains support for morphable clothing. The Blendshapes field lets you specify all the blendshape names that you want to sync between the main body and the clothing item (they need to have the same name on both meshes).

The last field is the (optional) mask for the clothing item. See above for the masking system.

Setting up clothing

In order for a clothing item to be used, the follow things need to be done:

- 1) Add a Clothing vItemType to the vItemList 2)
Add two attributes to the vItemList:
 - a. ClothingHolder
 - b. ClothingID
- 3) Set up a ClothingItem object for each item (see below)
- 4) Add items to the vItemListData, of type Clothing
 - a. ClothingID needs to match the value in the scriptable object
 - b. ClothingHolder needs to be the same as what is in the scriptable object

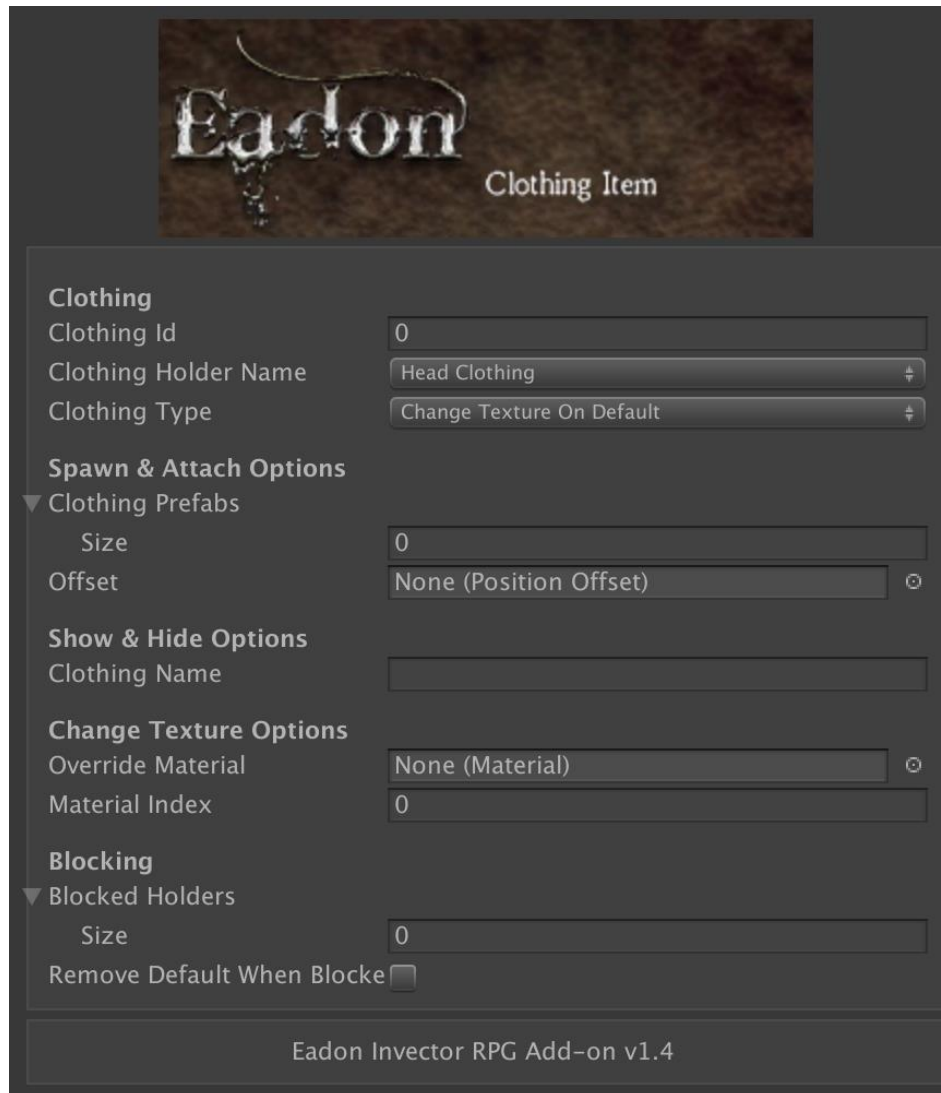
Clothing Manager

The **ClothingManager** is a scriptable object which contains the list of all the **ClothingItem** you use. You can have as many **ClothingManager** objects as you want, and it needs to be set in the General tab of the RPG character inspector. You can create a new **ClothingManager**

object by right clicking in your project and selecting the Create/Eadon/Managers/Clothing Manager menu.

Clothing Item Scriptable Object

The clothing item scriptable object looks like this:



There are four types of **ClothingItems**:

- **Spawn And Attach** are items which are spawned and attached to a **ClothingEquipmentHolder**
- **Spawn And Attach On Main Object** are items which are spawned and attached to the root of the character game object
- **Show And Hide** are items which are always attached to the main game object and can be activated and deactivated
- **Change Texture On Default** are items which are simply a texture (Material) change on an existing clothing item (of Show and Hide type), replacing the material on the clothing holder default clothing

The fields are:

Field	Use	Clothing Item Type
Clothing ID	The link between this item and the vItem in the vItemDataList	All
Clothing Holder Name	A StringReference for the actual holder name for that clothing item	All
Clothing Type	The type of ClothingItem	All
Clothing Prefab	A list of key/value pairs to identify the character and the corresponding clothing prefab	Spawn And Attach, Spawn And Attach On Main Object
Offset	A PositionOffset for the spawning of the prefab	Spawn And Attach
Clothing Name	The name of the existing game object in the hierarchy	Show And Hide
Override Material	The Material to use on the existing clothing item	Change Texture On Default
Blocked Holders	A list of holders whose slots will be locked when the clothing item is worn (see Clothing Holders List below)	All
Remove Default When Blocked	A flag to determine if the default item on the holder (if present) should be removed when the slot is blocked	All

The use of key/value pairs for the prefabs lets you have a single clothing item (a shirt, for example) with two different meshes (a male and a female version) and works like this:

- 1) Set a prefab tag in the Character Appearance component
- 2) Create a Clothing Item with all the variants you need, associated with the right tag
- 3) Create a single vItem for the clothing

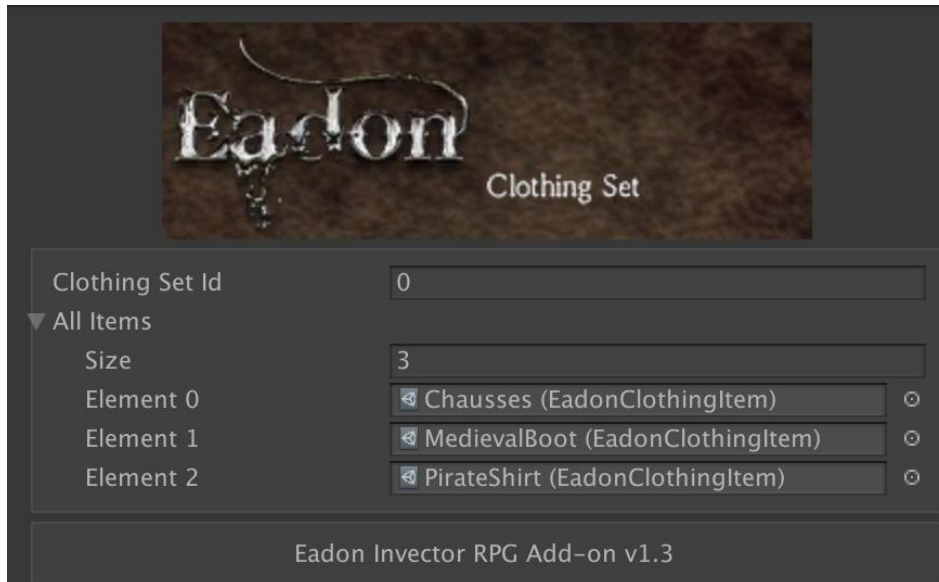
At runtime, when the clothing item is attached, the system will select the right one based on the tag.

If you don't want to use this system, you can leave the tag empty. In this case the system will pick the first prefab from the list.

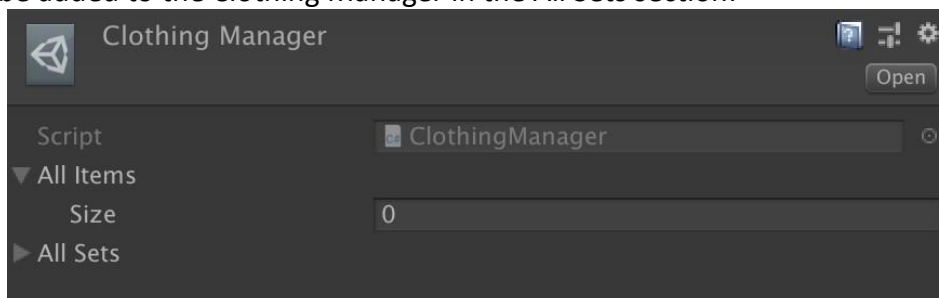
The blocking of holders is useful if, for example, you equip a robe on the chest and want to prevent equipping trousers on the legs at the same time.

Clothing Sets

Clothing Sets are combination of clothing that can be worn as a single item. They can be created by right clicking in the project window and selecting Create->Eadon->Inventory>Items->Clothing Set. They look like this:

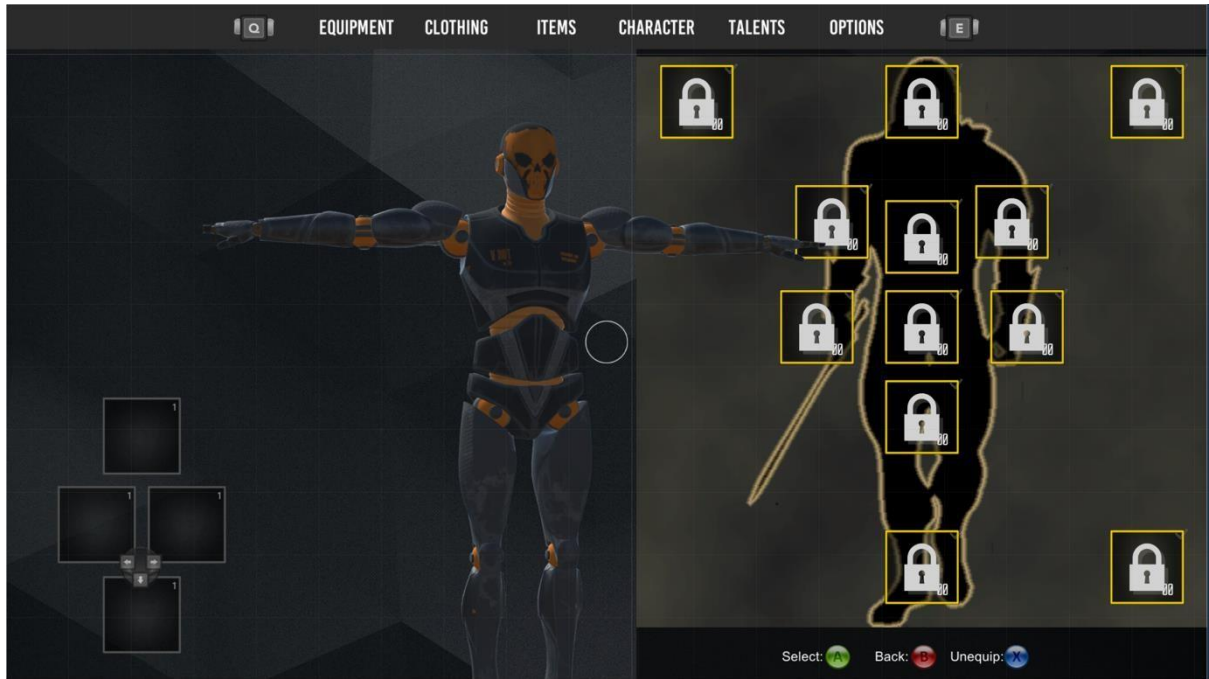


Simply drag the clothing items in the list and set a unique clothing set id. The Clothing Set needs to be added to the Clothing Manager in the All Sets section:



In order to wear Clothing Sets, you need to create a vItem of type Clothing Set in your vItemList, add a Clothing ID attribute with the value equal to the clothing set id. When you add the item to your character (whether as starting equipment or via a vendor or a pickup), the clothing set will automatically add also all the clothing vItems.

In order to equip sets, a new slot for sets is now present in the bottom right corner of the clothing tab:



Once the set is worn, the corresponding slots will also be filled with the various parts, removing a previously worn item and hiding the default part (if the holder is set to hide it).

Clothing Holder List

In the Clothing Item scriptable object the Clothing Holder is chosen from a drop down list. In the vItem attribute it is a numeric value. Please refer to this list for equivalence:

Holder Name	Numeric Value
HeadClothing	0
HelmetClothing	1
CowlClothing	2
HatClothing	3
FaceGuardClothing	4
HelmetAccessoryClothing	5
ChestClothing	6
BackClothing	7
UpperRightArmClothing	8
LowerRightArmClothing	9
BothUpperArmClothing	10
UpperLeftArmClothing	11
LowerLeftArmClothing	12
BothLowerArmClothing	13
RightHandClothing	14
LeftHandClothing	15

BothHandsClothing	16
LegsClothing	17
RightFootClothing	18
LeftFootClothing	19
BothFeetClothing	20
RightShoulderAttachment	21
LeftShoulderAttachment	22
BothShoulderAttachment	23
RightElbowAttachment	24
LeftElbowAttachment	25
BothElbowAttachment	26
RightKneeAttachment	27
LeftKneeAttachment	28
BothKneeAttachment	29
BeltAttachment	30

Changes to inventory code

The Eadon RPG Inventory has a new tab for equipping clothes on the character. That tab uses a number of custom scripts to enable this functionality and relies on the use of Eadon Inventory instead of the stock Invector vInventory.

The example clothing tab does not have all the handlers configured but is a perfect starting point for customization.

Workflow for Character Creation 3

The best way to handle clothing when using CC3 is the following:

- 1) Make a base model with just the base clothing that will never be removed, export and import into Unity
- 2) For each clothing needed:
 - a. Make copies of the base character, add clothing to it, export, import into Unity
 - b. Run the clothing extraction tool
 - c. Save the textures and materials for the clothing
 - d. The imported model can be deleted

Every model exported from CC3 can include multiple clothing, but pay attention to settings that hide the underlying mesh when combining multiple of the same clothing type on the model

Support for Eadon Survival for Invector

Enabling support for Eadon Survival for Invector will unlock options in various areas.

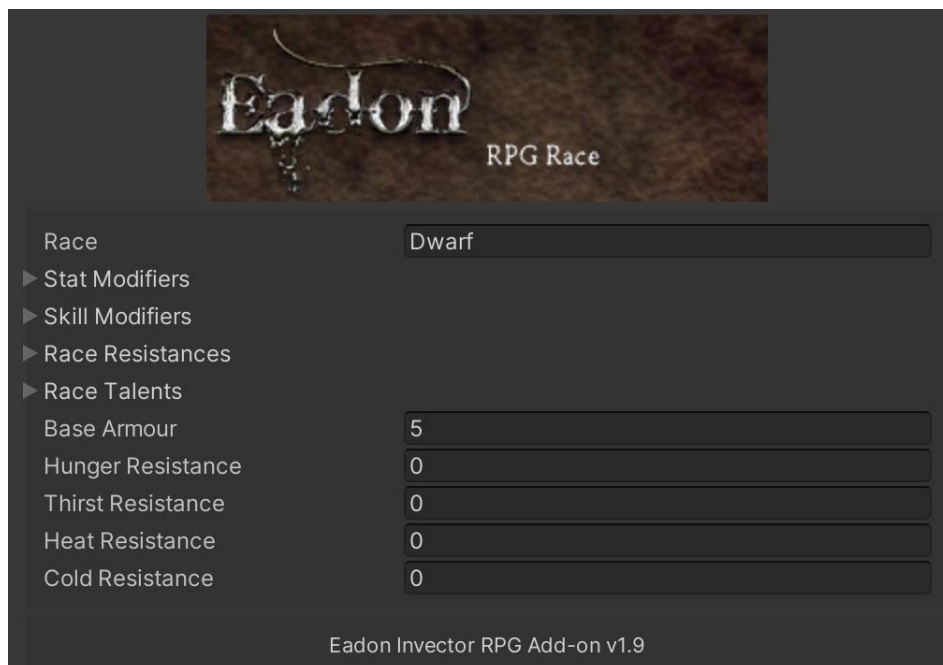
Talent enhancements

Four new talent types have been added:

- Hunger resistance
- Thirst resistance
- Heat resistance
- Cold resistance

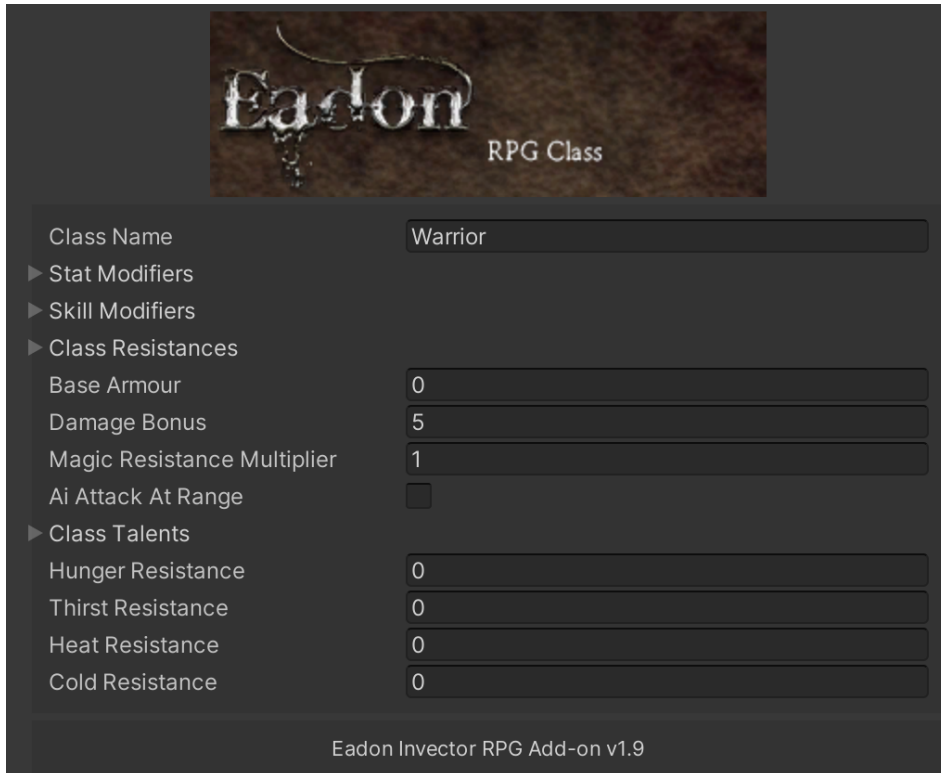
Race enhancements

Races now can have resistances to hunger, thirst, heat and cold:



Class enhancements

Classes now can have resistances to hunger, thirst, heat and cold:

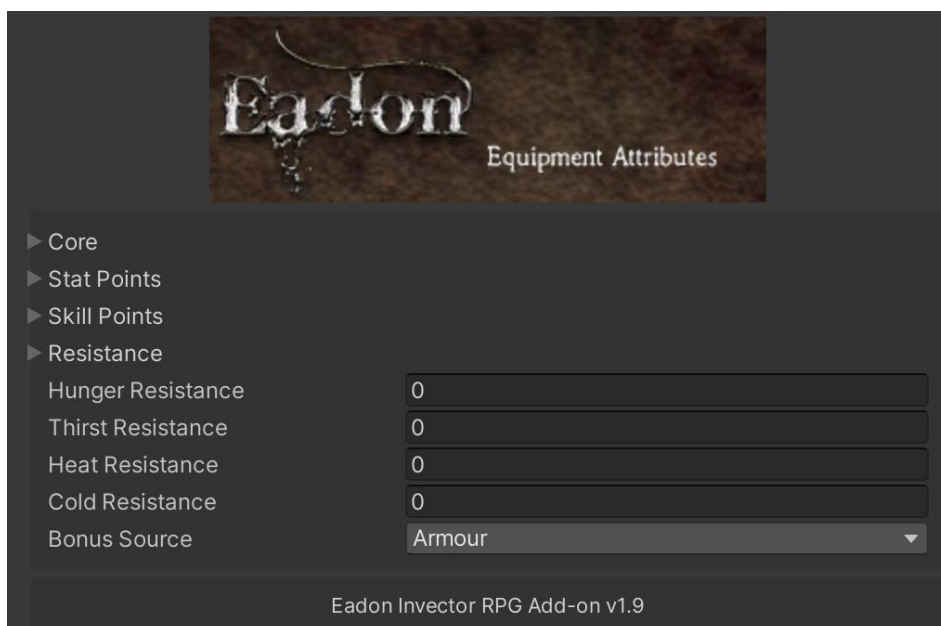


Buff spells enhancements

Buff spells and area buff spells can now provide hunger/thirst/heat/cold buffs and debuffs (see below for additional information)

Equipment attributes enhancements

Equipment can now provide resistances to hunger, thirst, heat and cold:



Survival protections

All the protections, irrespective of the source, act as a modifier to the stamina and health loss due to survival effects:

- A positive value **decreases** the loss
- A negative result **increases** the loss

This allows you to have buffs and debuffs, protection and afflictions.

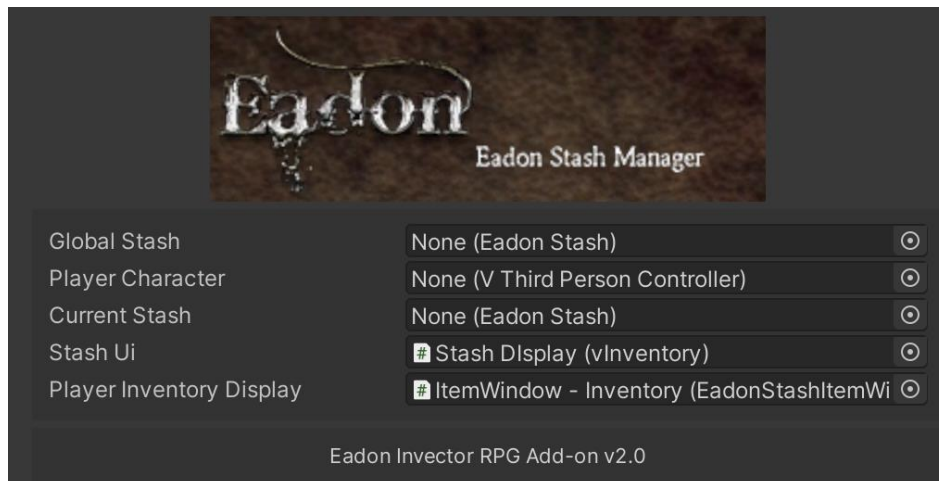
Stash System

Eadon RPG for Invector provides a stash system. Stashes are places/containers where the character can drop items and retrieve them at a later moment. Stashes can be of two types:

- Local stashes
- Global stashes

A local stash is a stash that can be accessed only locally: the character needs to be in front of it in order to access its content. A global stash, on the other hand, is simply a front-end to an abstract global stash: the character can place items in the global stash and access them from any other global stash.

To use the stash system, you need to drag the Eadon Stash System in your scene. The stash system is handled by the Eadon Stash Manager component (located in the Stash Manager child object of the prefab). It looks like this:



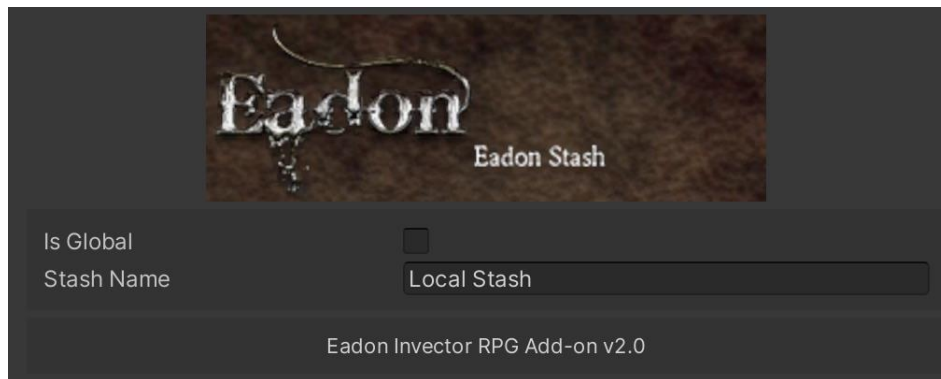
The fields are:

Holder Name	Use
Global Stash	A reference to the global stash object (see below)
Player character	A reference to the player, will be set at runtime if left empty
Current Stash	A reference set at runtime when accessing a stash
Stash UI	A reference to the stash UI
Player Inventory Display	A reference to the player inventory display in the stash UI

You then need to have stashes in your scene.

Creating a Stash

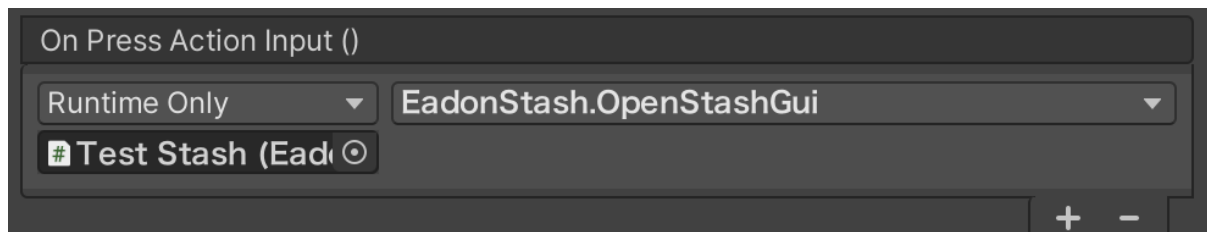
To create a stash, you need to add the [EadonStash](#) component to a game object. It looks like this:

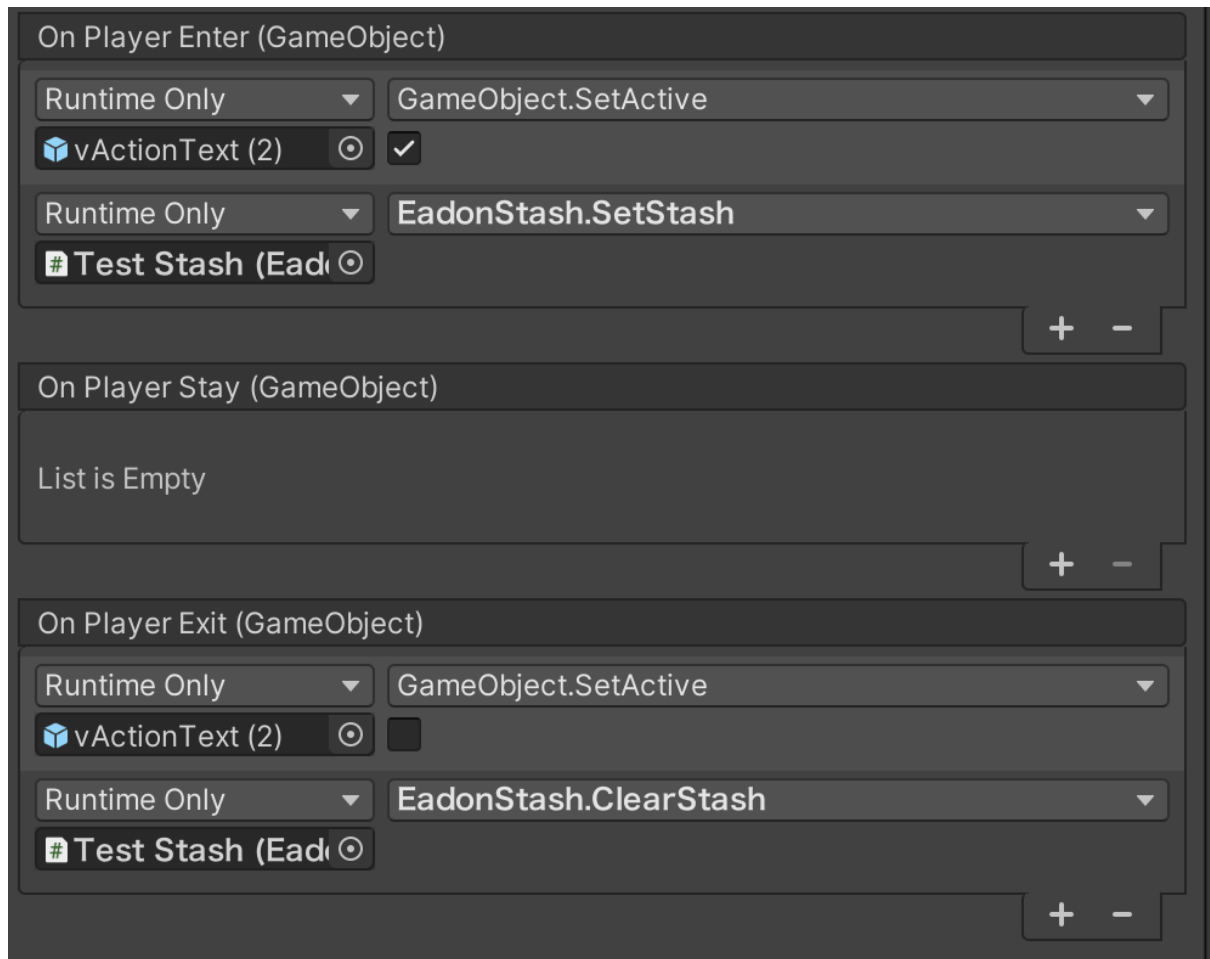


The first field indicates if the stash is local or global, and the second field is the stash name (to be displayed in the UI). You also need to add the following things:

- 1) A [vItemManager](#) on the same game object as [EadonStash](#) (**only for local stashes, global stashes do not need this**)
- 2) The Eadon Vendor Inventory prefab as a child of the stash game object
- 3) The Stash Trigger prefab as a child of the stash game object

The Stash Trigger contains a [vTriggerGenericAction](#) component which needs to have the following events set:





Global Stashes

To enable global stashes, drag the Global Stash Container prefab in the scene and set a reference to it in the Global Stash field of the Eadon Stash Manager. This prefab doesn't do anything by itself, but it holds the content of the global stash.

Any stash from which you want to access the global stash needs to have the Is Global flag set to true. A global stash does not need a vItemManager.

Saving And Loading Stashes

The **EadonStash** component has two methods that can help saving the stash content:

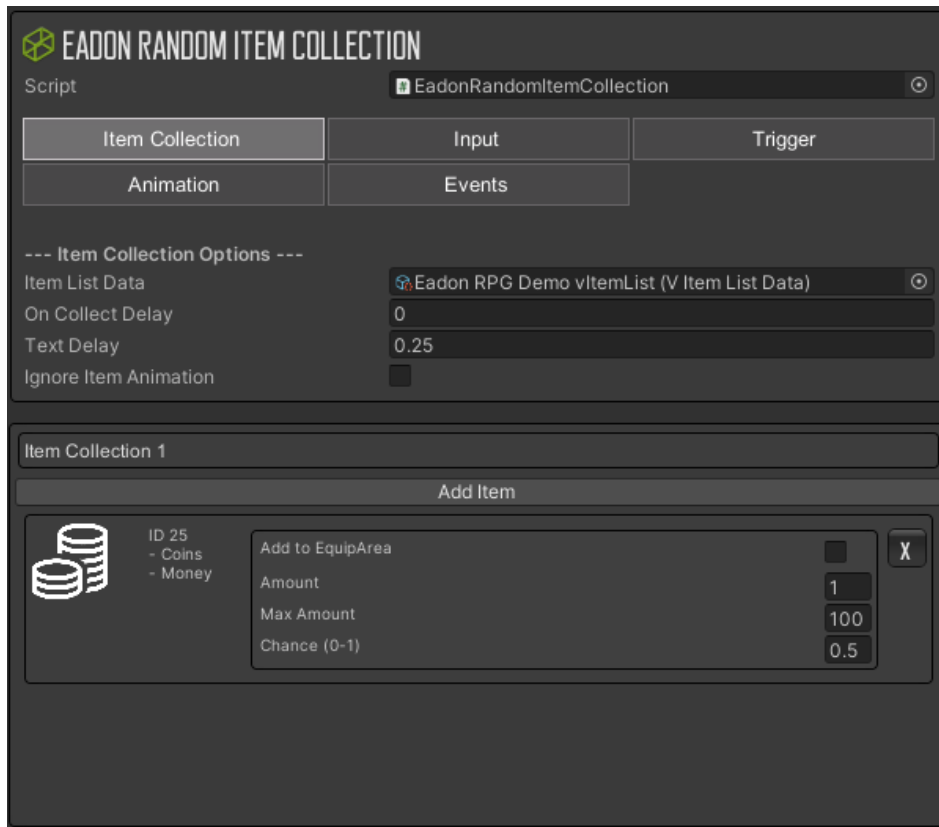
```
public string GetSaveData()  
public void LoadSaveData(string saveData)
```

The first method returns a JSON formatted representation of the stash content, while the second restores the content from the string returned by the first method.

Random Collectables and Random Loot

Eadon RPG for Invector has two components that can be used for random pickup content, [EadonRandomItemCollection](#) and [RandomLootDrop](#).

The first one works exactly like a traditional Invector `vItemCollection`, except that you now have extra fields when you add an item to the collection:

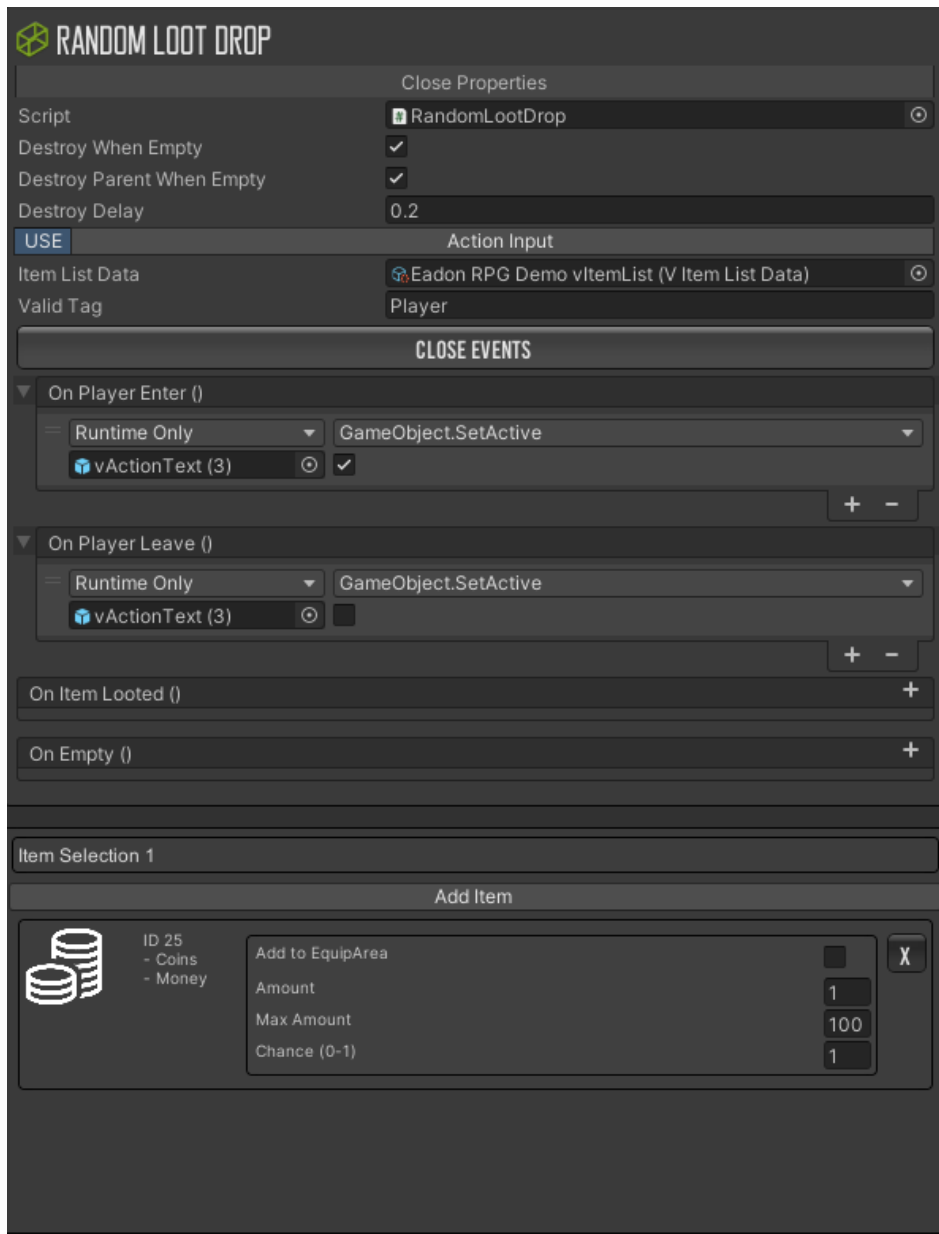


Max Amount lets you specify a maximum amount. If it's greater than the normal amount, the actual amount collected will be a random amount between amount and max amount. The second value is the chance of that particular item to spawn- It's a 0..1 value, where 0 means never and 1 means always.

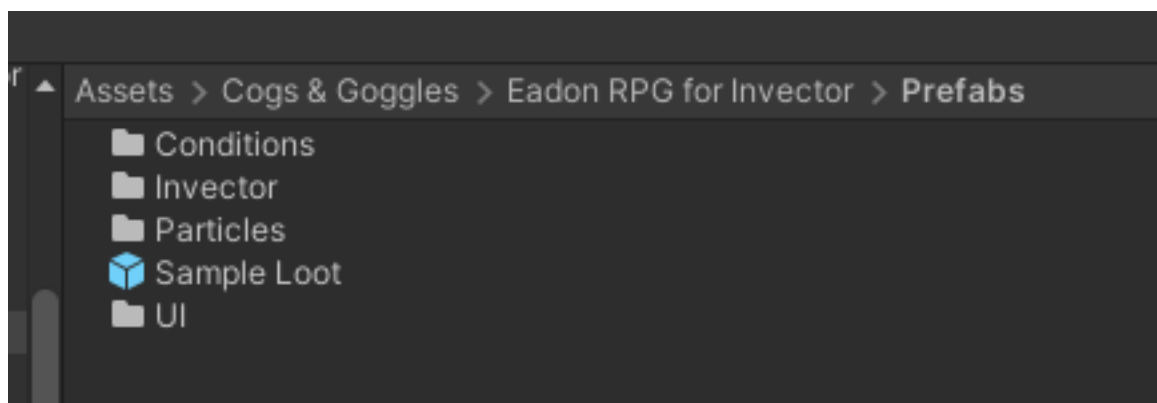
Configured like the picture above, the collection will have a 50% chance of giving the player one to a hundred coins.

The second way of handling random loot is to use the `RandomLootDrop` component. This is a component that does not use `vTriggerGenericAction` and has its own UI system to let the player pick what he wants from the pickup.

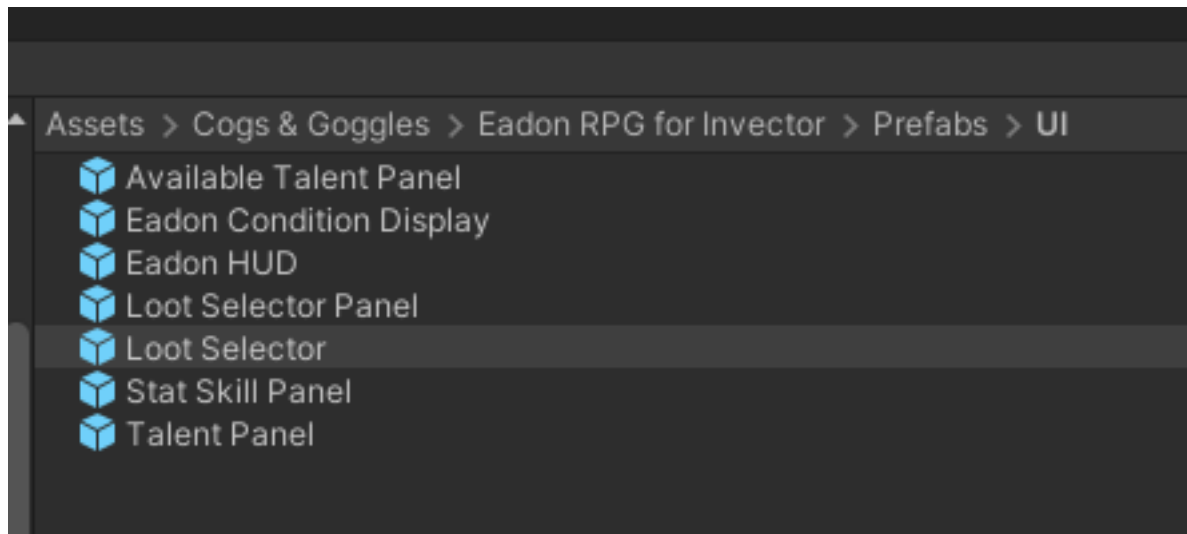
The component looks like this:



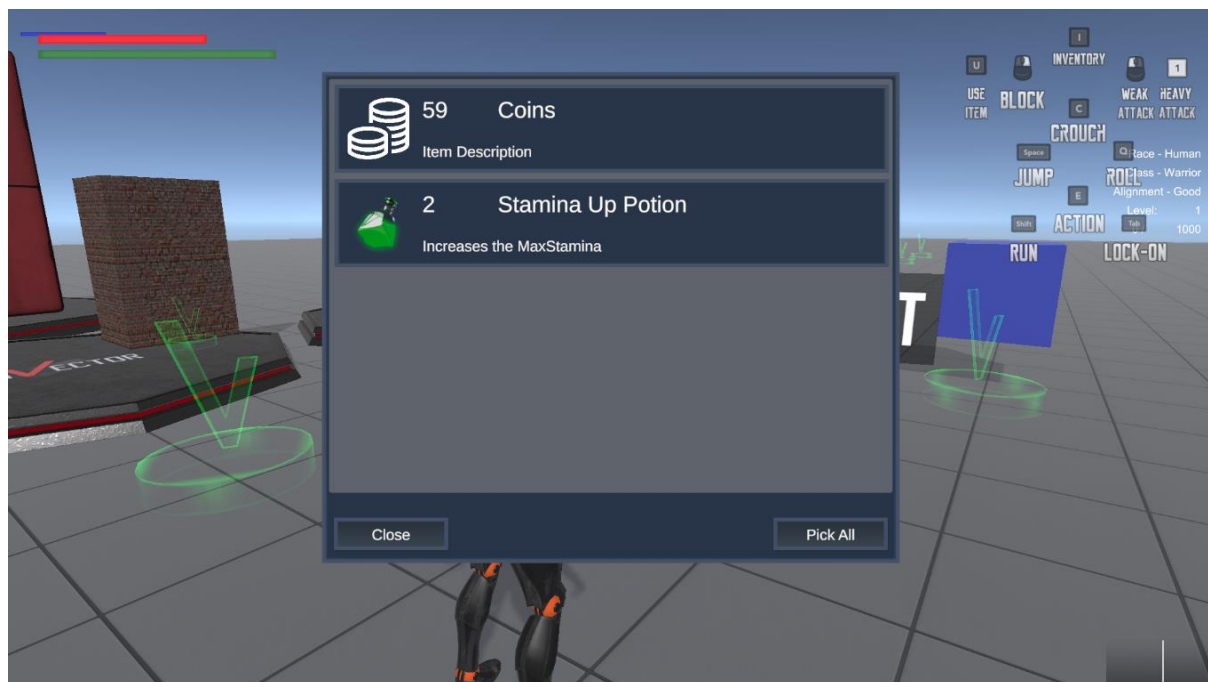
You can find an example preconfigured loot drop prefab here:



The item setup is the same as the [EadonRandomItemCollection](#). In order for this to work, you need to add to your scene the Loot Selector prefab:



When you activate the pickup, the following UI will appear:



This will let you pick all items or select one by one what you want to pick. If you collect all items the pickup will disable itself (either only the pickup or the parent as well), otherwise it will remain in play and you can go back and pick up what is left.

The [RandomLootDrop](#) component has two methods that can help saving the stash content:

```
public string GetSaveData()  
public void LoadSaveData(string saveData)
```

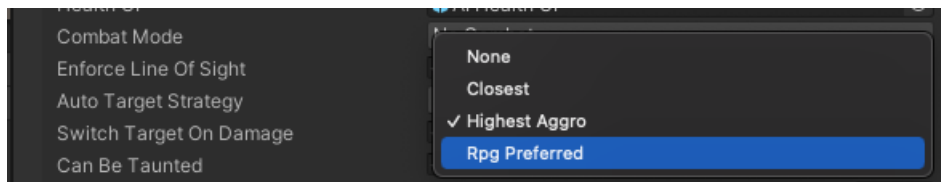
The first method returns a JSON formatted representation of the current content, while the second restores the content from the string returned by the first method.

Support for Eadon AI

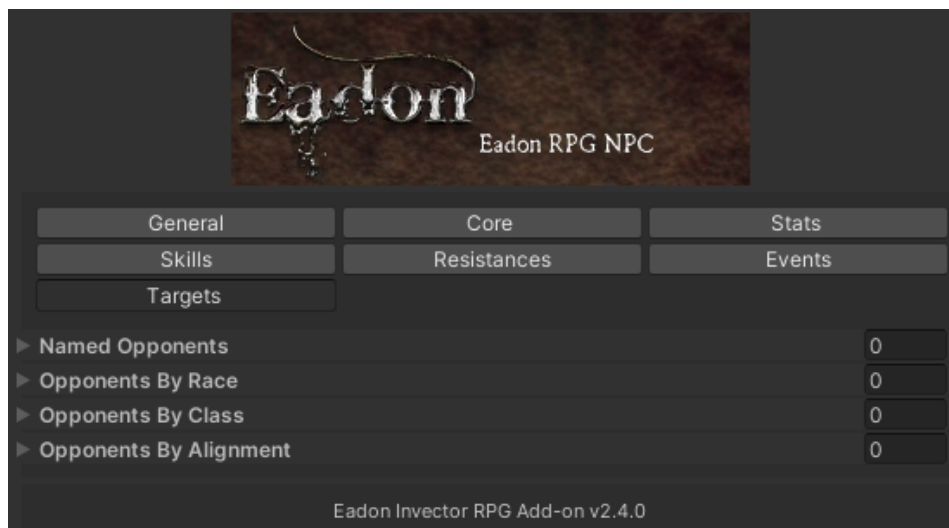
If Eadon AI and Eadon RPG for Invector are both in the same project and enabled, you get access to additional integration.

Preferred RPG Targets

NPCs created using Eadon AI and with a [EadonRpgNPC](#) component get access to a new automatic target selection strategy called RPG Preferred



This requires you to specify target priority in the Targets tab of the rpg NPC component. This tab is only visible if the character also has an AI controller component, and it looks like this:



This lets you specify (in order of priority):

1. **Named Opponents:** this uses the Character Name field in the General tab
2. **Opponents By Race:** this lets you specify priority races to target
3. **Opponents By Class:** this lets you specify priority classes to target
4. **Opponents By Alignment:** this lets you specify priority alignments to target

Switchable RPG characters

Please see the Eadon AI documentation on switchable RPG characters.

Integration with Clothing Culler

In order to use Clothing Culler with the clothing system of Eadon Character Controller, you need to add a [ClothingCuller](#) component to your character and set up Clothing Culler with a modular workflow and configure your items accordingly. Please check the asset documentation on how to do it.

At start, the system will look for a [ClothingCuller](#) component on the character and register all [Occludee](#) found in children (typically on the body mesh) as non modular.

When you equip/unequip a clothing item, the system will register/unregister the [Occludee](#) on the clothing prefab (if present) with Clothing Culler.

License

You agree that Cogs & Goggles own all right, title and interest in this Asset, including without limitation all applicable Intellectual Property Rights. "Intellectual Property Rights" means any and all intellectual property rights wherever in the world and whenever arising (and including any application), including patent laws, copyright, trade secrets, know-how, confidential information, business names and domain names, computer programs, trademark laws, service marks, trade names, utility models, design rights, semi-conductor topography rights, database rights, goodwill or rights to sue for passing off, and any and all other proprietary rights worldwide. You agree that you will not, and will not allow any third party to,

(i) copy, sell, license, distribute, transfer, modify, adapt, translate, prepare derivative works from, decompile, reverse engineer, disassemble or otherwise attempt to derive source code from the Asset, unless otherwise permitted,

(ii) take any action to circumvent or defeat the security or content usage rules provided, deployed or enforced by any functionality (including without limitation digital rights management or forward-lock functionality) in the Asset,

(iv) remove, obscure, or alter Cogs & Goggles' or any third party's copyright notices, trademarks, or other proprietary rights notices affixed to or contained within the Unity Asset Store or Assets.

YOU EXPRESSLY UNDERSTAND AND AGREE THAT YOUR USE OF THE ASSET IS AT YOUR SOLE RISK AND THAT THE ASSET IS PROVIDED "AS IS" AND "AS AVAILABLE" WITHOUT WARRANTY OF ANY KIND, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. IN PARTICULAR, COGS & GOGGLES, ITS SUBSIDIARIES, HOLDING COMPANIES AND AFFILIATES, AND ITS LICENSORS DO NOT REPRESENT OR WARRANT TO YOU THAT:

(A) YOUR USE OF THE ASSETS WILL MEET YOUR REQUIREMENTS,

(B) YOUR USE OF THE ASSETS WILL BE UNINTERRUPTED, TIMELY, SECURE OR FREE FROM ERROR,

(C) ANY INFORMATION OBTAINED BY YOU AS A RESULT OF YOUR USE OF THE ASSETS WILL BE ACCURATE OR RELIABLE, AND

(D) THAT DEFECTS IN THE OPERATION OR FUNCTIONALITY OF ANY SOFTWARE PROVIDED TO YOU AS PART OF THE ASSETS WILL BE CORRECTED.

YOUR USE OF THE ASSET IS AT YOUR OWN DISCRETION AND RISK AND YOU ARE SOLELY RESPONSIBLE FOR ANY DAMAGE TO YOUR COMPUTER SYSTEM, OR OTHER DEVICE, OR LOSS OF DATA THAT RESULTS FROM SUCH USE.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, COGS & GOGGLES FURTHER EXPRESSLY DISCLAIMS ALL WARRANTIES TERMS OR CONDITIONS OF ANY KIND, WHETHER

EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES TERMS AND CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.