# **Settings Collection**

## Overview **Fields** Identifier **Settings Saver** Input Templates (UGUI) Input Templates (UI Toolkit) **Audio Mixer** Post-process Profile HDRP Volume Settings List **Adding New Settings** Plus (+) Button Minus (-) Button **Setting Options** Setting Tab Options **Default Value** Assign Unity Value As Default Custom Label Apply Immediately Sync Selected Button Advanced Tab Identifier Override Identifier When Copied Input Custom Label Parent Identifier **UI** Toolkit Add Spacer Spacer Element Class Provider Change Button Auto From Template

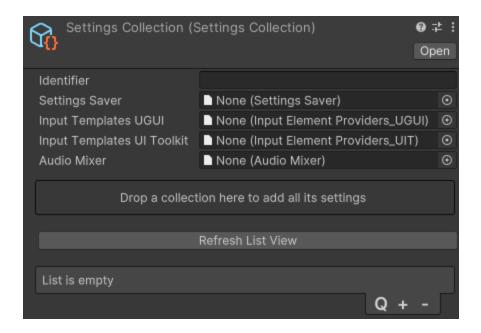
```
From Scriptable Provider
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   Custom Options Variables
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```

## **Overview**

**DuplicateSetting** 

The settings collection is the heart of a setting menu. It contains all the important references on how to create the input elements in the menu, how to save and load the settings and most importantly the settings to show in a settings menu. The settings are defined in a list in which the order specifies the order in which settings will be created and set up.

## **Fields**



#### **Identifier**

A string to name your collection. Used in conjunction with setting value change listeners to react or ignore setting value changes of a setting collection. Can be left empty if you don't need this extra control.

## **Settings Saver**

A reference to a Settings Saver object that is used to save and load the setting values for this collection. If left empty no saving/loading of settings will occur. <u>Settings savers</u> <u>documentation</u>

## **Input Templates (UGUI)**

A reference to the input elements provider collection object that is used to create and set up elements for the UGUI settings menu (sliders, toggles etc.)

## Input Templates (UI Toolkit)

A reference to an input element provider collection object that is used to create and set up elements for the UI Toolkit settings menu (sliders, toggles etc.)

### **Audio Mixer**

A reference to an Audio Mixer. This audio mixer is used for all audio settings that require an Audio Mixer. You can however override the Audio Mixer for each setting individually in the setting specific options. If this reference is left empty an Audio Mixer has to be referenced on an Audio Setting to function.

## **Post-process Profile**

Requires the post processing add-on! A reference to a Post-process Profile. Used for all post processing related settings. You can specify a profile override on a per setting basis. If this reference is left empty a profile has to be referenced on a post processing related setting for it to function.

#### **HDRP Volume**

A reference to a Volume Profile. Used for most HDRP related settings. You can specify a profile override on a per setting basis. If this reference is left empty a profile has to be referenced on most HDRP related settings for them to function.

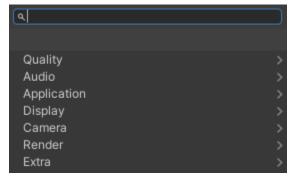
## **Settings List**

The settings list is where all your settings for your settings menu are shown.

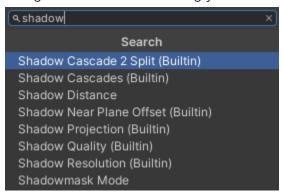
## **Adding New Settings**

## Plus (+) Button

Opens a dropdown to allow the selection of a setting.



You can use the search bar at the top to narrow the list of settings or click on the (sub-) categories to find the setting you want.



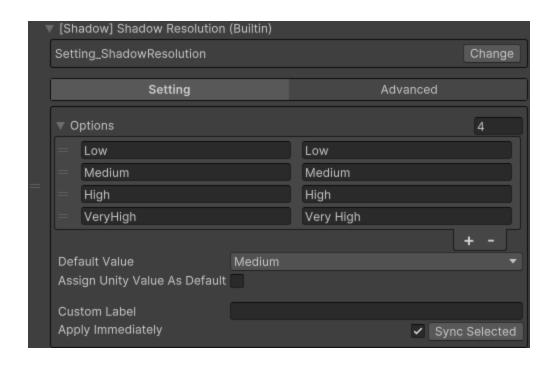
## Minus (-) Button

Removes the currently selected setting(s) or the last settings in the list if no setting is selected. You can add or remove settings to and from the current selection by holding ctrl/cmd and left clicking a setting. You can also select a range of settings by holding shift and selecting the first and then the last setting for the selection. If a setting can not be selected you may need to click the reorder image on the left of the setting (two horizontal bars).

## **Setting Options**

## **Setting Tab**

The settings tab contains the options for the setting that are used the most.



## **Options**

Available for many settings. Allows the specification of the setting options to be handled by the input element for that setting. Some variables can also be used to tell the input element how to be set up. Learn more <a href="here">here</a>.

#### Default Value

Available for many settings. Allows the specification of a default value for that setting. The default value will be applied if no other value was able to be loaded from a save or if the value is reset to default.

## Assign Unity Value As Default

If enabled the current value at runtime will be assigned as the default value for this setting.

## **Custom Label**

Each quality setting has a default label text predefined. This field can be used to override the default label text to a custom one.

## Apply Immediately

If enabled any change on an input element for this setting will be processed and applied immediately by the settings system. Disable this feature if you don't want to apply a change immediately for your setting. Can be useful for settings that are more hardware demanding such as changing the quality level. This is enabled by default.

## Sync Selected Button

If clicked all settings currently selected will have their apply immediately options updated to match the one on this setting. Useful if you want to quickly bulk change this value on a lot of settings without having to do it on each setting individually.

### **Advanced Tab**

The advanced tab contains options for the setting that are used less frequently such as specifying a custom input element or changing the element parent.



### Identifier

A string used to identify the setting. Should be unique to avoid problems. You can override this to make it easier to read (ie: screen-res for your screen resolution setting). This could

make debugging easier but should only be used if necessary. For most people the automatically assigned identifier works just fine.

## Override Identifier When Copied

This option works in conjunction with the collection drop to add settings feature. If enabled this setting will get a new identifier assigned when it is dropped and added to another settings collection. You can disable this to persist the identifier which may be useful if you have custom identifiers or want to keep the connection of the save file on a new settings collection. Enabled by default.

### Input

In this section you find input element specific options such as where to attach your elements (toggles, sliders etc.) or input element overrides for this specific setting.

#### Custom Label

Same custom label field as the one described in the Settings tab <u>here</u>. Only here for convenience.

#### Parent Identifier

An identifier used to find the correct object to attach/parent the input element of this setting to. In the case of a UGUI menu it will search and attach the element to a GameObject in the hierarchy that has a SettingObject component with this identifier. For a UI Toolkit menu it will search and attach the element to a VisualElement with a class matching this identifier. The provided menu layouts already have this set up but you can modify them as you see fit. Check out the demo scenes for various use cases of this option.

#### UI Toolkit

Contains options specific to the UI Toolkit input element for this setting.

### Add Spacer

If enabled a VisualElement with the class specified in Spacer Element Class will be added after the input element for this setting. This is useful if you want to add spacing which would otherwise be necessary to add on the input element itself. Having this enabled offers more flexibility than having this on each input element because it can easily be modified with a stylesheet. Enabled by default.

### Spacer Element Class

The class name to add to the spacer VisualElement as described in Add Spacer.

### Provider Change Button

Allows the selection of a provider specifically for this setting. Setting anything but auto will override the provider from the Input Templates on the collection. This option is useful if you want this setting to have a different input element than all the others that share the same type. Check the demo scenes for use case examples.

#### Auto

Will select and use the provider of the input templates list based on this settings type. Enabled by default.

### From Template

Will set up the element based on the specified stylesheets, class names and UXML templates.

### From Scriptable Provider

Will use the referenced scriptable input element provider to set up the input element for this setting.

#### From Name

Will use the (specified) name to select and use the input element provider from the input templates (Input Element Providers) assigned in the settings collection to set up the input element. Useful for things like headers, labels etc. because in the default providers list a setting without a type will have a button generated. In the case of the menu title you can specify Title as the name to have it use the Title provider instead of provider specified for Void.

#### UGUL

## Provider Change Button

Allows the selection of a provider specifically for this setting. Setting anything but auto will override the provider from the Input Templates on the collection. This option is useful if you want a setting to have a different input element than all the others that share the same type. Check the demo scenes for use case examples.

#### Auto

Will select and use the provider of the input templates list based on this settings type. Enabled by default.

#### From Prefab

Will set up the element based on the specified prefab(s).

### From Scriptable Provider

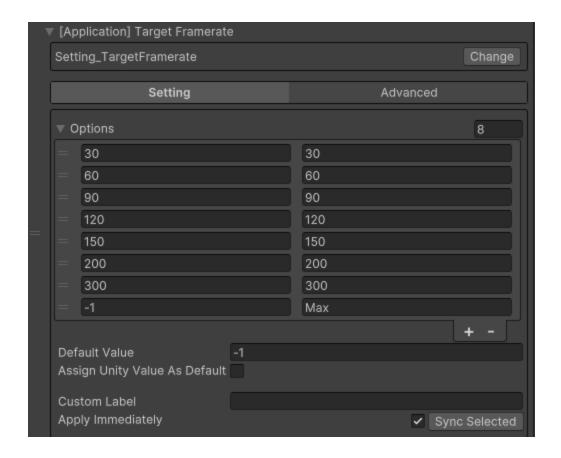
Will use the referenced scriptable input element provider to set up the input element for this setting.

#### From Name

Will use the (specified) name to select and use the input element provider from the input templates (Input Element Providers) assigned in the settings collection to set up the input element. Useful for things like headers, labels etc. because in the default providers list a setting without a type will have a button generated. In the case of the menu title you can specify Title as the name to have it use the Title provider instead of provider specified for Void.

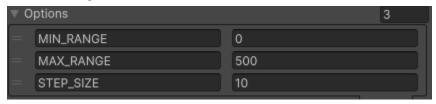
## Setting specific fields/options

Many provided settings have additional options. The most common option is the input element options. They are represented by a list in which the left side for each element specifies the internal value to use with Unity and a custom display value on the right side.



In this image the setting is for the target framerate for which the last option entry has a '-1' on the left (internal value) and a 'Max' on the right side (display value). If this setting is using an input element that displays the current value(s) (ie: a dropdown or previous next selector) the right side of the list will be used for display and use the internal value (left) to actually apply the changes to Unity. All settings that have custom options have a list already specified. You can use them as a starting point and customize them to add, remove or change entries. Some specific variable names can be used as well.

## **Custom Options Variables**



#### MIN\_RANGE

Minimum value. Primarilyused for sliders but also works with dropdown and previous next selectors.

#### MAX\_RANGE

Maximum value. Primarilyused for sliders but also works with dropdown and previous next selectors.

## STEP\_SIZE

Specifies the step size for a step slider. Useful to make steps larger or smaller. Primarily used for sliders but also works with dropdown and previous next selectors which will assign values to the dropdown (or previous next selector) based on the step size or step count in conjunction with the min and max range values.

### STEP\_COUNT

Specifies the amount of steps for a step slider. Useful if you want the slider to have a set amount of steps. Primarily used for sliders but also works with dropdown and previous next selectors which will assign values to the dropdown (or previous next selector) based on the step size or step count in conjunction with the min and max range values.

## **Settings Collection Utility**

The SettingsCollectionUtility script adds methods for adding and removing settings of a SettingsCollection.

## AddSettingToCollection

Allows a Setting or SettingHolder to be added to a SettingsCollection. If only a Setting is provided a SettingHolder with default variables will be created and used.

## Remove Setting From Collection

Removes a setting at the specified index from a SettingsCollection

## **DuplicateSetting**

Duplicates the setting at the specified index and adds it to the SettingsCollection.