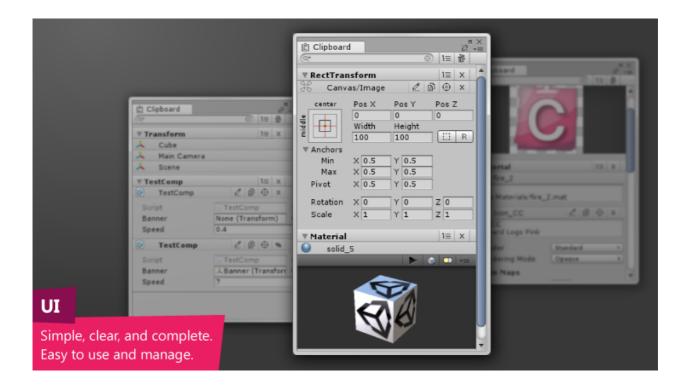


# Let's save your time from routine work.

- Have you ever tweaked lots of Components in play mode, and noted values for later?
- Do you need to try many settings or Material properties to pick which looks better?
- Do you even want to copy a lot, then paste after lunch or the weekend?
- Would you like a Component presets panel to apply values quickly?

# That's why I made this!

The videos below show the brief and the smooth workflow, and how to use as a presets panel.



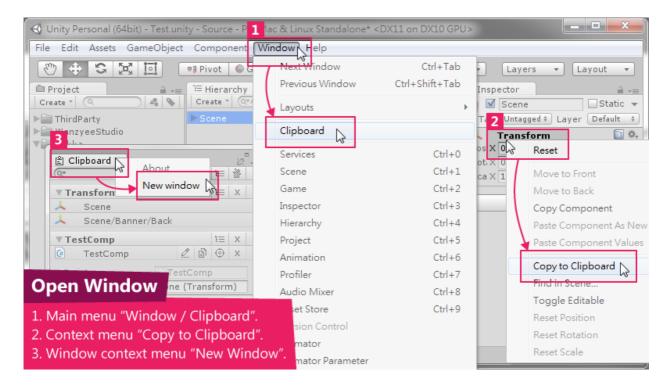
#### Overview:

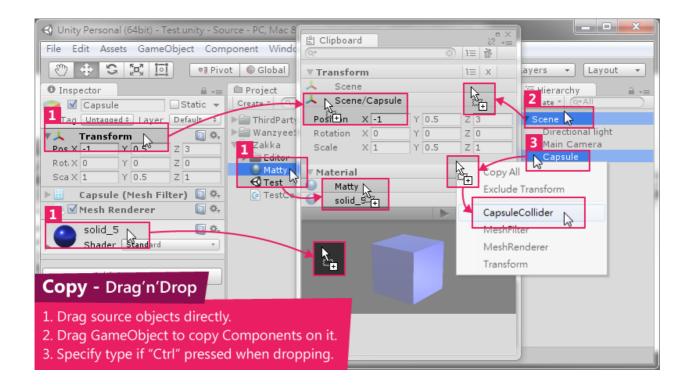
- Easy to copy and paste multiple Components or Materials.
- Just drag'n'drop to snapshot them, and drag'n'drop to paste the copies back.
- All the copies can be managed and edited in a foldable Inspector-like window.
- · With custom labels and quick search bar, it could work as a presets panel.
- One click to find the copy source.
- · Most copies will be saved in the project.

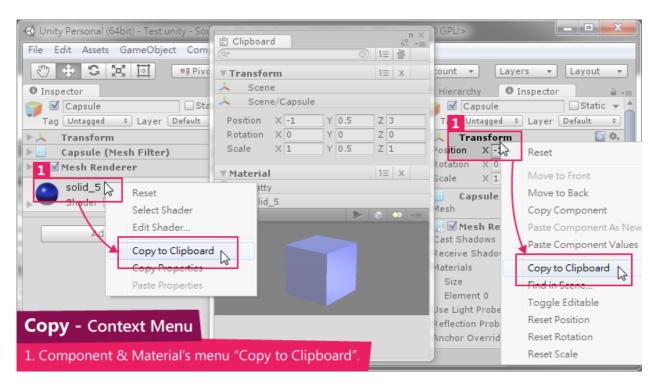
The further technical documentation is available here.

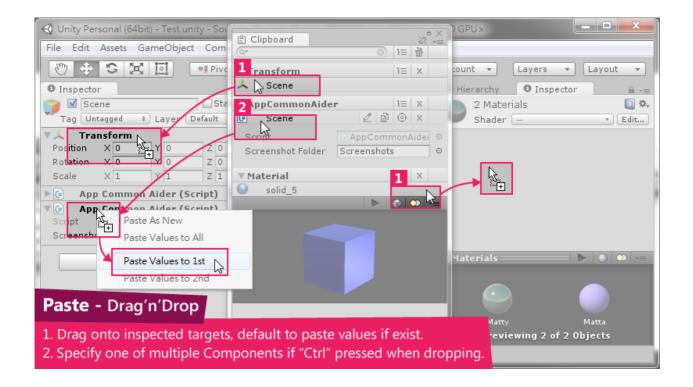
And the operation manual is right below.

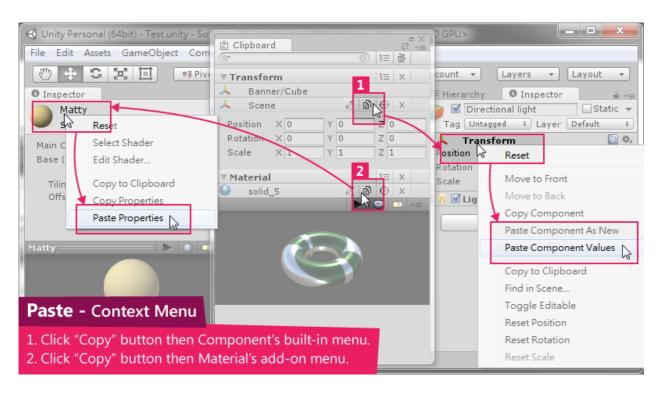
# **Using:**

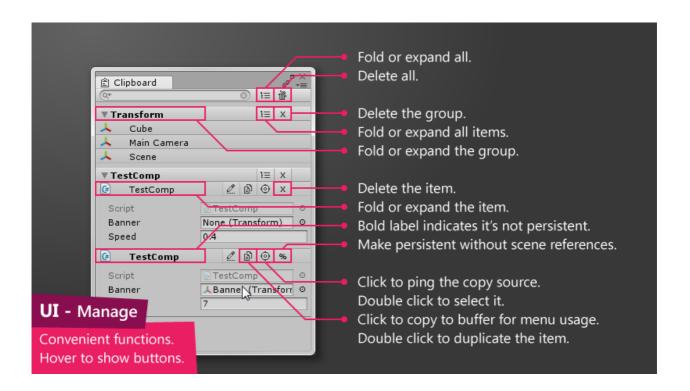


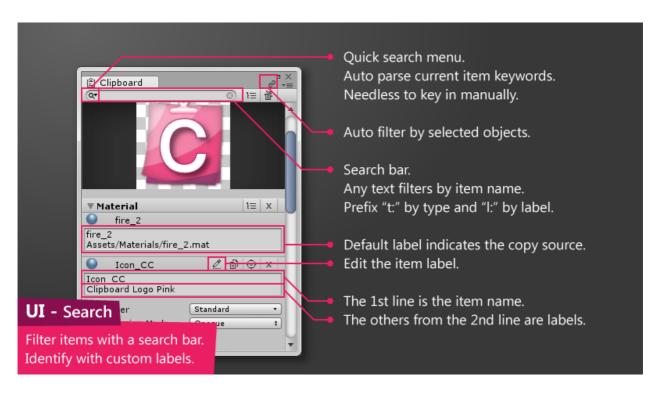












# Add-on:

- Here's AuxCursor to show cross windows dragging hint, useful for editor developer.
- This also includes a small utility: Material Property Copier.
- It provides context menus "Copy Properties" and "Paste Properties" for Material.
- It works just like the similar menus of a Component.

# **Release Notes:**

#### 1.2.4

- Fix, a mouse up aborting exception may occurs when drop to open the paste menu.

#### 1.2.3

- Fix, quick search menu to determine the existing keywords.
- Change the package name.

#### 1.2.2

- Free version, drag'n'drop Transform, Camera, Light to copy and paste for trial.
- Free version, able to filter items with the search bar.
- Fix, error occurs when use the context menu to copy more than the limit in free version.
- Fix, API "track" didn't work properly.
- Fix, unfocus the text field when change layout to ensure display correctly.
- Fix, potential uncleared editor error.
- Add the label "Ignore" to the asset copies in case.

#### 1.2.1

- New, double-click the Copy button to duplicate a copied item.

#### 1.2

- More features for free version, e.g., more copies, fold item, preview, find source, API.
- New, custom item label for search and identification.
- New, quick search menu to select filters without manual typing.
- New, auto filter by tracking selected objects.
- Change the search bar to work like the Project window's instead of regex.
- Keep the search filter after exiting the editor.
- Keep the fold states after exiting the editor.
- Clearer GUI, show item's buttons only when mouse hover, and adjust layout a little.
- Show a confirm dialog when click "Clear all" button to avoid miss operation.
- Save label data to AssetImporter.userData instead of a temp file in assets.
- Optimize, lower reload frequency with a new trigger system, obvious while playing.
- Optimize, new faster reload system for multiple windows usage.
- Change the store folder from "Temps/Clipboard" to "Temp/Clipboard".
- Change EditrixStyle API from "Create" to "Load", and reuse the generated texture.
- Fix, drag an object into a field of a copied item.
- Fix, Inspector reflection for dragging paste in Unity 5.5.0p3.
- Fix, support to copy audio filters.
- Improve compatibility for the same name types of different assemblies.

# 1.1.7

- Move the toolbar "Window" and "Tooltip" buttons to the window context menu.
- Change the toolbar "Clear" button icon instead of text.

# 1.1.6

- Fix the random crash caused by removing component in Unity 5.5.
- Fix the hideFlags error occurs when copying component in Unity 5.5.

#### 1.1.5

- Add the documentation link to the window context menu "Help".
- Remove the big tooltip shows when there's no copied items.

# 1.1.4

- Change the drag'n'drop pasting system to avoid some weird behavior on Mac.

- It's able to cancel dragging paste by press "Esc" key.

#### 1.1.3

- Fix showing the Save Assets dialog when copying, if the Verify Saving Assets flag set.
- Fix the null reference of an unexpected empty prefab when loading copies.
- Fix creating the style images from the window constructor.

#### 1.1.2

- Fix an error when cleaning invalid Editor by checking its target.

#### 1.1.1

- Add a regex search bar to filter labels.
- Rename the dll and move to an Editor folder to avoid exporting when building player.
- It's recommended to remove the old package before updating.

#### 1.1

- New, Drag'n'Drop to paste.
- New, able to copy all components on a GameObject by dragging it.
- Fix copying a component which isn't a specific type, e.g., Halo is a Behaviour.

#### 1.0.5

- Improve the source finding function to find in an unsaved scene.
- Fix the obsolete API about the HSV color used for icons.
- Fix the reference to the copy source when a copied component references to itself.
- Fix component copy operation to be not undoable since it shouldn't be.

#### 1.0.4

- Fix the copied asset isn't saved caused by the previous bug fixing for weird object.
- Fix copying a material which inherits from Material in case.
- Fix the reference lost when a material refers to a non-asset texture.

# 1.0.3

- Add a dark background to every preview to make UI identical.
- Add a public method to open window, for users to make their own hotkey.
- Fix copying a component which inherits from Transform, e.g., RectTransform.
- Fix a weird object shown in Hierarchy when copy a component related to RectTransform.

# 1.0.2

- New, a button to easily find copy source object, and adjust the UI for it.
- Fix material copy operation to ensure be saved.

# 1.0.1

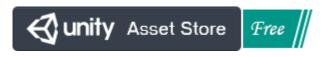
- Fix the cursor flashing when the Project or Hierarchy window changes constantly.
- Fix the component editor usage to avoid crash when a copied asset is operated manually.

# 1.0

- First release.

# **Publish Notes:**

- Requires: Unity 5.3.5f1 or higher.
- Category: Editor Extensions / Utilities
- Keywords: Component Material Clipboard Copy Paste Snap Snapshot Drag Drop Editor Extension Utility Inspector Custom Preset Pool Search Filter





# **Full-only Features:**

- Unlimited copy numbers. (10 for free version)
- · Keep the copies after exit editor.
- Full Drag'n'Drop operations. (Transform, Camera, Light for free version)
- · Quick search menu.
- · Auto filter by tracking selection.
- · Custom item label.
- · Open multiple windows.

# Clipboard

Released Packages » ClipboardSpecific Classes » |

**Editor Extensions** 

Utility to copy UnityEngine.Component or UnityEngine.Material and paste it back. More...

Inherits EditorWindow, and IHasCustomMenu.

# **Public Member Functions**

void AddItemsToMenu (GenericMenu menu)

Add the window context menu items. More...

# Static Public Member Functions

static void	OpenWindow () Show the clipboard window. More
static bool	IsCopyable (Object source)  Determine if the specified source is able to copy to clipboard. More
static void	Copy (params Object[] sources) Copy the specified sources to clipboard. More
static void	Clear (Type type=null) Clear clipboard by specified type, or pass null to clear all. More

# **Public Attributes**

bool track
Flag to track selection to change search filter automatically. More...

string search = ""

The search filter pattern in the search bar. More...

# **Detailed Description**

Utility to copy UnityEngine.Component or UnityEngine.Material and paste it back.

Useful for tweaking lots of objects in the editor, even in play mode. Click the menu "Window/Clipboard" to open the window. Just play and tweak, drag and drop, copy and paste whenever. It acts as sort of preset system, edit lots of copies as presets, and paste to apply values quickly. Easy to find and manage copies with a search filter, custom item label, and foldable inspector.

# Copy:

- 1. Drag'n'Drop from "Inspector" to copy the inspected sources.
- 2. Drag'n'Drop a UnityEngine.GameObject to copy the components on it.
- 3. Show menu to specify the component type if "Ctrl" pressed when dropping gameObjects.

4. Or click the context menu "Copy to Clipboard".

#### Paste:

- 1. Drag'n'Drop to "Inspector" to paste back to the inspected targets.
- 2. When dragging a component, it pastes values to the first one on the gameObject, or pastes as new if none.
- 3. Show menu to specify a target of multiple components if "Ctrl" pressed when dropping.
- 4. Or click the "Copy" button above any item, and paste by the target's context menu.

# Filter items with the search bar:

- 1. Click the "Magnifier" icon to show a context menu made from the current items to select filters easily.
- 2. Or input any text to filter the item's name, just like the Project window's search bar.
- 3. Prefix "t:" filters by the type, the search will include all specified types.
- 4. Prefix "I:" filters by the tooltip as labels, an item has to match all specified labels.
- 5. Toggle the "Link" icon at the top-right of window to filter automatically by tracking selection.

#### Edit the item label:

- 1. Click the "Pen" button beside the label to show or hide the edit field.
- 2. To save the change, just press "Ctrl-Enter" keys or unfocus the field after editing.
- 3. The first line shows as the label title, and the full text is the tooltip.
- 4. Leave the field empty to show the default text, i.e., the copy source path.

# Find the copy source object:

- 1. Click the "Aim" button to ping it or double-click to select it.
- 2. The saved trace path is also shown as the default label tooltip.
- 3. It'll beep if not found, e.g., the trace may be lost if the source is moved or renamed.

# The reasons not to save the trace by references below:

- 1. A scene object reference will change when load a scene.
- 2. We can't save the scene reference in the project assets.
- 3. We shouldn't save the edit data in user's game scene.

For component references to scene object. This creates copies and store in editor scene temporarily to ensure content correct. It means the copy will be destroyed when quitting the editor. And also, the scene references will become missing when opening another scene. The situation above is applicable to a material with scene texture, too.

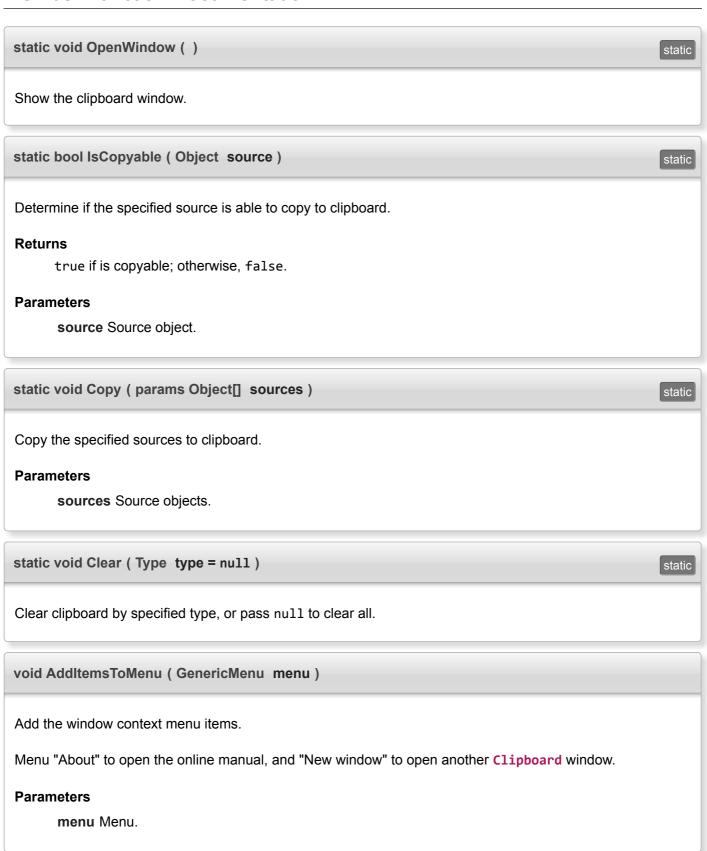
For material or component without reference to any scene object. The copies will be saved with a label "Ignore" in an asset folder to make them still until manually "Clear". This tracks all copies by specific name or folder to ensure valid after script reloaded.

SVN users may clear all manually to avoid committing, or ignore the storing folder below:

- 1. The default is "Temp/Clipboard" under the root folder "Assets/WanzyeeStudio".
- 2. If the root is moved, it becomes "Temp/Clipboard" under the first found "WanzyeeStudio".
- 3. If there's no "WanzyeeStudio" folder, it'll be "Assets/Temp/Clipboard".

Instructions, to copy and paste generic component is dangerous, even if reflect all the fields. Since we'll never know what the developer do when the component awake. As the thread I commented, we'd be very careful with which aren't made by ourselves. Finally, this was created, works in the editor with Unity built-in classes and API.

# Member Function Documentation



# Member Data Documentation

The search filter pattern in the search bar.

bool track
Flag to track selection to change search filter automatically.
string search = ""

# **MaterialPropertyCopier**

Specific Classes » Editor ExtensionsReleased Packages » |

Clipboard

Copy or paste properties from one UnityEngine.Material to another. More...

# Static Public Member Functions

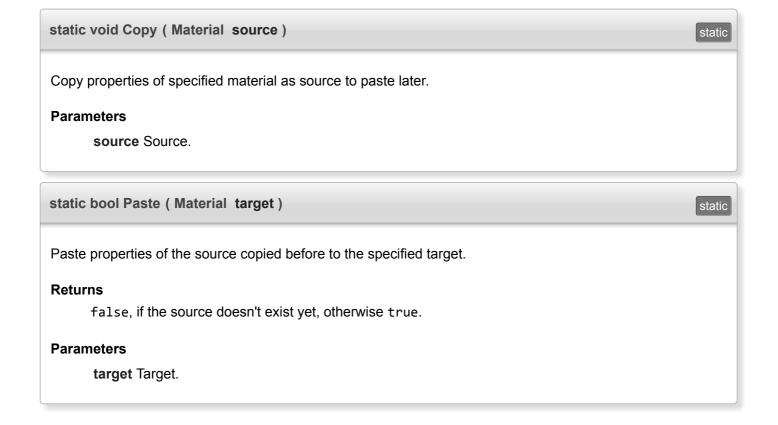
static void	Copy (Material source)
	Copy properties of specified material as source to paste later. More
static bool	Paste (Material target)
	Paste properties of the source copied before to the specified target. More

# **Detailed Description**

Copy or paste properties from one UnityEngine.Material to another.

Operate by UnityEngine.Material context menu "Copy Properties" and "Paste Properties". This works like the similar menu of UnityEngine.Component, and will change the shader. To keep valid after script reloaded by a temporary material as medium storage. Copy properties by built-in Material.CopyPropertiesFromMaterial() method.

# Member Function Documentation



# **AuxCursor**

Released Packages » Clipboard

Draw an auxiliary icon follows the cursor globally. More...

Inherits EditorWindow.

# **Properties**

static DragAndDropVisualMode	<pre>mode [get, set] The visual mode of cursor to show, to set this will override the icon. More</pre>
static Texture	<pre>icon [get, set] The texture of cursor to show, to set this will override the mode. More</pre>
static Vector2	<pre>offset [get, set] The pixel offset between the auxiliary icon and the system cursor. More</pre>
static Vector2	size [get, set] The pixel size of the auxiliary icon, set Vector2.zero to use the default texture size. More

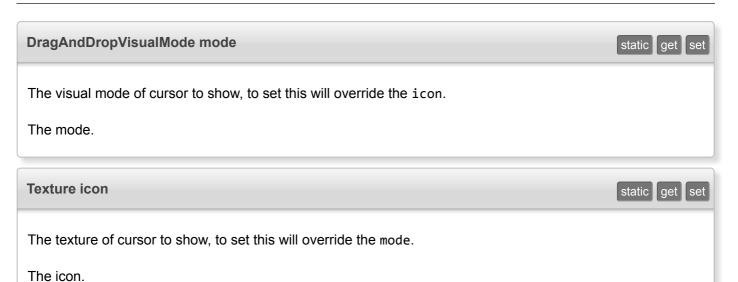
# **Detailed Description**

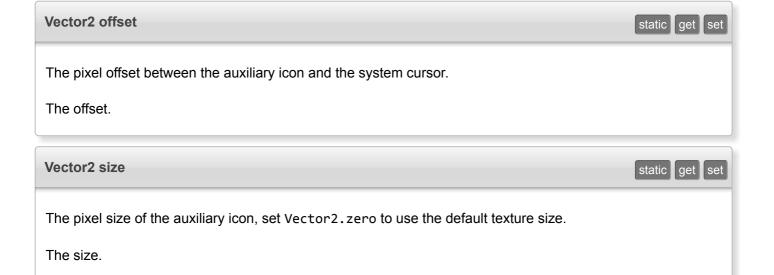
Draw an auxiliary icon follows the cursor globally.

Used to provide a cross windows hint for reasons below:

- 1. DragAndDrop.visualMode only works when using UnityEditor.DragAndDrop system.
- 2. EditorGUIUtility.AddCursorRect() only applies inside the current window.

# **Property Documentation**





# **EditrixGUI**

Released Packages » 3P MakerReleased Packages » |

BookmarkReleased Packages » |

ClipboardReleased Packages » |

**Event DelegatorReleased Packages** » | **Notebook** 

Include some convenient methods for editor GUI. More...

# Static Public Member Functions

static float	GetLabelWidth (float viewWidth=0f) Get the label width within the specified view width. More
static void	MultiFloatField (GUIContent label, GUIContent[] subLabels, float[] values, params GUILayoutOption[] options) Make a multi-control with text fields for entering multiple floats in the same line. More
static Vector4	<b>Vector4Field</b> (GUIContent label, Vector4 value, params GUILayoutOption[] options)  Make an X, Y, Z and W field for entering a UnityEngine.Vector4. More
static Quaternion	QuaternionField (GUIContent label, Quaternion value, params GUILayoutOption[] options)  Make an X, Y, Z and W field for entering a UnityEngine.Quaternion. More
static string	SearchField (string text, Action onPopup=null, params GUILayoutOption[] options)  Make a toolbar style search field, optional to set a callback invoked when click the magnifier popup icon. More
static void	ErrorField (Rect position, GUIContent label, GUIContent error)  Display an error message after the prefix label. More
static void	SetIconForObject (Object obj, Texture2D icon) Set the icon for the specified UnityEngine.Object to show in the Inspector or Project window. More
static Object[]	<pre>CheckDragObjects (Func&lt; Object, bool &gt; filter) Check if Drag'n'Drop performed with the filtered dragged UnityEngine.Object references. More</pre>
static Object[]	CheckDragObjects (Func< IEnumerable< Object >, IEnumerable< Object >> filter=null)  Check if Drag'n'Drop performed with the filtered dragged UnityEngine.Object references.  More
static string[]	CheckDragPaths (Func< string, bool > filter)  Check if Drag'n'Drop performed with the filtered dragged string paths. More
static string[]	CheckDragPaths (Func< IEnumerable< string >, IEnumerable< string >> filter=null) Check if Drag'n'Drop performed with the filtered dragged string paths. More

# **Detailed Description**

Include some convenient methods for editor GUI.

# Member Function Documentation

# static float GetLabelWidth ( float viewWidth = 0f )

static

Get the label width within the specified view width.

Commonly used for a prefix label in a resizable window. Use EditorGUIUtility.currentViewWidth instead if not assign.

# **Returns**

The label width.

# **Parameters**

viewWidth View width.

```
static void MultiFloatField ( GUIContent label,
```

GUIContent[] subLabels,

float[] values,

params GUILayoutOption[] options

)

static

Make a multi-control with text fields for entering multiple floats in the same line.

Wrap EditorGUI.MultiFloatField() as the GUI layout automatically.

# **Parameters**

label Main label.

subLabels Sub labels.

values Values.

**options** Layout options.

```
static Vector4 Vector4Field (GUIContent
                                                       label,
                            Vector4
                                                       value,
                            params GUILayoutOption[] options
                                                                                               static
```

Make an X, Y, Z and W field for entering a UnityEngine. Vector 4.

Copycat of EditorGUILayout. Vector4Field() but use MultiFloatField(). Contrast to original, this correct line wrap and indent level.

# Returns

The new value.

# **Parameters**

label Label.

value

Value. options Layout options.

```
static Quaternion QuaternionField ( GUIContent
                                                              label,
                                   Quaternion
                                                              value,
                                   params GUILayoutOption[] options
                                 )
                                                                                               static
```

Make an X, Y, Z and W field for entering a UnityEngine.Quaternion.

Just looks like Vector4Field().

# Returns

The new value.

# **Parameters**

label Label.

value Value.

options Layout options.

```
static string SearchField ( string text,

Action onPopup = null,

params GUILayoutOption[] options
)

static
```

Make a toolbar style search field, optional to set a callback invoked when click the magnifier popup icon.

# Returns

The new text.

# **Parameters**

text The text to edit.onPopup The popup callback.

options Layout options.

```
static void ErrorField ( Rect position,
GUIContent label,
GUIContent error
)
```

Display an error message after the prefix label.

# **Parameters**

position Position.

label Label.

**error** Error message.

```
static void SetIconForObject ( Object obj,

Texture2D icon
)
```

Set the icon for the specified UnityEngine.Object to show in the Inspector or Project window.

This wraps the internal EditorGUIUtility.SetIconForObject():

- 1. It applies to all the same type objects, also the UnityEditor.MonoScript declares the type.
- 2. You may pass the script asset to set without any object instance.
- 3. To restore to default, pass a null icon.

The opposite methods below to get the icon:

- 1. AssetPreview.GetMiniThumbnail() to get by UnityEngine.Object.
- AssetPreview.GetMiniTypeThumbnail() to get by System.Type.
- 3. EditorGUIUtility.ObjectContent() to get by both.

# **Parameters**

obj Object.

icon Icon.

# static Object [] CheckDragObjects (Func< Object, bool > filter)

static

static

Check if Drag'n'Drop performed with the filtered dragged UnityEngine.Object references.

# **Returns**

The filtered objects, only valid when drag performed, otherwise null.

# **Parameters**

filter The callback invoked to filter each object only when drag updated.

# static Object []

CheckDragObjects (Func< IEnumerable< Object >, IEnumerable< Object >> filter = null)

static

Check if Drag'n'Drop performed with the filtered dragged UnityEngine.Object references.

#### Returns

The filtered objects, only valid when drag performed, otherwise null.

# **Parameters**

filter The callback invoked to filter all objects only when drag updated.

# static string [] CheckDragPaths (Func< string, bool > filter)



Check if Drag'n'Drop performed with the filtered dragged string paths.

# **Returns**

The filtered paths, only valid when drag performed, otherwise null.

# **Parameters**

filter The callback invoked to filter each path only when drag updated.

# static string []

CheckDragPaths (Func< | Enumerable< string >, | Enumerable< string >> | filter = null |



Check if Drag'n'Drop performed with the filtered dragged string paths.

# Returns

The filtered paths, only valid when drag performed, otherwise null.

# **Parameters**

filter The callback invoked to filter all paths only when drag updated.

# **EditrixStyle**

Released Packages » BookmarkReleased Packages » |

ClipboardReleased Packages » | Notebook

Extend editor GUI style, and include some premade icons or styles. More...

# Static Public Member Functions

static Texture2D	LoadTexture (int width, Color32[] pixels) Load a UnityEngine.Texture2D with color pixels for editor usage. More
static Texture2D	<b>LoadTexture</b> (string[] pixels, Dictionary< char, Color32 > colors, Color32 other)  Trick to load a UnityEngine. Texture2D by parsing pixel string array. More
static Texture2D	Loadlcon (string[] pixels, byte pro=196, byte free=60)  Trick to load icon UnityEngine.Texture2D by parsing pixel string array. More
static Texture2D	LoadCursor (string[] pixels)  Trick to load cursor UnityEngine.Texture2D by parsing pixel string array. More

# Static Public Attributes

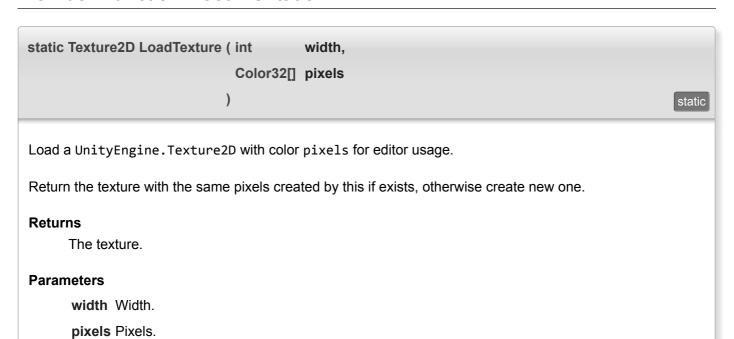
static readonly Texture2D	splitterPixel
	The splitter pixel texture with the same color as on the Inspector, 1 x 1. More
static readonly GUIStyle	statusBar
	The status bar style. More
static readonly Texture2D	editlcon
	The icon represents to edit, a pencil, 12 x 12. More
static readonly Texture2D	copylcon
	The icon represents to copy, overlapping notes, 12 x 12. More
static readonly Texture2D	removelcon
	The icon represents to remove, a moving out arrow, 12 x 12. More
static readonly Texture2D	deletelcon
	The icon represents to delete, a trash can, 12 x 12. More
static readonly Texture2D	aimlcon
	The icon represents to aim, a front sight, 12 x 12. More
static readonly Texture2D	hierarchylcon
	The icon represents a hierarchy, indent level lines, 12 x 12. More
static readonly Texture2D	clipboardlcon
	The icon represents a clipboard, 12 x 12. More
static readonly Texture2D	bookmarklcon
	The icon represents a bookmark, 12 x 12. More
static readonly Texture2D	questionIcon
	The icon represents the Super Mario question mark, 12 x 12. More

static readonly Texture2D	<b>linklcon</b> The icon represents to link, a connected chain, 9 x 9. More
static readonly Texture2D	unlinklcon The icon represents to unlink, a broken chain, 9 x 9. More
static readonly Texture2D	stopCursor The aux cursor represents a stop mark, 20 x 20. More
static readonly Texture2D	<b>copyCursor</b> The aux cursor with a plus symbol, 19 x 15. More
static readonly Texture2D static readonly Texture2D	The aux cursor with a plus symbol, 19 x 15. More

# **Detailed Description**

Extend editor GUI style, and include some premade icons or styles.

# Member Function Documentation



```
static Texture2D LoadTexture ( string[] pixels,

Dictionary< char, Color32 colors,

Color32 other
)
```

Trick to load a UnityEngine.Texture2D by parsing pixel string array.

Array length as texture height, element string length as width. Set each char pixel by colors map if existing, otherwise the other color. Return the texture with the same pixels created by this if exists, otherwise create new one.

# Returns

The texture.

# **Parameters**

```
pixels Pixel bits.colors Colors map.other Other.
```

Trick to load icon UnityEngine.Texture2D by parsing pixel string array.

Array length as icon height, element string length as width. Any space char as transparent, others color light if pro skin, otherwise dark. Return the texture with the same pixels created by this if exists, otherwise create new one.

# Returns

The icon UnityEngine.Texture2D.

#### **Parameters**

pixels Pixel bits.

**pro** Grayscale for pro skin.

free Grayscale for free skin.

# static Texture2D LoadCursor ( string[] pixels )

static

Trick to load cursor UnityEngine.Texture2D by parsing pixel string array.

Array length as cursor height, element string length as width. Any '1' char as white, '0' as black, otherwise transparent. Return the texture with the same pixels created by this if exists, otherwise create new one.

#### Returns

The cursor UnityEngine.Texture2D.

#### **Parameters**

pixels Pixel bits.

# Member Data Documentation

# readonly Texture2D splitterPixel

static

The splitter pixel texture with the same color as on the Inspector, 1 x 1.

# readonly GUIStyle statusBar

static

The status bar style.

Text colored light if pro skin, otherwise dark, with darken background anyway.

# readonly Texture2D editIcon

static

The icon represents to edit, a pencil, 12 x 12.

# readonly Texture2D copylcon

static

The icon represents to copy, overlapping notes, 12 x 12.

# readonly Texture2D removelcon

static

The icon represents to remove, a moving out arrow, 12 x 12.

# readonly Texture2D deletelcon static The icon represents to delete, a trash can, 12 x 12. readonly Texture2D aimlcon static The icon represents to aim, a front sight, 12 x 12. readonly Texture2D hierarchylcon static The icon represents a hierarchy, indent level lines, 12 x 12. readonly Texture2D clipboardlcon static The icon represents a clipboard, 12 x 12. readonly Texture2D bookmarkIcon static The icon represents a bookmark, 12 x 12. readonly Texture2D questionIcon static The icon represents the Super Mario question mark, 12 x 12. readonly Texture2D linklcon static The icon represents to link, a connected chain, 9 x 9. readonly Texture2D unlinkIcon static The icon represents to unlink, a broken chain, 9 x 9. readonly Texture2D stopCursor static The aux cursor represents a stop mark, 20 x 20.

# readonly Texture2D copyCursor The aux cursor with a plus symbol, 19 x 15. readonly Texture2D linkCursor The aux cursor with an arrow, 19 x 15. readonly Texture2D moveCursor static The aux cursor represents a dotted frame, 13 x 9.

# **MenuExtension**

```
Released Packages » 3P MakerReleased Packages » |
BookmarkReleased Packages » |
ClipboardReleased Packages » |
Editor AiderReleased Packages » |
Event DelegatorSpecific Classes » |
ExtensionsReleased Packages » | Notebook
```

**Extension** methods for UnityEditor.GenericMenu. More...

# Static Public Member Functions

static void	AddItem< T > (this GenericMenu menu, string content, Action< T > func, T param, bool check=false, bool enable=true)  Add an item to the menu, it will be disabled if the function isn't assigned. More
static void	AddItem (this GenericMenu menu, string content, Action func=null, bool check=false, bool enable=true)  Add an item to the menu, it will be disabled if the function isn't assigned. More

# **Detailed Description**

**Extension** methods for UnityEditor.GenericMenu.

3

# Member Function Documentation

Add an item to the menu, it will be disabled if the function isn't assigned.

#### **Parameters**

menu Menu.

content Content.

**func** The function to call when the menu item is selected.

param The parameter to pass to the function.

**check** Whether to show the item is currently activated.

enable If set to false to enforce disabled.

# **Template Parameters**

T The parameter type.

```
static void AddItem ( this GenericMenu menu,
string content,
Action func = null,
bool check = false,
bool enable = true
)
```

Add an item to the menu, it will be disabled if the function isn't assigned.

# **Parameters**

menu Menu.

content Content.

**func** The function to call when the menu item is selected.

**check** Whether to show the item is currently activated.

enable If set to false to enforce disabled.

# ComponentExtension

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Clipboard

**Extension** methods for UnityEngine.Component. More...

# Static Public Member Functions

static string	GetPath (this Transform transform, string separator="/")  Get the hierarchy path, used for log or GameObject.Find() with the default separator.  More
static Transform[]	GetParents (this Transform transform)  Get the hierarchy transforms, sorted from self to the root. More
static Quaternion	TransformQuat (this Transform transform, Quaternion rotation) Transforms rotation from local space to world space. More
static Quaternion	InverseTransformQuat (this Transform transform, Quaternion rotation)  Transforms position from world space to local space, opposite of TransformQuat().  More
static void	SetSorting (this Component component, int order) Set the sorting order of the UI element inside a UnityEngine.Canvas. More

# **Detailed Description**

**Extension** methods for UnityEngine.Component.

# Member Function Documentation

```
static string GetPath (this Transform transform,
string separator = "/"
)

Get the hierarchy path, used for log or GameObject.Find() with the default separator.

Returns
The hierarchy path.

Parameters
transform Transform.
separator Separator.
```

# static Transform [] GetParents (this Transform transform)



Get the hierarchy transforms, sorted from self to the root.

# Returns

The hierarchy transforms.

# **Parameters**

transform Transform.

# static Quaternion TransformQuat (this Transform transform, Quaternion rotation

static

Transforms rotation from local space to world space.

# **Returns**

The world rotation.

# **Parameters**

transform Transform.

rotation Local rotation.

# static Quaternion InverseTransformQuat (this Transform transform,

Quaternion rotation

)

static

Transforms position from world space to local space, opposite of TransformQuat().

# **Returns**

The local rotation.

# **Parameters**

transform Transform.

rotation World rotation.

static void SetSorting ( this Component component,
int order
) static

Set the sorting order of the UI element inside a UnityEngine.Canvas.

This only apply the sub canvas in a root canvas. Check to add it with UnityEngine.UI.GraphicRaycaster if not existing.

# **Parameters**

component Component.

**order** Sorting order.

# TypeExtension Released Packages » 3P MakerReleased Packages » | BookmarkReleased Packages » | ClipboardReleased Packages » | Editor AiderReleased Packages » | Event DelegatorSpecific Classes » | ExtensionsReleased Packages » | NotebookReleased Packages » | Www Loader

**Extension** methods for System. Type. More...

# Static Public Member Functions

static string	GetPrettyName (this Type type, bool full=false) Get a pretty readable name of the type, even generic, optional to use the full name. More
static Type	GetNestedType (this Type type, string name, bool isStatic)  Get the named public or nonpublic nested type of the specified type. More
static FieldInfo	GetField (this Type type, string name, bool isStatic, Type fieldType=null)  Get the named public or nonpublic FieldInfo of the specified type. More
static PropertyInfo	GetProperty (this Type type, string name, bool isStatic, Type propertyType=null, params Type[] indexTypes) Get the named public or nonpublic PropertyInfo of the specified type. More
static MethodInfo	GetMethod (this Type type, string name, bool isStatic, Type returnType=null, params Type[] paramTypes) Get the named public or nonpublic MethodInfo of the specified type. More
static Type[]	GetParents (this Type type)  Get the parent hierarchy array, sorted from self to root type. More
static Type[]	GetChildren (this Type type, bool deep=false)  Get all child types, excluding self, optional to find deep or directly inheritance only. More
static Type	GetItemType (this Type type)  Return the element type of an array or list type, otherwise null. More
static object	GetDefault (this Type type)  Get the default value of the type, just like default(T). More
static bool	IsCreatable (this Type type, bool exception=false)  Determine if able to create an instance of the type. More

# **Detailed Description**

**Extension** methods for System. Type.

```
static Type GetNestedType (this Type type,
                             string
                                        name,
                             bool
                                       isStatic
                           )
                                                                                                    static
Get the named public or nonpublic nested type of the specified type.
Returns
      The nested type.
Parameters
      type
               Type.
      name
              Type name.
      isStatic If to get a static type.
```

```
static FieldInfo GetField ( this Type type,
string name,
bool isStatic,
Type fieldType = null
)
```

Get the named public or nonpublic FieldInfo of the specified type.

# Returns

The field.

# **Parameters**

type Type.

name Field name.

isStatic If to get a static field.

fieldType Field type.

```
static PropertyInfo GetProperty ( this Type type,
string name,
bool isStatic,
Type propertyType = null,
params Type[] indexTypes
)

static
```

Get the named public or nonpublic PropertyInfo of the specified type.

# **Returns**

The property.

# **Parameters**

type Type.

**name** Property name.

**isStatic** If to get a static property.

propertyType Property type.

indexTypes Index types.

```
static MethodInfo GetMethod ( this Type type,
string name,
bool isStatic,
Type returnType = null,
params Type[] paramTypes
)
```

Get the named public or nonpublic MethodInfo of the specified type.

#### **Returns**

The method.

# **Parameters**

type Type.

name Method name.

**isStatic** If to get a static method.

returnType Return type.

paramTypes Parameter types.

# static Type [] GetParents (this Type type)

static

Get the parent hierarchy array, sorted from self to root type.

# **Returns**

The parent hierarchy array.

# **Parameters**

type Type.

```
static Type [] GetChildren ( this Type type,
```

bool deep = false

)

static

Get all child types, excluding self, optional to find deep or directly inheritance only.

# **Returns**

The child types.

# **Parameters**

type Type.

deep If set to true deep.

# static Type GetItemType (this Type type)

static

Return the element type of an array or list type, otherwise null.

# **Returns**

The element type.

# **Parameters**

type Type.

# static object GetDefault (this Type type)

static

Get the default value of the type, just like default(T).

# **Returns**

The default value.

# **Parameters**

type Type.

```
static bool IsCreatable (this Type type,
```

bool exception = false

)

static

Determine if able to create an instance of the type.

Optional to throw an exception message or just return false if invalid. This only checks some basic conditions and might be not precise.

The current conditions below:

- 1. Return false only if it's interface, abstract, generic definition, delegate.
- 2. Recurse to check the element type of an array type.
- 3. Recurse to check the generic arguments of a list or dictionary type.

# **Returns**

true, if creatable, false otherwise.

# **Parameters**

type Type.

exception Flag to throw an exception or return false.