

### 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.



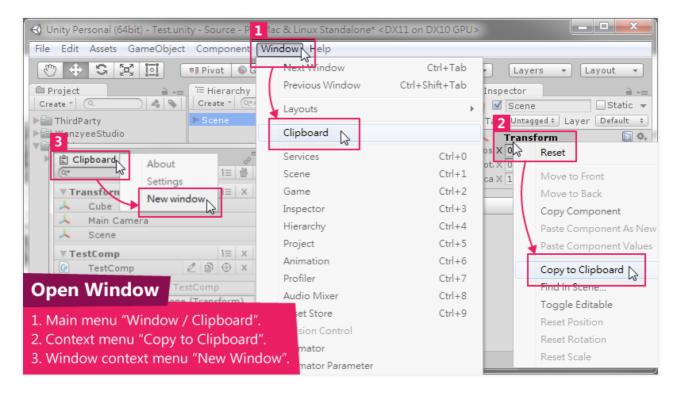
#### Overview:

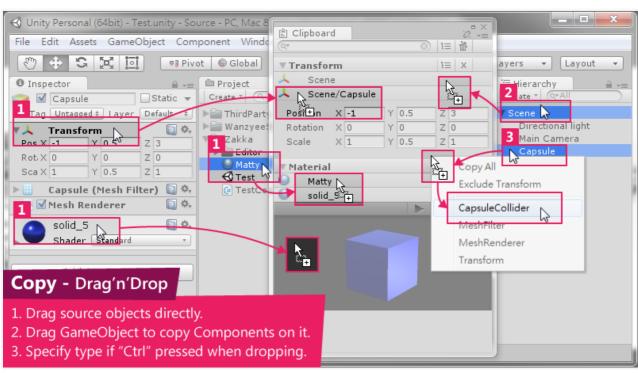
- Easy to copy and paste multiple Components or Materials.
- Just drag'n'drop to snapshot them, and drag'n'drop to paste the copies back.
- All the copies can be managed and edited in a foldable Inspector-like window.
- With custom labels and quick search bar, it could work as a presets panel.
- One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

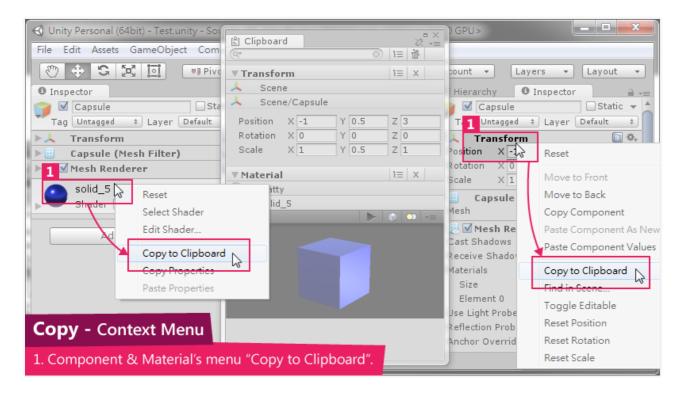
The further technical documentation is available here.

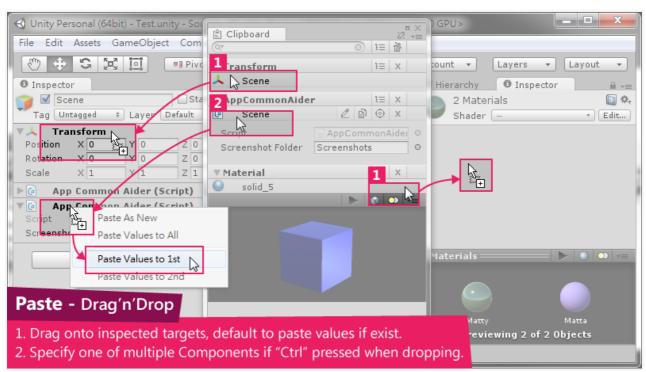
And the operation manual is right below.

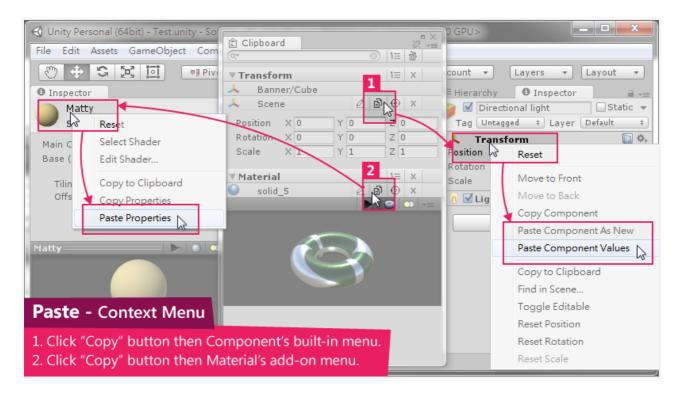
### **Using:**

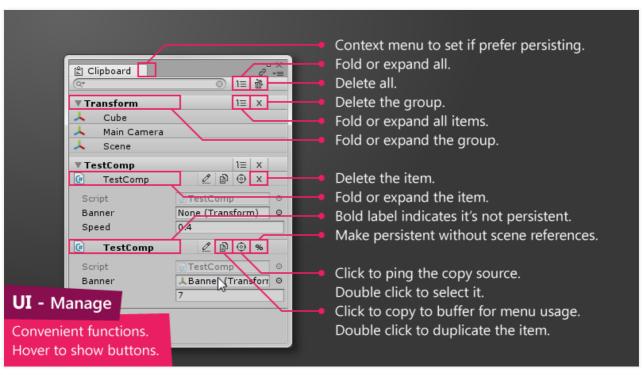


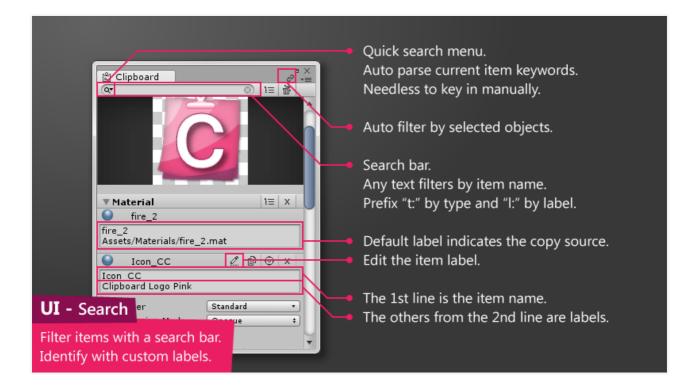












#### Add-on:

- 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.

### **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.

### Release:



### 1.2.6

- Provide assembly definition files, please be aware the script files were moved therefore.
- Fix, material edit interface doesn't show in Unity 2018.

- New, window context menu "Settings" to toggle if prefer persisting.
- Fix, prevent errors caused by missing components.
- Compile Lite version and upload by the same Unity version to avoid plugin settings wrong.

#### 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.

## 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...

bool setting

Flag to show settings. More...

# **Properties**

static bool preferPersist [get, set]

Flag to persist new copies as asset if possible. 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

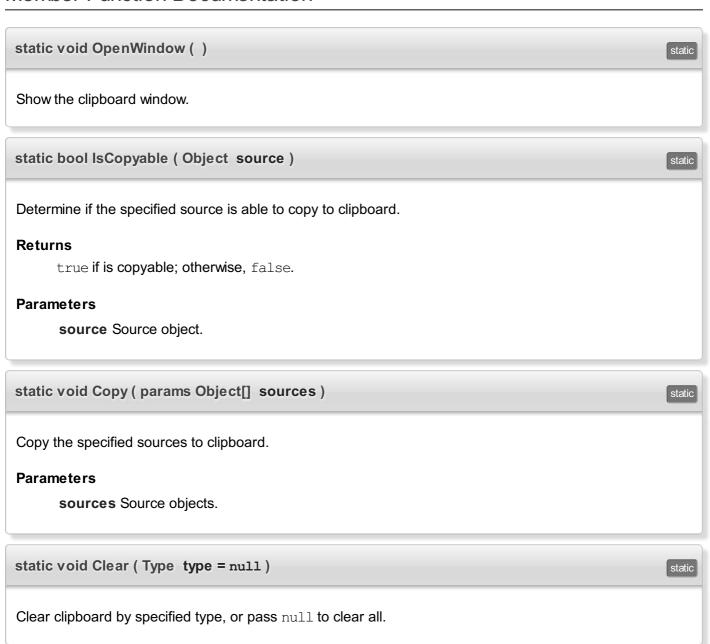
ensure valid after script reloaded.

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



### void AddItemsToMenu (GenericMenu menu)

Add the window context menu items.

Menu "About" to open the online manual, and "Settings" for common preferences. Menu "New window" to open another Clipboard window.

### **Parameters**

menu Menu.

### Member Data Documentation

### bool track

Flag to track selection to change search filter automatically.

string search = ""

The search filter pattern in the search bar.

bool setting

Flag to show settings.

# **Property Documentation**

### bool preferPersist







Flag to persist new copies as asset if possible.

Enable to save the copies for next time opening the project. Disable to make copying faster without creating asset if you don't need. It only applies to copy operations after changing this setting.

If to persist.

# **MaterialPropertyCopier**

Released Packages » ClipboardSpecific Classes » |

**Editor Extensions** 

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...

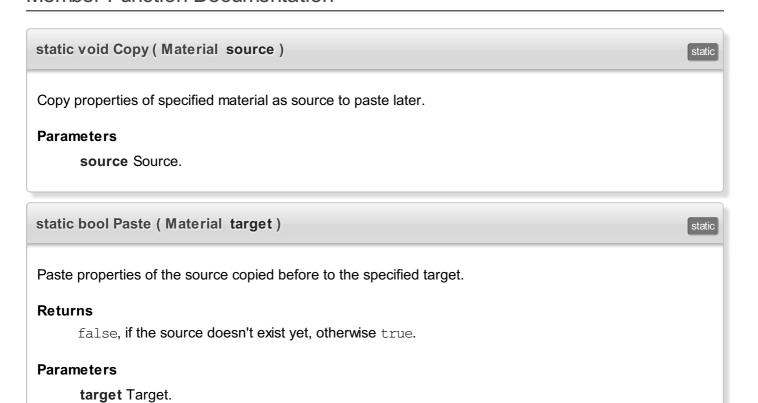
static bool Paste (Material target)
Paste properties of the source copied before to the specified target. More...

# **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	offset [get, set] The pixel offset between the auxiliary icon and the system cursor. More
static Vector2	size [get, set] The pixel size of the auxiliary icon, set Vector2.zero to use the default texture size. More

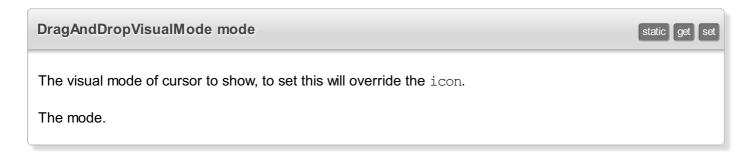
# **Detailed Description**

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 Maker Released Packages » |

ClipboardReleased Packages » |

Event DelegatorReleased Packages » |

Notebook Released Packages » | Shortcut

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	SetIconForObject (Object obj, Texture2D icon) Set the icon for the specified UnityEngine.Object to show in the Inspector or Project window. More
static void	MultiFloatField (GUlContent label, GUlContent[] subLabels, float[] values, params GUlLayoutOption[] options) Make a multi-control with text fields for entering multiple floats in the same line. More
static Vector4	Vector4Field (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 GUlLayoutOption[] 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 Object[]	CheckDragObjects (Func< Object, bool > filter) Check if Drag'n'Drop performed with the filtered dragged UnityEngine.Object references. More
static Object[]	CheckDragObjects (Func<  Enumerable< Object >,  Enumerable< 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**

### 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 SetIconForObject ( Object obj, Texture2D icon

static

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.
- 2. AssetPreview.GetMiniTypeThumbnail() to get by System.Type.
- 3. EditorGUIUtility.ObjectContent() to get by both.

### **Parameters**

obj Object.

icon Icon.

```
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.

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

### **Parameters**

label Main label.subLabels Sub labels.values Values.

options Layout options.

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
                     )
                                                                                              static
```

Display an error message after the prefix label.

### **Parameters**

position Position.

label Label.

error Error message.

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

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 []

(Func< |Enumerable< Object >, |Enumerable< Object >> filter = null) static CheckDragObjects

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)

static

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  $\operatorname{string}$  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**

Notebook Released Packages » | Shortcut

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	LoadTexture (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	

# Static Public Attributes

static readonly Texture2D	splitterPixel
	The splitter pixel texture, middle gray, 1 x 1. More
static readonly Texture2D	backgroundPixel
	The background pixel texture, dark gray, 1 x 1. More
static readonly GUIStyle	statusBar
	The status bar style. More
static readonly Texture2D	
	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	<b>questionIcon</b> The icon represents the Super Mario question mark, 12 x 12. More
static readonly Texture2D	linklcon
	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	copyCursor
	The aux cursor with a plus symbol, 19 x 15. More
static readonly Texture2D	linkCursor
	The aux cursor with an arrow, 19 x 15. More
static readonly Texture2D	moveCursor
	The aux cursor represents a dotted frame, 13 x 9. 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.

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

byte pro = 196,

byte free = 60
)
```

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, middle gray, 1 x 1.

### readonly Texture 2D background Pixel

static

The background pixel texture, dark gray, 1 x 1.

### readonly GUIStyle statusBar

static

The status bar style.

Light color text for pro skin, otherwise dark, with darken background.

### readonly Texture2D editlcon

static

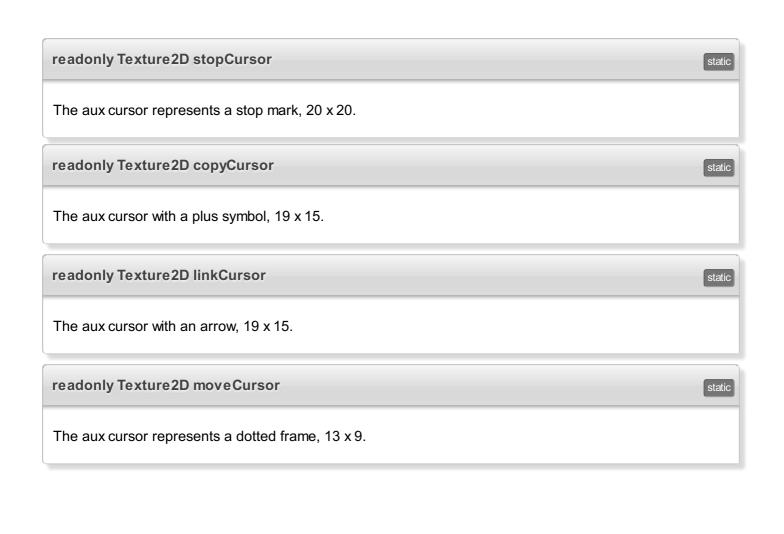
The icon represents to edit, a pencil,  $12 \times 12$ .

### readonly Texture2D copylcon

static

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

# readonly Texture2D removelcon 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 Texture 2D 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 Texture 2D clipboardlcon static The icon represents a clipboard, 12 x 12. readonly Texture 2D bookmark I con 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 Texture 2D linklcon static The icon represents to link, a connected chain, 9 x 9. readonly Texture 2D unlink Icon static The icon represents to unlink, a broken chain, 9 x 9.



# **EditrixUtility**

Released Packages » 3P Maker Released Packages » |

ClipboardReleased Packages » | Editor AiderReleased Packages

» | Event DelegatorReleased Packages » |

NotebookReleased Packages » | Shortcut

Include some convenient methods for editor or asset operation. More...

# Static Public Member Functions

static Object[]	GetAllAssets (bool progressBar=false) Get all main assets in the project folder. More
static string[]	GetAllAssetLabels (params Object[] assets)  Get all asset labels used in project, or only find the ones used by assigned assets. More
static T[]	LoadAssets< T > (string filter=null, params string[] searchInFolders)  Load all specified type assets with the search filter in the folders. More
static bool	OpenAsset< T > (int instanceID, Action< T > handler)  Common template method to open an asset. More
static string	GetObjectOrder (Object source, bool assetFirst=true) Get an order string of given object for sorting. More
static bool	CheckloCreatable (string path, bool overwrite=false, bool exception=false)  Determine if the path can be used to create a file or directory. More
static lEnumerable< Type >	GetExposingTypes (bool editor=false)  Get types appropriate to expose in the Inspector to select members, optional to include editor types. More

### **Events**

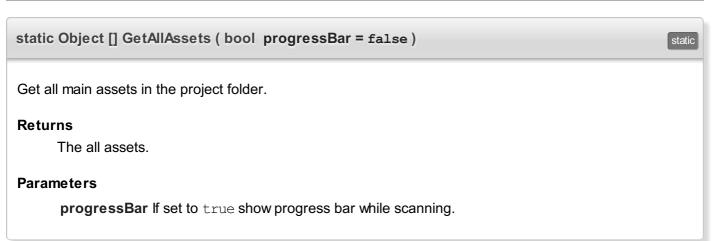
static EditorApplication.CallbackFunction	<pre>playmode Changed = () =&gt; {} Callback of play mode state changed event, for compatibility before Unity 2017.2. More</pre>
static Action	<pre>projectChanged = () =&gt; {} Callback of project changed event, for compatibility before Unity 2018.1. More</pre>
static Action	hierarchyChanged = () => {} Callback of hierarchy changed event, for compatibility before Unity 2018.1. More

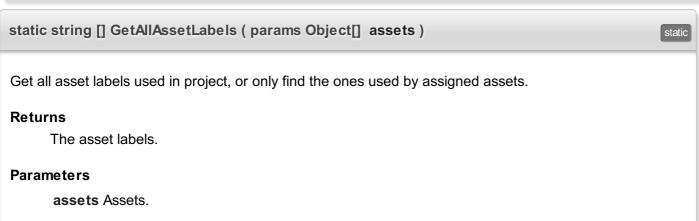
# **Detailed Description**

Include some convenient methods for editor or asset operation.

### Member Function Documentation

T: Object





```
static T [] LoadAssets< T > ( string filter = mull, params string[] searchInFolders
)

Load all specified type assets with the search filter in the folders.

Returns
The assets.

Parameters
filter The filter string can contain search data.
searchInFolders The folders where the search will start.

Template Parameters
T The asset type.

Type Constraints
```

```
static bool OpenAsset< T > ( int instanceID,

Action< T > handler
)
```

Common template method to open an asset.

Basically for usage of UnityEditor.Callbacks.OnOpenAssetAttribute.

### Returns

true, if handled the opening of the asset.

### **Parameters**

instance ID.

handler Callback to open the asset.

### **Template Parameters**

T Asset type.

### **Type Constraints**

T: Object

```
static string GetObjectOrder ( Object source,

bool assetFirst = true
)
```

Get an order string of given object for sorting.

It's asset path, append with sibling if relative to UnityEngine.GameObject. Optional to sort asset or hierarchy object first.

### Returns

The order.

### **Parameters**

**source** Source object.

assetFirst If set to true asset first.

static bool CheckloCreatable (string path,

bool overwrite = false,

bool exception = false
)

Determine if the path can be used to create a file or directory.

Optional to throw an exception message or just return false if invalid. Check IoUtility.CheckCreatable() at the first. Then return true if the file doesn't exist yet or force to overwrite. Otherwise popup a dialog for the user to make the decision.

### **Returns**

true if is creatable; otherwise, false.

### **Parameters**

path Path.

overwrite Overwrite.

exception Flag to throw an exception or return false.

### static IEnumerable<Type> GetExposingTypes ( bool editor = false )

static

Get types appropriate to expose in the Inspector to select members, optional to include editor types.

Include types from Unity and assemblies in the project folder. And what excluded is non-public, interface, enum, array or generic types.

### Returns

The types.

### **Parameters**

editor If set to true include editor types.

### **Event Documentation**

### EditorApplication.CallbackFunction playmodeChanged = () => {}

static

Callback of play mode state changed event, for compatibility before Unity 2017.2.

### Action projectChanged = () => {}

static

Callback of project changed event, for compatibility before Unity 2018.1.

Action hierarchyChanged = () => {}

static

Callback of hierarchy changed event, for compatibility before Unity 2018.1.

### **MenuExtension**

Released Packages » 3P Maker Released Packages » |

ClipboardReleased Packages » | Editor AiderReleased Packages

» | Event DelegatorSpecific Classes » |

Extensions Released Packages » | Notebook Released Packages

» | Shortcut

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

```
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.

### **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.

# **loUtility**

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» | Event DelegatorReleased Packages » |

NotebookReleased Packages » | ShortcutReleased Packages » |

**Www Loader** 

Include some convenient methods to extend IO operation. More...

# Static Public Member Functions

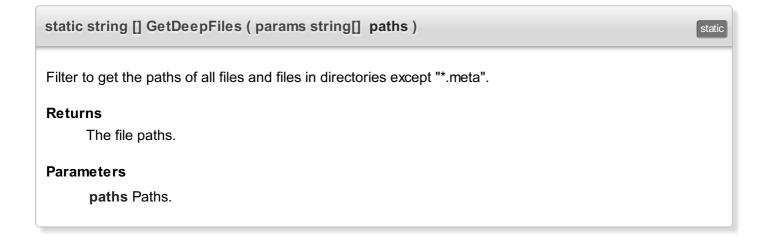
static string[]	GetDeepFiles (params string[] paths)  Filter to get the paths of all files and files in directories except "*.meta". More
static void	<b>Delete</b> (string path, bool ancestor=false)  Try to delete a file or directory at the specified path. More
static bool	CheckCreatable (string path, bool exception=false)  Determine if the path can be used to create a file or directory. More

# **Detailed Description**

Include some convenient methods to extend IO operation.

3

### Member Function Documentation



```
static void Delete (string path,

bool ancestor = false
)

static
```

Try to delete a file or directory at the specified path.

This doesn't work in Web Player. **Note**, the operation is permanently and irreversibly. Optional to trace and delete ancestor directories if became empty.

### **Parameters**

path Path.

ancestor If set to true delete ancestor directories if empty.

```
static bool CheckCreatable (string path,
bool exception = false
)
static
```

Determine if the path can be used to create a file or directory.

Optional to throw an exception message or just return false if invalid. A legal path might not be in good format, e.g., "C:dir\ //file" or "/\pc\share\\new.txt". But it's safe to pass to <code>Directory</code> or <code>FileInfo</code> to create. Path in situations below is invalid, even dangerous:

- 1. Nothing but empty or white-spaces, nowhere to go.
- 2. Starts with 3 slashes, this causes crash while system looking for parent directories.
- 3. Includes invalid chars, can't name a file.
- 4. A name in path starts or ends with space, we can't get the created file, even delete.

### **Returns**

true if is creatable; otherwise, false.

### **Parameters**

path Path.

exception Flag to throw an exception or return false.

# ComponentExtension

Released Packages » ClipboardReleased Packages » |

Event DelegatorSpecific Classes » | Extensions

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 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 Vector2	CenterToScreenPoint (this RectTransform transform)  Convert the center of a specified UnityEngine.RectTransform to screen space point.  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.

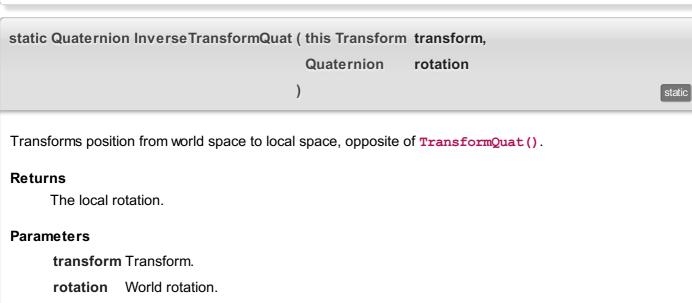
Parameters
transform Transform.
separator Separator.
```

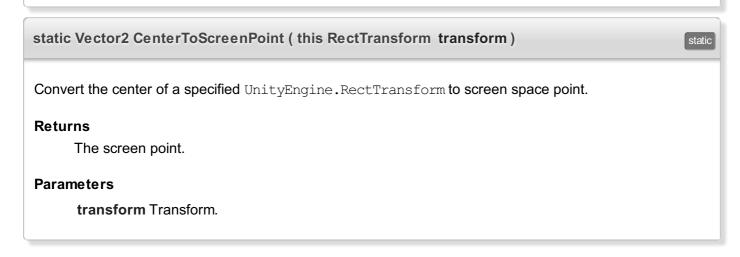
```
static Quaternion TransformQuat ( this Transform transform,
Quaternion rotation
)

Transforms rotation from local space to world space.

Returns
The world rotation.

Parameters
transform Transform.
rotation Local rotation.
```





static void SetSorting (this Component component, int order

static

Set the sorting order of the UI element inside a  ${\tt UnityEngine.Canvas}$ .

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 Maker Released Packages » |

ClipboardReleased Packages » | Editor AiderReleased Packages

» | Event DelegatorSpecific Classes » |

Extensions Released Packages » | Notebook Released Packages

» | ShortcutReleased 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 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
)
```

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
)
```

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.