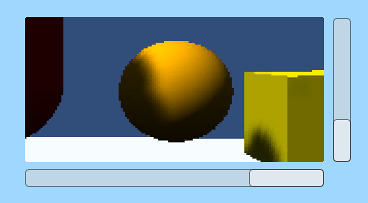
|  |  |
| --- | --- |
| **翻以前字数** | **314** |
| **目录** | **Unity Manual/ UI / UI Reference / Visual Components / Mask** |
| **链接** | <https://docs.unity3d.com/540/Documentation/Manual/script-Mask.html> |

**Mask**

**Mask**

A **Mask** is not a visible UI control but rather a way to modify the appearance of a control’s child elements. The mask restricts (ie, “masks”) the child elements to the shape of the parent. So, if the child is larger than the parent then only the part of the child that fits within the parent will be visible.

**Mask** 不是可见的UI控件，而是一种修改子UI控件出现的方式的组件。Mask（即”掩模”）是限制子元素的形状的父物体。所以，如果子元素大于父物体的形状，那么将只显示在父物体内的子元素部分。

Section of a large Image masked by a Panel (Scrollbars are separate controls) 由面板遮盖的大图像的部分（滚动条是独立的控件）

**Properties**

**属性**

https://docs.unity3d.com/540/Documentation/uploads/Main/UI_MaskInspector.png

| ***Property:*** | ***Function:*** |
| --- | --- |
| **Show Graphic**  **展示图形** | Should the graphic of the masking (parent) object be drawn with alpha over the child object?  是否在子对象上用透明绘制遮罩的图形 |

**Description**

**描述**

A common use of a Mask is to show a small section of a large Image, using say a Panel object (menu: **GameObject > Create UI > Panel**) as a “frame”. You can achieve this by firstly making the Image a child of the Panel object. You should position the Image so that the area that should be visible is directly behind the Panel area.

Mask的常见用法是使用一个Panel对象作为一个”模板”来显示一张大图的一小部分。首先将图像设为Panel对象的子物体。修改坐标，使应该可见的区域位于面板区域的后面。

Panel area shown in red with child Image behind

面板区域显示为红色，后面有子对象图像。

Then, add a Mask component to the Panel. The areas of the child Image outside the panel will become invisible since they are masked by the shape of the Panel.

然后，为Panel添加Mask组件。面板外的自图像区域将不可见，因为他们被面板的形状所遮盖。

Masked areas shown faint, but would really be invisible

Mask区域显的微弱，但是他们真的不可见

If the image is then moved around then only the part revealed by the Panel will be visible. The movement could be controlled by [Scrollbars](https://docs.unity3d.com/540/Documentation/Manual/script-Scrollbar.html) to create a scrollable viewer for a map, say.

如果图像向后移动，那么只显示面板的部分区域。比如用滚动条可以创建地图的滚动视图。

**Implementation**

**实现**

Masking is implemented using the stencil buffer of the GPU.

Masking是使用GPU的模板缓冲区实现的。

*The first Mask element writes a 1 to the stencil buffer*All elements below the mask check when rendering, and only render to areas where there is a 1 in the stencil buffer \*Nested Masks will write incremental bit masks into the buffer, this means that renderable children need to have the logical & of the stencil values to be rendered.

首个遮罩（Mask）层会向Stencil缓冲区里写入一个1。遮罩层下的所有元素在渲染时会对Stencil缓冲进行检查，随后只渲染值为1的区域。嵌套的遮罩层则会向缓冲中写入累加位，也就是说可渲染的子元素需要拥有处Stencil值的处理逻辑来进行渲染。