<http://www.ceeger.com/Script/Bounds/Bounds.html>

Represents an axis aligned bounding box.

表示一个轴对齐边界框。

An axis-aligned bounding box, or AABB for short, is a box aligned with coordinate axes and fully enclosing some object. Because the box is never rotated with respect to the axes, it can be defined by just its[center](http://www.ceeger.com/Script/Bounds/Bounds.center.html) and [extents](http://www.ceeger.com/Script/Bounds/Bounds.extents.html), or alternatively by [min](http://www.ceeger.com/Script/Bounds/Bounds.min.html) and [max](http://www.ceeger.com/Script/Bounds/Bounds.max.html) points.

一个轴对齐边界框，或AABB的简称，是一个坐标轴对齐的盒子并完全包围某些物体。由于这个盒子不会相对于轴旋转，它只可以通过[center](http://www.ceeger.com/Script/Bounds/Bounds.center.html)和[extents](http://www.ceeger.com/Script/Bounds/Bounds.extents.html)定义，或者由[min](http://www.ceeger.com/Script/Bounds/Bounds.min.html)和[max](http://www.ceeger.com/Script/Bounds/Bounds.max.html)点定义。

边界框用于[Collider.bounds](http://www.ceeger.com/Script/Collider/Collider.bounds.html), [Mesh.bounds](http://www.ceeger.com/Script/Mesh/Mesh.bounds.html), [Renderer.bounds](http://www.ceeger.com/Script/Renderer/Renderer.bounds.html).

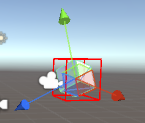


其中GameObject



Cube





void OnDrawGizmosSelected()

{

*Vector3* center = *gameObject*.*GetComponent*<*Renderer*>().*bounds*.center;

*Vector3* size = *gameObject*.*GetComponent*<*Renderer*>().*bounds*.size;

*Gizmos*.*color* = *Color*.*red*;

*Gizmos*.*DrawWireCube*(center, size);

*Debug*.*Log*("center.x = " + center.*x* + ", center.y = " + center.*y* + ", center.z = " + center.*z*);

*Debug*.*Log*("size.x = " + size.*x* + ", size.y = " + size.*y* + ", size.z = " + size.*z*);

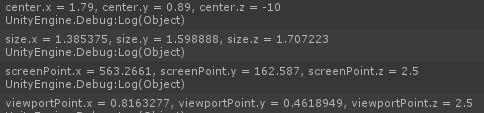
var screenPoint = camera.*WorldToScreenPoint*(center);

var viewportPoint = camera.*WorldToViewportPoint*(center);

*Debug*.*Log*("screenPoint.x = " + screenPoint.*x* + ", screenPoint.y = " + screenPoint.*y* + ", screenPoint.z = " + screenPoint.*z*);

*Debug*.*Log*("viewportPoint.x = " + viewportPoint.*x* + ", viewportPoint.y = " + viewportPoint.*y* + ", viewportPoint.z = " + viewportPoint.*z*);

}



### Variables变量

* [center](http://www.ceeger.com/Script/Bounds/Bounds.center.html)

The center of the bounding box.  
边界框的中心。

* [size](http://www.ceeger.com/Script/Bounds/Bounds.size.html)

The total size of the box. This is always twice as large as the extents.  
包围和的总大小。这个总是[extents](http://www.ceeger.com/Script/Bounds/Bounds.extents.html)的两倍大。

* [extents](http://www.ceeger.com/Script/Bounds/Bounds.extents.html)

The extents of the box. This is always half of the size.  
边界框的广度。这个总是[size](http://www.ceeger.com/Script/Bounds/Bounds.size.html)的一半。

* [min](http://www.ceeger.com/Script/Bounds/Bounds.min.html)

The minimal point of the box. This is always equal to center-extents.  
边界框的最小点，这个总是等于center-extents。

* [max](http://www.ceeger.com/Script/Bounds/Bounds.max.html)

The maximal point of the box. This is always equal to center+extents.  
边界框的最大点，这个总是等于center + extents。

### Functions函数

* [SetMinMax](http://www.ceeger.com/Script/Bounds/Bounds.SetMinMax.html)

Sets the bounds to the min and max value of the box.  
设置边界框的最小和最大值。

* [Encapsulate](http://www.ceeger.com/Script/Bounds/Bounds.Encapsulate.html)

Grows the Bounds to include the point.  
增大边界框以包含这个点。

* [Expand](http://www.ceeger.com/Script/Bounds/Bounds.Expand.html)

Expand the bounds by increasing its size by amount along each side.  
通过增加amount的大小沿着每条边扩大边界框。

* [Intersects](http://www.ceeger.com/Script/Bounds/Bounds.Intersects.html)

Does another bounding box intersect with this bounding box?  
这个边界框是否和另一个边界框相交？

* [Contains](http://www.ceeger.com/Script/Bounds/Bounds.Contains.html)

Is point contained in the bounding box?  
这个点包含在包含盒中么？

* [SqrDistance](http://www.ceeger.com/Script/Bounds/Bounds.SqrDistance.html)

The smallest squared distance between the point and this bounding box.  
点和这个边界框之间的最小平方距离。

* [IntersectRay](http://www.ceeger.com/Script/Bounds/Bounds.IntersectRay.html)

Does ray intersect this bounding box?  
射线与这个边界框相交么？

* [ToString](http://www.ceeger.com/Script/Bounds/Bounds.ToString.html)

Returns a nicely formatted string for the bounds.  
返回边界框格式化好的字符串。