

[Metal / MTLViewport](#)

Structure

MTLViewport

A 3D rectangular region for the viewport clipping.

[iOS](#) | [iPadOS](#) | [Mac Catalyst](#) | [macOS](#) | [tvOS](#) | [visionOS](#)

```
struct MTLViewport
```

Topics

Creating a viewport

`init()`

Returns a new viewport.

```
init(originX: Double, originY: Double, width: Double, height: Double,  
znear: Double, zfar: Double)
```

Returns a new viewport of a specified size at a specified origin.

Specifying viewport boundaries

`var originX: Double`

The x coordinate of the upper-left corner of the viewport.

`var originY: Double`

The y coordinate of the upper-left corner of the viewport.

`var width: Double`

The width of the viewport, in pixels.

```
var height: Double
```

The height of the viewport, in pixels.

```
var znear: Double
```

The z coordinate of the near clipping plane of the viewport.

```
var zfar: Double
```

The z coordinate of the far clipping plane of the viewport.

Relationships

Conforms To

BitwiseCopyable, Sendable

See Also

Dynamic render pipeline states

```
struct MTLScissorRect
```

A rectangle for the scissor fragment test.

```
struct MTLVertexAmplificationViewMapping
```

An offset applied to a render target index and viewport index.

```
struct MTLQuadTessellationFactorsHalf
```

The per-patch tessellation factors for a quad patch.

```
struct MTLTriangleTessellationFactorsHalf
```

The per-patch tessellation factors for a triangle patch.