Protocol

MTLDrawable

A displayable resource that can be rendered or written to.

iOS 8.0+ | iPadOS 8.0+ | Mac Catalyst 13.1+ | macOS 10.11+ | tvOS | visionOS 1.0+

```
protocol MTLDrawable : NSObjectProtocol
```

Mentioned in

📄 Managing your Metal app window in iPadOS

📄 Adjusting for GPU memory bandwidth tradeoffs

Overview

Objects that implement this protocol are connected both to the Metal framework and an underlying display system (such as Core Animation) that's capable of showing content onscreen. You use drawable objects when you want to render images using Metal and present them onscreen.

Don't implement this protocol yourself; instead, see CAMetalLayer, for a class that can create and manage drawable objects for you.

Topics

Identifying the drawable

var drawableID: Int

A positive integer that identifies the drawable.

Required

Presenting the drawable

func present()

Presents the drawable onscreen as soon as possible.

Required

func present(afterMinimumDuration: CFTimeInterval)

Presents the drawable onscreen as soon as possible after a previous drawable is visible for the specified duration.

Required

func present(at: CFTimeInterval)

Presents the drawable onscreen at a specific host time.

Required

Getting presentation information

func addPresentedHandler(MTLDrawablePresentedHandler)

Registers a block of code to be called immediately after the drawable is presented.

Required

var presentedTime: CFTimeInterval

The host time, in seconds, when the drawable was displayed onscreen.

Required

Relationships

Inherits From

NSObjectProtocol

See Also

Render pass outputs

`typealias` `MTLDrawablePresentedHandler`

A block of code invoked after a drawable is presented.