Class

CNRenderingSession

An object representing the context in which rendering occurs.

iOS 17.0+ | iPadOS 17.0+ | Mac Catalyst | macOS 14.0+ | tvOS 17.0+

```
class CNRenderingSession
```

Topics

Structures

`struct Attributes`

The rendering session asset attributes.

`struct FrameAttributes`

Controls the focus distance and aperture of the rendering for the frames.

Initializers

`init(commandQueue: any MTLCommandQueue, sessionAttributes: CNRenderingSession.Attributes, preferredTransform: CGAffineTransform, quality: CNRenderingQuality)`

Intializes an object for a rendering session.

Instance Properties

`let commandQueue: any MTLCommandQueue`

The command queue of a Metal device that creates the command buffer.

`let preferredTransform: CGAffineTransform`

The preferred transform of the rendered image for display purposes.

`let quality: CNRenderingQuality`

The quality of rendering desired for a session.

`let sessionAttributes: CNRenderingSession.Attributes`

Rendering session attributes for a Cinematic asset.

Instance Methods

```
func encodeRender(to: any MTLCommandBuffer, frameAttributes: CNRenderingSession.FrameAttributes, sourceImage: CVPixelBuffer, sourceDisparity: CVPixelBuffer, destinationImage: CVPixelBuffer) -> Bool
```

```
func encodeRender(to: any MTLCommandBuffer, frameAttributes: CNRenderingSession.FrameAttributes, sourceImage: CVPixelBuffer, sourceDisparity: CVPixelBuffer, destinationLuma: any MTLTexture, destinationChroma: any MTLTexture) -> Bool
```

```
func encodeRender(to: any MTLCommandBuffer, frameAttributes: CNRenderingSession.FrameAttributes, sourceImage: CVPixelBuffer, sourceDisparity: CVPixelBuffer, destinationRGBA: any MTLTexture) -> Bool
```

Type Properties

`static var destinationPixelFormatTypes: [OSType]`

A static number representing the video compositor's required pixel buffer attributes context dictionary when implementing video compositing.

`static var sourcePixelFormatTypes: [OSType]`

The static pixel format types supported for the output destination.

See Also

Reading and rendering

`class` `CNAssetInfo`

An object that provides Cinematic-specific information about an asset, including its tracks.

`class` `CNCompositionInfo`

An object that enables you to add the appropriate number of tracks for a Cinematic asset.