Structure

vImage_CGImageFormat

The description of a Core Graphics image.

iOS | iPadOS | Mac Catalyst | macOS | tvOS | visionOS | watchOS

```
struct vImage_CGImageFormat
```

Mentioned in

- Converting bitmap data between Core Graphics images and vImage buffers
- Applying flood fills to an image
- Building a basic image conversion workflow
- Converting chroma-subsampled images
- Optimizing image-processing performance

Overview

This structure describes the ordering and number of the color channels, the size and type of the data in the color channels, and alpha information. This format mirrors the image format descriptors that Core Graphics uses to create objects, such as `CGImage` and `CGContext`.

Topics

Initializers

`init(bitsPerComponent: UInt32, bitsPerPixel: UInt32, colorSpace: Unmanaged<CGColorSpace>!, bitmapInfo: CGBitmapInfo, version: UInt32, decode: UnsafePointer<CGFloat>!, renderingIntent: CGColorRenderingIntent)`

Creates a Core Graphics image format.

`init?(bitsPerComponent: Int, bitsPerPixel: Int, colorSpace: CGColorSpace, bitmapInfo: CGBitmapInfo, renderingIntent: CGColorRenderingIntent)`

Creates a Core Graphics image format with a color space instance and default decode array.

`init?(cgImage: CGImage)`

Creates a Core Graphics image format of the specified image.

`init()`

Creates an empty Core Graphics image format.

Instance properties

`var bitsPerComponent: UInt32`

The number of bits that represents one channel of data in one pixel.

`var bitsPerPixel: UInt32`

The number of bits that represents one pixel.

`var colorSpace: Unmanaged<CGColorSpace>!`

A description of the position of the pixel data in the image, relative to a reference XYZ color space.

`var bitmapInfo: CGBitmapInfo`

The component information that describes the color channels.

`var version: UInt32`

The version number.

`var decode: UnsafePointer<CGFloat>!`

The decode array for the image.

`var renderingIntent: CGColorRenderingIntent`

A rendering intent constant that specifies how Core Graphics handles colors that aren’t within the destination color space gamut.

```
var componentCount: Int
```

The number of color and alpha channels.

Relationships

Conforms To

`BitwiseCopyable`