

[Accelerate](#) / `vImageMultidimensionalTable_Retain(_:)`

## Function

# `vImageMultidimensionalTable_Retain(_:)`

Retains a multidimensional table.

iOS 7.0+ | iPadOS 7.0+ | Mac Catalyst 13.1+ | macOS 10.9+ | tvOS 7.0+ | visionOS 1.0+ | watchOS 1.0+

```
func vImageMultidimensionalTable_Retain(_ table: vImage_Multidimensional
Table!) -> vImage_Error
```

## Parameters

**table**

The multidimensional table to retain.

## Return Value

[kvImageNoError](#); otherwise, one of the error codes in [Data Types and Constants](#).

## Discussion

This function increments the multidimensional table's reference count.

## See Also

Transforming with a multidimensional lookup table



Applying color transforms to images with a multidimensional lookup table

Precompute translation values to optimize color space conversion and other pointwise operations.



Cropping to the subject in a chroma-keyed image

Convert a chroma-key color to alpha values and trim transparent pixels using Accelerate.



Applying transformations to selected colors in an image

Desaturate a range of colors in an image with a multidimensional lookup table.

```
func vImageMultidimensionalTable_Create(UnsafePointer<UInt16>, UInt32,
UInt32, UnsafePointer<UInt8>, vImageMDTableUsageHint, vImage_Flags,
UnsafeMutablePointer<vImage_Error>!) -> vImage_MultidimensionalTable!
```

Creates a multidimensional lookup table.

```
func vImageMultiDimensionalInterpolatedLookupTable_PlanarF(Unsafe
Pointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRaw
Pointer!, vImage_MultidimensionalTable, vImage_InterpolationMethod, v
Image_Flags) -> vImage_Error
```

Uses a multidimensional lookup table to transform a 32-bit planar image.

```
func vImageMultiDimensionalInterpolatedLookupTable_Planar16Q12(Unsafe
Pointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRaw
Pointer!, vImage_MultidimensionalTable, vImage_InterpolationMethod, v
Image_Flags) -> vImage_Error
```

Uses a multidimensional lookup table to transform a 16Q12 planar image.

```
func vImageMultidimensionalTable_Release(vImage_MultidimensionalTable!)
-> vImage_Error
```

Releases a multidimensional table.

```
typealias vImage_MultidimensionalTable
```

An opaque pointer that represents a multidimensional lookup table.

```
struct vImageMDTableUsageHint
```

Constants that indicate the use for a multidimensional lookup table.

```
struct vImage_InterpolationMethod
```

Constants that represent different interpolation methods.