AVFoundation / AVAssetReaderOutput

Class

AVAssetReaderOutput

An abstract class that defines the interface to read media samples from an asset reader.

iOS 4.1+ | iPadOS 4.1+ | Mac Catalyst 13.1+ | macOS 10.7+ | tvOS 9.0+ | visionOS 1.0+

```
class AVAssetReaderOutput
```

Mentioned in

▤ Tagging media with video color information

Overview

You add concrete output instances, such as AVAssetReaderTrackOutput or AVAssetReaderVideoCompositionOutput, to an asset reader to perform specific tasks.

> **Important**
>
> If you don't require modifying sample data in-place, set the value of the alwaysCopiesSampleData property to false to prevent the output from making unnecessary copies.

Topics

Configuring reading

`var alwaysCopiesSampleData: Bool`

A Boolean value that indicates whether the output vends copied sample data.

`var supportsRandomAccess: Bool`

A Boolean value that indicates whether the output supports reconfiguring the time ranges it reads.

`func reset(forReadingTimeRanges: [NSValue])`

Restarts reading with a new set of time ranges.

`func markConfigurationAsFinal()`

Tells the output that it's finished reconfiguring time ranges, and allows the asset reader to advance to a completed state.

Copying sample buffers

`func copyNextSampleBuffer() -> CMSampleBuffer?`

Copies the next sample buffer from the output.

`class Provider`

An object that reads a collection of samples of a common media type from an asset reader.

`class RandomAccessController`

Object used to reset an output provider to read specified time ranges.

`protocol SupportedPayload`

Inspecting the media type

`var mediaType: AVMediaType`

The media type of samples that the output reads.

Relationships

Inherits From

`NSObject`

Inherited By

```
AVAssetReaderAudioMixOutput
AVAssetReaderSampleReferenceOutput
AVAssetReaderTrackOutput
AVAssetReaderVideoCompositionOutput
```

Conforms To

```
CVarArg
CustomDebugStringConvertible
CustomStringConvertible
Equatable
Hashable
NSObjectProtocol
```

See Also

Media reading

`{}` Reading multiview 3D video files

Render single images for the left eye and right eye from a multiview High Efficiency Video Coding format file by reading individual video frames.

`class` AVAssetReader

An object that reads media data from an asset.

`class` AVAssetReaderTrackOutput

An object that reads media data from a single track of an asset.

`class` AVAssetReaderAudioMixOutput

An object that reads audio samples that result from mixing audio from one or more tracks.

`class` AVAssetReaderVideoCompositionOutput

An object that reads composited video frames from one or more tracks of an asset.

`class` AVAssetReaderSampleReferenceOutput

An object that reads sample references from an asset track.

```
class AVAssetReaderOutputMetadataAdaptor
```
An object that creates timed metadata group objects for an asset track.