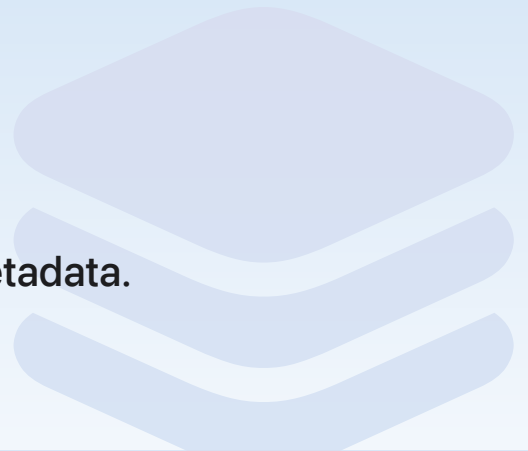


Framework

Immersive Media Support

Read and write essential Apple Immersive Video metadata.

macOS 26.0+ | visionOS 26.0+



Overview

Immersive Media Support enables you to create custom workflows for processing Apple Immersive Video (AIV). Use it to read and write AIV-specific metadata and enable previewing content in editorial workflows.

Topics

Essentials

- `{}` **Authoring Apple Immersive Video**
Prepare and package immersive video content for delivery.

Camera metadata

`actor` `VenueDescriptor`

The Apple Immersive Media Venue Descriptor is a collection of static metadata necessary for every Apple Immersive Video.

`struct` `ImmersiveCamera`

A structure that holds the required information for an immersive media camera to process and render video frames.

`struct` `ImmersiveCameraCalibration`

A structure that represents immersive media camera calibration data.

`enum ImmersiveCameraMask`

A structure that holds the camera mask type information and its relevant mask name.

`struct ImmersiveDynamicMask`

A type that holds the information required to dynamically generate an immersive media mask at load time.

Presentation commands

`enum PresentationCommand`

A set of properties that define the interface for a presentation command.

`struct FadeCommand`

A command type for color fading during immersive media playback.

`struct FadeEnvironmentCommand`

A command type for opacity fading environment backdrops during immersive media playback.

`struct SetCameraCommand`

A command type for immersive camera switching during playback.

`struct ShotFlopCommand`

A command type to flip the video frames horizontally (mirrored horizontally) during playback for the duration of the command.

`struct PresentationDescriptor`

A structure that represents dynamic metadata used during playback or when outputting the metadata track for an immersive video file.

`class PresentationDescriptorReader`

An object that provides the functionality required to understand and process immersive presentation commands.

Parametric immersive support

`class ParametricImmersiveAssetInfo`

An object that helps convert the original wide field of view video asset to parametric immersive asset.

Immersive video rendering support

`struct ImmersiveCameraViewModel`

A view model that holds all the resources needed to render an immersive camera view.

`struct ImmersiveVideoMask`

A video mask to use during video rendering to smooth the edges of the mesh.

Preview

`class ImmersiveMediaPreviewMessagingProtocol`

An object that represents the messaging protocol a remote preview sender and receiver use to communicate.

Validation

`struct AIVUValidator`

A type to validate existing AIVU files to ensure that they meet the minimum requirements for AIV.

Classes

`class ImmersiveCameraMeshCalibration`

Calibration mesh geometry based on USDZ data.

`class ImmersiveImageMask`

An object that holds all the information needed to load immersive media masks from image data or from a file.

`class ImmersiveMediaRemotePreviewReceiver`

An observable object that helps apps handle receiving commands and data sent from an immersive media remote preview sender object.

`class ImmersiveMediaRemotePreviewSender`

An observable object that helps an app send the required data to all connected receiver apps to help facilitate the complete preview of the immersive media playback.

Structures

`struct ImmersiveCameraLensDefinition`

This type holds the ILPD lens configuration parameters to generate camera calibration type instance.

`struct ImmersiveVideoFrame`

A type that represents an immersive video frame. An immersive video frame contains: - layout (SideBySide, OverUnder, Separate, Mono) - presentationTime: frame presentation time - pixelBuffers: an array with one or more images representing the frame.