API Collection

VTFrameSilo

An object that stores sample buffers from a multipass encoding session.

Overview

A frame silo object starts out empty and is populated by calls to `VTFrameSiloAddSampleBuffer(_:sampleBuffer:)` to add sample buffers in ascending decode order. After the first full pass, additional passes may be performed to replace sample buffers. Each such pass must begin with a call to `VTFrameSiloSetTimeRangesForNextPass(_:timeRangeCount:timeRangeArray:)`, which takes a list of time ranges. Samples in these time ranges are deleted, and calls to `VTFrameSiloAddSampleBuffer(_:sampleBuffer:)` can then be made to provide replacements.

Call `VTFrameSiloCallFunctionForEachSampleBuffer(_:in:refcon:callback:)` or `VTFrameSiloCallBlockForEachSampleBuffer(_:in:handler:)` to retrieve sample buffers. The frame silo object may write sample buffers and data to the backing file between addition and retrieval; don't expect to get identical object pointers back.

The sample buffers are ordered by decode timestamp.

Topics

Creating Frame Silos

```
func VTFrameSiloCreate(allocator: CFAllocator?, fileURL: CFURL?, timeRange: CMTimeRange, options: CFDictionary?, frameSiloOut: UnsafeMutablePointer<VTFrameSilo?>) -> OSStatus
```

Creates a frame silo object using a temporary file.

Configuring Frame Silos

`func VTFrameSiloAddSampleBuffer(VTFrameSilo, sampleBuffer: CMSampleBuffer) -> OSStatus`

Adds a sample buffer to a frame silo object.

`func VTFrameSiloSetTimeRangesForNextPass(VTFrameSilo, timeRangeCount: CMItemCount, timeRangeArray: UnsafePointer<CMTimeRange>) -> OSStatus`

Begins a new pass of samples to be added to a frame silo object.

`func VTFrameSiloCallBlockForEachSampleBuffer(VTFrameSilo, in: CMTimeRange, handler: (CMSampleBuffer) -> OSStatus) -> OSStatus`

Retrieves sample buffers from a frame silo object.

`func VTFrameSiloCallFunctionForEachSampleBuffer(VTFrameSilo, in: CMTimeRange, refcon: UnsafeMutableRawPointer?, callback: (UnsafeMutableRawPointer?, CMSampleBuffer) -> OSStatus) -> OSStatus`

Retrieves sample buffers from a frame silo object.

Inspecting Frame Silos

`func VTFrameSiloGetProgressOfCurrentPass(VTFrameSilo, progressOut: UnsafeMutablePointer<Float32>) -> OSStatus`

Gets the progress of the current pass.

`func VTFrameSiloGetTypeID() -> CFTypeID`

Retrieves the Core Foundation type identifier for the frame silo object.

Data Types

`class VTFrameSilo`

An object that stores a large number of sample buffers, as produced by a multipass compression session.

See Also

Compression

{} Encoding video for low-latency conferencing

Configure a compression session to optimize encoding for video-conferencing apps.

{} Encoding video for live streaming

Configure a compression session to encode video for live streaming.

{} Encoding video for offline transcoding

Configure a compression session to transcode video in offline workflows.

VTCompressionSession

An object that compresses video data.

VTDecompressionSession

An object that decompresses video data.

VTMultiPassStorage

An object that stores video encoding metadata from a multipass encoding session.