

Quick Time Container 1.2 – More Features

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Introduction

This plug-in updates the release from TN 05-30, it corrects some minor problems and adds more features to the original plug-in.

New Features

OffScreen Areas

Similar to offscreen areas in 4D Write or 4D Chart, this feature allows you to open a movie or song invisible to the user and use commands like QTGetControl to read information such as the Movie length, read MP3 tags or to get a screenshot of a movie.

Read Tags - MP3 Tags

A new command allows you to retrieve text-based tags handled by QuickTime. QuickTime supports only a small subset of ID3tags, mainly Album, Artist and Song title. For pictures, information such as the camera make and timestamp are supported.

Screenshot

A new command allows the creation of a picture from the current frame of a movie; this is similar to a screenshot of a movie.

Optimizations

Better redraw on Windows, especially when it comes to resizing the form.

Offscreen Areas

Two new commands allow you to use offscreen movies:

QTNewOffscreenArea

QTNewOffscreenArea(Area) -> errorcode

Parameter	Type	Description
Area	Longint	QTContainer area
Function result	Longint	Error code (0 = No error)

Description

QTNewOffscreenArea creates a QuickTime plug-in area and returns the area's ID: The value returned by QTNewOffscreenArea can be used in any other QTContainer command that requires an area.

It is your responsibility to close the area using the command QTDeleteOffscreenArea when you are finished using the area to free the occupied memory.

Example

The following code shows how to open a movie offscreen and create a screenshot of a specified frame:

```
C_LONGINT (IAreaRef)
IMovieFileLastError:=QTNewOffscreenArea (IAreaRef)
tPath2File := "C:\mymovie.mov"
IMovieFileLastError:=QTSetMovie (IAreaRef;tPath2File)
IMovieFileLastError:=QTSetControl (IAreaRef; QTGoto; 100) ` Goto Frame 100
IMovieFileLastError:=QTScreenshot (IAreaRef;mypicture) ` Get a screenshot
IMovieFileLastError:=QTDeleteOffscreenArea (IAreaRef)
```

QTDeleteOffscreenArea

QTNewOffscreenArea(Area) -> errorcode

Parameter	Type	Description
Area	Longint	QTContainer area
Function result	Longint	Error code (0 = No error)

Description

The QTDeleteOffscreenArea command disposes of a QTContainer offscreen area that was created with QTNewOffscreenArea and frees the memory previously used by the area.

New and modified commands

QTSetMovie

QTSetMovie(Area; Document path) -> error code

Parameter	Type	Description
Area	Longint	QTContainer area
Documentpath	Text	Full path to document
Function result	Longint	Error code (0 = No error)

Description

This command syntax remains unchanged from the previous version. The command now accepts paths longer than 255 chars on both platforms.

QTRemoveMovie

QTSetMovie(Area) -> error code

Parameter	Type	Description
Area	Longint	QTContainer area
Function result	Longint	Error code (0 = No error)

Description

This command removes (closes) a movie from a QTContainer area. If the area contained a movie or picture, the contents are erased. The QuickTime controller is hidden. As result the entire area space will become empty.

QTScreenshot

QTSetMovie(Area; Picture) -> error code

Parameter	Type	Description
Area	Longint	QTContainer area
Picture	Picture	4 th Dimension picture of current frame
Function result	Longint	Error code (0 = No error)

Description

This command creates a picture of the content of the area, using the current position of the movie. The picture is created in the actual displayed size of the movie.

A picture with the real movie size can be created using the Command QTSetControl(Area; QTSize; 100).

QTGetTags

QTGetTags(Area; Tags; Tag content) -> error code

Parameter	Type	Description
Area	Longint	QTContainer area
Tags	Array text	Description of tags
Tag contents	Array text	content of tags

Description

The command QTGetTags returns two text/string arrays with information on the contents of the area. The arrays contain the "user data" text information supported by QuickTime.

The kind of data that is returned depends on the version of QuickTime that is installed and the type of the document.

This example shows the information returned for a MP3 file ripped using iTunes:

Tag Name	Tag Content
@cmt	3d45e5db-312a-427a-b79e-3d90896cfa85
@nam	Marry You
@ART	B.B. King / Eric Clapton
@alb	Riding with the King
@trk	4

In this case the information describes the comment (cmt), song title (nam), artist (art), album (alb) and track number (trk). QuickTime uses a 4-byte identifier starting with the copyright symbol.

The following example shows the information for a picture, created by iPhoto using a digital camera. Available data is: maker (mak), camera model (Mod), used Software (swr), timestamp (day), host (hst) and comment (cmt).

Tag Name	Tag Content
@mak	Canon
@mod	Canon EOS 20D
@swr	QuickTime 6.5.2
@day	2005:03:23 13:59:13
@hst	Mac OS X 10.3.8
@cmt	AppleMark

QTGetControl – New Selectors

These selectors are read only, so not useable with QTSetControl (because the modified move cannot be saved)

Constant	Selector	Description
QTGetMoviePreferredRate	19	Preferred play speed (to be used for QTSpeed). Like QTSpeed 0 is stop, 100 normal speed, 200 double speed, -100 normal speed reverse. QTPlay automatically
QTGetMoviePreferredVolume	20	Uses the Preferred rate to play Preferences Volume. 0 for no volume, 255 for max volume

Optimizations

The new version uses an improved redraw concept on Windows which drastically decreases flickering of the area, especially during a window resize with growing containers.

The plug in source code was updated to be compatible with newest C compilers (Apple XCode 2.2 and MS Visual Studio 2005) to ensure compatibility with future operating systems and 4D releases.