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Photo CD Access: QuickTime and CD-ROM Players (8/96)

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TOPIC ----------

How does the Photo CD Access extension file work with QuickTime 1.5? Does it tie directly to QuickTime, or is it dependent on the CD-ROM manufacturer as well? How is the Photo YCC translation accomplished?

I have a third-party CD-ROM player, and I want to read Photo CD discs. Does the CD-ROM player manufacturer have to provide the Photo CD extension, or can I use Apple's Photo CD Access?

DISCUSSION ----------

Photo CD Access and QuickTime 1.5

It's correct that QuickTime and Apple Photo Access extensions can perform functions independently, without the presence of the other. HOWEVER, to actually open a Photo CD image from within an application, you need BOTH QuickTime 1.5 (or later) and Apple Photo Access.

Apple Photo Access provides the ability to mount, on the desktop, a foreign file system as a native Macintosh HFS file system. Photo CDs are definitely a foreign file system. The main point here is -- if the Photo Access extension is alone (that is, no QuickTime 1.5), mounting the Photo CD as a native volume is all that can take place. Photo Access permits the Macintosh HFS file system to recognize the CD as a Macintosh volume which has Macintosh resources. For example, if you use ResEdit to open one of the image files, it will display icon resources which are associated with that image file. It will also have a PICT resource that states that QuickTime is needed to display the Photo CD image file.

On a more general note, if Foreign File Access (FFA) extension isn't installed, the Photo CD won't be recognized and you can eject it. If FFA is installed, yet Apple Photo Access isn't, the Photo CD mounts as a

generic ISO 9660 disc. You'll see "generic" icons, and the Slide Show and Slide Show Viewer won't appear in the volume's window.

If you want to do more than simply mount the Photo CD on the desktop as a Macintosh volume, you will absolutely need BOTH extensions.

Photo YCC Translation

QuickTime 1.5 allows you to use Photo CD images on the Macintosh. This step translates the Photo CD Image Pacs from the Kodak YCC format to the standard Macintosh PICT format. If the Apple Photo Access extension isn't present, QuickTime can't access the images on the Photo CD. And, in turn, can't translate or decompress the images on the Photo CD. For example, without Apple Photo Access, Photoshop doesn't offer any of the image files in the standard Open… dialog box.

In other words, Apple Photo Access "makes" the Photo CD into a Macintosh volume; and QuickTime (1.5 and later) "makes" the Photo CD image files into PICT image files. Both Apple Photo Access and QuickTime must be present to have useful access to Photo CDs.

Third-Party CD Players

As for compatibility of third-party CD players, there are elements that must be present in the basic drive -- the primary one is the ability to handle CD-XA. Then there's the issue of single session versus multisession access. These two issues are based on the drive mechanism.

A CD-ROM drive mechanism that doesn't have CD-XA ability can't be corrected by software. A CD-ROM mechanism that is single session can't be made to have multisession ability with software. These must be addressed within the drive mechanism. Without CD-XA ability, Apple software won't correct the situation. Once a drive is CD-XA capable, the drive may be single session or double session. Our software won't change this hardware limitation.

The general compatibility rule is: a well-written CD driver should be written to use Apple's Foreign File Access software. If it can use Apple's FFA, then it can use Apple Photo Access. This is because Photo Access is a File System Translator (FST), which is a FFA module. So technically, it should be no problem to use Photo Access with a correctly written CD driver from a third party.

This brings up the question of what is legitimate distribution for Apple's FFA and FSTs. The standard mode of operation is for the third-party hardware company to contact Apple Software Licensing for a distribution license agreement.

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19 Aug 1996 - Corrected misspelling.

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