An Easy and Effective Approach to Manage Radiologic Portable **Document Format (PDF) Files Using iTunes**

managing radiologic files in portable document format (PDF) using iTunes.

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iTunes (Apple Computer) to manage PDF documents as easily as managing music files.

OBJECTIVE. The objective of this article is to explain an easy and effective approach for

CONCLUSION. PDF files are widely used as a standard file format for electronic publica-

tions as well as for medical online documents. Unfortunately, there is a lack of powerful software to manage numerous PDF documents. In this article, we explain how to use the hidden function of

ortable document format (PDF) is a file format created by Adobe that allows you to view and print a file exactly as the author de-

signed it. Since its introduction in 1990 [1], PDF has become the most popular Internet standard for electronic distribution and is also supported by most medical bibliographic databases. It is convenient to obtain various resources in PDF format, as well as to view, navigate, and print them using an Adobe Acrobat product. PDF files are cross-platform documents, which means they can be created and used on almost any type of operating system: Windows (Microsoft), Macintosh (Apple Computer), or Linux (open source). However, there is a lack of effective approaches with which to manage the files. The general method of classifying PDF files is to separate them, in your PC, into folders by different topics such as "fMRI" or "evidence-based imaging." However, using this approach does not solve the problem of how to deal with multisubject articles: Into which folder should they go? Putting a copy of the same file in every correlated folder wastes system resources. Moreover, with the accumulation of files, the efficiency of finding your target file

agement approach is needed. iTunes is a software program designed by Apple Computer, but it is available for both Macintosh and Windows operating systems. iTunes allows you to manage your music files and sync the files with an iPod (Apple Computer) device. Being a little more than a database, iTunes offers the following options:

drops. As a result, an effective PDF file man-

define the artist, album, or category; comment; rank music files; and sort and search efficiently according to the various properties mentioned.

One of the hidden powers of iTunes is its ability to manage and organize PDF documents just as conveniently as music files. This function was originally designed for the digital brochure of albums. It costs just a double-click to open PDF files with your default PDF viewer.

In this article, a detailed specification on radiologic PDF files management using iTunes is discussed.

Software Requirements

iTunes began to support PDF files organization with version 4.7 [2]. The latest release of iTunes is 7.5. It is available for free download from Apple's Download iTunes page (www.apple.com/itunes/download/), and the detailed software requirements for installation can also be found there [3]. For the PDF management features covered in this article, a 500-MHz Pentium (Intel)-class processor with Microsoft Windows XP or Vista or a 500-MHz G3 processor with Mac OS X (Apple Computer) and 256-MB random access memory (RAM) are needed.

Manage PDF Files

Add Files to the iTunes Library

After you open iTunes, there are two ways to add PDF files to the iTunes library: One is to select File > Add File to Library, and the other is to drag the files directly to your iTunes Library window. Every time a PDF

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How to Manage PDFs Using iTunes

file is added to the Library, a book icon will appear after the file name. When you double-click the file name, iTunes opens the file using your default PDF viewer. In the following section, additional examples of PDF files management are given.

iTunes does not, in fact, save all the resources imported into its library. Instead, it remembers the exact file location and the user's description of the file. This information is saved in an index file; thus, iTunes can perform a rapid and effective search of the index file rather than browsing the entire hard disk.

Edit File Information

Once you have saved a PDF file into the iTunes library, edit the file information; this step takes time, but that information will be of great help in the following process. To get started, right-click on the file name, select Get Info > Info. In the Info dialog box, add information such as Artist, which equals the authors' names; Grouping, which could be set to names of different categories, such as neuroimaging or musculoskeletal; and Comments, which allows you to add multiple keywords, such as diagnosis, diffusion tensor imaging, or multiple sclerosis.

Search and Sort

The objective of adding a description of the file, which we discussed in the previous section, is to facilitate the file search process. iTunes offers a powerful search widget for its users. Type any word, even partially, that you have already added for a file description, such as neuroimaging or multiple sclerosis, in the search bar in the top right corner of the iTunes window; within a second, all the results are on the screen. In this way, articles are effectively filtered by their names, categories, keywords, authors, and anything you can think of.

To sort the list by column, click the column heading. If you do not see the column heading you are looking for, right-click a column heading to see a list of columns you can view. Select an item (so that it has a check mark next to it) to make it visible or deselect an item to remove it. To reverse the sort order, click the triangle that appears when the column is selected.

Adding stars according to the significance of an article by clicking the My Rating column is extremely useful. You do not need to change the file name with some other marks or signs any more; instead, clicking the My Rating heading will arrange the articles in the order of preference.

Create a Smart Playlist

Another useful function of iTunes for radiologists is to create a Smart Playlist, which is, in fact, a shortcut with certain rules. iTunes can update these playlists automatically. Select the top menu File > New Smart Playlist in the upcoming dialog box, choose options from the pop-up menus, and fill in the blanks. To add more rules, click the Add (+) button. A new playlist will appear under the Playlists tree with a gear icon as soon as it is created, and any articles that match the rules will now be added automatically.

Backut

Unlike music files, exporting PDF files by selecting either File > Export or File > Export Library to an external XML (Extensible Markup Language) file [4] will not include any descriptions. However, backup your customized playlists by quitting iTunes and copying the iTunes library file to a secure folder. The iTunes library file contains all the information and preferences of playlists, songs, and PDFs. It is automatically updated simultaneously when you make changes to iTunes.

The path to this file is C:\Documents and Settings\username\My Documents\My Music\iTunes\iTunes\iTunes Library.itl for Windows XP and Windows 2000; Users\username\Music\iTunes\iTunes Library.itl for Windows Vista; and Users\username\Music\iTunes\iTunes Library for Mac OS X [4, 5].

By pasting the backed-up iTunes library file to its original site after reinstalling iTunes, all the resources and setups will be back. New versions of iTunes sometimes include enhancements to the iTunes library. As a result, accidental error will happen if you try to copy the iTunes library file of an old version to the new one and vice versa.

Summary

iTunes provides a unique way for us to manage electronic files. It has powerful search and sort functions, it can remember a user's favorite articles, it supports customized shortcuts for different topics or categories, and the backup of these shortcuts can be easily achieved. We no longer need to keep PDF files in redundant folders.

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AJR:191, July 2008 291