# Digital Philatelic References or Studies Storage Methods

By Francis Adams

### Part IX

V arious factors should be considered when producing a study and expecting good results when storing or distributing it. In this article, I will cover the subject of media, such as compact disc (CD), digital versatile disc (DVD), and other portable or virtual media.

# **Physical Media**

The physical storage of your DPS is most likely on your computer's internal hard drive or an external hard drive, typically used for file backup. Keeping the study on your computer is simple. It is easy to move, modify or even send as an attachment via an e-mail message, if your mailbox size allows it, at any time.

The drawback to this method is that computers are generally not very mobile. Getting your study before the eyes of other collectors interested in the same subject is difficult at best, unless a laptop is available and the files have been transferred to its hard drive. While laptops are an option, to be truly portable the media should be much smaller.

# **Portable Options**

Portable media for backups or distribution however, is another matter. Modern physical options include a CD, DVD, flash memory drive, sometimes called a thumb drive or memory stick, or perhaps camera memory cards, including Secure Digital (SD) and Compact Flash (CF).

Floppy disc technology is a non-starter. In the main, floppy discs are no longer used as most modern computers do not have floppy drives. The disc's maximum size is usually 1.4 megabytes (mb), good for only a small study.

The sophistication of digital studies has accelerated. With the number and size of graphics included, the CD, DVD, flash, and camera card options are best for storing studies.

CDs are a popular and convenient means of distributing your work and the method you most likely will use as they are relatively easy for home-based authors to produce. They also have the advantage that most computers have a CD or DVD drive that will read CDs and nearly everyone is familiar with how to use them. CDs accommodate approximately 600-700 mb of data and are inexpensive as 100 cost roughly \$15. (Fig. 1)



Fig. 1. Compact / Digital Versatile Disc media

DVDs are a newer storage media type and hold more than 4.5 gigabytes (gb) of data, roughly seven times that of a CD. They are slightly more expensive than CD media, but for the storage capacity more reasonably priced. It is more a question of storage needs as videos or movies requiring more storage space are better placed on a DVD for instance.

Computers using either Microsoft Windows or Apple Macintosh operating systems can read CDs and DVDs. If there are specific concerns about which media format should be used, save the file on Windows-formatted media as a Macintosh can accept and read both Windows and Macintosh formatted media.

A newer physical storage media is a flash memory drive with a universal serial bus (USB) connection. Flash drives have no moving parts; they are simply memory chips in a plastic case with a USB connector. They have larger capacities (up to 64 gb presently) than CD / DVDs. A 2 gb flash drive can be found these days for less then \$6 and will hold a number of studies. (Fig. 2)



Fig. 2. Flash Memory Drive

As our files are typically smaller than one gigabyte, most any small flash drive will do very nicely. (Look for small sticks of one mb or smaller as freebies at some electronic outlet stores.) They are compact enough that you can carry one in your pocket — very handy for getting copies of presentations from the presenter's laptop. For mailing purposes, they are smaller than CD / DVDs and more robust during shipping. Some Windows machines may need to be configured to read flash memory drives.

SD memory cards found in many digital cameras may also be used as storage. Some cameras come with small cards and upgrading to a larger capacity memory card to hold more images is not unusual. Using an external reader for these cards, allows these castoffs to be used as a storage option. Another advantage is that they are small and demand little storage area in a desk drawer for instance.

An interesting SD innovation is a card with a hinge in the center. When the card is opened, by folding half of it up, a USB connector is exposed. This allows the card to be used like a flash memory drive – without the external card reader. The latest SD card development incorporates a wireless transmission function into the card that allows the transfer or uploading of files without using a computer. (Fig. 3)

Sony and Olympus both produce portable media similar to these cards — the stick and XD card however, I will simply acknowledge these options as the SD card is the most popular.



#### Fig. 3. External Reader & Folding SD Memory Card

**EDITOR'S NOTE:** Professional DSLRs use the more rugged compact flash (CF) storage. Combining a CF card with a small dedicated reader, similar in size to flash drives creates a shirt-pocket package that will store up to 64 gb.

## **Mobile Devices**

Storing studies on a mobile device is another option. Depending on the file format chosen for the study, you may be able to display it on some of the more advanced portable digital media devices such as an iPod. (Fig. 4) I carry and view my exhibits and reference documents in pdf format; images of cancels in jpg format, and listen to audio interviews or presentations in mp3 format on my iPod Touch. Most recently, YouTube has movies made by philatelists and those may be played in mp4 format.



Fig. 4. iPod Touch Displaying Exhibit Title Page

The ability to make your study truly portable and use it dynamically lies with this storage method. As long as the battery on the device is charged, the study (or many other documents) can be viewed most anywhere and by anyone.

Apple is not the only mobile device solution. Other mp3 players are also able to store and display these types of files and documents. Some of the newer mobile phones, portable DVD players or even electronic photo frames might be used for these same purposes.

## Virtual Media

The virtual storage option is simply a remote computer (server) connected to the internet which acts as an additional storage area for your files. Your information is always available regardless of where you travel and you need not bring any devices with you.

The simplest of the virtual media options is an attachment to an e-mail message. If the study exists as a pdf file, it can be sent to anyone with an e-mail address. In some instances, the study may be stored in your own e-mail account by sending the file to your own account as an attachment. If you have a large capacity e-mail account like Gmail, quite a number of large files can be accommodated in this fashion. Your e-mail account is always accessible via the web from most any computer with internet access and the attachment may be downloaded as needed. This method also allows you to control the distribution of the file easily.

In the event a file is too large to be sent via e-mail for example, an online storage option is ideal. Virtual storage services are provided by Microsoft, Apple, and Google. Box (www.box.net), A drive (www.adrive.com) and others provide free virtual storage accounts and even personal servers are being added to the web.

Simply access your personal account via any computer with a web browser and a connection to the internet. Not as valuable perhaps as a handheld device when you're not in a position to connect to the internet, but definitely easier than some other options.

An entire study may be produced completely independent of your computer using web-based applications such as WordPress (www.wordpress.com) or Blogger (www.blogger.com) blogging software, and Adobe Photoshop Express (www.photoshop. COM/EXPRESS) which are all free. These applications allow you to write as well as edit and add images in a variety of ways.

Depending on the purpose of the study, another option might be one of the photo-hosting services such as Flickr (www.flickr.com) or Photobucket (www.photobucket.com). Slide shows may be assembled using these online applications.

The real drawback to these last few options is that the information is formatted and stored online — there's really no way to turn it into a file which can be distributed other than via the web.

Finally, your study can be made available on a web site. The study might be on a dedicated site or accessible through a hyperlink on a site. Adobe Portable Document Format (pdf) files are especially good for this manner of display.

Done correctly, the original files of the web site can also be burned to a CD or DVD and the study will run directly from the CD / DVD. To make the study searchable when on this type of portable media, a special software program is required. This option is my personal favorite, but it does require some additional investment in software, as well as more computer and software skills than many people have or are willing to learn.

## Conclusion

Getting your study and digital reference materials onto a CD or into your hip pocket does not have to be difficult. Think about how and to whom you wish to present or distribute the study as that will help determine which media should be used.

Using a combination of media is advisable. You never know when a disc may become damaged or a drive will fail. All of these options can be used as a backup methodology.

9