

Archiving Electronic Files

By Jim Lynch

A large part of office spring cleaning is archiving old paper files and creating new paper files. However, many of us give little thought to archiving our electronic files. In this day of email attachments, digital photographs and memory-hogging image files, however, a lot of offices are confronting the dilemma of how to manage their electronic file storage. This article describes a method to automate the process of cleaning or archiving files off of your computer system, saving staff productivity and hardware resources. The method works for small and large offices alike. It assumes you understand the importance of and have a back up system in place. (If you don't, see the "courting disaster" section below.)

The Dilemma

In the past, when your computer system was getting low on hard drive space, the solution was asking users to save their files onto a floppy disk or to simply delete their old files. But really, how many of your staff complied with such requests? And, how would your request impact their productivity? Of course, these days you can simply buy more hard drive storage for your computer system – this is cheap. But, when you add gigabytes of file storage, you also need to upgrade your back up system – this is not cheap. Even if you can afford a high speed, high capacity backup system, you will inevitably reach a point where your tape back up takes so long to run that back up time creeps into business hours slowing productivity and causing a critical problem for staff who work late or come in early. When personally confronted with this problem three years ago, I decided against buying bigger and bigger "buckets" to store and back up data. Instead, I developed an automated file archiving plan.

Guidelines

When reflecting on how to approach this dilemma, it became apparent that it was not going to be as simple as copying files onto a CD or back up tape. Three elements that guide a file archiving plan were identified.

- * First, there are two types of files: files that serve a one time purpose (and can be archived) and files that are used over and over from year to year (that should not be archived).

- * Second, archiving must occur in two stages: first, to a separate area on your computer system that remains accessible to users for one year (with read only access – so nothing new gets stored in the directory --a directory is the same as a folder-- that would require a backup) and then off of your computer system onto tape or other media.

- * Third, some data needs to be archived to CD or DVD rather than tape. While tapes can be used to restore files when needed, the process is cumbersome. Files that are used for reference, such as photographs, should be archived onto easily accessible media.

Directory/Folder Reorganization

With the above guidelines in mind, I first determined that electronic files should be saved in two primary directories: “never_archive” and “auto_archive”. Sample files (including templates and contracts), graphics, and databases go under never_archive. Everything else gets stored under auto_archive in a directory for the current year. Also under auto_archive is a directory for the previous year (which should be read only and will be permanently archived after an additional year). The goal is to have as little as possible stored under never_archive. Rather than accumulating (and backing up) years and years worth of data, you will have only two years of data on your computer system at any given time.

Annual Tasks

At the end of each year, you have only three tasks to perform: a) create a directory for the new year, b) make the directory for the outgoing year read only, and c) archive the directory for the oldest year. For example, at the end of this year (2003) I will create a new directory under auto_archive for the upcoming year (2004). I will make the directory for the outgoing year (2003) read only. And, I will archive files from the oldest directory (2002) off of the computer system onto back up tape and photographs from the 2002 directory onto CD's or DVD's. The chart below illustrates how files should rotate through the auto_archive directory.

Buy-In

The directory structure and annual tasks are really the easy part. For successful implementation, it is important that staff buy-in to the whole auto-archive process. Some staff were anxious about automated archiving, fearing they would not be able to access their files. This anxiety was satisfactorily addressed by providing an additional year of access to files before permanent archiving along with proactive communications, sharing plans and implementation tasks, and some hand holding. Also, because staff had previously saved files in a single primary directory, they had to get used to the concept of deciding under which directory the file should go: “never_archive” or “auto_archive”. Of course, for the plan to work effectively, it was necessary for staff to store most files under the “auto_archive” directory. Initially, there was a tendency for staff to store everything under “never_archive” but, with some guidance and encouragement (and by limiting the size of their storage space on “never_archive”), staff quickly began to store most things under “auto_archive”.

Results

Users are now very comfortable with the automated archiving system. Each year, to the staff's credit, I am able to archive approximately 17 gigabytes of data off of the computer system (for a 120 person office). This represents about 50% of used file storage space. The process requires about 30 minutes of my time and 0 minutes of staff time. In addition, since implementing this automated archiving plan three years ago, I have not had to add any “buckets” to my computer system (no additional hard drives and no change in back up systems), saving thousands of dollars each year. The plan is easy to implement, saves time, and saves money.