



Kansas RTAP Fact Sheet

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To Back Up, or to Back Up...

There's no question about it. Do it!

by Craig Damlo

Do you ever worry that your filing cabinet will get a cold and lose your payroll files? Unlike your filing cabinet, your computer can get a virus and lose valuable files. Are you worried that gravity will pull your cabinet doors down so that files can't be retrieved? That is just what can happen to the heads of your hard drive. Now, before you throw out your computer and switch back to paper record-keeping, you should know that the odds of losing computer files are small, and you can shrink those odds even more by backing-up your files.

What exactly is a back-up? The classic definition is "a reserve or substitute." A more modern computer-related definition is "a copy of a program or file stored separately from the original." This definition should also say: "—and is updated regularly." Whether a file is backed up after every change, once a day, or once a month depends on the situation.

An ideal computer system would have just one central file server that contains all the data that needs to be backed up. This server would be connected to personal PCs that execute the software used to manipulate the files on the server. But most of us don't work that way—we each have a PC on

our desk that stores software applications and data used by those applications. Therefore, there are three important questions to ask when deciding to start an effective backup system:

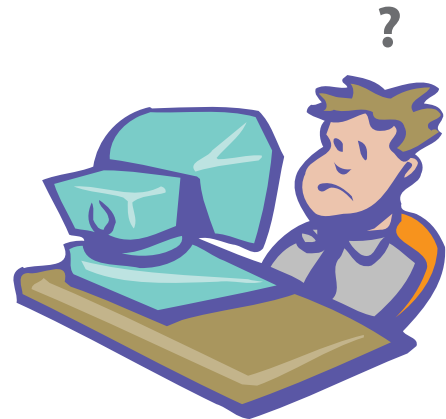
- ✓ What files need to be backed-up?
- ✓ What media should I back-up onto?; and
- ✓ How often should I back-up?

All three questions have solutions that are difficult to put into general terms, but I will try to generalize for the most common system types.

You don't need to back up the whole hard drive.

What do you need to back up? Not the whole hard drive, not the days. This worked when hard drives were small, and backup media were larger than the hard drives. But today huge hard drives are affordable, which makes entire-disk imaging impractical. Besides, most of the drive is filled with program files that shouldn't be backed up, not only because it is a waste of space, but also because it may infringe on copyright protections.

So take a look at your hard drive



and decide what needs to be backed up. Good candidates are payroll files, passenger databases, budget spread sheets, word processing documents and any other files you create using software. A great way to make back-up easier is to place these files in a central folder from the start. You can always sub-divide this central folder into specific applications.

Now that you have decided what files to backup, the next question—what media?—is easier to handle. Look at the size of your files that need to be backed up; odds are good that they take up more space than a single diskette,

but not enough to justify a large tape system. Other options are a zip disk system or a Compact Disk Recorder (CD-R) system. I prefer CD-Rs, because they are less vulnerable to being destroyed, and are relatively inexpensive.

CD-Rs are also helpful for keeping a backlog of backups. Instead of overwriting your back-up media each week, you really should keep a minimum of a month of backups, or more, if the data you are saving is especially important.

Ask yourself, "How much can I really afford to lose?" By placing files on CD-Rs you won't be able to overwrite what is already written, and can sometimes keep two or three back-ups on a single CD-R. This capability comes in very handy when you need to make backups from multiple machines.

The final aspect of backing up doesn't involve your data files at all. Instead it involves your power system. As we saw earlier this year in California, power isn't a completely predictable commodity.

Modern computer power back-up systems are battery stack systems. These are typically are only good for about three minutes of power to a computer and monitor. Three minutes may not seem like a great amount of time, but this is usually enough time to stop a loss of data during a brown out, and also enough time to save your data and shut the machine down during a black out. Many power back-up systems also come with options that allow you to hook the system to your computer and it will automatically shut your windows machine down if you are not around to shut it down yourself.

Back-up technology is prevalent and inexpensive, and the reason for backing-up files is clear. So there's no question about it... be sure to do it!

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