Better call for backup

Iomega's Ditto Max drive offers a good, albeit slow, way to copy critical files / **Simson L. Garfinkel**

ROUGHLY ONCE A month I get a phone call from a friend who has lost something of vital importance that they had stored on their computer. Sometimes their data just disappeared – the result of an errant keystroke or a buggy computer program. Another time a friend had his laptop stolen. And then there was the novelist who had his unpublished book burn up in the flames of the 1990 Oakland hills fire.

Whatever the cause, all of these data catastrophes could have been prevented if the person involved had simply taken the time to back up the information stored on their computer's hard drives and send the tape to a friend for safekeeping.

The cheapest way to make a backup is simply to copy your important files to a floppy. If you have a lot to back up, you can use a high-capacity cartridge drive like the SyQuest SyJet. This works, but it's expensive: SyJet cartridges cost $60 for 1.5GB, or roughly $40 per gigabyte. Iomega Zip disks are even more expensive: $20 for a 100MB cartridge, or $200 per gigabyte.

A second problem with this approach to backing up your computer is that most people forget to back up their application programs. That's a bad mistake to make. Although it's true you can

always reinstall your applications from the original CD-ROMs, you can't restore the hundreds of hours that you spent customizing and updating your apps.

It also takes a lot of time to install a full suite of apps onto a typical desktop or laptop computer – time that you could have saved if you had simply backed up your applications with an appropriate backup utility.

Iomega's Ditto Max drive offers a better way to back up Windows 3.1, 95, and NT machines. The drive, introduced just in time this past holiday season, can take your entire hard drive and store it on a single cartridge. You can then restore your files one at a time or, in the event you lose your hard drive, you can restore your entire system by booting from a special disaster recovery disk. The drive works with Iomega's 7GB cartridges, as well as the smaller 3GB and 5GB cartridges from the company's previous generation of backup devices. Iomega also makes a Ditto Max Professional that can also use the company's new 10GB cartridges.

There are two versions of the Ditto Max: an external, which clips on to your PC's parallel port, and an internal, which connects to the floppy disk controller. The styling is quite attractive – for starters, its burgundy.

Of course, some people prefer the control that comes from being able to drag their important files one by one onto a removable cartridge. For these people, Iomega has a new feature call Flash!File.

Basically, the Ditto Max software reserves the first 150MB of each tape for instant access to your important files. Just drag a file from your computer's hard drive to the icon for the Ditto Max floppy. Five seconds later, the data is safely in place on the tape. As we used to say at MIT, it's a cute hack.

What isn't so attractive about the Ditto Max is the price of its QIC cartridges. A 7GB cartridge costs $34.95, or $5 per gigabyte.
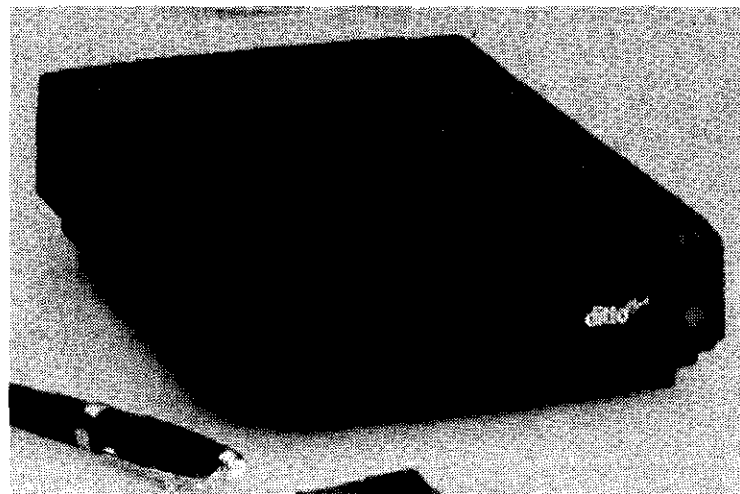
However, Iomega assumes 2:1 compression; in my testing, I only managed to get 1.6:1 compression, reducing the size of a 7GB cartridge down to just 5.6GB.

I was also underwhelmed by the speed of the Ditto Max drive. On my Windows NT system it took 13 hours to back up and verify 2.2GB of information (160MB/hour) while I was using the computer for other tasks. On my Windows 95 laptop, it took 3.5 hours to back up and verify 1.2GB (342MB/hour) while the system was otherwise unused.

The Ditto Max software does a good job keeping you informed about how much time has been spent on the backup. Unfortunately, while it keeps a running counter of how much data is left to process, it doesn't predict how much more time will be required.

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That would have been an easy feature for Iomega's programmers to add.

One thing that I like about the external Ditto Max is that it is easy to move around between computers. I can back up my laptop, back up my wife's desktop, and then back up my primary machine. That's because all of our computers have parallel ports. Of course, all of our machines also have Ethernet cards.

Alas, Ditto Max software does not work properly over a network. For doing that, the best choice appears to be Dantz's Retrospect and Retrospect Remote. Although the Retrospect server only runs on Macintosh systems, the client runs on both Macs and PCs.

If you plan to do a lot of backups, a better choice is to buy a 4MM DAT drive. DAT drives come in three flavors – DDS, DDS-2 and DDS-3 – which can store 4, 8, or 16GB on a single cartridge. If you call up the catalog companies you'll find refurbished DAT II drives priced from $400 to $500; a new one costs $800 to $1,100. You'll also need to get a SCSI card ($50 to $200).

The advantage of DAT is speed and cost. Last night my UNIX system backed up 4.8GB in 3 hours (1,600MB/hour). Meanwhile, an 8GB cartridge costs $15 ($1.87 per GB), making the DAT the way to go if you need more than 40 cartridges.

On the other hand, if you aren't a backup fiend like me, take a serious look at the Ditto Max drive. Odds are that you'll be glad you did.

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