

Paranoia Pays!

By Tal Herzberg

Out of all the mistakes a DAW operator can make, one is absolutely non-remediable: irrecoverable data loss! Losing those magical creative moments, along with the time and money invested in the recording process, may add up to a serious career disaster. Data security and the ability to recover a project's data if necessary is ultimately in the hands of the DAW operator — and that's *you*, so let's delve into this crucial subject.

HARD DRIVES CAN FAIL

Any hard drive is susceptible to a fatal failure. Most incidents are software- and driver-related (causing directory and file corruption), while some are hardware-related — after all, anything with moving parts, especially when spinning at thousands of RPMs, can malfunction.

You can fix some problems simply by running a drive utility (such as Norton Disk Doctor or Disk Warrior); other times it takes a professional data rescuing service to retrieve the data, which can end up costing thousands of dollars. Sometimes, though, that data is gone forever — so it's crucial to be able to retrieve any data, from any media, at any time. That's what data backup is all about.

MEDIA

Although many users copy their hard drive's contents onto additional hard

drives as their main means of backup, also consider alternatives as your main means of data backup, or as extra insurance. The two most common types are based on *tape* and *optical media*.

TAPE

Magnetic tape-based backup mechanisms are becoming the standard in many facilities around the world. Some of the more popular systems are AIT, DLT, VXA, DDS, ADR, LTO, and Exabyte. The advantages of tape-based systems are:

- Excellent dollars-per-MB ratio
- Large capacity (tens and even hundreds of GB of storage per tape)
- Fast backup and restore speeds (hundreds of MB per minute using fast SCSI or FireWire interfacing).

However, tape can't be mounted on the desktop like a hard drive volume or CD-ROM, but requires special software for reading and writing.

OPTICAL

CD-R, CD-RW, and DVD-R mechanisms are also popular solutions for data backup. The advantages of optical media are:

- Readily available playback mechanisms (almost every computer today comes with either a CD-R or DVD-R drive built-in)
- Affordable media cost

- Longest expected shelf life

CDs and DVDs can also be mounted on the desktop, making access to backed-up data easy and convenient.

BACKUP SOFTWARE

Most DAW-based projects take anywhere from days to months to finish. Every few hours there are new audio files recorded, additional editing, new versions of the sessions being saved, etc. Using backup software eliminates the need to search for newly created data each time you backup. The software scans the drive(s) used on the sessions, finds any data created since the last backup, and then appends only the new data to the existing backup set — now that's convenient!

The two most commonly used programs are Dantz's Retrospect and GMR's Mezzo. Both programs maintain a full history of every backup session ever recorded onto the backup media, a comprehensive file-based search engine, and the ability to define multiple backup volumes (different projects) on the same drive. Both programs will also ask for new media when the first tape/CD/DVD used becomes full. Mezzo stores the backup content catalog on the media used, while Retrospect generates a catalog storage set (document file containing the backup set content).

IT CAN HAPPEN

On rare occasions, the backup

Without a backup system such as Sony's AIT Library, you are living dangerously.

