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Copy Protection: The Audio Industry's Dirty Little Secret

By Ethan Winer

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You won't see software publishers talk about it in their glossy product brochures or on their web sites. I've never seen it listed in an advertisement, and it is rarely mentioned in magazine product reviews. It affects almost everyone who buys software, yet vendors go to great lengths to avoid talking about it. I'm referring, of course, to software copy protection, the audio industry's dirty little secret. Traditionally, copy protection has been more of a burden for Mac than PC users, but I am greatly disturbed by the recent trend of PC programs to start using copy protection too. Let me state up front that I am vigorously opposed to software piracy, and my objections to copy protection are based solely on its negative impact for legitimate users.

Copy protection comes in many forms, and is an attempt by manufacturers to limit the use of their software to people who actually buy it. The simplest form of protection requires you to enter a serial number when the program is first installed. In practice this protects very little, since anyone can lend the installation disks to a friend along with the serial number. All this does is minimize the chance that someone will upload the program to a web site for others to retrieve. Since they'd also have to include the serial number, that number could be used to identify them - assuming they had registered the program. A more severe form of copy protection uses a key disk, which is a floppy disk that cannot be copied and is needed to install the program. The most punitive method uses a device called a dongle that comes with the software and must be attached to the computer's parallel or serial port. If the dongle is not connected, the program detects that and refuses to run. A recent protection trend requires you to phone or email the manufacturer when the program is installed; they give you a special code number to enter, which is needed to install.

There is no doubt that a lot of software - and not just audio software - is illegally copied, and I am not without sympathy for the software companies. In many cases someone buys a program and then "loans" it to a friend who installs it too. In other cases a large company will buy one copy of a program and then install it on 400 computers. Most damaging of all are the misguided losers who buy or borrow a program, and then crack it and upload it to a web site for others to download and use. (Cracking means modifying a program to remove the part that asks for a serial number, or checks for the key disk, or verifies that a dongle is attached to the computer.) Indeed, many people believe that copy protection is a nuisance only for legitimate users because would-be pirates can find cracked versions of many programs on the Internet if they look hard enough.

What's So Bad About Copy Protection?

It would be difficult to condemn copy protection if it protected the publishers without harming the legitimate user. Unfortunately, it usually does harm legitimate users. Some protection schemes interfere with disk optimizers, requiring you to uninstall all of the programs that use such protection each time you defragment your hard disk, and then reinstall them all again after. When I'm working on an audio project I defragment my hard drives daily or even more often, and having

to uninstall and reinstall several programs every time would be a terrible nuisance! Admittedly, this is less of a problem today, now that hard disks are cheap and audio files are often kept on a separate drive that can be defragmented independently.

Any copy protection scheme that requires intervention from the publisher has the potential to cause you disaster. Suppose you're working on a project and your hard disk fails. So you go to Staples and buy another, only to find that your Key disk is no longer readable or it reports that you already used up your two allowable installations. Even the seemingly benign method of calling the vendor for an authorization number is a burden if you're working on a weekend and can't reach them on the phone. Or suppose the dongle simply stops working? You're in the middle of a project with a client paying \$200 per hour, and you're hosed because even with overnight shipping the new dongle won't arrive until tomorrow.

The ultimate disaster is when the software vendor goes out of business. In that case you can forget about ever getting a replacement dongle or key disk. I have many thousands of hours invested in my music programs. This includes not only the time spent creating my audio tracks, MIDI sequences, and printed scores, but also the time it took to learn these programs. I use Master Tracks and Encore from Passport Designs, which still serve me well after many years. Even though Passport is no longer in existence, my enormous investment is secure because I have safe copies of all the original disks. I have never and will never buy any program that I cannot backup and use without intervention from the publisher for exactly this reason. [Added 1/13/2006: I now use Cakewalk's Sonar, which is vastly superior to Master Tracks and is not copy protected.]

Just The Facts, Ma'am

Is copy protection really the best solution? Does every pirated program really reflect lost income? According to the latest figures from the Software & Information Industry Association (formerly the SPA), in 1998 pirated software accounted for \$11 billion in lost sales. But this assumes that every pirated program would have been purchased, which clearly is not the case!

Bob Lentini of Innovative Quality Software, maker of the SAW line of multi-track software, is philosophical on the subject: "We don't use copy protection on any of our current products. It has been my experience that in the long run the pirates do not cause as many lost sales as you might expect. Those of the pirate mentality would never have purchased the product anyway if they could not steal it. Many of our customers came to us after running a pirated version for a short time, and then decided that they could not live without the product and wanted to register for access to support and free downloads and other product discounts. Others have purchased after seeing a pirated version running in some other location...free advertising."

Tom Johnson from Coda (Finale) feels similarly: "We have tried a few forms of protection over the years. Currently we have a system that places the moral burden on the software owner. When Finale is loaded onto a hard drive from its CD, it locks to that hard drive. This is invisible to the user but prevents copying the software off the hard drive. However, there is nothing stopping the software owner from giving his or her CD to another individual thereby giving them *permission* to copy the CD."

SEK'D America (publisher of Samplitude) uses an uncopyable key disk, but it also accepts that piracy exists despite its best efforts. According to Michael Seltzer, "Cracked versions of almost all software exist on the Internet. This seems to be an unstoppable fact of life. Personally, I have no problem registering anyone who calls our office because I feel that in this new world (Internet) the concept of 'marketing through piracy' and 'free pre-release' and 'shareware' versions are appropriate and rather effective. Samplitude has always been a very deep program with many

layers of functionality. An owners manual and the support of our Tech team is almost required to learn Samplitude's ocean of features and methods of working. For SEK'D, word of mouth is by far how most people discover Samplitude, and that is much more important to us than big hyped-up print ads. Access to trial and cracked versions, or a friend's version, will often create another Samplitude evangelist, spreading the good word about our products!"

But a more typical response from many software vendors is that without copy protection, not enough people would buy their products for them to stay in business. This is patently false, as evidenced by the strong advertising presence of PG Music and Cakewalk. The last time I checked, Microsoft was doing pretty well too. Further, I would argue that copy protection can even hurt sales. Surely there are many people like me who love the gorgeous screens and integrated audio and MIDI of Cubase and Logic Audio - but buy something else because of the dongle. In that case copy protection translates to *lost* sales!

Nonetheless, many companies - especially those entering the PC marketplace from the Mac world - defend vigorously their use of copy protection. Steinberg's (Cubase, Nuendo) position is typical, as stated clearly by Costa Kotselas: "Software piracy still is increasing, and we have to protect our sales in order to survive and finance new development. Depending on the product, we use serial numbers, uncopyable key disks, dongles, and CD protection. Sometimes even combinations of two. But we plan to strip down the protection to one scheme for all products to make it more customer friendly."

Sonic Foundry (Sound Forge) has used only serial numbers in the past, but its new Vegas Pro program uses more secure protection. According to Kirstin Beckman, "The software is fully functional but must be registered with Sonic Foundry within seven days of installation or it will time out. To register, a customer can call, e-mail, fax, or write in and request a key code to enter along with their registration number. We allow for multiple installs within reason because we understand that computers go down, or people upgrade and need to re-install their software.

TC Works also requires a phone call but extends the "trial" period to three weeks. After someone put a cracked copy of its Native Reverb on a web site, there were reportedly 30,000 downloads within three days. Says Ralf Schluenzen, "I would personally love to drop copy protection! But having just lived through the Native Reverb trauma, it doesn't seem to be an option." F.A. Preve from NemeSys concurs: "We are a small company that uses every dollar we receive to improve our products and create new technologies. Without legitimate customers, it would be impossible for us to continue to provide cutting-edge technology like GigaSampler."

The most candid and revealing comments came from Todd Souvignier, Marketing Director of Arboretum Systems (Hyperprism, Ray Gun): "We use a serial number only. Like most software companies in the pro audio space, we had lots of experience with copy protection, and we've tried both key disk authorization and dongles. The dongles in particular were a nightmare - they cost upwards of \$20 each and have lots of defectives. As we're about 75% Mac, when we learned that Apple was eliminating the floppy drive, we saw the writing on the wall, held our breath, and got rid of the key disks and dongles in one fell swoop last fall. Surprise! Our product sales actually increased. Not only that, our tech support calls were cut by two-thirds, and our cost of product manufacture was cut in half. So I'm a serial number-only believer. I *hate* challenge/response. Making the customer wait upwards of a day or more to run their new purchase is intolerable. Steinberg's 'show me the CD' scheme is just as bad; I had WaveLab time out on me when I was on the road demonstrating with my laptop...BOGUS!"

The Bottom Line

Personally, I believe the real problem is that much software is grossly overpriced. People want to do the right thing and will gladly pay for a program that meets their needs if they can afford it. When I first saw the DINR noise reduction plug-in on a friend's ProTools rig, I thought it would be great for cleaning up my old LPs and 45s. But I don't restore recordings for a living, and even \$400 for DART was more than I could justify. When I saw a magazine review of DCart selling for \$59, I called and ordered it on the spot.

Should all audio programs retail for \$59? Probably not. But in my opinion, many software companies fail to understand the very market they serve, and should seek a better balance between what they charge and how many copies they hope to sell. It is clear to me that, as computers and music hardware become cheaper by the week, the real growth is happening at the low end. I would much prefer to sell 70,000 copies of a program for \$99 than 1,000 copies for \$799, but it seems many companies are unable to understand this basic marketing concept. Moreover, the more a company charges for a product, the more irrational and protective they become. I know from my own success as a software company president that the key to making a lot of money is to sell a great product for a great price, and without alienating the very customers you depend on.

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