

## Software Piracy

When you buy software, be it a computer game or the newest Windows operating system that you know will not work when you install it, the assumption is that you now own that copy of the software and can do as you please. Unfortunately, that is not the case. You do not buy that copy of the program but you buy the *license* to use that program. That license gives you the right to use the program either on one computer that has many users or just to yourself as the user, which could mean that you have many computers on which to install the program. As a *licensed user*, you can make copies of the software as a backup for yourself, but you would cross the line if someone other than yourself (e.g. a friend) used the software that you own the license to on his computer. That includes copies such as the backup that you might have stored for emergencies. Any breach of the license is piracy and is therefore against the law.

*“Basically, the 1988 Data Protection and Copyright Act states that it is legal to copy data you own for your own use. It is also legal to sell copies, or 'backups' of data you own to other people that own the original too. End of story.” (Smith)*

Many forms of piracy are practiced around the world Microsoft (2003) lists them as such:

- End-user Copying: This is the basic copying of software for use by other people. It also includes casual swapping of software with friends.
- Counterfeiting: This is larger scale end-user copying. Sometimes linked to organised crime, the techniques used are so sophisticated that the people who unknowingly buy the pirated software cannot tell the difference.
- Hard-disk Loading: This is when unlicensed software is installed onto PCs before being sold. One copy of the software is illegally installed onto computers that are advertised as having pre-installed software.
- Mischannelling: There are many different types of licenses attached to software. Mischannelling occurs when one license is exploited by a user that does not qualify for that particular license. For example, an academic license being used by a small business.

- Fake Licensing: Counterfeit licenses that arrive with the software.
- Internet Piracy: Probably the most common form at the present time, using the Internet to distribute software that is licensed to only one user. It is comparable to wide-scale end-user copying.
- 'Grey Market' Software: This is software that originally was intended for distribution only within a certain area of the world, but is also available to buy in countries outside that area. The software is only licensed for sale in those countries, any sales outside of those countries would be considered as piracy.

There are some well-known cases of software piracy. One famous pirate computer game within the gaming community was the 'Black Belt Edition' of Street Fighter II that was available to play in the arcades at the same time that the genuine version was available. In this case the Black Belt Edition was known to be inferior so the experienced gamers did not play the game even though there were less people around that particular cabinet. The lack of people however did attract tourists to the unlicensed version.

Napster is the most famous case of piracy. It used Peer-to-Peer (P2P) file-sharing software to allow users to download music files from other computers that use the program to their own hard drive. The company eventually had to close down the Napster network after the band Metallica brought the case to court. Dr. Dre was also involved with the lawsuits.

The main reason for the lawsuits against Napster was the fact that for every copy made that was not bought in the shops, the people involved in the production of that record would not get the money that is owed to them for that particular 'sale'. Games companies were possibly the first to really feel its effects, and with games now being sold on compact discs (CDs) and Digital Versatile Players (DVDs), the opportunities to copy the games onto the blank discs widely available seem endless. Sega of America lost \$3.2 billion in 1998, US game publishers lost more than \$1.9 billion in 2001 (minus the losses in US,

Canada, and Western Europe, the main 3 territories besides Japan), the figure was \$3 billion in 2000.

Therefore, it would seem that the company loses out in the short term. However, in the long term, the consumers might lose out, as software houses, producers, would shut down due to losses.

However, entire economies lose billions to piracy, the US economy loses around \$3 billion a year due to computer and video game piracy. This number has slowly declined in recent years, reaching \$1.9 billion last year. The companies have taken steps over the years to ensure that only their products are used on their machines. The early tapes that could be used to copy 20+ games onto a tape for use on a Spectrum 48K or Commodore 64 using the hi-fi systems that were around in 1980's. So with the 5½-inch floppy disks that were the medium for the Amiga, protection came into play with the write protect tab, this meant that the discs could not be copied. However, because people managed to hack into the game and crack it, which meant that the protection on the cracked disk was not there, copies started to flow again. So did compressed discs, where many games were stored onto one disk for ease of loading. Consoles then started to appear, and Nintendo started the trend with their Nintendo Entertainment System (NES). The games came on cartridges, which were expensive to make and difficult to get hold of without any good reason, therefore the games were difficult to copy "too much hassle for not enough profit" (Smith). This trend continued to Sega's Mega Drive and Nintendo's Super Nintendo Entertainment System (SNES). Due to those companies (especially Nintendo) choosing not to release as many games in Europe than they did in Japan or America, importing games became more popular. With the use of universal adaptors, or converters, even with the different television systems used in the regions the game was imported from (NTSC compared to the PAL system used here) and the different sized cartridges depending on which area you were, the games would still play with no problems.

New problems arose when Sony brought out its PlayStation. As CD's are the same size all over the world, the only thing that needed to be bypassed was the region restrictions that were written onto the disc. This was easily combated with Mod chips. These can be soldered onto the motherboard to trick the console into believing that every CD put into it is from the correct region. Doing this also eliminated the

check for the authenticity of the CD, therefore copied games could be used in the console. Copied games were easy to come by using the CD-writers that were now commercially available.

In conclusion, the only ways to really reduce piracy is to either make it financially infeasible or encourage consumers to buy the licensed product. Nintendo used the first route when they brought out their NES and SNES. They turned down Sony's proposal of a CD based add-on to the SNES, and they seemed to have done the right thing as that add-on became the PlayStation. The cartridge trend continued to their N64, and now they have changed medium again to a mini CD for their GameCube. The mini CD is a new medium that is hard to produce to the right specifics and piracy will be less of an issue for the company.

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