

Hi,

I'd first like to thank you for soliciting comments from the public in regards to DRM.

DRM is such a broad topic, so I'll comment on it mainly in regards to PC gaming, as that is where it effects me the most.

DRM is touted as a solution to illegal distribution of copyrighted works (often improperly referred to as "piracy"), but it only ever truly effects end users. The "pirates" have access to non-DRM works and are not bothered with many of these problems related to DRM:

\* Incompatibility.

DRM often hampers a digital product from being used on multiple operating systems due to it's implementation being operating system specific.

\* Hampering of legal reselling

In regards to PC games, the last year's worth of DRM highlights what many believe to be the true purpose of DRM:

Killing second-hand sales. Activation-based DRM (example: Spore) either kills your game after X many installations or forces you to uninstall your game in order to reclaim an installation "token". This is silly and inconvenient.

If I buy a used copy of a game from eBay, Amazon or another popular online site (legally I might add) I have to worry now about how many installation tokens/counts are left.

Many game companies claim to work with customers to resolve these issues, but message boards are full of horror stories of dealing with their customer support. No surprise here, but this puts a chill on used game sales.

\* Insecurity

PC game DRM installs drivers into the core of your operating system and opens your computer up to either software or hardware damage. An example of hardware damage is the late StarForce DRM implementation that kills optical drives, followed by recent implementation of SecuROM that have been known to do the same.

Software damage is the insecurity that I refer to. By running as a driver the DRM implementation has the ability to "catch" commands from software and alter them as it sees fit. The explanation is that this approach is used to stop the user from copying the content. If the user's computer does not obey their commands then copying is made more difficult.

By running with such low level access, any flaws in the drivers can be exploited by malicious attackers.

\* Legal backups

If that wasn't enough, the concept of legal backups doesn't seem to be a thought at all to most of the game publishers.

In order to make a legal backup now, many users resort to downloading what is called a "NOCD" or "NODVD" exe. This is a copy of a file that has been altered to no longer require the original media to be in the system in order to use the product.

This is done so the original media can be protected from damage by frequent use. Gaming consoles (XBox360 is an example) are now taking this approach by allowing the customer to install the full product and place the disc in storage to protect it.

- \* Lack of disclaimers on the package

Until Q4 2008 it was very uncommon for "disc copying protection" or "Internet Activation Required" notices to be featured prominently on the game package. I've since noticed the labels on recent releases and have known to avoid purchasing them (I prefer to purchase, not rent what I am paying full price for). Unfortunately many people still don't understand exactly what this means.

Crysis:Warhead mentions that an activation is required, but the limited number of installs isn't mentioned.

My apologies for the somewhat incoherent nature of this commentary (writing in a hurry), but here is a summary of my concerns:

- \* DRM only inconveniences legitimate users (customers).

- \* DRM (recent implementations, especially activation required versions) results in a chilled secondhand market.

- \* DRM (that uses drivers) results in a lowering a systems security

- \* DRM that utilizes internet activation results in a product with a very limited lifespan. Companies go out of business and their activation servers will go with them. Not all will release a patch to disable this requirement.

Thank you for your time.