



DRM consultation response for FTC

If a company sold a chair, but it came with an End User License Agreement which stated that you could only sit in it on certain days, during certain times? If a bank tried to sell a repossessed house, but warned that if more than 3 people tried to live there at once, the bank would repossess it? This is the situation with digital rights management, or DRM. (needs a transition, and another sentence.)

DRM is an implementation of technology in the form of software, which is used in attempts by the proprietor to arbitrarily apply restrictions. In practice, DRM is used to restrict interoperability, and lock out viable, and legal uses, in the name of 'copy protection', and is widely, and frequently bypassed. Often, this has alienated and hurt consumers of DRM enabled products, and driven those who would have purchased the product legally to download it illegally.

Perhaps one of the most widespread uses of DRM is on DVDs. Discs are limited in one of two ways: The first of these is through the use of region codes, region-encoded discs, meaning that DVD players will only play discs whose region codes match their own. For example, I can't play a region 'four' disc (Mexico and South America) with my region 'one' (North America) DVD player. The rationale for this, is that it is costly to make thousands of copies for cinema use, so releases are staggered, with reels from the first countries being shipped to later countries in the list, with local language soundtracks (in some instances) accompanying it. In order to capitalize on the desire for the film, the film companies wish to retail the DVDs as quickly as possible after the film is in theaters in the region.

All told, there are six geographical regions, with additional region codes used for aircraft and "industry screeners". There is no doubt that these last two categories would be of benefit to the

consumer, but in neither case are the discs so encoded available for purchase, **but there is no technical reason why a DVD purchased in the UK or Australia should not work in the United States.**

The region coding also means that consumers are often deprived of content depending on their geographic location. Often, a Region 2 DVD will contain less special features than the DVD of the same film sold in the United States. This is attributed to 'extra language support' for the European Union, although this is typically not the whole reason. If it were, there would be no need for technical restrictions to undermine 'gray imports' or allow differential pricing; consumers would be allowed to purchase the DVD with the contents that they want, from wherever they want.

The other control method for DVDs is a *protocol* known as CSS, or *Content Scrambling System*. The intent of CSS is that only licensed players are able to play DVDs, and the scrambling method is such that attempts to make copies are not able to reproduce a playable disc. CSS is written and carried out in such a method as to control not only the consumer, but the *DVD player manufacturers* as well. This can cause problems when no licensed players are available, as often is the case with software DVD playback mechanisms, found in most consumer personal computers. CSS was largely unknown until Norwegian programmer Jon Lech Johansen posted a program on a GNU/Linux user group. The program, aptly titled "*DeCSS*", would allow people who used the free operating system, to playback retail DVDs. Despite owning equipment that was fully legally purchased, the fear of copyright infringement was such that it drove the manufacturers of the dvd's to leave the consumer with an unusable product. This drove the consumers to create a program that would make them criminals, for the simple reason of using the dvd's that they had purchased.

People who wished to play their legally purchased DVDs on their laptops were fine as long as they were running a proprietary operating system. A DVD drive and a compatible hardware accelerated video card were around the same price as a suitable standalone player, and in addition, offered sharper playback than was available through a standalone DVD player. Often, laptops were bundled with TV-out ports for linking to televisions from their respective video cards.

"I say to you that the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone," Jack Valenti said in 1982. The 97th Congress was hearing a case regarding the home recording of copyrighted works. Clearly, this shows that the legal head of film proprietors, the RIAA, is out to discourage fair use and inhibit technology. As such, the over protectiveness allows for, and adds to, the discrimination against future innovation.

This is one product, *suffers under* two separate forms of DRM which while it is invisible to many consumers, it of great frustration to a good number of others. Yet there are other items which

have contained DRM that have significantly disrupted other consumers, even when they have used them for the purpose they were purchased for. A prime example is the Sony BMG CD Copy protection problem of late 2005.

In this case, Sony had been selling audio discs (DRM is not part of the specification for Compact Discs, and discs so equipped are not permitted to display the CD logo) which contained DRM. This DRM installed software on computers on the insertion of the disc, without permission or notification of the user. These then sent usage information, via the Internet, to SonyBMG. The software was designed to enforce Sony's copyright, by restricting what the computer could do with the files. However, it also severely compromised the integrity of the computer; not only was the program more likely to cause a system crash, but it gave an easily exploitable opening for other malware.

The seriousness of this was not reflected in the cavalier attitude SonyBMG displayed, with statements like "Most people, I think, don't even know what a rootkit is, so why should they care about it?". This culminated in the FTC's decision of January 2007. Yet it is worthwhile noting that the only people affected by the DRM are those that had already purchased the discs. If someone wanted to infringe the copyright, it would be easy enough for them to obtain the tracks by other methods, and not be bothered by DRM at all. As such, it only punishes the legitimate consumer for purchasing, which is the implicit drawback of DRM.

The basic question of how DRM works for the consumer, can be summed up as 'not well'. With the internet, the majority of items which contain DRM are able to be transferred over the internet in one form or another. It requires only one person to circumvent DRM, and make it available over the internet, for DRM to be a non-issue for those it is intended to protect against.

DRM impacts only legitimate consumers and their purchases, and then only in a negative way. It prevents many fair uses, in the name of protecting against copyright violations. It significantly harms consumers in the name of profit maximising. In some cases, it has violated the legal rights of consumers, and it acts as an impediment to competition. This has the effect of creating monopolies, such as iTunes and the ipod. To the consumer, DRM can be considered as nothing other than 'defective by design'.

Outline Idea:

trinsic - 2009/02/02

I was thinking an outline would help us pull ideas about focus the approach, sometimes after trying to use examples, it can be difficult to implement them due to most peoples non-understand of technology and the comlex nature of certain DRM methods... If we follow an overview and write down our ideas about them, its much easier to focus our language and come up with something that can be understood by all.

FallingLeaf - 2009/02/02

Great Idea.

trinsic - 2009/02/05

Id like to suggest that we each add a description to a bullet point describing your understanding of and known facts about the topic of interest. once we cover a good portion of them, that are relevant to this paper, when can then start generating main topics for the draft.

FallingLeaf - 2009/02/05  
Sounds good

RedHeron (ray.jenson) - 2009/02/05

The question becomes, however, what is a "fact" and what is "popular myth" when talking about something which is not well-documented and which is questionable practice to begin with (particularly when so many companies have stated openly that they're dropping DRM). A classic example of this exists during the deCSS stuff, when people were claiming in the courtroom that CSS (the encryption schema for digital media) reported information back to the source, without actually consulting the code or people who had written it. It's difficult to actually know what we're dealing with, and the problem is that anything that is not 100% factual becomes an excuse to discredit. NOTE: I just wanted to say this looks really well done, folks... I'm still down for the count, but I'm actually glad to see this going forward and would like to help if I can.

trinsic - 2009/02/05

Good question. I think its important that we do focus on real world results. We make a claim, and then see if we can find examples of results. if cause and effect are their, then it really comes down to popular opinion. If I am correctly interpreting what you are saying... I think the point of this is to state what our party believes to be important about the ramifications of DRM based on what we understand about the technology.

Part of me thinks this whole exercise (FTC workshop) is a moot point since the market place is deciding what works. I think the only thing that needs to be addressed (from my standpoint) is the DRM systems that don't have enough visibility in the market place, but has enough of an impact to effect customer choice. That kind of behavior should be regulated... and then I think that regulation can be corrupted so mabey its a waste of time...

(not sure if this is relevant, but leaving it anyway)

The cause: RIAA believes that piracy is hurting their bottom line -or- RIAA is coming to the realization that they are losing control over what music is being played(which hurts their business model if they cant predict what is going to be popular) forces content providers to put restrictions on music to prevent piracy.

The Effect: Music piracy is not be slowed or stopped, but in fact is increasing. RIAA for what ever reason relaxes their requirements for restrictions on music. My guess is that its to cumbersome and customers of music deliver systems are complaining, which puts pressure on the RIAA.

## **\*\*\*START OUTLINE QUESTION AND RESPONSE FOR REVIEW\*\*\***

### **Proposed Topics for Discussion:**

#### ***Introduction and Overview:***

- **What is DRM?**

*DRM or Digital Rights Management is a form of control, allow publishers to exercise their rights over digital products.*

*DRM operates on the customers own computer technology (Storage Devices, Computers, Entertainment systems). The publisher is attempting to exercise their rights on technology that is strictly owned and operated by the owner of these products mostly without their consent. Due to the complicated nature of DRM it is difficult to make the customer aware of all the possible outcomes that could happen if the customer were to purchase a product that contains restrictions. For instance, when a customer purchases music from iTunes, there is a natural inclination to be able to transfer that music from the customers computer to other portable devices. Any time you put a system in place that restricts someones natural inclination, you alienate your customer base. For the most part, the nature of DRM reflects this. Secondly, the nature of computer technology is to share information, when you put restrictions on it that do not benefit the user of the technology you inhibit the natural functioning of the technology. The problem becomes compounded when you have competing DRM products interacting with the natural functioning of technology and each other.*

<http://arstechnica.com/apple/news/2009/02/norway-we-have-no-reason-to-pursue-apple-over-drm-anymore.ars>

- **What types of DRM systems have been and are being used?** (list as many as you can, the more the better as it will be easier to draw clear examples)

CSS

Sony Root kit

Software Activation Limits, based on single user systems.

- **In what contexts have they been and are they being used?**

DRM is being used by content holders to exercise greater control over the flow of digital media to the customer. It was used in music delivery systems such as Apples iTunes, but now that market is changing as customers are favoring restriction free music over DRM content. (Apples Fair Play DRM (Now discontinued) <http://arstechnica.com/apple/news/2009/02/norway-we-have-no-reason-to-pursue-apple-over-drm-anymore.ars>)

DRM is also being pushed to restrict customers from transferring video from entertainment systems such as HDTV and Media Centers. Sony Entertainment is asking the FTC to legislate the removal of analog outputs on these devices to force customers to use HD only outputs. HD outputs use technology that is secured from making fair use of content that is sent through these outputs. (<http://feeds.arstechnica.com/~r/arstechnica/index/~3/g-1bpclFYrk/sony-not-giving-up-on-selectable-output-control.ars>)

- **How do they work and what sorts of limitations do they impose?**

DRM works by restricting bits of information from flowing along a restriction free delivery system. A computer or any technological device is designed to share information across all of its systems. DRM works by limiting access to certain parts of that system to protect content providers bottom line. They also cause damage to the system DRM is imposed on if the DRM in question has a poor design spec, or is deliberately designed to cause havoc. ([http://news.cnet.com/FAQ-Sonys-rootkit-CDs/2100-1029\\_3-5946760.html](http://news.cnet.com/FAQ-Sonys-rootkit-CDs/2100-1029_3-5946760.html))

- **How are DRM systems and limitations being disclosed to consumers?**

From my experience as a customer of digital media, there is little or no disclosure of DRM technology imposed on these products. (Sources?)

- **What are the potential benefits to consumers and commerce from use of DRM systems?**

From our standpoint we cannot see any benefits to customers, DRM is designed to restrict choice, that is not a benefit. From our standpoint the Entertainment Industry needs to move on and come to terms with the idea that they are no longer in control as to how customers are using their products and work towards a business model that supports customer choice.

- **What are the potential burdens on consumers and commerce from use of DRM systems?**

In a recent request to the FTC, The MPAA wants to limit or control analog outputs on New TVs. This allows them to deliver HD content over secured outputs before its released on DVD. This new content will only be able to be watched on devices that conform to these specifications and will cause anyone that wants to watch this content to purchase brand new equipment that have these restrictions.

[http://www.youtube.com/watch?v=QOGB96Hz\\_Dk&eurl=http://www.publicknowledge.org/issues/soc](http://www.youtube.com/watch?v=QOGB96Hz_Dk&eurl=http://www.publicknowledge.org/issues/soc)

#### ***Legal Landscape of DRM:***

- **The Copyright Act and the Digital Millennium Copyright Act**
- **Copyright Office triennial rule making**
- **Impact of DRM on fair use and the first sale doctrine**
- **End User License Agreements / Terms and Conditions**
- **FTC Act – Section 5**

#### ***Consumer Information Issues:***

- **What do consumers generally know about DRM systems used in connection with the products and services they buy and use?**
- **What do they (and should they) expect about the use of DRM systems in connection with various products and services?**
- **What additional information would be helpful to consumers?**
- **How can information about DRM systems and use limitations be effectively communicated to consumers?**
- **What aspects of DRM appear subject to misunderstanding?**
- **What is the potential for consumer harm from such misunderstanding?**

#### ***Other Consumer Issues:***

- **Are DRM systems being used in contexts that consumers might not expect?**
- **What can be done, and by whom, to protect consumers or mitigate harm to them if content they purchase is protected by DRM systems that become archaic or obsolete?**
- **Are DRM systems being designed in a way that will require consumers to purchase the same content multiple times? Are consumers aware of this and how can they be made aware?**
- **What security and privacy issues are associated with the use of DRM systems?**
- **How might bad consumer experiences with DRM-limited content harm the marketplace?**

<http://feeds.arstechnica.com/~r/arstechnica/index/~3/g-1bpclFYrk/sony-not-giving-up-on-selectable-output-control.ars>

- **Can current practices be improved? Would attempts to improve them have unintended consequences?**

#### ***The Future of DRM:***

- **What are some current issues, controversies, situations, and trends involving DRM?**
- **In what contexts are DRM systems and limits likely to persist?**
- **In what contexts are they likely to perish?**

- **What are the trends in the marketplace that indicate consumer acceptance or rejection?**
- **Are DRM systems evolving in ways that can lead to more consumer choices and mitigate potential harms?**
- **What challenges face consumers and content (or other DRM-limited goods) vendors in the future?**
- **What steps can be taken to protect consumers and the marketplace?**
- **Are new laws or regulations needed to protect consumers?**