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Digital Rights Management DRM

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drm

technological protection measures (TPM), also called Digital Rights Management (DRM). DRM are technologies that enforce a restriction on the use of content.

"rights management"

"digital restrictions management"

"digital handcuffs

"It is law protecting software code protecting copyright" (Lessig, "Jail Time in the Digital Age").

Big Content wants DRM controls on music to work forever

We reject the view," he (Steven Metalitz, the Washington DC lawyer who represents the MPAA, RIAA, and other rightsholders before the Copyright Office) writes in a letter to the top legal advisor at the Copyright Office, "that copyright owners and their licensees are required to provide consumers with perpetual access to creative works. No other product or service providers are held to such lofty standards. No one expects computers or other electronics devices to work properly in perpetuity, and there is no reason that any particular mode of distributing copyrighted works should be required to do so."

FilmTrack makes it simple. (this is an example, not an endorsement)

Websites. Streaming services. Digital stores. Global currencies. Circular deductions. Financial waterfalls. Today's entertainment rights landscape is enough to make anyone's head spin. Thankfully, FilmTrack is here to help you make sense of it all in one simple interface with intuitive tools . You'll be able to maximize the performance of your library, process complex financials with ease, and enjoy industry leading business intelligence all with top notch security and robust APIs.

This is the way a rights management system is supposed to work.

Ugly but telling example in 2009 that brought DRM into the headlines

Orwell, Kindle, and Amazon

In a move that <u>angered customers</u> and generated waves of online pique, Amazon remotely deleted some digital editions of the books from the Kindle devices of readers who had bought them.

An Amazon spokesman, Drew Herdener, said in an e-mail message that the books were added to the Kindle store by a company that did not have rights to them, using a self-service function. "When we were notified of this by the rights holder, we removed the illegal copies from our systems and from customers' devices, and refunded customers," he said.

Amazon effectively acknowledged that the deletions were a bad idea. "We are changing our systems so that in the future we will not remove books from customers' devices in these circumstances," Mr. Herdener said.

License v. Sale (<u>for example, of software</u>): First Sale Doctrine doesn't apply

The 9th circuit reconciled a series of prior panel rulings deemed inconsistent by the lower court, and ruled that proposed resales of packaged software via an eBay auction were not protected by the copyright first sale doctrine because the initial transaction between the software developer and its transferee was a license, not a sale.

Who owns the copyright on a copy is also not always clear. the case of the software on a chip on a smartphone that I "purchase"

In her recommendations to the Librarian of Congress, the Register of Copyrights declined to resolve the question of ownership, stating that the law on ownership of computer programs is "in a state of flux," and "unclear" and that as a result, she was unable to determine whether owners of smartphones are also the owners of the copies of computer programs on the devices.

DRM Strikes Again: Ubisoft Makes Its Own Game Unplayable By Shutting Down DRM Server

Last month, Ubisoft decided to end online support for a bunch of older games, but in doing so also brought down the DRM servers for Might and Magic X - Legacy, meaning players couldn't access the game's single-player content or DLC.

As Eurogamer reports, fans were not happy, having to cobble together an unofficial workaround to be able to continue playing past a certain point in the single-player. But instead of Ubisoft taking the intervening weeks to release something official to fix this, or reversing their original move to shut down the game's DRM servers, they've decided to do something else.

They have simply removed the game for sale on Steam.

https://www.techdirt.com/articles/20210706/10382147121/drm-strikes-again-ubisoft-makes-own-game-unplayable-shutting-down-drm-server.shtml

- Wii U won't play games from other regions
 - Diehard fans of imported games had better be prepared to buy multiple international editions of the Wii U if they want to play every game available for the system worldwide. Following an off-handed mention in a translated report from Japanese gaming magazine Famitsu, Nintendo has now confirmed to CVG that its upcoming system will be region locked, meaning that Wii U games will only work on hardware sold in the same region.

Additional troublesome issues/instances: conflicting rulings/standards

- Court: breaking DRM for a "fair use" is legal
 - A federal appeals court has just ruled that breaking through a digital security system to access software doesn't trigger the "anti-circumvention" provisions of the Digital Millennium Copyright Act.
- Court rules copying your own DVD's is illegal
 - A federal court has found a DVD copying company's software violates U.S. copyright law. What is more, the court held copying DVD's (including ones you've purchased and legally own) is illegal.

Additional instances

- DRM in Cars Will Drive Consumers Crazy
 - Forget extra cup-holders or power windows: the new Renault Zoe comes with a "feature" that absolutely nobody wants. Instead of selling consumers a complete car that they can use, repair, and upgrade as they see fit, Renault has opted to lock purchasers into a rental contract with a battery manufacturer and enforce that contract with digital rights management (DRM) restrictions that can remotely prevent the battery from charging at all.

whose digital rights managed?

- the IP ownership rights of the legal rights owner
- the schemes don't (generally) protect the digital rights of users.
 - They could do so.
 - Big content holders say that the measures protect consumers from breaking the law without knowing it, and/or dissuade them from trying--as they might if doing so were easy.
 - In other words, protecting ourselves from, ourselves, and protecting content by making piracy more difficult.

strength of control/applied to what functions?

- Strong (end-to-end enforcement)
 - everything you have to the single allowed use. (dvd)
- moderate
 - only some aspects of the thing you have, to single uses (e.g., downloaded movies--free watching, no copying/transfer)
 - everything you have to multiple allowed uses (e.g., downloaded music)
- Weak (speedbump)
 - not everything you have and only in some uses (version file conversions; watermarks, music over home networks, etc.)

places/ways to exert control

- the physical layer
 - The file/cd/dvd will not engage with/in certain devices
 - During the "last mile" in a fiber system, a switch on the relay could control access to wireless service
 - log on technologies of many sorts that engage physical devices (card swipes and the like)
 - net neutrality restrictions enacted via monitoring and bandwidth adjustments
- the code layer
 - Encryption
 - proprietary platforms
 - Within the standards (Encrypted Media Extensions (EME))
- the content layer
 - "traditional" DRM speed bumps (notices, contract restrictions, etc.)
 - watermarks
 - flags

Acts vs. Tools

1201(a)(1) ACTS: no breaking access controls; 1201(a)(2) TOOLS: no selling tools to break access controls; 1201(b) TOOLS: no selling tools to break copy controls.

"No copying" . . . Is left out . . . In effect, protecting legal copying

Acts vs. Tools

a new type of works protections that have little or nothing to do with the traditionally protected rights of the copyright holder (David Nimmer). This creates a somewhat strange and paradoxical situation: one may be prohibited from defeating technical protection measures that protect access, but once access has lawfully been gained, whether or not further protection measures may be defeated is subject to evaluation of the traditional and technology-neutral existing exemptions within copyright law: "Nothing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title" (17 U.S.C. sec. 1201(c)(1)).

What Is DRM?

Sydney Butler, How-to Geek, 2/26/22

- **Media-Based DRM:** DRM can be baked directly into media in a way that is hard or impossible to copy.
- **Product Key DRM:** When you buy a product, you may get a card (or email) containing a product key (string of numbers/letters).
- Executable DRM: a file you run to start a program.
- Online Activation: the software has to "call home" in order to verify that it's a legal copy.
- Check-in Online DRM: a variant of online activation. Software that uses check-in DRM can only work online for set intervals of time before requiring activation again.
- Physical DRM Devices and Accessories: separate hardware device or other physical solution.

Triennial DMCA Rulemaking

- Is not a very efficient process
 - Parties (from companies, to industries and trade groups, to citizens) petition to have their "favorite-of-the-year instance/circumstance reviewed in hopes that exceptions will be made.
 - Maybe this is better than nothing: at least there is a regular review and SOME good has come from it.
 - Sometimes makes hardly ANY sense.

DRM (and the DMCA-based review processes, look silly In hassles over phones

• In the case of the cell phone unlocking, the 2012 rule actually cut back on a previously granted exception: in both 2006 and 2009 the Register of copyrights had permitted cell phone handset unlocking in order to switch carriers, but by 2012, she felt that opponents had demonstrated that market forces had produced many more alternatives to circumvention and the exception was no longer needed.

DRM looks silly In hassles over phones

• The 2012 rule only allowed unlocking for handsets sold within 90 days of the rule's issuance. A public uproar ensued and led to an online petition (at the White House website) that reached the qualifying threshold for administration attention. Legislation soon followed and in August, 2014, President Obama signed a bill restoring consumers' rights to unlock mobile handsets

 Not long after the failure to renew the exemption was fully in place. In January, 2013, a petition at whitehouse.gov zoomed past 100,000 signatures, thereby crossing the mandated thresholds for administration attention ("Make Unlocking"). Soon thereafter, the Obama administration called for a return of the exemption and by September, 2013, the Department of Commerce began examining mandating a return to the exemption (Mullin, March 4, 2013; Farivar, Sept. 17, 2013). None of this action appears closely related to the intent of Congress to use the DMCA's anti-circumvention language as a way to combat copyright infringement via piracy.

in this corner: Pro-drm

- if you don't lock it up, they'll steal it.
- user rights? we (the content owners) think users have way fewer rights than they think they do or than they actually do.
- Digital files can be protected (sort of)
- DRM is strongly supported by the DMCA and further extension of it is hotly pursued by big media AND big software.
 - loads of folks zero in here with the need for the lock down, ways to do it, and money to be made by doing it.
- Most large, corporate, holders of protected content, and many digital enterprises, advocate strong DRM.

in this corner: con DRM

- locking stuff up is often an excessive intrusion on user rights.
- Don't blame users for the lack of user law and don't limit their rights because of that void
- rootkit fiasco ... generally, drm doesn't work and often violates user rights
- neutral but true: No widely distributed DRM scheme has yet actually defeated determined users
 - DeCSS (and other such schemes) unlock them
 - DVD rip studio or others: the stuff is like mushrooms
 - Apple gave up
 - Even the feds are worried that DRM is often over done: FTC: We'll "come calling" about deceptive DRM
 - loads of folks are "agin it"
 - Creative commons
 - EFF < http://www.eff.org/issues/drm>
 - ALA

some of the battlegrounds

- downloaded music
- digital TV (digital everything)
 - pay for services restrictions
 - broadcast flag restrictions (still not fully implemented)
- interoperability restrictions
- implications of "total" cloud or subscription-provided computing (still lots of fights over how to provide wanted files... and/or storage space for "questionable" files)
- closing analog holes
- Status of cryptography research and information exchange (lots of pressure against even legitimate research and development... our spy guys want holes in the back door and that weakens the DRM and puts our companies at a disadvantage, globally.

DRM in HTML5

- <u>DRM in HTML5 is a victory for the open Web, not a defeat</u>
- Why the HTML5 Standard Fight Matters (EFF against it)
- HTML5 steps closer to baked-in DRM support
- Web Daddy Berners-Lee DRMs HTML5 into 2016
 - Support for "the playback of protected content"

And of course, there's the issue of device and endto-end encryption, backdoors, and law enforcement/intelligence.

- FBI can't get inside Texas church shooter's phone
 - The situation echoes the one the agency faced when Apple refused to unlock the iPhone of a San Bernardino shooter.
- FBI Director Wray Calls Encrypted Phones A "Huge Problem"

Right to Repair

- 14 States Are Now Considering 'Right to Repair' Legislation
- FTC Formally Embraces Right To Repair As Movement Goes Mainstream
- <u>U.S. Copyright Office Weighs in on the</u> <u>Right to Repair Digital Devices</u>