

Illegal Software

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Disclaimers

- I am not a law professor
(but I understand technology)
- This is political: I have opinions
- The lecture is US-centric,
though similar fights are playing out all over
the industrialized world

Poll: Do these mean anything to you?

- | | |
|--|----------------------------------|
| • Phil Zimmerman | • PGP |
| • Daniel Rung | • Grokster |
| • Chris Soghoian | • NWA Boarding Pass Generator |
| • Tim Jung,
Ross Combs,
and Rob Crittenden | • BnetD |
| • Jon Lech Johansen | • DeCSS |
| • Dmitry Sklyarov | • Advanced eBook Processor |
| • Static Control Components | • Toner Cartridges for Lexmark |
| • Matthew Crippen | • Xbox modding |
| • Other World Computing | • iDVD patch for external drives |
| • iPhone | • Jailbreaking |

Two Competing Views

- Programs are bits
 - In general, bits are information.
 - In particular, programs convey creative information to programmers, students, and others.
 - Information is protected by freedom of speech
Therefore, programs are protected speech
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- Computers are devices
 - Purpose of programs is to make computers work
 - In particular, programs can launch rockets, control the power grid, copy music, play movies, and forge documents
 - Devices can be regulated by the government
Therefore, programs are devices and can be regulated

Why the difference matters

Implications of the Creative Speech view

- Government has almost no ability to restrict programs
- No “prior restraint” on publication
- Programs are protected by copyright law
(Copyright ≈ automatically granted monopoly to copy for lifetime + 70 years, or 95 years if corporate author)

Implications of the Device view

- Government can regulate/ban programs just like it can regulate/ban nuclear weapons, guns, toasters, or toys
- Programs are protected by patent law
(Patent ≈ monopoly to distribute, but only if you disclose, prove novelty, and pay fees; lasts 20 years)

both!

DMCA anti-circumvention provision: 17 USC § 1201

- (a)(1)(A) No person shall circumvent a technological measure that effectively controls access to a [copyrighted] work
- ...
- (a)(2) No person shall manufacture, import, offer to the public, provide, or otherwise traffic in
- any technology, product, service, device, component, or part thereof, that –
- (A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a [copyrighted] work

U.S. Constitution, First Amendment

Congress shall make no law ... abridging the freedom of speech

“An item of some controversy ... is the extent to which CSS-encrypted DVDs can be copied even without DeCSS. The record leaves largely unclear how CSS protects against the copying of a DVD...”

Universal City v. Reimerdes
Opinion by Judge Newman
US Court of Appeals for the Second Circuit

(Only a judge who doesn't get the very basics of technology could have written this. Everyone understands that garbled text printed on a page can be copied letter-by-letter without being deciphered; the same applies to encrypted bits. CSS does not protect against copying—it cannot.)

“Current jailbreak techniques now in widespread use utilize unauthorized modifications to the copyrighted bootloader and OS, resulting in infringement of the copyrights in those programs.”

Comment of Apple, Inc.
In Opposition to EFF's Proposed Exemption
for Phone Jailbreaking
(note 1: the OS is available free on Apple web site)
(note 2: the copyright office granted
the exemption July 2010)

Some Interesting Links

- Chris Soghoian's boarding pass generator:
http://www.dubfire.net/boarding_pass/
- An example consumer software license (used to argue that bnetd should be shut down because of reverse engineering):
http://us.blizzard.com/en-us/company/legal/wow_eula.html
- Gallery of CSS Descramblers (arguing for code=speech)
<http://www.cs.cmu.edu/~dst/DeCSS/Gallery/>
- The story of Dmitry Sklyarov's arrest under DMCA:
http://news.zdnet.com/2100-9595_22-116424.html
- The story of Matthew Crippen's trial under DMCA
<http://www.wired.com/threatlevel/2010/12/crippen-dismissed/>
- Examples of DMCA's effects: <https://www.eff.org/files/eff-unintended-consequences-12-years.pdf>