Section 1201

Professor Grimmelmann Internet Law Fall 2007 Class 22

Where we are

• Part I: Public Law • Part II: Private Law Control over Computers Domain Names Copyright Innovation • Case Studies

In today's class

The DMCA *Streambox*: what section 1201 does *Remeirdes*: the geeks freak out

The history of the DMCA

• 1995: NII White Paper Ensuing legislation stalls in Congress • 1996: World Copyright Treaty • Signed by the U.S. in 1997 • 1998: Digital Milennium Copyright Act • § 1201 *et seq.*: anticircumvention § 512: intermediary liability

RealNetworks: one-time streams • iTunes: tethered downloads Rhapsody: all-you-can-eat subscription Fine-grained use controls Micropayments and "the cloud" Eliminates piracy Eliminates pesky personal and fair uses

The downside of DRM

- Eliminates pesky personal and fair uses Pervasive copyright surveillance Harder to archive stuff for history Price discrimination benefits producers by hurting consumers Many technologies must be crippled Anticompetitive platform
 - incompatibilities now protected by law

The heart of section 1201

Circumvention

Trafficking in circumvention tools

Access-control technological measures

Rights-protection technological measures

§ 1201(a)(1)	§ 1201(a)(2)
nada	§ 1201(b)

Definitions to watch out for

- The three-pronged test for trafficking is essentially the same for access-control and rights-protection
- But "circumvent" is defined differently in § 1201(a) and § 1201(b)
- "effectively controls" and "effectively protects" are also defined separately

Some small-change exceptions

- § 1201(c) contains a lot of jabber that various fair use, secondary liability, and free speech doctrines are unaffected
- Law enforcement gets a big wide exception in § 1201(e)
- Libraries, reverse engineers, encryption researchers, privacy protecters, and security testers get painfully narrow exceptions in §§ 1201(d), (f), (g), (i), (j)

RealNetworks, Inc. v. Streambox, Inc.









The role of the Secret Handshake



The role of the Secret Handshake





Streambox VCR



Streambox VCR



Streambox VCR



Streambox VCR



Streambox VCR

Just whose ox is being gored here?

- Why would consumers choose to use Streambox?
- Who, if anyone, could be sued for copyright infringement here?
 - Users? RealNetworks? Streambox?
- Why is RealNetworks willing to sue to protect the Copy Switch?
 - And what else, if anything, could it do?

Prototypical DMCA claims in action

• Why is there a violation of § 1201(a)(2)?

 Elements: trafficking, a technology, design/use/marketing, a technological measure, effective control of access, a protected work, and circumvention

Identify the sources of these elements

• Show how they're met

Lather, rinse, repeat with § 1201(b)

Streambox's failed defenses

• Why is there no § 1201(a)(1) claim here? How does Streambox appeal to Sony? • Why does the court reject the argument? • Does that lead to a good result here? • Does it always lead to a good result? Does Streambox have a point about the ineffectiveness of an "effective" measure?

The DeCSS cases

The Content Scramble System

- Digital Versatile Discs have a set of anticopy protections, including CSS
 - All DVDs are encrypted; each DVD player has the decryption key
 - The DVD Copy Control Association requires equipment makers to keep the key secret

Why CSS really bothers techies

It's hopelessly insecure, because every DVD player in existence has the key • This is a general problem for DRM • The DVDCCA monopoly creates frustrating restrictions Region-coding No Linux player (why not?) • And CSS doesn't even stop copying!



"DVD" Jon Lech Johansen (b. 1983)

Interlude: Highlights from the DeCSS Gallery

Use t4 for an index into Table Five: find a byte and store

it back in t4. Shift t3 right by three bits, take exclusive OR

of this with t3, shift this right by one bit, and take exclusive OR

#define m(i)(x[i]^s[i+84])<<</pre>

unsigned char x[5],y,s[2048];main(n){for(read(0,x,5);read(0,s,n=2048);write(1,s
,n))if(s[y=s[13]%8+20]/16%4==1){int i=m(1)17^256+m(0)8,k=m(2)0,j=m(4)17^m(3)9^k
2-k%8^8,a=0,c=26;for(s[y]-=16;--c;j=2)a=a*2^i&1,i=i/2^j&1<<24;for(j=127;++j<n
;c=c>y)c+=y=i^i/8^i>>4^i>>12,i=i>>8^y<<17,a^=a>>14,y=a^a*8^a<<6,a=a>>8^y<<9,k=s</pre>

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DeCSS is even set to music . . .

DeCSS is even set to music . . .

Our friends at 2600 join the cause



Eric Corley a/k/a Emmanuel Goldstein



• Of course DeCSS violates § 1201 • This court also rejects the fair use / *Sony* argument More interesting: the First Amendment Content-neutral or content-based? Or, put another way, is this a regulation of code as speech or code as functional capacity?

Liability for hyperlinking

• The test for DMCA liability for linking: • "Clear and convincing evidence" of: Knowledge that the linked site contains the offending material Knowledge that it's illegal • A purpose of disseminating it • Are you satisfied with this test?

Coda: The courts push back

Chamberlain and Lexmark both involve the platform monopoly aspect of DRM DRM lock excludes third-party garagedoor openers and printer cartridges But both courts find no DMCA violation Chamberlain: no infringement facilitation • Lexmark: no effective "access" control Common theme: no nexus with copyright

Next time The DMCA safe harbors