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Digital Locks, Real Freedoms: Technological Protection Measures in Bill C-32

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Digital Locks, Real Freedoms

Technological Protection Measures
in Bill C-32

Dr. Thomas Margoni

Bill C-32

1) **What it says**
(brief analysis)

2) **Why it says that**
(international obligations or US deference?)

3) **Could have said something different?**
(what international agreements require)

4) **Alternatives**
(Free Licences)

1. Some definitions

- TPM → Technological Protection Measures
- RMI → Rights Management Information
- DRM → Digital Rights Management
- TC → Trusted Computing

TPM

any effective technology, device or component that, in the ordinary course of its operation:

a) controls **access** to a work ...

or

b) restricts the doing of any act referred to in sec. 3, 15, 18, 19 (which means **to produce, reproduce, perform or publish any translation of the work**, etc. etc)

What is prohibited

“to circumvent access control TPMs (a), even if the work subject to the TPM is legally acquired.

Important difference between access control (access to the work itself) and copy control (copying the work)

Is circumvention of copy-control TPM legitimate?

Plain meaning of the bill suggests yes...

HOWEVER

Without access there is no technical
possibility of making a copy...

Circumvention

- a) to descramble a scrambled work or decrypt an encrypted work or to otherwise avoid, bypass, remove, deactivate or impair the technological protection measure, unless it is done with the authority of the copyright owner;
- b) to avoid, bypass, remove, deactivate or impair the technological protection measure.

Copy Control TPM (and access control TPM)

Prohibited:

distribution, marketing, manufacture, importation, offer for sale or rental, of devices, technologies or components, such as software, that can be used to circumvent TPMs [no distinction, so arguably a) + b)]

RMI

Information that:

(a) is attached to a copy of a work,

AND

(b) identifies or permits the **identification** of the work or its author, or concerns the terms or **conditions** of the work's use

RMI

what is prohibited

removal or alteration of rights management information, if the person doing such acts knows that the removal or alteration will facilitate or conceal any infringement of copyright, or adversely affect a copyright owner's right to remuneration

DRM

“Digital rights management (DRM) is a term for access/copy control technologies that can be used by hardware manufacturers, publishers, copyright holders and individuals to limit the usage of digital content and devices”

From: www.wikipedia.org

TC

“With Trusted Computing, the computer will consistently **behave in expected ways**, and those behaviors will be enforced by hardware and software”

“The main functionality of TC is to allow someone else to verify that **only authorized code runs on a system**. This authorization covers initial booting and kernel and may also cover applications and various scripts”

From: www.wikipedia.org

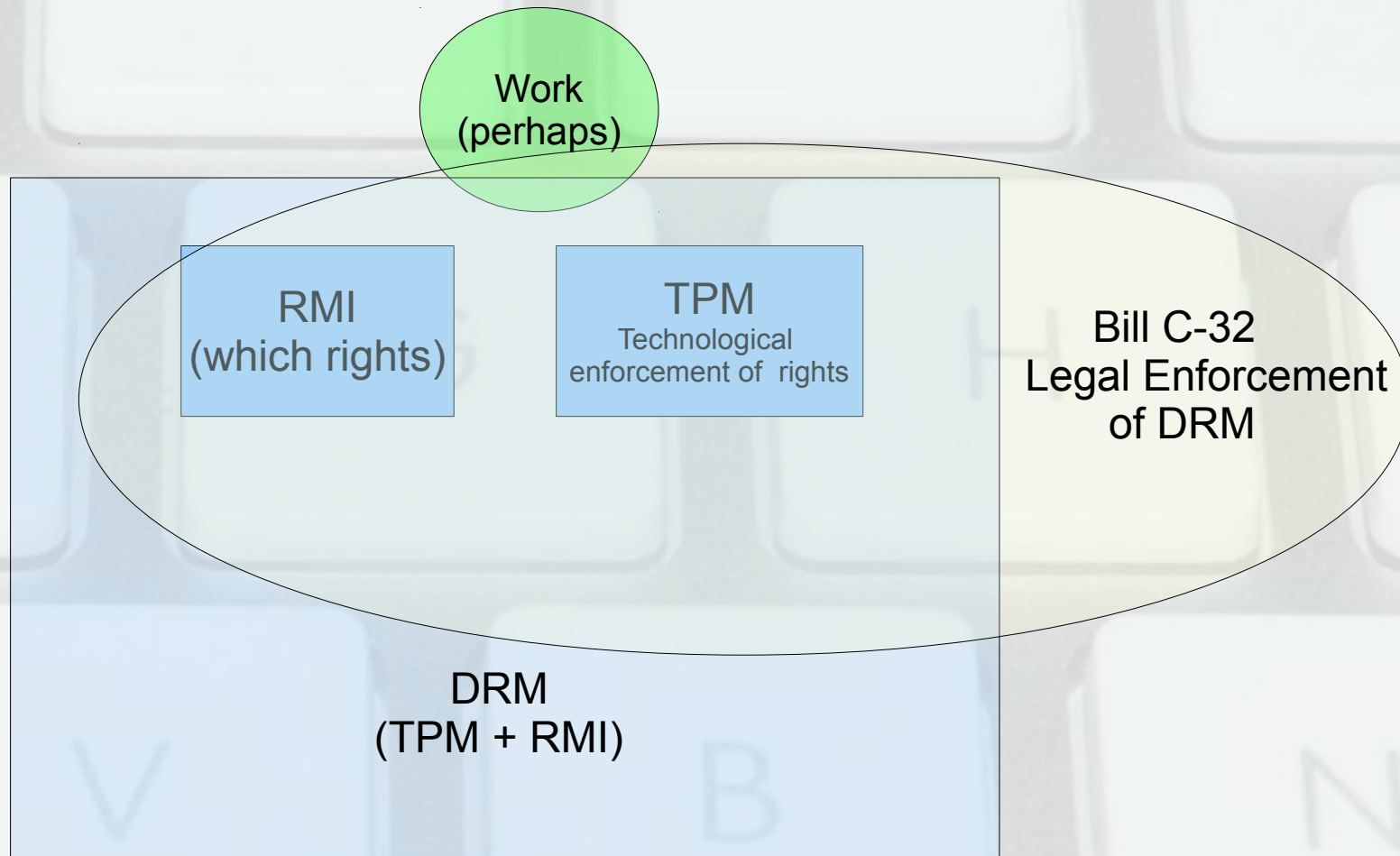
4 Concepts

{TPM, RMI, DRM, TC}

FOR

1 Scheme...

The control of information





General



Accessibility



Performance



Presentation



Identity

General Options



Appearance

- Show scrollbars
- Link the thumbnails with the page
- Show hints and info messages

Program Features

- Obey DRM limitations
- Reload document on file change
- Show backend selection dialog

View Options

The control of information

Work
(perhaps)

Trusted Computing (hardware enforcement of rights rules)

DRM
(TPM + RMI)

Why?

***One ring to rule them all,
One ring to find them,
One ring to bring them all
and in the darkness bind them***

Start thinking that I am paranoid?

Maybe... but before reaching a final judgment
have a look at this:

Stefik, M., *Shifting the possible: how digital property rights challenge us to rethink digital publishing*, Berkeley Technology Law Journal. **1997**; 12 (1): 137-159.
(BTW, Stefik was Principal Scientist at Xerox)

Privatization of Justice

Identification in the same person of:

- Creator of the rule
- Interpreter of the rule
- Enforcer of the rule
- Person who benefits from the rule

(modern legal theories, market and competitive economies, division of powers, check and balances, modern constitutionalism, enlightenment, Voltaire Montesquieu, participative democracy, etc. notwithstanding...

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(Fair dealing and Free Licences)

International Obligations

- World Intellectual Property Organization (WIPO) Copyright Treaty (WCT) 1996
- WIPO Performances and Phonograms Treaty (WPPT) 1996

WCT

Art. 11:

“... provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights ...”

WCT

Art. 12

“... provide adequate and effective legal remedies against any person [who] knowingly ... induce, enable, facilitate or conceal an infringement rights: (i) to remove or alter any electronic rights management information ... ; (ii) to distribute, import for distribution, broadcast or communicate to the public ... works or copies of works knowing that electronic rights management information has been removed or altered ...”

TPM

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or

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Why it says that?

Bill C-32 wording on TPM is only partially connected to international obligations

Let's have a look at some other legislation...
for example:

U.S. Digital Millennium Copyright Act, [Pub. L. 105-304, **1998**]

DMCA

- **Sec. 103 DMCA** (17 U.S.C. Sec. 1201(a)(1):
 - No person shall **circumvent** a technological measure that effectively **controls access** to a work protected under this title
 - (b) No person shall **manufacture, import, offer to the public, provide, or otherwise traffic** in any technology, product, service, device, component, or part thereof, that ... is primarily designed or produced for the purpose of circumventing protection afforded by a technological measure that **effectively protects a right of a copyright owner** ...

DMCA

- 1) Defines Access control and Copy control
TPM
- 2) Prohibits circumvention for access control
- 3) Prohibits production, manufacture and distribution of both access and copy control

So...

- Are Bill C-32 TPM provisions:
 - a) An international requirement?
 - OR
 - b) A USA requirement?

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WCT

- Does not require distinction of copy and access control (No Access right!)
- Does not require limitations to Fair Dealing/Use or other Exceptions or Limitations to Copyright (ELC)
- Does not require limitation to use, production, manufacturing, importation, etc of devices or technologies

Examples

- **Bill C-60** (fair dealing provision and no limitation on tools or devices)
- **AUSFTA 2004** (WCT-plus provisions? Mandate to include use of circumventing devices)
- **EUCD similar to DMCA but leaves to member states an open door...** (so many have limited to actual copyright infringement or only to copy-protection, denying any “access-right”)
- **Japan** (no access right and actual infringement)

ACTA?

- Anti Counterfeiting Trade Agreement
 - In consolidate text for public release 06 Oct. 2010, in footnote 14 (...):
 - technological measure means any technology, device, or component that, in the normal course of its operation, is designed to prevent or restrict acts, in respect of works ... Without prejudice to the scope of copyright or related rights contained in a Party`s law, technological measures shall be deemed effective where the use of protected works ... is controlled by authors ... through the application of a relevant access control or protection process, such as encryption or scrambling, or a copy control mechanism, which achieves the objective of protection.

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YES, of course!

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(Free Licences)

Personal Autonomy

- Creative Commons
- Free Libre Open Source Software

Some rights reserved... how?

- Ready to use (online form)
- Modularity (you choose the rights)
- User friendly (3 languages)

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- To use the program for any scope (freedom 0)
- To study the program, understand how it works, and adapt it to your needs (freedom 1)
- Distribute copies of the program (freedom 2)
- Improve the program and distribute the modifications (freedom 3)
- **Pre-requisite: The source code availability** (“the better form of the work in order to modify it, in a format which is publicly documented, without protection systems as password, etc”)

GPLv3 and TPM?

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

- No covered work shall be deemed part of **an effective technological measure under any applicable law fulfilling obligations under article 11** of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

GPLv3 and TPM?

- When you convey a covered work, you **waive any legal power to forbid circumvention of technological measures** to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

That's all
Thank you for your attention!

Questions?
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