

11-3-2010

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

Thomas P. Margoni

The University of Western Ontario, tmargoni@uwo.ca

Follow this and additional works at: <http://ir.lib.uwo.ca/lawpres>

 Part of the [Law Commons](#)

Citation of this paper:

Margoni, Thomas P., "Digital Locks, Real Freedoms: Technological Protection Measures in Bill C-32" (2010). *Law Presentations*. 3.
<http://ir.lib.uwo.ca/lawpres/3>

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

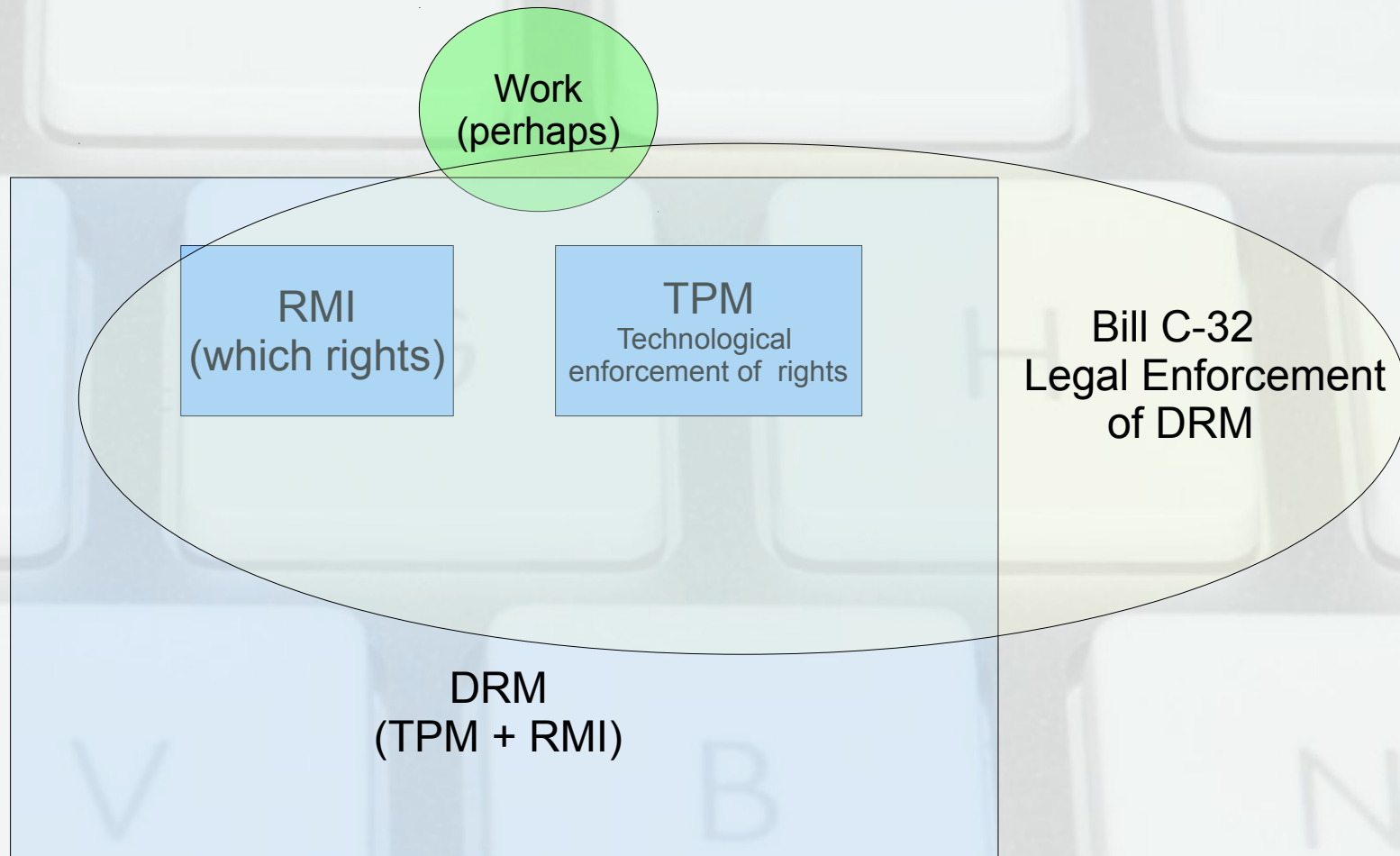
4 Concepts

{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...

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

(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

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.

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)]

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?

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

(Fair dealing and Free Licences)

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.

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

(Fair dealing and Free Licences)

YES, of course!

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)

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)

License Your Work

With a Creative Commons license, **you keep your copyright** but allow people to *copy and distribute your work* provided they *give you credit* — and only on the conditions you specify here. For those new to Creative Commons licensing, we've prepared [a list of things to think about](#). If you want to offer your work with no conditions or you want to certify a work as public domain, choose one of our [public domain tools](#).

Allow commercial uses of your work?

Yes [i](#)

No [i](#)

Allow modifications of your work?

Yes [i](#)

Yes, as long as others share alike [i](#)

No [i](#)

Jurisdiction of your licence [i](#)

International ▼

Additional Information

The additional fields are **optional**, but will be embedded in the HTML generated for your license. This allows users of your work to determine how to attribute it or where to go for more information about the work. [i](#)

Tell us the format of your work:

Other ▼

Jurisdiction

Use the option

"International" if you desire a license using language and terminology from international treaties. If the licenses have been ported to your jurisdiction and you feel that your jurisdiction's ported licenses account for some aspect of local legislation that the international licenses do not, then you may want to consider [which license is better suited for your needs](#).

Commercial Use

The licensor permits others to copy, distribute, display, and perform the work, including for commercial purposes.

Non-Commercial

The licensor permits others to copy, distribute, display, and perform the work for

Select a jurisdiction ▼

Go

[License your work](#)

[Find licensed works](#)

[Jobs](#)

[Events](#)

[Newsletter](#)

[Case Studies](#)

[Creative Commons](#)

[Press Room](#)



Attribution 3.0 Unported



CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS LICENSE DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE INFORMATION PROVIDED, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM ITS USE.

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. TO THE EXTENT THIS LICENSE MAY BE CONSIDERED TO BE A CONTRACT, THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

1. Definitions

- a. **"Adaptation"** means a work based upon the Work, or upon the Work and other pre-existing works, such as a translation, adaptation, derivative work, arrangement of music or other alterations of a literary or artistic work, or phonogram or performance and includes cinematographic adaptations or any other form in which the Work may be recast, transformed, or adapted including in any form recognizably derived from the original, except that a work that constitutes a Collection will not be considered an Adaptation for the purpose of this License. For the avoidance of doubt, where the Work is a musical work, performance or phonogram, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered an Adaptation for the purpose of this License.
- b. **"Collection"** means a collection of literary or artistic works, such as encyclopedias and anthologies, or performances, phonograms or broadcasts, or other works or subject matter other than works listed in Section 1(f) below, which, by reason of the selection and arrangement of their contents, constitute intellectual creations, in which the Work is included in its entirety in unmodified form along with one or more other contributions, each constituting separate and independent works in themselves, which together are

You are free:



to **Share** — to copy, distribute and transmit the work



to **Remix** — to adapt the work



Under the following conditions:



Attribution — You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).

With the understanding that:

Waiver — Any of the above conditions can be **waived** if you get permission from the copyright holder.

Public Domain — Where the work or any of its elements is in the **public domain** under applicable law, that status is in no way affected by the license.

Other Rights — In no way are any of the following rights affected by the license:

- Your fair dealing or **fair use** rights, or other applicable copyright exceptions and limitations;

Machine Code

```
<a rel="license"
href="http://creativecommons.org/licenses/by/3.0/">
  </a><br />This work is licensed under a
  <a rel="license"
href="http://creativecommons.org/licenses/by/3.0/">
  Creative Commons Attribution 3.0 Unported
  License</a>.
```

- use for commercial purposes
- modify, adapt, or build upon

Creative Commons is a nonprofit organization

Learn more — Support our work

Please note that search.creativecommons.org is **not a search engine**, but rather offers convenient access to search services provided by other independent organizations. CC has no control over the results that are returned. **Do not assume that the results displayed in this search portal are under a CC license.** You should always verify that the work is actually under a CC license by following the link. Since there is no registration to use a CC license, CC has no way to determine what has and hasn't been placed under the terms of a CC license. If you are in doubt you should contact the copyright holder directly, or try to contact the site where you found the content.

Creative Commons and TPM?

4.a) “When You Distribute or Publicly Perform the Work, You **may not impose any effective technological measures** on the Work that restrict the ability of a recipient of the Work from You to exercise the rights granted to that recipient under the terms of the License”

Free Open Source Software

- 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?
tmargoni@uwo.ca

© 2010 Thomas Margoni



This work is licensed under a Creative Commons Attribution – Share Alike
– Non commercial licence