



MASARYKOVA UNIVERZITA
PRÁVNICKÁ FAKULTA
ÚSTAV PRÁVA A TECHNOLOGIÍ

Software Protection

DRM & Law

MVV59K Software Law

Mgr. Matěj Myška

Tento projekt je spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky.



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

2 | Mgr. Matěj Myška



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3 | Outline



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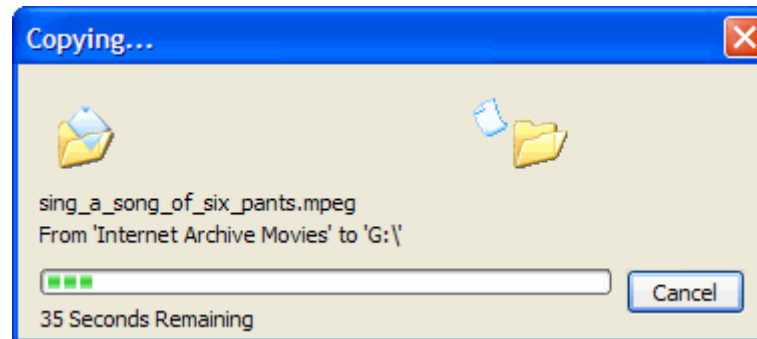
- DRM?
- Why DRM?
- Technology used
- Another layer of protection > Law
- DRM – defective by design?

4 | Why DRM?



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Dematerialization
+
Distributed communication
=
Disintermediation



5 | Protection “Strategies”



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- Lobbying
- Litigation
- Education
- Self-Help = DRM
 - “the answer to the machine is in the machine”

6 | DRM = TPM + RMI



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- TPM – technological protection measures
- RMI – rights managements information
- DRM – digital rights management

7 | Tech used



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- Access X Copy Control
- Online X Offline
- Examples:
 - Manual Checking
 - Dongles
 - Access Keys
 - Online Activation
 - Hardware Locking
 - Trusted Computing

8 | YE OLDE TIMES!



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GAME ORDERS ADVISORS WORLD CIVILOPEDIA

27,760,000
1872 AD
21020 0.73

French
Nuclear
Veteran
Moves: 8(8)
Chartres
(River)
(Irrigation)

Sevastopol

17
19
7



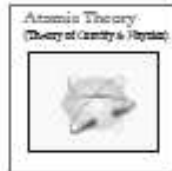
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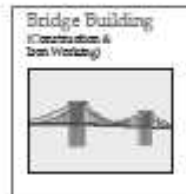
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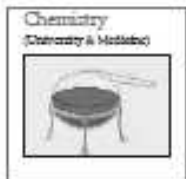
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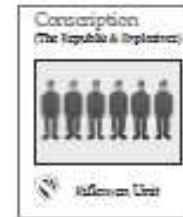
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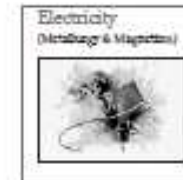
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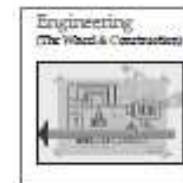
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10 | Tech used



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- Access X Copy Control
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- Examples:
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SecuROM™
get maximum control



11 | Thee Hackerz



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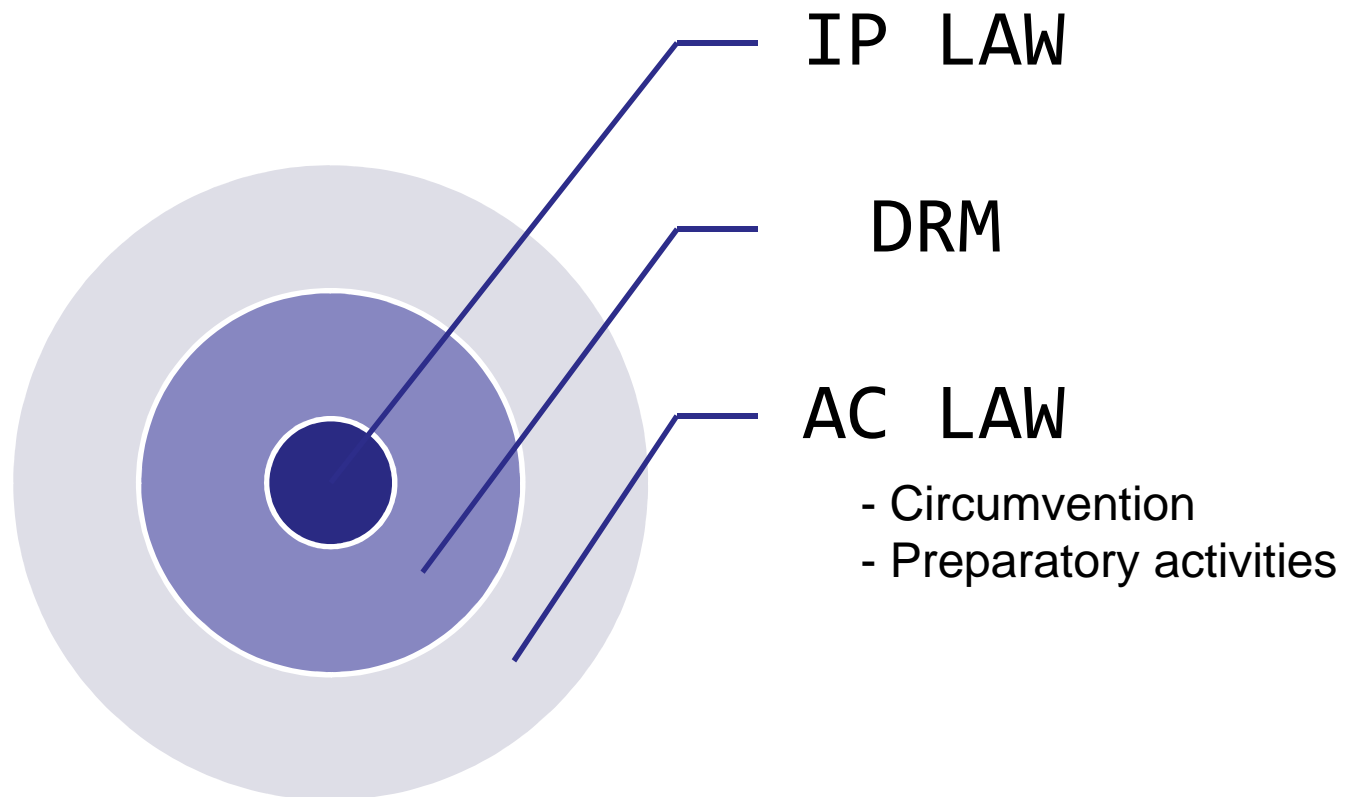


12 | Legal Protection



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- Another Layer of Protection





- WIPO Copyright Treaty (WCT)
 - Art. 11, 12
- WIPO Performances and Phonograms Treaty (WPPT)
 - Art. 18, 19
- Protection of TPM
- RMI protection

14 | Art. 11 WIPO



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- *„Contracting Parties shall 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 under this Treaty or the Berne Convention and that*
 - *restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.“*



- Digital Millennium Copyright Act
 - § 1201 - Circumvention of copyright protection systems
 - § 1202 - Integrity of copyright management information





- Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society
- Effective TPM protection
 - Art. 6(1) - Acts of circumvention
 - Art. 6(2) - Dealings in circumvention devices
 - Art. 6(3) - Definition - **effective**
 - Art. 6(4) - © exemptions measures
- Art. 7 Protection for RMI





- 1. Member States shall provide adequate legal protection against the circumvention of any effective technological measures, which the person concerned carries out in the knowledge, or with reasonable grounds to know, that he or she is pursuing that objective.



- 2. Member States shall provide adequate legal protection against the manufacture, import, distribution, sale, rental, advertisement for sale or rental, or possession for commercial purposes of devices, products or components or the provision of services which:
 - (a) are promoted, advertised or marketed for the purpose of circumvention of, or
 - (b) have only a limited commercially significant purpose or use other than to circumvent, or
 - (c) are primarily designed, produced, adapted or performed for the purpose of enabling or facilitating the circumvention of,any effective technological measures.



- 3. For the purposes of this Directive, the expression "technological measures" 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 or other subject-matter, which are not authorised by the rightholder of any copyright or any right related to copyright as provided for by law or the sui generis right (96/9/EC).
- Technological measures shall be deemed "**effective**" where the use of a protected work or other subject-matter is controlled by the rightholders through application of an access control or protection process, such as encryption, scrambling or other transformation of the work or other subject-matter or a copy control mechanism, which achieves the protection objective.



- Such a harmonised legal protection does not affect the specific provisions on protection provided for by Directive 91/250/EEC. In particular, it should not apply to the protection of technological measures used in connection with computer programs, which is exclusively addressed in that Directive. It should neither inhibit nor prevent the development or use of **any means of circumventing a technological measure** that is necessary to enable acts to be undertaken in accordance with the terms of **Article 5(3)** or **Article 6** of Directive 91/250/EEC. Articles 5 and 6 of that Directive exclusively determine exceptions to the exclusive rights applicable to computer programs. = STUDYING+DECOMPILATION



- Member States shall provide for appropriate remedies against a person committing any of the following acts:
 - (c) any act of putting into circulation, or the possession for commercial purposes of, any means the sole intended purpose of which is to facilitate the unauthorised removal or circumvention of any **technical device** which may have been applied to protect a computer program.

22 | EPIC FAIL



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- Fair use/private copy
- Privacy
- Lock-In
- Interoperability
- Disinformation of end users



23 | DRM Today



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Content/Medium	DRM	Status	Tools
HD DVD	AACS	Hacked	AnyDVD HD
Blu-ray Disc	AACS	Hacked	BackupBluRay
iTunes Music	FairPlay	Hacked	JHymn
PlaysForSure	Windows Media DRM	Hacked	FairUse4WM 1.3
TiVo	.tivo files	Hacked	TiVoDecode Manager
DVD movies	CSS	Hacked	AnyDVD
CD	unprotected	X	;)
MS Vista "Premium content"	Protected Media Path DRM	Compromised	Not yet

<http://poderigiacomo.netsons.org/blog/wp-content/uploads/drmstatus.png>



24 | Conclusion



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- Nice idea that did not work
- Cat-and-mouse game
- Copyright Overriding / Technoparacopyright?
- Legal protection from DRM?
- Software DRM protection as Software



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Thank you for your attention!

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