

Copyright And Digital Rights Management: Creator To Consumer In A Digital Age

Learning element 2.1

Digital Rights Management (DRM) Systems And The Law:

*How do DRM systems work and
how has copyright law responded?*



Bill Cope, Tom Davis and Mary Kalantzis

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www.C-2-CCourse.com

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This Learning Framework is published at RMIT University

First Published in Australia in 2003
by the Faculty of Education, Language
and Community Services
PO Box 71
RMIT University
Bundoora VIC 3083

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[Cataloguing-in-Publication and ISBN data]

Cover image: <http://www.secureattachment.com/img/key.jpg>

Contents

Framework map.....	6
Aims.....	7
Knowledge scope	7
Knowledge and capability aims	7
Important terminology.....	7
Learning processes	8
Learning activity: Online/Tutorial Issues	8
Recommended reading:.....	8
Sources	9
Assessment Task A option	14
Learning pathways	15
Transition from Learning Element 2.1	15
Pathway options	15

Framework map

Copyright And Digital Rights Management

	<i>Empirical And Experiential</i>	<i>Conceptual And Critical</i>	<i>Applied And Transferred</i>
<p>Theme 1: Copyright & Intellectual Property</p>	<p>1.1</p> <p>Existing Copyright Rules</p> <p><i>How has copyright traditionally been determined?</i></p>	<p>1.2</p> <p>Freedom v Protection</p> <p><i>What is the best way to encourage innovation?</i></p>	<p>1.3</p> <p>Copyright & The Publishing Industry</p> <p><i>How does the publishing industry deal with copyright issues?</i></p>
<p>Theme 2: Digital Rights Management</p>	<p>2.1</p> <p>Digital Rights Management (DRM) Systems & The Law</p> <p><i>How do DRM systems work and how has copyright law responded?</i></p>	<p>2.2</p> <p>DRM & Freedom</p> <p><i>How has technology change altered the freedom v protection debate?</i></p>	<p>2.3</p> <p>Industry Responsibilities Under DRM</p> <p><i>What copyright issues do businesses need to consider under a digital regime?</i></p>
<p>Theme 3: Copyright Commons</p>	<p>3.1</p> <p>Software & The Intellectual Commons</p> <p><i>What do we mean by the 'commons' and how have some software developers attempted to keep their work within it?</i></p>	<p>3.2</p> <p>Protecting The Commons</p> <p><i>What legal, commercial and political arguments have occurred over the copyright commons?</i></p>	<p>3.3</p> <p>Copyright Commons & The Publishing Industry</p> <p><i>How can businesses survive in a copyright commons?</i></p>

Aims

Knowledge scope

Digital Rights Management (DRM) Systems And The Law asks you to define what Digital Rights Management Systems are and to gain a basic knowledge of the concepts and technology on which they are built. It also identifies the current laws that guide the usage and application of these new systems. DRMS are based on the capacity of digital technologies to order a massive quantity of small units of information. This ‘granularisation’ means that, rather than copyright adhering to an entire work, different rights can be attached to different parts of that work. Not only does this reflect the fact that most publications, digital or otherwise, involve multiple players in their production, it also enables greater recognition of the fact that consumers in a digital environment have the capacity to select individual components of a work. This element explores the state-of-the-art thinking on this, and how the law, in Australia and internationally, is responding to these developments.

Knowledge and capability aims

By the completion of this Learning Element you will have the capacity to:

- ⊗ define and understand the basic concepts and technology underpinning Digital Rights Management Systems (DRMS);
- ⊗ define and understand the key changes to copyright and intellectual property law that have come about as a result of technological changes;
- ⊗ explore and engage with the extent to which rights can be attached to all ‘granules’ of information, and the extent to which consumers can be *unwilling* purchasers of such information; and
- ⊗ form a knowledge base from which you can then argue through the issues of privacy and intellectual freedom raised by DRMS.

Important terminology

The ‘Learning Framework’ is the overall educational endeavour of ‘*Copyright And Digital Rights Management*’. This is comprised of three ‘themes’, presented in the left-hand column of the Framework map. Each theme is divided into three learning ‘processes’, presented in the top row of the Framework map. Altogether this constitutes nine ‘elements’. The Learning Framework is also referred to as the ‘course’.

Learning processes

The primary learning process in this element is to discuss with fellow students the questions set out below. In your discussion you are to make reference to the readings listed underneath the questions. You should also seek out other material, starting from the list of weblinks provided.

You will notice that the information included along with the reference indicates the perspective of the reading, whether it tends to be:

Business,
Cultural studies or
Technology oriented.

In your discussions and learning activities you should take account of the different perspectives represented by the readings and acknowledge those in your responses. You may wish to concentrate on one approach over another, such as technological change taking place in the industry.

Learning activity: Online/Tutorial Issues

Engage in Online/Tutorial discussion in response to the following questions:

- 1) **What does “Mark-Up Language” do?**
- 2) **How can DRMS assist consumers (especially educational institutions) in managing their rights ‘purchasing’?**
- 3) **How can DRMS assist creators and producers in ensuring they maintain control over, and receive remuneration for, the rights they own in a work?**
- 4) **What liability do internet service providers (ISPs) incur for the copyright breaches of their clients?**
- 5) **What type of understanding of DRMS do the Australian Government’s changes to the Copyright Act exhibit?**
- 6) **How does the US Digital Millennium Copyright Act support companies such as Microsoft in controlling the right of access to information? Does Australian legislation mirror that of the US?**

Recommended reading:

The first three sources provide you with the building blocks for the knowledge required in this element; the later sources then pick up on more specific questions.

Sources

When viewing this online you can click on a learning source title to go to the reading. Each reading in the list is provided with a label titled ‘**Perspective**’. Use this as a guide in determining its relevance to the three categories: Business, Culture or Technology.

Title:	Digital Rights Management Systems (DRMS)
Author(s):	Laidler, Terry
Year:	2001
Book Title:	Digital Rights Management and Content Development
Editor:	Cope, Bill; Freeman, Robin
City:	Altona, Vic
Publisher:	Common Ground Publishing Pty Ltd
Pages:	31-57
Perspective:	Technology, Business
Keywords:	Copyright, Technological Change, Rights of Creators and Producers, Copyright Protection
Abstract:	Sets out the core elements of Digital Rights Management Systems and the possible ways they may begin to impact on traditional notions of copyright.

Title:	Ch 5, 'DRM Building Blocks: Protecting and Tracking Content' in Digital Rights Management: Business and Technology
Author(s):	Rosenblatt, William; Trippe, William; Mooney, Stephen
Year:	2002
City:	New York, NY
Publisher:	M&T Books
Perspective:	Business, Technology
Keywords:	Copyright, Digital Rights Management, Information Architecture, Mark-Up Language, Tagging, Encryption, Watermarks
Abstract:	"In this chapter ... we concentrate on the components of systems that use technology to control distribution - to enforce rights models. It turns out that most DRM solutions are variations on a common theme - a DRM reference architecture. In this chapter, we present a DRM reference architecture and examine each of its components. We also discuss the two most prevalent core technologies involved in DRM implementation: encryption and watermarking." (Rosenblatt et al 2002: 79)

Title:	Chapter 6: "Copyright, moral rights and rights in databases" from Cyberlaw: cases and materials on the internet, digital intellectual property and electronic commerce
Author(s):	Fitzgerald, Brian F.; Fitzgerald, Anne Maria
Year:	2002
City:	Chatswood, NSW
Publisher:	LexisNexis Butterworths
Perspective:	Business, Law
Keywords:	Internet (Computer network) Law and Legislation Australia, Intellectual Property. Electronic Commerce Law and Legislation Australia
Abstract:	Updated Australian case law and materials textbook on digital copyright. Examines Australian cases and legislation as well as international agreements and treaties.

Title:	Copyright in the Digital Age: A Comparative Survey
Author(s):	Lipton, Jacqueline
Year:	2001
Journal:	Rutgers Computer & Technology Law Journal
Volume:	27
Issue:	2
Pages:	333-370
Perspective:	Technology, Law
Keywords:	Copyright, Digital Rights Management, Corporatisation of Knowledge, Legal Responses, Public Policy, Comparative Analysis
Abstract:	[Author's abstract] "As a result of the development of the Internet and other electronic technologies, drafters of intellectual property laws the world over have been faced with some unprecedented challenges. Many of these relate to the appropriate content and scope of intellectual property protection for various works and bring into question fundamental policies underlying that protection. This article identifies and examines some of these challenges, with particular reference to the increasing commodification of valuable information under the guise of copyright law. It takes as its focus recent developments in the laws of the European Union, the United Kingdom and the United States."

Title:	Liability of Internet Service Providers for Copyright Infringement
Author(s):	Paynter, Hugh; Foreman, Ross
Year:	1998
Journal:	University of NSW Law Journal
Volume:	21
Issue:	2
Pages:	Online version. Article available at http://www.austlii.edu.au/au/journals/UNSWLJ/1998/58.html
Perspective:	Technology, Law
Keywords:	ISPs, Copyright, Comparative Analysis, Legal Response to Technology Change
Abstract:	[Authors' abstract] "This article considers the liability of Internet service providers (ISPs) and similar carriers for copyright infringement, and consists of three sections. First, Australian legal and policy developments are examined. Secondly, litigation and policy papers from the USA, EU and other overseas jurisdictions are discussed. Finally, a suggested approach to liability for copyright infringement on the Internet is proposed."

Web Sources

US Digital Millennium Copyright Act 1998

www.loc.gov/copyright/legislation/dmca.pdf

Australia. Copyright Amendment (Digital Agenda) Act 2000 Schedule 1—Amendment of the Copyright Act 1968

http://www.austlii.edu.au/au/legis/cth/num_act/caaa2000n1102000321/longtitle.html

Australia. Attorney-General's Department. 2000. Copyright Reform: Copyright Amendment (Digital Agenda) Act 2000.

[http://www.law.gov.au/www/rwpattach.nsf/viewasattachmentPersonal/6C4E02190C07F1D8CA256B880080621F/\\$file/Copyright%20Amendment%20Act%202000.pdf](http://www.law.gov.au/www/rwpattach.nsf/viewasattachmentPersonal/6C4E02190C07F1D8CA256B880080621F/$file/Copyright%20Amendment%20Act%202000.pdf)

Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society.

<http://www.patent.gov.uk/copy/notices/pdf/implement.pdf>

Open eBook Forum: www.openebook.org/aboutOEBF.htm

XrML: www.xrml.org

The Dublin Core Metadata Initiative: www.dublincore.org

The Open Digital Rights Language (ODRL): www.odrl.net

ContentGuard: www.contentguard.com/overview.asp

InterTrust Technologies: www.intertrust.com/main/index.html

DigiMarc: www.digimarc.com/

Alchemedia: www.alchemedia.com/

Assessment Task A option

You may wish to draw on the issues raised in this element, **Digital Rights Management (DRM) Systems And The Law**, for your Assessment Task A (worth 25% of your overall grade).

To complete Assessment Task A you must write a proposal (of approximately, but not exceeding, 1,500 words) for the larger work that will constitute Assessment Task B. In choosing the format of this proposal refer to the range of assessment formats provided in the Framework Level description of the course. If applicable, you can draw on experience from your own workplace to provide examples of how these issues impact on the education, communication and/or business sectors.

The aim of Task A is to:

- (i) help you begin to format the structure of Task B; and
- (ii) help you begin to build the content for Task B.

You also need to consider how you will later integrate the final work you produce for Task A into Task B.

Note: You are required to do only one Assessment Task A throughout the course.

Choosing issues from **Digital Rights Management (DRM) Systems And The Law** as the springboard for your Assessment Task A does not necessarily lock you into pursuing them for Task B. For example, on completion of this task, you may decide to pursue a different theme for Task B.

Even if you choose not to base your Assessment Task on the issues raised in this element, the knowledge and capabilities you have gained here can be fed into the topic you eventually use as the basis for your Assessment Task A.

Note: Assessment Task A must be submitted by the end of week four.

Learning pathways

Transition from Learning Element 1.1

Having completed the learning process of this element (with or without completing the Assessment Task A option), you must decide which element to undertake next.

Possible transitions from this element are presented below, however it is recommended that you work out your own pathway in consultation with your teacher.

Pathway options

By the completion of this element, **Digital Rights Management (DRM) Systems And The Law**, you should have improved primary research capabilities and an in-depth empirical knowledge of the issues in this element as analysed from the perspectives of Technology, Business and/or Culture.

You may now wish to build on this empirical knowledge by exploring the **Conceptual And Critical** element of this Theme, **DRM And Freedom**. Alternatively, you may wish to follow the **Empirical And Experiential** direction and pursue more practical issues regarding the relationship between this element and that entitled, **Software And The Intellectual Commons**. If you wish to tackle an **Applied And Transferred** element at this point, you need to bear in mind that it may pre-suppose you possess knowledge you may not have yet covered.

Example pathways

	<i>Empirical And Experiential</i>	<i>Conceptual And Critical</i>	<i>Applied And Transferred</i>
<i>Theme 1: Print</i>	1.1 Existing Copyright Rules	1.2 Freedom V Protection	1.3 Copyright & The Publishing Industry
<i>Theme 2: Etext</i>	2.1 Digital Rights Management (DRM) Systems & The Law	2.2 DRM & Freedom	2.3 Industry Responsibilities Under DRM
<i>Theme 3: Convergence</i>	3.1 Software & The Intellectual Commons	3.2 Protecting The Commons	3.3 Copyright Commons & The Publishing Industry

About this Learning Element

Digital Rights Management (DRM) Systems And The Law defines Digital Rights Management Systems and the concepts and technology on which they are built. It also identifies the current laws that guide the usage and application of these new systems. DRMS is based on the capacity of digital technologies to order a massive quantity of small units of information. This 'granularisation' means that, rather than copyright adhering to an entire work, different rights can be attached to different parts of that work. Not only does this reflect the fact that most publications, digital or otherwise, involve multiple players in their production, it also enables greater recognition of the fact that consumers in a digital environment have the capacity to select individual components of a work. This element explores the state-of-the-art thinking on this, and how the law, in Australia and internationally, is responding to these developments.

Keywords

Australian Copyright Amendment (Digital Agenda) Act
Authorship
Code
Copyright
Creator
Digital Intellectual Property
Digital Object Identifiers
Granularisation
Internet Publication
Meta-Data Tagging
Open Source Code
Ownership
Publisher Rights
US Digital Millennium Copyright Act
World Intellectual Property Organisation (WIPO) Copyright Act