



# Computers and Media: Censorship and Legal Issues

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CSCI 1200  
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# Internet Censorship

# Goals

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By the end of today's lecture, you will:

- Be able to discuss the impacts of censorship on the Internet

Censorship:  
blocking or denying  
access to information,  
modifying or even  
falsifying media

# Censorship

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Censorship is an important topic for media professionals and people who study media

Two forms of censorship that are of interest to us:

- Active
- Passive or systemic

# Active Censorship

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**Active censorship** is when a censor examines media to determine what is acceptable, or modifies the content of media

This is what we normally think of as censorship in North America, someone is actively modifying the media

Could also be **self censorship**, when the media producers know that particular things won't be acceptable so they don't bother with them

Where is Active  
Censorship Used in  
Canada? Self  
Censorship?

# Passive Censorship

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**Passive** or **systemic** censorship can be harder to detect, but can be more dangerous

No official censor, information is blocked through *the nature of the system* or the actions of a group

Example: North Americans have few direct sources of information on Middle East, TV stations from that region are not available on cable or satellite TV



# Passive Censorship

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Recently Al Jazeera and TV stations from mainland China were added to cable offerings

The CRTC (Canadian Radio-television and Telecommunication Commission) must approve these offerings, and several groups protested about the addition of these channels, attempted to block them

Quite often *economics* is given as the reason, not enough people are interested so not worth adding

# Active vs. Passive Censorship

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Passive censorship can be worse than active:

- Active censorship: usually you know that is happening
- Passive: you don't know that you are missing out on something

The Internet has had an impact on both forms of censorship

# Active Censorship Online

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This is relatively easy to do on the Internet

The easiest way is to directly block a website, for example CNN

The CNN website is well known and easy to find, so its an easy target for governments that don't like its coverage

Technically this is **very easy** in many countries

Can also block links or parts of a website, but this is harder to do

# Recent Examples

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Most Google services blocked in China during the renewal of the government

Facebook blocked in Syria

# China Blocks Virtually All Of Google's Web Services As 18th Party Congress Gets Underway

Comment 32

Like 862

Blocked by

Share 187



FREDERIC LARDINOIS ✓

Friday, November 9th, 2012

32 Comments



According to **multiple reports**, China recently started blocking numerous Google services, including Gmail, Google Maps and others that usually pass through the country's so-called Great Firewall. Google's **Transparency Report** shows a significant drop in traffic from China that started around 12:30am GMT last night. According to a statement from Google, the company has checked and "there's nothing wrong on our end."

It's common for China to sporadically block some of Google's services. **According to watchdog site Greatfire.org**, today's

disruption is affecting more users than ever, as the Firewall now also stops traffic to Gmail, a move that is relatively unusual.

This time around, most observers assume that the reason for the disruption is the Chinese Communist Party's **18th Party Congress**, which began on November 8.

<http://techcrunch.com/2012/11/09/china-blocks-virtually-all-of-googles-web-services-as-18th-party-congress-gets-underway/>

What sorts of  
websites are blocked  
in Canada?

# Canadian Elections

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As election results arrive in Canada at different times across the country, they are not allowed to be posted online

- Early posting could influence the voting in other jurisdictions

This has been challenged by news organizations and Twitter users



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# Twitter, Internet undermine Canada election rules

Tue Nov 10, 2009 3:58pm EST

Print This Article | Single Page

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By David Ljunggren

OTTAWA (Reuters) - Twitter 1, Elections Canada 0.

In this era of smartphones and the Internet, the federal elections agency is struggling to enforce a rule that bans the general broadcasting of voting results until all the polls have closed.

As Canadians in four electoral districts spread right across the giant country cast ballots on Monday to fill vacant seats in the House of Commons, Elections Canada asked a newspaper to remove from its website a story revealing initial results from one constituency where voting had ended early.

The agency did not notice reporters had been discussing the same by-election results on the microblogging network Twitter, which is accessible across Canada.

One journalist even sent a Twitter message saying "Oh dear. Have just realized I may have been violating law because of my poor understanding of Twitter". Elections Canada did nothing.

<http://ca.reuters.com/article/domesticNews/idCATRE5A94XM20091110>



# CBCNews.ca closes comments for poll blackout

Elections act limits online comments, social media

CBC News Posted: May 2, 2011 3:07 AM ET | Last Updated: May 2, 2011 8:51 PM ET 164



Canadians are being reminded to comply with Elections Canada's broadcasting ban, preventing premature elections results from being distributed even over social media sites. (CBC)

CBCNews.ca is closing comments on all stories for several hours Monday to comply with an elections law that forbids any instance of "premature transmission of results" until the last polls have closed in every electoral district in the country.

## Related Links

■ FULL COVERAGE:

## Stay Connected with CBC News



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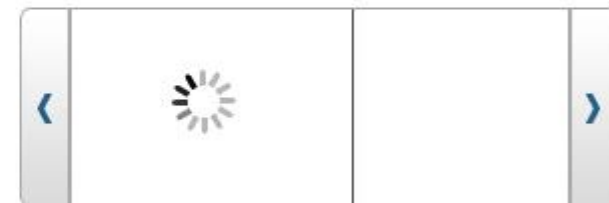
Alerts



Newsletter

Watch Listen

## Canada Votes



## Federal Election Results

Updated: May 3, 2011, 3:40 AM EDT

Party	Elected	Leading	Total	Vote Share (%)
CON	167	0	167	39.62
NDP	102	0	102	30.62
LIB	34	0	34	18.91
BQ	4	0	4	6.05
GRN	1	0	1	3.91

<http://www.cbc.ca/news/politics/canadavotes2011/story/2011/05/02/cv-election-blackout.html>

# Activity: Websites blocked in ... ?

- Try searching for active censorship examples online
  - E.g. search for “YouTube blocked in” and see which countries appear
- Are your favourite sites blocked in parts of the world?

# Active Censorship: Business

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Some websites and Internet services cut deals with governments in order to get access to their countries

They will volunteer to block some content from being sent to certain countries, or record the requests that come from these countries

Google has been known to do this (but has recently reversed it's policy)

Skype allows Chinese government to monitor calls

# Google Transparency Reports

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Google posts its own *transparency report* which lists censorship requests and how Google handled them

Explore the Google reports here:

<http://www.google.com/transparencyreport/>



## Canada

We received a request from the [Passport Canada office](#) to remove a YouTube video of a Canadian citizen urinating on his passport and flushing it down the toilet. We did not comply with this request.

# Active Censorship

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Over the past decade many countries have become more knowledgeable in communications technology

They are much more aware of the possibilities and have learned how to block and monitor different media

**Peer to peer systems** provide a way of getting around this, much harder to block

# Active Censorship: Peer to Peer

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CNN is easy to block, just need to block one website, one location

With a peer to peer model, many peers could be a source of information, and the set can change over time

Now need to block a moving target

Need to find all the peers that are sending the information, and need to continuously update the list

# Active Censorship: Peer to Peer

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Peer to peer networks are more robust, if one peer has problems, others can take over

Peer to peer can also add privacy, particularly in the case of email

If you don't want authorities to read your email, send it over a peer to peer network, peer outside of the country can then send the email for you, another peer can then forward the responses back to you

# Active Censorship: Email

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There are services that allow you to send anonymous emails

- Search “disposable email” online to find some services

They are designed to protect people who have politically sensitive things to say, support freedom of expression

They can also be used for other purposes, such as criminal activities, or to slander or libel people without fear of retaliation, these are less honourable applications



# Methods for Evading Censorship

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## Use of *proxy servers*

- User accesses a non-censored system (**the proxy**) which forwards their web requests to the censored site
- Censored content is passed back through the proxy to the user
- Appears to the censor that users are just accessing the proxy – actual content is not known

Using `https://` (secure http) to enable encrypted access to web services

# Systemic Censorship

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There are many sources of systemic censorship:

- Technology, or the lack of technology
- Economics
- Social structure or pressure
- Regulation

Systemic censorship can marginalize parts of society, give a biased view of the world and our beliefs

# Systemic Censorship

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Note: Canada is a leader in multicultural media, it is much worse elsewhere

Due to economics the main stream media addresses the largest group, works towards the center where it will get the most viewers

Economics not in favour of smaller groups, not enough advertising revenue

# Systemic Censorship

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Without access to the media these groups don't have the ability to tell their story, their view of current events

This has the same impact as active censorship, the stories aren't told

Yet, the mainstream doesn't see this as censorship, this is why it is dangerous

Lack of access to the media and technology place some social groups at a disadvantage

# Systemic Censorship

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Regulatory bodies, like the CRTC can also have an impact

They control the TV channels that we can view, the ones that can appear on cable and satellite TV

This can be an economic decision, but it can also be a social or cultural decision

# Systemic Censorship

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The Internet can remove some of this censorship, since it lowers the barrier to participation (“democratization of media”)

A TV station is expensive and controlled by the CRTC, but a website or streaming video is quite cheap and not regulated

This gives smaller groups access to media that they wouldn't have before the Internet

# Social Media

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Social networking sites provide a way to form groups around social and cultural issues

Social media played an influential role in many recent world events

- Large number of users makes it difficult to police
- People can create anonymous accounts

Facebook/Twitter

- the Arab Spring revolutions (especially Egypt)
- the *occupy* movement in the USA and Canada

# Systemic Censorship

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The biggest issue now is access to technology

In Canada most people have access to the Internet, and for many that don't this is a matter of choice, not economics

But, there is still a portion of the population without access to the Internet

This has been called the [Digital Divide](#)



# Systemic Censorship

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Canada has one of the highest Internet participation rates in the world, but what about other countries?

Political barriers are hard for us to deal with, but economic ones can be tackled

There are several organizations developing low cost technologies for the 3<sup>rd</sup> world, for example \$100 laptops

# Systemic Censorship

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Some of this technology may not be state of the art, but it can increase the participation rate in many 3<sup>rd</sup> world and developing countries

Ability to have a voice and preserve their culture

We must be careful, use digital technology to promote other cultures and ideas and not destroy them

# Summary

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There are two types of censorship:

- Active and passive (systemic)

Both are present online, though active is easier to enforce

# Legal and Ethical Issues ( 1 )

# Goals

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- Reasons why the internet makes copyright law difficult to enforce
- Define intellectual property and list some examples of your personal intellectual property
- Present ownership
- Define digital watermarks and digital rights management

# International Law

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# International Law

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There are some laws that cross countries, but these laws are part of **international treaties** that usually involve a limited number of countries

There is international law and there is an international court

Tend to deal with issues like war crimes, natural resources, location of borders and occasionally commercial disputes

# International Law

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Cases at the international court tend to be long and expensive, they are not something an individual would be involved in

Usually its a country, political group or multi-national company

Until recently international disputes have been rare, so this structure has worked quite well



What does the  
Internet introduce to  
this picture?

# International Law: the Internet

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The Internet has changed all of this, since it does not recognize national boundaries

This greatly complicates law enforcement and legal procedures

Example: a person in Europe uploads a Hollywood movie to a website in Asia

This is a violation of US copyright law and it involves a US company, which would obviously like to use the US court system

# Extradition and Jurisdiction

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But, the person who copied the movie is in Europe, *how do we get them into a US court?*

Why would they come to the US? Extradition based on copyright would be very difficult.

But, even if they come to the US, they can make the argument that the crime didn't occur in the US so the US court has no jurisdiction over them!

# Where did the Crime Occur?

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European copyright law is similar to the US, so the US company will claim it occurred in Europe

But, the movie is really on a server in Asia, so isn't that the crime location?

The US company would probably want the file removed from the server, but how do they convince the Asian company to do this?

# Need for International Law

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Copyright law in Asia is usually weaker than North America or Europe, so the US company doesn't want to use an Asian court

But, will an Asian police force or court enforce a judgement from a European or US court?

Not likely, so we have a real problem, the parties are spread all over the world

This suggests a need for [international laws](#)

# Timeline Issues

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The US company could have the case heard in international court, but this is expensive and could take many years

The US company wants the movie removed from the website now, not 5 years from now

In 5 years it won't matter if the movie is on a website, its commercial life is over, there is no money to be made

We extradite for  
murder.

We do not extradite  
for media offenses.



What about child  
pornography?  
Is it a media offense?

Jurisdictional  
arguments shouldn't  
matter in some cases.

# Legal Variance

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Different countries have different laws, what is legal in one country may not be legal in another

Example: a website in country X has content that is legal in country X, and is intended for viewing in country X

Someone in country Y, where the content is illegal, finds the website and complains to the authorities

Now country Y wants to shut down the website in country X

# Censorship and Politics

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How do we handle this?

The website in country X could be about the country's history and isn't very flattering to country Y

Why would anyone in country X be interested in shutting down this website, it could be a matter of national pride for both countries, which could lead to an international incident

# Capitalism Strikes Again!

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More likely the website is selling something that is legal/inexpensive in country X that is illegal/expensive in country Y

Example: X=Canada, Y=US and the product is prescription drugs, which are cheaper in Canada

US companies might want to shut the site down for shipping to customers in the US

But, why should the Canadian site do this?

# Finding a Resolution is Difficult

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This is a difficult issue and it is far from resolved

In major cases countries have worked together, but this is rare

In the case of copyright there are international laws, but they are not recognized by all countries

Developing international laws is quite difficult, but it might be the only solution to these problems

# Volume Challenges

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International crimes are not new, and we have built a legal system for them: treaties, extradition, and an International Court

But, before the Internet the volume was quite low and the system could handle it

Serious crimes: war crimes, child pornography, bank fraud, etc.



INTERNATIONAL COURT  
OF JUSTICE



<http://www.icj-cij.org/>

# Where to Try the Case?

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The Internet has greatly increased the volume of these crimes, in particular minor crimes

The international legal system is not set up to handle this, which produces the problems

A good analysis:

<http://www.seomoz.org/blog/international-copyright-on-the-web-what-rules-apply-to-me-and-what-court-will-apply-them->



# Media Law and the Internet

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Some people have argued that the Internet has resulted in a new type of international crime

This is not the case, it has just made it easier and faster so more people are doing it, and there are many more victims

In some cases people and companies are not aware of international law, so they don't know how to correctly handle the cases, and this results in problems

# What is Intellectual Property?

# Intellectual Property

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Copyright and patent laws address what we call intellectual property (IP)

Real property is something tangible, you can touch it and manipulate it

Examples of this include real estate, cars, furniture, buildings, etc

Laws for real property are quite old, in some societies they date back thousands of years, this is not the case with IP

# Intellectual Property

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The first copyright laws appeared around 1500, at that time they were mainly a king giving a particular right to one of his subjects

They were not very common and they did not protect everyone, just the king's favourites

# Intellectual Property

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The party protected by copyright laws has changed over the years

Early copyright laws **protected the editor or the publisher of the work,** and not the author

The belief at the time was that the editor or publisher did all the work, the author didn't do any work!

# Intellectual Property

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This slowly changed and by the 1900s it was pretty much universally agreed **that the author held the initial copyright**

The author was free to sell this copyright to another party, but when the work was just completed the author was the copyright holder

# Intellectual Property

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A copyright document should be marked with the copyright symbol, ©, the year of copyright, and the copyright holder

A copy of the document should also be sent to the *national library* in case a claim needs to be settled, proof of date and authorship

Recently there has been some motion back to **corporate ownership of copyright**, this has mainly occurred in the US and has been pushed by major Entertainment companies

# Term of Copyright Increasing

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The length of a copyright has also changed over the years

The formula that is normally used is:

- Length = lifetime of author + some number of years

Initially the second term was relatively small, around 30 years

It is now around 70 to 90 years and there is a push to make it unlimited



# Copyright Protects Expression of Ideas

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After the copyright is over the work goes into the public domain and anyone is free to copy it

What exactly is protected by a copyright?

It is the expression of an idea, but not the idea itself

In the case of a book it is the words, sentences and paragraphs that make up the book and not the idea behind the story

# Derivative Work

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Anyone is free to write another story with the same basic idea

Recently derivative work have been added to copyright, again pushed by the Entertainment industry

A **derivative work** is one that is based on a previously copyright work

Example: writing a book that has the same characters and theme as another book

# Derivative Work

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If you write a Harry Potter book that is considered to be a derivative work

Not all countries recognize protection for derivative work, this is still a controversial issue

What do you do if you want people to be able to freely copy your work?

The initial thought is to not copyright the material, but this is wrong

# Don't Release your Copyright!

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If you don't copyright your work someone else can do it, this is not ethical, but in many places its viewed as legal

You should copyright the work and then let anyone copy it

Copyright shows ownership of the work, as the owner you are free to do whatever you want with it

If you want other people to copy it for free, that is perfectly okay

# Licensing and Use

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You can license your work for people to use

You can even do this for free, while retaining your copyright

The *Creative Commons* offers a variety of free use license agreements with different clauses.

## Donate to Freedom and Sharing: CC's Annual Campaign

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 attached, or you want to mark a work that is already free of known copyright restrictions and in the public domain, choose one of our [public domain tools](#).

When you choose a [license](#), we provide you with HTML you can use to add the license information to your site and information on how to select a license on one of several free hosting services that have incorporated Creative Commons. This is not a registration and we do not retain a record of your selection.

### 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 license [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 ▼

Title of work

What do you get  
when you buy  
copyrighted material?

# Buying Access to Copyrighted Material

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What do you get when you buy a copyright work?

Until digital media the answer to this question was pretty clear

When you bought a book you get the physical book, it was your property, you could read it, lend it to a friend, sell it when you were finished with it, etc

It was like any other piece of physical property



# Buying Access to Copyrighted Material

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Because the book was physical the author or publisher had some control over what you did with it

You could photocopy the book, but this is expensive and time consuming, so it wasn't common practice

With digital media this has all changed, if we have something in digital form it is easy to make copies of it

# Murky Waters

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Consider a music CD, with a computer I can easily make multiple copies of it and sell the copies

This is obviously illegal, but what happens if I want to play the music on my MP3 player or on my computer?

What happens if I have a VHS copy of a movie and I want to copy it to a DVD so I can play it on my DVD player and sell my VHS player?

# Owning the Media or the Contents

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There are two possible interpretations of copyright here:

- I only own the media that the music or video is recorded on
- I own the actual music or video, regardless of the media that is used

In the first case it would be illegal to copy the music to the MP3 player, since you don't own the right to play the music on any other media

# Owning the Media or the Contents

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This is the interpretation that many music companies would like

This forces you to repurchase the music for each device that you own

This is not particularly popular with consumers, and the laws are slowly changing in some countries to support the second interpretation

As long as only one copy is being played at any one time you are not violating copyright

# Not even owning the media??

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There is a push in some countries to go in the other direction

In Japan Sony is pushing for an interpretation where you don't even own the media

If you buy a CD, Sony still owns the CD, you have only bought the right to listen to the CD

You cannot sell or lend the CD to another person

We would like to avoid this interpretation of copyright

# Restricted Use

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Online services, like iTunes, give you the right to play the music on any media, as long as its only one device at a time

Without this right online purchase of music really isn't viable, you would only be able to play the music on your computer

In Canada we are moving towards this type of copyright law

# Digital Watermarks

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How do we know if someone has violated copyright?

If it's a well known music CD or movie, there are really no problems

But what about copying a picture from a news source?

The person could claim that they took a similar picture and didn't copy.

# Digital Watermarks

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We use digital watermarks to detect this type of copying

Watermarks were originally added to paper by papermakers to identify their products, *impressions* visible when the paper is held up to the light

A digital watermark is a similar idea, digital information that is added to a picture or video that is only visible to special software or viewers



# Digital Watermarks

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The watermark is spread over the entire image so it cannot be removed by normal editing operations

When an image is first published the watermark is added, if the image appears again without proper credit the watermark can be used to establish ownership

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[http://en.wikipedia.org/wiki/Digital\\_watermarking](http://en.wikipedia.org/wiki/Digital_watermarking)



Search for DRM +  
iTunes  
Kindle  
DVD  
Games

What does it mean?

# Digital Rights Management

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Digital technology caused the current copyright problems, so why not use it to solve the problem?

Digital Rights Management software, DRM, is one of these solutions

This is software that controls how the media can be copied and how it can be played, prevents people from illegally copying media

# Digital Rights Management

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Information is added to the file containing the media that specifies what can be done with the media

Programs that play or copy the media read this information before they perform any operations to see if the operation is permitted by the copyright holder

In this way the copyright holder can control the actions that can legally be performed on the media

# Digital Rights Management

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To make this all work the media file is encrypted so only authorized programs can read it

If any program could read the file, then we could always write a program that does whatever we like with the media, thus it must be encrypted

What's to stop us from cracking the code and then be able to copy the media?

# Digital Rights Management

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In the US this is illegal, it is part of the copyright laws

No one can legally write software that breaks the encryption on a media file that uses DRM

There are exceptions made for people who do encryption research, but the media industry tends to watch these people quite closely

Copyright regulations in other countries aren't as strict



# Digital Rights Management

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DRM tends to be a hacker target, people view it as a challenge to break the code

Sometime adding DRM to a media product just attracts the hackers and encourages copying

Without the DRM people would probably ignore the product and not copy it, there is no challenge

In some cases using DRM causes more problems than it solves

# Sony Rootkit Scandal

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A good example of what can go wrong is the DRM system Sony introduced several years ago for music CDs

When the CD was inserted into the computer it automatically installed software that would prevent copying of the CD

It did this by modifying Windows to intercept all writes to a CDRW drive, so it could detect when the CD was about to be copied

[http://en.wikipedia.org/wiki/Sony\\_BMG\\_copy\\_protection\\_rootkit\\_scandal](http://en.wikipedia.org/wiki/Sony_BMG_copy_protection_rootkit_scandal)

# Digital Rights Management

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Unfortunately, the technique used to do this left the computer wide open to hackers, it completely disabled all security software

When this was first discovered Sony denied that it had done this, then when it was backed into a corner it release a patch that made the situation worse

Basically it caused serious damage to all computers that the CD was played on

# Digital Rights Management

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It took some time to fix all of the computers, and Sony faced a class action law suit in both North America and Europe, which it lost

This attempt at installing their own DRM and outsmarting the hackers cost Sony a considerable amount of money and had a negative impact on their reputation

# Summary

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Protecting IP is still a very hot issue and there are no good solutions

Many of the techniques only hurt honest customers and they don't stop determined people from stealing media

Still can't agree on what the protection means, consumer's rights and how long the protection should last

# Actions

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Review slides!

Read Chapter 14th from course book.