

# The Ethics of Information Distribution Systems

By Nathaniel Welch

CSC 300: Professional Responsibilities

Dr. Clark Turner

February 10, 2011

## Abstract

In November 2010, Wikileaks.org began slowly releasing 251,287 diplomatic cables from the United States of America. [5] Since then some companies and governments have attacked the organization because they are sharing this information. Wikileaks uses BitTorrent, a protocol written by Bram Cohen in 2001, to make sure their information is distributed redundantly internationally.

On the 17th of April, 2009, Peter Sunde, Fredrik Neij, Gottfrid Svartholm and Carl Lundstrm of The Pirate Bay were all found guilty “for promoting the copyright infringement of others” and sentenced to serve one year in prison and pay a fine of \$3.5 million. [7] Their website, the Pirate Bay, uses software they wrote to collect “torrent files” for a wide variety of content.

Since 2004, BitTorrent Inc., a company formed by Cohen, has maintained the BitTorrent protocol, built BitTorrent client software and promoted individuals and businesses to use their system. Is the building of BitTorrent (and other information distribution systems) an ethical pursuit?

In this paper I argue that the building of BitTorrent is ethical because it helps other users promote the public good by sharing information and promoting knowledge on a global level.

# Contents

<b>1</b>	<b>Facts</b>	<b>3</b>
<b>2</b>	<b>Ethical Question</b>	<b>4</b>
<b>3</b>	<b>Extant arguments</b>	<b>4</b>
3.1	Arguments For . . . . .	4
3.1.1	Argument One . . . . .	4
3.1.2	Argument Two . . . . .	5
3.2	Arguments Against . . . . .	5
3.2.1	Argument One . . . . .	5
3.2.2	Argument Two . . . . .	5
<b>4</b>	<b>Analysis</b>	<b>5</b>
4.1	Why the SE Code Applies . . . . .	5
4.2	BitTorrent and the Public Good . . . . .	6
4.3	Promoting Public Knowledge . . . . .	6
4.4	Publishers and the Public Good . . . . .	7
4.5	The First Amendment and Personal Expression . . . . .	9
<b>5</b>	<b>Conclusion</b>	<b>9</b>

# 1 Facts

1. BitTorrent Inc. is a company founded by Brian Cohen and maintains the BitTorrent Protocol and an associated client. [8]
2. The BitTorrent Protocol was initially created to share files and distribute information. “BitTorrent is the global standard for delivering high-quality files over the Internet. With an installed base of over 160 million clients worldwide, BitTorrent technology has turned conventional distribution economics on its head. The more popular a large video, audio or software file, the faster and cheaper it can be transferred with BitTorrent. The result is a better digital entertainment experience for everyone” [8].
3. The BitTorrent Protocol is a computer protocol “allowing you to download files quickly by allowing people downloading the file to upload (distribute) parts of it at the same time. BitTorrent is often used for distribution of very large files, very popular files and files available for free, as it is a lot cheaper, faster and more efficient to distribute files using BitTorrent than a regular download” [8].
4. In a few countries, people have been prosecuted for using BitTorrent for sharing illegal files and promoting copyright infringement. [7]
5. In the United States of America, copyright holders have the exclusive right to reproduce their copyrighted work [12].
6. A EULA is an end-user license agreement, which is a type of software license agreement. It is a contract between the person who uses the software and the licensor (the creator) of the software.
7. According to the United States of America, the limitations on exclusive rights in regards to computer programs allows users the freedom to use, archive, re-sale, and

backup their software [10].

8. uTorrent's EULA does not restrict what content their users can distribute [9].
9. BitTorrent itself does not have a EULA [9].

## 2 Ethical Question

Is the building and maintenance of BitTorrent (and other information distribution systems), an ethical pursuit?

## 3 Extant arguments

The issue of whether or not information distribution systems are ethical is usually not discussed. The reason for this is quite simple, if we prove that the building of an information distribution system is unethical, there is a slippery slope argument that says the creation of the Internet is therefore unethical because it is in essence an information distribution system. While there is not proof that this is why the issue is not argued, the topic is still valid. But because of the lack of discussion on the topic, most of the arguments do not explicitly address the issue, but rather areas the issue is involved in.

### 3.1 Arguments For

It is ethical to develop software to distribute information.

#### 3.1.1 Argument One

“If there is a bedrock principle underlying the First Amendment, it is that the government may not prohibit the expression of an idea simply because society finds the idea itself offensive or disagreeable” [2, 414].

### **3.1.2 Argument Two**

“At the heart of the First Amendment is the recognition of the fundamental importance of the free flow of ideas and opinions on matters of public interest and concern” [1, 51].

## **3.2 Arguments Against**

It is unethical to develop software to distribute information.

### **3.2.1 Argument One**

“Publishers have a responsibility to the public” according to publisher Steven Schragls, and if your content is offensive it is not helping the public [14, 46].

### **3.2.2 Argument Two**

“A defendant is vicariously liable for copyright infringement if he enjoys a direct financial benefit from another’s infringing activity and ‘has the right and ability to supervise’ the infringing activity” [3].

## **4 Analysis**

### **4.1 Why the SE Code Applies**

The Software Engineering Code of Ethics applies to this question because Software Engineers are the one’s designing and building these information distribution systems. Brad Cohen, the original author of the BitTorrent protocol, is a Software Engineer [6]. Of course, not all information distribution systems are built by software engineers. Public libraries, the original information distribution systems, were originally devised and managed by different groups than those that built and designed the buildings that stored them. But this

is besides the point, thanks to the internet most modern information distribution systems are built on top of the Internet, and because of this are created by software engineers.

## **4.2 BitTorrent and the Public Good**

Section 1.03 says that professional Software Engineers should “approve software only if they have a well-founded belief that it is safe, meets specifications, passes appropriate tests, and does not diminish quality of life, diminish privacy or harm the environment. The ultimate effect of the work should be to the public good” [13, 1.03]. This seems like a reasonable request. Make sure all software that passes an engineer’s desk has an ultimate effect of public good. But what is “public good”? According to the dictionary, public good is “a good or service that is provided without profit for society collectively” [4]. Is BitTorrent an application that contributes to the public good?

BitTorrent was originally a completely free service (cite?), but two years after Cohen invented the client and protocol, he created a for-profit company around the protocol. While BitTorrent Inc. is privately held, they have around forty employees and have been around since 2004. From this data, we can safely assume they are profitable, but until they become public or release their financial information, there is no way of knowing how profitable they really are. But if we make our assumption, BitTorrent, is by definition, not developed for the public good.

## **4.3 Promoting Public Knowledge**

Section 6.02 of the software engineering code says that professional Software Engineers should “promote public knowledge of software engineering” [13, 6.02]. The whole concept of information distribution systems are to promote the dissemination of information and increasing the public knowledge. If a piece of software does not care about what knowledge

it is promoting, is it still ethical?

Maybe, but the great thing about BitTorrent is that it is impartial to all data. The concept behind the protocol is that everyone connected to the network should have all of the data they want as long as they share it back out to the network so that as new people join the network, they can gain more information. BitTorrent, as a protocol, does not promote any one piece of data over another. The only way any piece of data gets distributed faster and to a wider audience is based on the number of clients who request it, or as Clive Thompson of Wired Magazine puts it, “the more people trying to download, the faster everything is uploaded” [15].

#### **4.4 Publishers and the Public Good**

Book publishers are essentially information distribution systems. They take information (books) created by others and then distribute it to the masses. Depending on who you ask there are three possible guilty parties when content is distributed that you do not agree with. The first is the creator. The creator is the one who created the content initially and is often the source of information. Historically the creator is the one who wanted their information distributed. Now though, in our digital age, often the creator does not know who is distributing their content. The second guilty party is the editor. The editor took the creator’s content and put it into a format to be distributed. Finally there is the distributor. They take the edited work and send it off to people who want it (paying or otherwise).

Talk about how publishers are not required to validate their content, but mention obscenity laws (Miller case...)

The main goal of publishers though, is to distribute information for profit. In economics, information is just another good. It can be distributed easily and cheaply. Some publishers

take advantage of this fact, and make large profit margins (cite) and by distributing this information in print forms. Others, such as the internet redistribute the information in digital form. Some on the internet do this for pay, but others promote a free distribution model, such as BitTorrent. Logic seems to imply then, if someone can distribute the information for profit, then they should be able to give it away for free as well. But this is not the case, publishers usually need to get permission from the copyright owner (the initial writer) to distribute the information (cite). Some free publishers try to get distribution rights, and some copyright owners explicitly say that you can do whatever you want with their information (provide example here? Cory Doctorow). But what do we do when we are given rights to information that we are unsure if the original provider is the actual creator (wikileaks example)?

The historical response is that you do not distribute information and/or data that you can not verify you have the rights to. But now, programs like BitTorrent say that they will distribute anything, it is up to you to choose what to distribute. The problem with this is that people are stupid (cite?), and do not understand copyright law. Example.

So BitTorrent distributes anything, and because they profit off of the development of BitTorrent (source), we can say that they are guilty of breaking California State Law (BitTorrent Inc.'s offices are located in San Francisco, California). We can say this because of a ruling that the California District court system made in 2000, which stated that "a defendant is vicariously liable for copyright infringement if he enjoys a direct financial benefit from another's infringing activity and 'has the right and ability to supervise' the infringing activity" [3].



#### **4.5 The First Amendment and Personal Expression**

The supreme court has said on multiple occasions that the main principle behind the first amendment is that the American people should be allowed to express ideas even if society does not agree with those ideas [1, 51]. But what if the ideas they express are not originally theirs? We can argue about intellectual property and whether someone can actually own an idea, but the United States Copyright law says that ideas are not copyrightable [11]. The problem is that BitTorrent lets users distribute more than just ideas, it lets them distribute digital copies of works that are protected under copyright law. And no matter what anyone tells you, a digital copy is still a copy by definition (cite).

### **5 Conclusion**

Yes. Creating software to distribute information, no matter the information, is ethical.

## References

- [1] “Hustler Magazine, Inc. v. Falwell,” p. 46, 1988.

Landmark case on the First Amendment in relation to publishers.

- [2] “Texas v. Johnson,” p. 397, 1989.

First Amendment case claiming the difference between societies morals and the law.

- [3] “A & M RECORDS, INC. v. Napster, Inc.” p. 896, 2000.

- [4] “Dictionary.com’s 21st century lexicon,” Feb 2011. [Online]. Available: <http://dictionary.reference.com/browse/publicgood>

- [5] J. Assange, “Wikileaks cablegate press release,” November 2010. [Online]. Available: <http://wikileaks.ch/cablegate.html>

A press release by WikiLeaks, “Wikileaks began on Sunday November 28th publishing 251,287 leaked United States embassy cables, the largest set of confidential documents ever to be released into the public domain.”

- [6] B. Cohen, “Bram cohen.” [Online]. Available: <http://bramcohen.com/resume.txt>

Bram Cohen’s Resume.

- [7] enigmax, “Torrentfreak’s coverage of the pirate bay verdict,” April 2009. [Online]. Available: <http://torrentfreak.com/the-pirate-bay-trial-the-verdict-090417/>

TorrentFreak is a blog, and they did a meticulous job of covering every day of the Pirate Bay Trial, it’s verdict and the Appeals. This is their article from the day of the verdict.

- [8] B. Inc., “Bittorrent - management team.” [Online]. Available: <http://www.bittorrent.com/company/management>

A little history about BitTorrent Inc. and their management team.

- [9] —, “utorrent’s end user license agreement.” [Online]. Available: <http://www.utorrent.com/legal/eula>

- [10] L. I. Institute, “United states code: Title 17,117. limitations on exclusive rights: Computer programs.” [Online]. Available: <http://www.law.cornell.edu/uscode/17/117.html>

Cornell's summary of the rights copyright holders have in regards to computer programs.

- [11] U. S. of America, "United states copyright law: Title 17, chapter 1, section 103." [Online]. Available: <http://www.copyright.gov/title17/92chap1.html#103>

An important section of US Copyright Law describing whos work falls under US Copyright Law.

- [12] —, "United states copyright law: Title 17, chapter 1, section 106." [Online]. Available: <http://www.copyright.gov/title17/92chap1.html#103>

Describes the exclusive rights of copyright holders in the USA.

- [13] A. of Computing Machinery, "Software engineering code of ethics." [Online]. Available: <http://www.acm.org/about/se-code>

The Software Engineering Code of Ethics, co-written by ACM and IEEE.

- [14] D. Smith, "The happy hawker," New York Magazine, vol. 25, January 1992.

An interview with a large book publisher in the early ninties who showed little remorse in publishing the obscene and the offensive but then decided not to publish The Ancharchists Cookbook.

- [15] C. Thompson, "The bittorrent effect," Jan 2005. [Online]. Available: [http://www.wired.com/wired/archive/13.01/bittorrent\\_pr.html](http://www.wired.com/wired/archive/13.01/bittorrent_pr.html)

An article from Wired Magazine describing how BitTorrent works.