In recent years, the illegal distribution of copyrighted digital material over the internet has become a significant problem for institutions of higher education. Copyright holders and trade association such Recording Industry Association of America (RIAA) and the Motion Picture Association of America (MPAA) have been very aggressive in pursuing their rights under the Digital Millennium Copyright Act of 1998 (DMCA) and traditional copyright law; employing technological countermeasures such as mapping and tracking activity on peer to peer file sharing networks (p2p) and “poisoning” those networks with poor quality or deceptively labeled media; pursuing political means of controlling the problem; and adjusting their business models to better accommodate the realities of the digital environment. Higher education has been a frequent target of copyright holders and trade associations. The focus on higher education in regard to copyright infringement may stem from a number of reasons including ambiguity in the “safe‐harbor” provision in the DMCA since universities act both as an internet service provider (ISP) and as an organization that hosts and distributes content; the demographics of our community; the likelihood that universities and university students have limited resources at hand to challenge the copyright holders on their claims of infringement and tactics; and the possibility that access to financial aid and other sorts of federal funding to universities provides the copyright holders and trade associations with potential leverage that they would not have against other organizations and individuals such as large, commercial internet service providers. Whatever the reason may be for the heightened scrutiny on higher education, ensuring that the UNT community is adhering to copyright law and established university policy on the matter is in the best interest of the university. Combating copyright infringement and ensuring that the university community understands their rights and responsibilities has been and will continue to be a strategic initiative of CITC.

While we occasionally see instances of p2p activity or receive DMCA take down notices for machines on the UNT network used by faculty or staff members, the majority of copyright related incidents have centered on students living in university housing. As such, our efforts and resources have focused on this segment of the university community. In the summer of 2008, UNT outsourced network services for students living in university housing to a third party company, Apogee. Apogee maintains a view and approach to the copyright infringement problem that is consistent with our views and values; however, since we are not providing network services to students serviced by Apogee, we are extremely limited in what we can do from a technical standpoint. As a result of this migration, the technical controls we had implemented to counter copyright infringement might not necessarily be in effect on Apogee’s network.

Our approach to the copyright infringement problem includes the following tactics:
• implementation of policy and procedure to address copyright infringement;
• implementation of education and awareness programs to ensure the UNT community understands their rights and responsibilities regarding copyright issues;
• employment of technical countermeasures to discourage or stop illegal file sharing on the UNT network; and
• execution of sanctions on those who violate copyright law and university policies.

This is an extremely serious issue. We will to continue to act upon all allegations of copyright infringement in an efficient manner and make a best faith effort to take proactive actions to address this problem.

Controls and Countermeasures

Policy and Procedure

Current UNT policy addresses copyright infringement in the following ways:

• **Student Code of Conduct, Section IX, Letter D, Items 1 & 2 (18.1.11)**
  • **Acts Affecting Intellectual Property:** The use or distribution of the original work of another (whether copyrighted or not copyrighted) without the express consent of the owner, including but not limited to the unauthorized downloading of copyrighted music and the distribution for commercial purposes or creation of derivative works from written materials created by faculty or staff, without expressed written permission of the originator. The use or distribution of a trademark, including the university trademark, without the expressed written consent of the owner.

• **UNT Computer Use Policy (3.10)**
  • **Introduction:** Intellectual Property: All members of the University community should be aware that intellectual property laws extend to the electronic environment. Users should assume that works communicated through the computer network are subject to copyright laws, unless specifically stated otherwise.
  • **Misuse of Computing Resources:** Unauthorized duplication and distribution of commercial software and other copyrighted digital materials. All commercial software and many other digital materials are covered by a copyright of some form. The unauthorized duplication and distribution of software and other copyrighted materials (including copyrighted music, graphics etc) is a violation of copyright law and this policy. Exceptions to this are specific authorization by the copyright holder or use under the fair use provisions of the copyright law.

• **UNT Copyright Compliance Policy (16.13.3)**
  • **Compliance with the DMCA:** The Digital Millennium Copyright Act (DMCA), effected in 1998, implements two 1996 World Intellectual Property Organization (WIPO) treaties. It criminalizes production and dissemination of technology, devices, or services that are used to circumvent measures that
control access to copyrighted works and criminalizes the act of circumventing an access control, even when there is no infringement of copyright itself. It also heightens the penalties for copyright infringement on the Internet. The most common violation of the DMCA that occurs in the university setting is illegal file sharing, especially of music files. Students and employees of UNT should be aware that if they violate the DMCA either by illegally sharing copyrighted files, or in any other way, they could face severe penalties.

- **Copyright Infringement:** Anyone who makes unauthorized use of copyrighted material in a manner that violates the copyright owner’s exclusive rights (except for the limitations and exemptions described above) is committing copyright infringement and may be subject to civil and criminal penalties as well as disciplinary action by UNT.

**Education and Awareness**

Education and awareness regarding copyright infringement is a cooperative effort between CITC, Student Development, and Housing. We currently employ the following methods to educate the UNT community about copyright law:

- **Communication from the Acting Vice President for Information Technology and CIO (VPITCIO):**
  The VPITCIO sends a message to the faculty, staff, and student body each semester regarding their rights and responsibilities regarding information security. This message strongly addresses copyright infringement (see appendix).

- **Communication from the Assistant Vice President for Student Development:**
  The Assistant Vice President for Student Development periodically sends a message to students who reside in university housing regarding university policy on copyright (see appendix).

- **Brochures and Posters:**
  Brochures that address copyright and other information security related issues are distributed to students living in university housing each semester, to new students at orientation, and to various departments for distribution. Posters that address copyright issues are posted in university housing and other public areas.

- **The Student Tour Educational Website:**
  The UNT Student Tour website, [http://www.unt.edu/helpdesk/studenttour](http://www.unt.edu/helpdesk/studenttour), is advertised to all incoming students to the university and contains information about the use of p2p software, copyright infringement, and other security issues.

- **WebCT Vista Course on Copyright:**
  CITC has developed an online course to educate students on their rights and responsibilities regarding copyright issues.

- **UNT Copyright Resources Website ([http://copyright.unt.edu](http://copyright.unt.edu))**:
  The Center for Learning Enhancement, Assessment, and Redesign and the UNT Libraries maintain a website with links to policies and resources related to copyright.

**Technical Counter Measures**

UNT currently employs a number of technologies to discourage or detect copyright
infringement through p2p and other means.

- **NetVCR**: CITC employs a device known as NetVCR to monitor and record traffic. NetVCR is used to detect anomalies in UNT’s network traffic often caused by p2p traffic.

- **SourceFire Intrusion Detection System (IDS)**: CITC uses the SourceFire Intrusion Detection System (IDS) to monitor network activity on the UNT Network. The SourceFire system has rules to alert the security team of specific network events related to illegal file sharing.

**Sanctions**

Outside of the legal implications of copyright infringement, UNT policy and university procedures specify the following sanctions:

- **Information Security Resources Policy (3.6)**
  - Machines on the campus data communications network will be disconnected if they are deemed by the Information Resources Security Coordinator to be dangerous to the remainder of campus or to the Internet in general.
  - Penalties for violation of this policy range from loss of computer resource usage privileges to dismissal from the University, prosecution, and/or civil action. Each case will be determined separately on its merits. Referrals for legal action will be made through the Office of the Vice Chancellor and General Counsel.
  - If the offender is a faculty member, the procedures to be followed are those specified in accordance with the UNT Faculty Discipline Policy. (Policy 15.1.33.)
  - If the offender is a staff member, the procedures to be followed are those specified in the Performance Counseling and Discipline Procedure (Policy 1.7.1.1. If the offender is a student, the procedures to be followed are those specified in the Code of Student Conduct. If the student in violation of this policy is also an employee of the university, sanctions may include termination of employment.

- **UNT Housing**
  
  When a take-down notice is received from a copyright holder or authorized agent of a copyright holder, the machine in question is removed from the network and the infringing material is removed from the machine prior to the restoration of network access. In addition, the following sanctions are employed by UNT Housing:
  
  - 1st offense in a semester - $100 fine
2nd offense in a semester - additional $100 fine, the student is not allowed back on the network, and the student is sent to Judicial Affairs

**Student Judicial Affairs**

After the second instance of copyright infringement during a semester, the student is sent to Judicial Affairs to have a personal meeting about their conduct. The first time the student meets with Judicial Affairs, the meeting is largely educational. If a student is sent to Judicial Affairs a second time for the same offense, the university considers this to be theft and is dealt with more seriously. The incident is then marked on their permanent record. Various other disciplinary actions may be taken as appropriate in accordance with the UNT Student Code of Conduct.

Students not living in UNT Housing will also be sent to Student Judicial Affairs after the second offense and will likely face similar punishment.

**Responding to Copyright Infringements**

When Information Security receives a copyright complaint, we strive to process it as quickly as possible. The physical location of the machine is found, usually with the help of the CITC Data Communications department, and then we will assign the Network Manager of that machine a ticket in Remedy (the official ticketing application for UNT) that includes all information we have on the machine and the original complaint. The Network Manager will then remove all copyrighted data from that machine, educate the user about illegal downloading, and close the ticket.

**Communication Plan**

The University will pursue the following avenues to communicate the University’s stance on copyright infringement:

- A summary of the University’s stance on copyright infringement, illegal downloading, sanctions for violating copyright policies and laws, and legal alternatives to downloading of copyright infringing materials will be distributed with the annual crime statistics report.
- The UNT Helpdesk maintains a list of legal alternatives to illegal downloading and publishes this on their website.
- The University maintains an education and awareness strategy (see above).

**Plan Review**

Plan effectiveness and HEOA copyright compliance will be evaluated quarterly and reported to the UNT compliance office.

**Challenges, Gaps, and Opportunities**
UNT takes copyright infringement very seriously and has invested a considerable amount of resources and staff time to addressing the problem. In spite of the investment we have made toward reducing the number of incidents that occur, we still receive a considerable number of complaints from copyright holders regarding copyright infringement. Most of the complaints we see involve students residing in university housing on Apogee’s network. We have limited capability to employ technical countermeasures against copyright infringement since we do not own the network that the students are using. In addition, technical measures against copyright infringement have proven to be marginally effective and extremely expensive. The university’s policy in regard to copyright is clear and the sanctions for breaking copyright policy are appropriate. One area that can be improved is the stance on copyright in the Student Code of Conduct. Copyright infringement is addressed more in terms of the distribution of the university’s intellectual property than in terms of the distribution of third party content through p2p networks. CITC is participating on the committee that is revising the code expressly to address this issue. Our educational campaign is extensive; however, there are two gaps that could be addressed. First, there is not a single place that effectively communicates the university’s stance on copyright infringement. The website, http://copyright.unt.edu, could be expanded to include the initiatives of CITC and UNT Housing. Second, no representative of the student body is involved in the university’s education and awareness initiatives.