Software licensing over software piracy

In 1993 worldwide illegal copying of domestic and international software cost $12. 5 billion to the software industry, with a loss of $2. 2 billion in the United States alone. Estimates show that over 40 percent of U. S. software company revenues are generated overseas, yet nearly 85 percent of the software industry's piracy losses occurred outside of the United States borders. The Software Publishers Association indicated that approximately 35 percent of the business software in the United States was obtained illegally, which 30 percent of the piracy occurs in corporate settings.

In a corporate etting or business, every computer must have its own set of original software and the appropriate number of manuals. It is illegal for a corporation or business to purchase a single set of original software and then load that software onto more than one computer, or lend, copy or distribute software for any reason without the prior written consent of the software manufacturer. Many software managers are concerned with the legal compliance, along with asset management and costs at their organizations.

Many firms involve their legal departments and human resources in regards to software distribution Information can qualify to be property in two ways; patent law and copyright laws which are creations of federal statutes, pursuant to Constitutional grant of legislative authority. In order for the government to prosecute the unauthorized copying of computerized information as theft, it must first rely on other theories of information-as-property. Trade secret laws are created by state law, and most jurisdictions have laws that criminalize the violations of a trade-secret holder's rights in the secret.

The definition of a trade secret varies somewhat from state to state, but commonly have the same elements. For example, AThe information must be secret, Anot of public knowledge or of general knowledge in the trade or business, a court will allow a trade secret to be used by someone who discovered or developed the trade secret independently or if the holder does not take adequate precautions to protect the secret. In 1964 the United States Copyright Office began to register software as a form of literary expression.

The office based its decision on White-SmithMusicCo. v. Apollo , where the Supreme Court determined that a piano roll used in a player piano did not infringe upon copyrighted music because the roll was part of a mechanical evice. Since a computer program is textual, like a book, yet also mechanical, like the piano roll in White-Smith, the Copyright Office granted copyright protection under the rule of doubt. In 1974, Congress created the Natural Commission on New Technological Uses (CONTU) to investigate whether the evolving computertechnologyfield outpaced the existing copyright laws and also to determine the extent of copyright protection for computer programs.

CONTU concluded that while copyright protection should extend beyond the literal source code of a computer program, evolving case law should determine the extent of protection. The commission also felt copyright was the best alternative among existing intellectual property protective mechanisms, and CONTU rejected trade secret and patents as viable protective mechanisms. The CONTU report resulted in the 1980 Computer Software Act, and the report acts as informal legislative history to aid the

courts in interpreting the In 1980 The Copyright Act was amended to explicitly include computer programs.

Title 17 to the United States Code states that it is illegal to make or to distribute copies of copyrighted material without authorization, except for the user's right to make a single ackup copy for archival purposes. Any written material (including computer programs) fixed in a tangible form (written somewhere i. e. printout) is considered copyrighted without any additional action on the part of the author. Therefore, it is not necessary that a copy of the software program be deposited with the Copyright Office in Washington, D. C. for the program to be protected as copyrighted.

With that in mind then a copyright is a property right only. In order to prevent anyone from selling your software programs, you must ask a court (federal) to stop that person by an injunction and to give you amages for the injury they have done to you by selling the program. The Software Rental Amendments Act Public Law 101-650) was approved by Congress in 1990, this Act prohibits the commercial rental, leasing or lending of software without the express written permission of the copyright holder. An amendment to Title 18 to the United States Code was passed by Congress in 1992.

This amendment. Known as Public Law 102-561 made software piracy a federal offense, and instituted criminal penalties for copyright infringement of software. The penalties can include imprisonment of up to five years, ines up to $250, 000 or both for unauthorized reproduction or distribution of 10 or more copies of software with a total retail Under United States law

duplicating software for profit, making multiple copies for use by different users within an organization, and giving an unauthorized copy to someone else - is prohibited.

Under this law if anyone is caught with the pirated software, an individual or the individual's company can be tried under both civil and criminal law. A Civil action may be established for injunction, actual damages (which includes the infringer= s profits) or statutory damages up to $100, 000 per infringement. The criminal penalties for copyright infringement can result in fines up to $250, 000 and a jail term up to five years for the first offense and ten years for a second offense or both.

When software is counterfeit or copied, the software developer loses their revenue and the whole software industry feels the effect of piracy. All software developers spend a lot of time andmoneyin developing software for public use. A portion of every dollar spent in purchasing original software is funneled back into research and development of new software.

Software piracy can be found in three forms: software counterfeiting, which is he illegal duplication and sale of copyrighted software in a form that is designed to make it appear to be a legitimate program; Hard disk loading, whereby computer dealers load unauthorized copies of software onto the hard disks of personal computers, which acts as an incentive for the end user to buy the hardware from that particular dealer; and downloading of copyrighted software to users connected by modem to electronic bulletin boards and/or the Internet.

When software is pirated the consumer pays for that cost by new software and/or upgrade version being very expensive. Federal appellate courts in the U. S. have determined that operating systems, object code and software cotained in ROMs are protected by copyright, and some lower federal courts have also determined that microcode (the instructions set on microprocessor chips), and the look and feel of computer screens is subject to copyright protection.

Which leads to the problems of the widespread development of multimedia applications that has brought out major problems in clearing copyright for small elements of text, The United States Government has been an active participant in protecting the rights of the software industry. When the Business Software Alliance (BSA) conducts a raid, Federal Marshals or local law enforcement officials participate also. An organization known as the Software Publishers Association (SPA) is the principal trade association of the PC software industry.

SPA works closely with the FBI and has also an written enforcement manual for the FBI to help them investigate pirate bulletin board systems and organizations (audits). With the help of the FBI, the result of enforcement actions resulted in recoveries from anti-piracy actions totaling $16 million The Software Publishers Association (SPA) funds a educational rogram to inform individuals and corporations about software use and the law. This program provides all PC users with the tools needed to comply with copyright law and become software legal.

The SPA also publishes brochures free of charge about the legal use of software for individuals and businesses. Also available to help corporations understand the copyright law is a 12-minute videotape, which is composed of the most commonly asked questions and answers to them. The video tape is available in French and Spanish and all together over 35, 000 copies of the tape had been sold. SPA has also compiled a free Self-Audit Kit with which organizations can examine their software use practices.

Included in the kit, is a software inventory management program designed to help an organization track their commercial software programs that are on all hard disks. The program searches PC hard disks for more than 1300 of the most common programs used in Also available is the SPA Software Management Guide which helps companies audit their current software policies, educate employees about the legal use of software, and establish procedures to purchase, register, upgrade and backup computing systems. The guide in ddition also provides an Internal Controls Analysis and Questionnaire.

The guide also contains all of the SPA's current anti-piracy materials. The U. S. software industry is facing the challenges of more sophisticated network environments, greater competition among software companies along with hardware manufacturers. At this moment more software than ever before is distributed on a high volume, mass marketed basis. There are many types of software out on the market and increasing every day. They range from graphical user interfaces for application programs such as mass-market

spreadsheets, to more sophisticated technical software sed to design integrated circuits.

The use of software plays a more vital role daily in our lives such as embedded software, which is critical to equipment in locations as adoctor= s office or an automotive shop. The instrument and devices found there depend more and more on software, because software provides the flexibility to meet the many different needs to the end user. As our lives our shaped and enhanced more by technology, there is already a greater demand One of the main concerns of the software industry is how to deal with the issues of Asoftware licensing.

More and more customers ant customized software suited for their business or personal need, and expect the software development firms to accommodate to their wishes. The other side of this issue is that software development firms are concerned with unrealized revenue and excess costs in the form of software piracy, unauthorized use, excess discounts and lengthened sales cycles. For the customer and the software development firm, both have high administrative costs in regards to software programs.

Software licensing policies were originally a result of software developers' need to protect their revenue base in the face of otential piracy. Product delivery for software is made up of a number of different components, which are referred to as 'software licensing'. The following factors are taken into consideration when determining a cost for a 'software license'; physical delivery pricing, metric discounts, license periods support and maintenance,

license management Tech support, change in use bug fixes and Platform Migration Product enhancements.

The most commonly found type of software license found in business is known as a, 'Network license'. There are four types of categories that are classified as a network Concurrent use licenses authorized a specified number of users to access and execute licensed software at any time. Site licenses authorize use at a single site, but are slowly being phased out and replaced by enterprise licenses. Enterprise licenses cover all sites within a corporation because of more virtual computing environments.

Node licenses are also slowly being phased out because they are mainly used in a client/serverenvironment, since the licensed software may be used only on a specified workstation in which a user must log on to in order to access and execute the software application. Currently the rend in a network system is to use measurement software, which allows vendors to be more flexible in licensing arrangements. This management software monitors and restricts the number of users or clients who may access and execute the application software at any one time.

This is significant because a user pays only for needed use and a vendor can monitor such use to protect intellectual property. A new type of license that is emerging is known as a, 'currency-based license'. This type of license work on the basis that it provides to the end user a specified dollar amount of software licenses. For example, licenses or different business application software, so long as the total value in use at a given time is less than dollars.

Another type of license emerging is known as a 'platform-independent' licensing, which one license permits software to be used on a variety of different computer systems within a business, instead of buying a different license for each version of the same software used by different systems. The most common type of licensing is known as 'Shrink-wrap', the concept behind this that the licenses terms are deemed accepted once the end user breaks a shrink-wrap seal or opens a sealed envelope ontaining the software.

A reason for these new types of licensing emerging is that when software licensing was first introduced, the software development firms assumed that most businesses would use the software for a 8 to 10 hour period. Yet, did not take into consideration that with the advancement of technology, more businesses would want a 'floating license' across the world for 24 hours - thus it was not cost effective for the software development firm. A floating license is a license that is made available to anyone on a network. The licenses are not 'locked' to particular workstations, nstead they Afloat to modes on the network.

Shareware, freeware and public domain are different type of software available to the end user, and are distinguished by different rules about how programs may be distributed, copied, used and modified. The term 'shareware' refers to software that is distributed at a low cost, but which requires usually a payment after a certain time period and registration for full use. Copies of this software are offered on a trial basis, the end user is free to try a scaled down version of the program. If the end user wants the

shareware program, ncluded in the program is information specifying how to register the program and what fee is required.

Once registered the end user will typically receive a printed manual, an updated copy of the software (often with additional features), and the legal right to use the program in their home or business. The advantage that shareware has is that it lets the end user thoroughly test a program to see if it= s useful before making a purchase. The authors of shareware programs retain their copyright on the contents, and as other copyrighted Freeware is also distributed at a very low cost and like hareware is found mainly on the Internet.

The authors of the freeware program do not expect payment for their software. Typically, freeware programs are small utilities or incomplete programs that are released by authors for the potential benefit to others, but the drawback to this is that there is no technical support. Public domain software is generally found on the Internet and is released without any condition upon its use. It may be copied, modified and distributed as the end user wishes to do. A license manager is a system utility-like application that controls or monitors the use of another end-user pplication.

It is generally implemented to protect intellectual property (meaning to stop illegal copying) and/or to become more competitive by offering new ways in which to evaluate, purchase and pay for software. Since the license manager controls the number of application users, there is not a need to control the number of application copies. This process lets the end user run one or more applications between machines, without violating the terms of the SPA has

created a program that companies can use to help discover and correct

problems before they result in legal actions, fines and also negative

publicity.