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1. Introduction

Software copyright law is something that affects anyone who uses a computer, and most particularly businesses - it is not uncommon for a business to face civil or even criminal proceedings for software copyright infringement. Yet at the same time, it is a complex area of law that is not widely understood.

The purpose of this briefing paper is to provide an explanation of the law that is comprehensible to a non-lawyer and non-programmer. It should be noted that this briefing paper should be taken only as general guidance: it is impossible to explain all the technicalities of the law, or to cover every possible set of circumstances, in a document of this kind. In any case, the details of the law can vary from country to country.

If you are in any doubt as to your legal rights, you should consult a specialist lawyer.

1.1. The scope of this briefing paper

This briefing paper concentrates on the law of software copyright in the European Union, with particular reference to the [Community Directive 2009/24/EC](#). It does not cover the laws of countries outside the European Union.

Also, it does not deal with intellectual property rights in things other than software. If, for example, there is a computer program that allows you to access a database, then the computer program will be subject to software copyright (covered here), while the database will be subject to the different legal provisions governing databases (not covered here).

This briefing paper contains a general introduction to software copyright law: there is other briefing paper, entitled [Software Copyright and the Computer Programmer](#), that cover more specialised aspects of the subject.

Please note that this briefing paper does not cover so-called "moral rights". These are certain special rights retained by each individual computer programmer. Although an intrinsic part of copyright law, the law of moral rights is not likely to be relevant to ordinary users of software, but only to programmers and their employers. This topic is therefore considered in section H of the briefing paper entitled [Software Copyright and the Computer Programmer](#).

1.2. "Software" defined

Before proceeding any further, it is important to ask: what exactly do we mean by "software"?

For a computer to work, it has to be programmed, i.e. given a set of instructions in a language that computers understand. These programs are referred to as "software", to distinguish them from "hardware" (the physical objects that make up a computer system, such as microchips, processors, the keyboard, etc.).

In this briefing paper, the terms "software" and "computer program" will be treated as synonyms.

Here are some examples of software:

- Operating systems, such as Microsoft Windows, and Linux. The operating system is the computer program that organises all of the other computer programs.
- Software for general, everyday use, such Web browsers, word processors, spreadsheets, software for making presentations, etc.
- More specialised software, such as computer-aided design software, software for statisticians, software for accountants, etc.
- The software that makes the Internet work, such as Web server software (which sends Web pages to your Web browser on demand)-

In order to understand the law of software copyright, it is necessary to understand two technical terms: "source code" and "object code".

"Source code" is a computer program in the form written by a programmer (in a language such as Perl or C).

"Object code" is a computer program converted into the form in which a computer would run it (in "machine language", i.e. ones and zeros). To convert source code into object code, you use a special computer program called a "compiler".

Note that a computer program will (generally speaking) exist in two forms: the source code form (the form in which it was written by human beings), and the object code form (the form in which a computer runs it). These are two different forms of one and the same computer program. So far as copyright law is concerned, both of these forms are covered by the definition of "computer program". Furthermore, the two forms are regarded as equivalent, in the sense that whoever owns the copyright in the source code will automatically own the copyright in the object code.

The Directive also states that a computer program incorporated into the design of a silicon chip is nonetheless considered to be software for legal purposes. This makes sense: any computer program could theoretically be build into the design of a silicon chip, and it seems only reasonable that doing this has no effect on copyright.

Note that computer languages are not themselves pieces of software. For example, no one owns a copyright in the computer language C, or in the individual words that make up that language.

Also note that the manuals, etc., that document a piece of software do not themselves count as software. Such manuals will be copyrighted, but the rules may not be exactly the same as for software copyright (for example, in relation to employees' rights).

2. What is software copyright?

Software copyright is not essentially different from any other sort of copyright. However, there are certain aspects of copyright law that are specific to software, because there are practical differences between software and other things that can be copyrighted (books, poems, drawings, sculptures, etc.).

Copyright law gives a programmer (or in the case of an employed programmer, that programmer's employer) a high degree of control over the program that he or she creates.

Specifically, it is (with a few very limited exceptions) **unlawful** for anyone other than the owner of the rights to run the program, copy the program, modify the program or distribute the program, except with the permission of the rights owner.

Let us consider this point by point:

- The permission of the rights owner is necessary if you want to **run** the program (although this rule is qualified by the exceptions to software copyright - see subsection C.3 of this briefing paper for details).
- The permission of the rights owner is necessary if you want to **make a copy** of the program for any reason. (There is an exception for the making of a "back-up" copy - that is, a spare copy, in case the original is erased or damaged by accident. See subsection C.3 of this briefing paper for details.)

Even copying the program from a disk into your computer's memory is considered as "copying", and requires permission.

- Converting a computer program from source code to object code ("**compiling**" the program) counts as copying, and requires permission. The same applies to converting a computer program from object code to source code ("**decompiling**" the program). In practice, this is not important for ordinary computer users, but only for programmers.
- The permission of the rights owner is necessary if you want to **modify** the program. Once again, this is not important for ordinary computer users, but only for programmers.
- The permission of the rights owner is necessary if you want to **distribute** the program. This would include, for example, distributing the program over the Internet.
- However, copyright law does permit certain very limited exceptions, such as the exception for back-up copies described above. (See subsection C.3 of this briefing paper for more details of the exceptions to copyright.)

It should be noted that (as under general copyright law) no registration, copyright notice, or other such formality is needed to establish copyright. Copyright protection is automatic.

3. The Community Directive on software copyright

Now, let us examine the provisions of the [Community Directive 2009/24/EC](#).

This Directive is a complicated legal document, and it is impossible to explain all aspects of it in a briefing paper of this kind. However, this section attempts to provide a simple explanation of the most important provisions.

3.1. What does software copyright protect?

The Directive begins by declaring that software is protected by copyright throughout the E.U. However, copyright protects only the computer program itself, and not the ideas behind the program. That is to say, it is perfectly permissible to take a computer program written by someone else, and write another that does the same thing. If you were the first person to write, say, a spelling checker program, you would have no rights in the concept of a program that checks spelling: you would only have rights in the actual program that you had written.

The permission of the rights owner is needed in order to run, copy, modify or distribute the software (see section B of this briefing paper for details). This is subject to a small number of exceptions (see subsection C.3 of this briefing paper).

3.2. Who owns the rights?

Generally speaking, the programmer who writes the program owns the rights. Where there is more than one programmer, the Directive provides for co-ownership.

There is one major exception: where the programmer creates the program in the course of employment, the employer owns the rights, unless there is a contrary agreement between the programmer and the employer. (The programmer will nonetheless retain the so-called "moral rights": see section H of the briefing paper entitled [Software Copyright and the Computer Programmer.](#))

The rights are freely assignable. So, for example, if I pay a self-employed programmer to write a program for me, it can be put in our contract that I will be entitled to the rights. Likewise, a company that owns the rights in software can sell those rights to another company. Some Member States require assignments to be made in writing.

An important case to consider is where a programmer modifies a program written by another programmer. As we have seen, such modification requires the permission of the rights owner. When a modification is made, it is not a simple issue to determine who owns the rights in the program as modified: to be on the safe side, it is best to assume that both the author of the original program (or his/her employer) and the author of the modification (or his/her employer) own separate copyrights in the modified program - so permission needs to be sought from both. (Modifications to programs also potentially raise issues relating to moral rights - see subsection H.2 of the briefing paper entitled [Software Copyright and the Computer Programmer.](#))

3.3. Exceptions to software copyright

There are certain exceptions to software copyright. This subsection discusses certain exceptions to software copyright that, by virtue of the Directive, apply everywhere in the E.U.

The Directive states that if you have acquired a computer program **lawfully** (i.e. with the rights owner's permission), then:

- You are entitled to **use it for its intended purpose**.
- You are allowed to **correct errors** in the program. (However, if you only possess the object code of the program, you must make corrections while the program remains in that form - you are not permitted to decompile it, i.e. convert it into source code form, in order to make error correction easier.)
- You are allowed to make a **back-up copy** of the program - that is to say, a spare copy, in case the original is erased or damaged by accident.
- You are entitled to **study and test** the program in order to discover how it works.
- You may also exercise the "**decompilation right**" - however, this somewhat complex provision of the Directive is only relevant to computer programmers, and so is discussed in detail in section F of the briefing paper entitled [Software Copyright and the Computer Programmer.](#)

What happens if there are terms in a software licence agreement under which the consumer renounces these rights? Would such licence terms be valid, or not?

Unfortunately, the law is unclear. The best view is that some restrictions are valid, while others are not. So, for example, a licence agreement restricting use of the software to a single machine (a common form of licence in practice) is perfectly valid. On the other hand, a term forbidding you from making a back-up copy would usually be invalid.

If in doubt, consult a lawyer - and to be on the safe side, assume that the licence terms are valid unless and until you are advised otherwise.

4. Copyright infringement

What is copyright infringement, in the context of software? Essentially, it is when you run, copy, modify or distribute a computer program, other than:

- where you yourself are the rights owner for that program;
- where you have the licence (permission) of the rights owner, whatever form that licence may take; or
- where your conduct falls within one of the very narrow exceptions to copyright (see subsection C.3 of this briefing paper).

If you commit copyright infringement, you could face a civil action, and under some circumstances criminal penalties.

In practical terms, as a computer user, you will need to ensure two things:

- You must be sure that all your software was lawfully obtained. If you are thinking of downloading software from a Web site, or obtain it from a friend, you must first check whether the rights owner ever consented to this form of distribution.

If you are not sure, then look for the licence agreement - is it a proprietary licence (the more usual sort), or is it a shareware or copyleft licence, or the like? If there are no visible licence terms, then you should assume that it is infringing.

Except where the software carries a copyleft, shareware or similar licence, only acquire software from reputable dealers.

- You must be sure that you abide by the licence agreement - whatever sort of licence agreement it may be.

Of course, you can always take advantage of the exceptions to copyright, and disregard any unlawful licence terms. So, for example, you will usually have the right to make a back-up copy of the software, even if the licence agreement claims that you don't have this right. (If in doubt, consult a lawyer - and to be on the safe side, assume that the licence terms are valid unless and until you are advised otherwise.)

4.1. The various kinds of infringement

It is worth pointing out, at this stage, that there various forms of software copyright infringement - all of which must be avoided! The most common kinds of infringement are the following:

- Wholly unlicensed use: for example, copying a piece of software from a friend, or over the Internet, etc., where the licence for the software does not explicitly permit this.
- Overuse: for example, buying a piece of software licensed for one computer, and installing it on two.
- Failure to have a licence assigned, or to relicence: if you acquire hardware second-hand, this does not necessarily transfer all software licenses, and you must take steps to ensure that your use is lawful.
- Shareware abuse: where software is licensed "for evaluation purposes only" or the like, it is copyright infringement to exceed these terms.
- Obtaining software fraudulently: for example, getting a reduced rate by pretending that your business is a educational institution.
- "Warez" copyright infringement: a "warez" site is a site on the Internet that allows people to download infringing copies of software. The software will usually have had its digital rights management "broken" (see section E of this briefing paper), and is referred to as "a warez copy", or "a hacked copy". Needless to say, the people who make warez

copies, the people who run warez sites, and the people who download and use warez copies are all copyright infringers.

- Illicit "special offers" from hardware vendors: a hardware vendor sells a computer with software installed, but (often unknown to the customer) the software is unlicensed.
- Making an unlawful copy of software on a burnable CD-ROM, or the like, for the purpose of giving it to someone else. (Note that, in contrast, making a back-up copy is usually lawful! A back-up copy is a spare copy, made in case the original is erased or damaged by accident. See section C.3 of this briefing paper for details.)
- Counterfeiting: this is the making of unlawful copies of software on burnable CD-ROM, or the like, on a commercial scale, and having them sold under the pretence that they are lawful copies (by putting them in deceptive packaging, etc.). Counterfeiting is the preserve of professional criminals. If software is on sale at a greatly reduced price, it may well be counterfeited.

4.2. What can happen if you infringe

Software companies - especially the larger ones - are vigilant in enforcing their rights, especially against businesses. They are even anonymous tip-off lines for people to report infringement. One disgruntled employee can get a company into serious trouble, if the company is disregarding copyright law!

If your business is caught, then the consequences might include civil damages, fines, police seizure of your company's computers, adverse publicity, and even the criminal prosecution of the individuals responsible.

If you are accused of copyright infringement, and the matter cannot be sorted out simply and amicably, you should consult a lawyer.

4.3. A software copyright compliance policy for your business

Much infringement is caused by ignorance, neglect or carelessness, rather than by wilful disregard of the law. In order to ensure that your business does not infringe, the following guidelines may be useful:

- Your company should have a written policy on compliance with software copyright law.
- Appoint someone senior in your company as your Compliance Officer. This person should be familiar with software copyright law. It is also important to decide who will deputise for the Compliance Officer if he or she is absent.
- The Compliance Officer should keep (and maintain up to date) a record of all the software used by the company, together with the licence terms for that software, and be responsible for ensuring that those licence terms are complied with.
- Except where the software carries a "copyleft", shareware or similar licence, only acquire software from reputable dealers. (Remember that even a software package that looks genuine may, in fact, be the product of a counterfeiting operation run by professional criminals.)
- If any software has particularly restrictive licence terms, procedures for ensuring that those terms are complied with should be put in place. For example, if a particular program is licensed on the condition that it may not be used on more than five computers at once, it may be possible to program the central server to enforce this rule.
- Staff should be taught the importance of respecting software copyright. They should be taught to recognise that certain "problematic" activities raise serious copyright concerns, and should not be undertaken without the authorisation of the Compliance Officer. (If other senior staff are familiar with copyright law, they too may be given authority to

authorise "problematic" activities. However, the Compliance Officer should remain in overall control.)

Such activities include:

- Downloading software over the Internet.
- Making copies of software.
- Transferring software from one computer to another.
- Putting software from home (or elsewhere) onto any of the company's computers.
- Taking company software home.

These activities should be regarded as "problematic" even if they are only undertaken for a brief period of time.

If an employee has a question, then he or she should be told to ask the Compliance Officer. (Needless to say, it is important that the Compliance Officer deals with such questions promptly, or else the system breaks down!)

- Finally, it should be made clear to your staff, as part of your compliance policy, that they will be disciplined if they are caught breaking the law.

4.4. Software auditing

It is sometimes recommended for a business to "audit" its software. This subsection explains briefly what this term means.

In essence, a software audit consists of taking stock of all the software used by the business, examining the licence terms for that software, and ensuring that the business is in compliance.

If your business has a compliance policy of the sort detailed in subsection D.3 of this briefing paper, then auditing is redundant. If, on the other hand, you have not previously had a compliance policy (or your compliance policy has not been properly implemented, etc.), then it is necessary to carry out this procedure as a step towards introducing a well-functioning compliance policy.

Software manufacturers' trade associations sometimes ask businesses to audit their software. They may even send you a so-called "audit form", and ask you to return it to them, complete with information about your business's software use. Such schemes are entirely voluntary.

Your business would be well advised not to participate in any scheme of this kind.

Although you are, of course, obliged to obey the law, you are not obliged to give away potentially confidential information about your business - and you are certainly not obliged to incriminate yourself! If you are auditing your software, do it internally; if you find that you have been infringing copyright without realising it, then either stop, or acquire the licence that you need.

One special sort of software audit that must be distinguished clearly from "audit form" schemes is the software audit that you may be asked to perform if your business has been caught infringing copyright. As part of a settlement, you may be asked to demonstrate that you are bringing your business into compliance with the law. If such a settlement is in question, you need to consult a lawyer.

5. Digital rights management

Digital rights management (usually abbreviated to "DRM") consists of all technological measures that rights owners use to protect their rights. For example, a software manufacturer might require the licensee to type in an "activation code" (a special sort of password) in order to use the software. The aim is always to prevent copyright infringement.



Software Copyright

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It is technologically possible to "break" DRM - i.e., to get around it somehow. However, the Directive requires Member States to take measures to prohibit the distribution, etc., of anything (including a piece of software) designed for the purpose of breaking DRM. This provision is drafted in somewhat vague terms, and the way in which it is implemented can vary from one Member State to another. Severe criminal penalties may be involved.