

How Eaton Protects Software

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A multinational company's practical approach to protecting and dealing with software

Computer software has increasing importance at Eaton Corporation. Accordingly, it is important to identify the types of software encountered and determine how to best deal with third-party software and how to protect Eaton software from a proprietary standpoint.

Eaton now develops and markets software both as a product per se and embedded in commercial hardware. Frequently, software development is more expensive and time-consuming than the development of hardware in which the software is embedded. The hardware is increasingly becoming a carrier for the software product. As such, software has increasing importance for Eaton because proprietary software can provide an advantage in selling its products, and controlling its corporate functions and manufacturing.

It is desirable for Eaton to own its software, protect its software and, if possible, prohibit others from selling the same or similar software without authorization.

Eaton desires to profit from the use of its software, either by selling more products, selling products at a higher profit as a result of their unique software, or obtaining income from selling or licensing software. These benefits are important to Eaton because they secure jobs and provide for future corporate growth.

CATEGORIES OF SOFTWARE

The basic types of software encountered at Eaton are generally classified as follows:

1. Software developed and inven-

tioned in products. Examples — A control for an adjustable frequency drive, a truck transmission or a testing machine.

2. Software per se which Eaton provides to its customers, distributors and sales engineers. Examples — A product selection guide or a product per se such as a data logging package to be added to an Eaton PC. Sometimes this type of software is provided free as an incentive to sell more products, and other times it is sold as a product per se or a software package for use with Eaton hardware.

3. Custom software developed for a particular customer. Examples — Controls for a truck transmission on a clothes dryer. This type of software could include semi-custom software where a custom product is modified for a particular customer.

4. Custom software developed for internal use in Eaton. This may include a communication package to allow one division to communicate with another or a process-control package that controls a heat treating or machining process. It may also include a custom module that can be incorporated in a software package that Eaton purchases or licenses from a third party or engineering software.

5. Software of others. This is software Eaton buys or licenses from third parties.

THIRD-PARTY SOFTWARE

In most instances, Eaton acquires software of others under certain restrictions. Examples of restrictions are:

1. Strict controls on where the software may be used, including limitations of use to a particular corporate site.
2. Limitations on the duplication of the software.

3. Limitations on the modifications of the software.

4. Limitations on access to and maintenance of confidentially regarding the software.

The restrictions must be clearly defined to and thus should be negotiated at incompatible with intended use. Failure to adhere to the restrictions can result in a violation of federal and/or state law and subject both Eaton and the individual user to court-imposed sanctions.

When buying or licensing third-party software, Eaton requires the following minimum terms and conditions:

1. Eaton will hold the software as confidential with the same degree of care that Eaton uses to protect its own similar proprietary information. Eaton will not agree to strict confidentiality. "Strict confidentiality" requires strict procedures to hold the software confidential, such as always keeping the software under lock and key. Many times these limitations are not practical and should not be agreed to.

2. Eaton should have the right to duplicate the software for backup and archival purposes.

3. Eaton should have the right to transfer the software to another CPU if the CPU on which the software is installed is inoperable.

4. Eaton should have the right to transfer the software to another CPU of similar power at Eaton with notice to Licensor.

5. Eaton should have the right to assign the software to a subsidiary of interest of the business unit that uses the software, provided the assignee agrees to be bound by

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terms and conditions governing the use of the software.

When licensing or buying third-party software, an intellectual property attorney can be of help in negotiating terms and conditions that are practical and less restrictive than the terms and conditions under which the software is normally licensed. At Eaton, this is applicable to both shelf software and software that is developed especially for Eaton under contract. It is extremely important that if software is developed for Eaton by subcontractors or consultants that a written document be executed defining Eaton's ownership rights in the developed material. Usually, if Eaton pays for the development of software, Eaton desires to own all rights associated with the software and desires that the software and related documentation be held in confidence by the developer.

COPYRIGHT PROTECTION

To protect Eaton's software, Eaton's employees are encouraged to utilize the protection of the federal copyright laws to the fullest extent. A copyright notice is included on all software developed by or for Eaton. The following notice is used:

© Eaton Corporation 1988
All Rights Reserved

This notice constitutes a warning that to duplicate or use the software without permission risks liability under both federal and state law because Eaton claims exclusive rights therein. The date of the creation of the software or the date of the last revision to the software, whichever is the latest, is used as the date in the notice. The notice is placed at a location in which a user of the software is reasonably expected to view the notice. Only a single use of the notice is required on the software. The notice is generally located in any one of the following locations depending upon space considerations:

1. On the initial screen and at the beginning of each on-line session.
2. At the beginning of any hard-copy listing, manual, flow chart and other documentation, a separate notice should be included on the

documentation.

3. At the beginning of each module of source and/or object code.

4. On the physical material or container in which the program or database is embedded, such as a disc cover, tape reel, integrated circuit, etc.

5. On the circuit board, controller box or other readily visible means containing any electronic memory device that contains the software.

6. If none of the above is practical, locate the notice on the packaging in which the work is shipped and/or on the computer cabinet supplied as part of a system.

Copyright notices should be placed on all software that is created internally. Establishing valid copyright protection in Eaton's software by the copyright notice is basic to the protection of Eaton's software and related documentation.

PATENT PROTECTION

Eaton uses patents to protect products and processes controlled by software and the control functions of software per se. Patent protection is available if the software is new, novel and nonobvious. Patent protection provides much broader protection than copyright protection.

Copyright protection protects the software from duplication and it prohibits a third party from copying Eaton's software, obtaining a copy of it and deriving a similar software from Eaton's software. Copyrights do not protect against similar software if such software is not derived or copied from software that is protected by copyright protection.

Patent protection provides much broader protection than copyright protection. Patents can cover not only the software products, but similar software products and products that perform similar functions. Patents are the most desirable form of protection, but copyrights are the simplest and least expensive to utilize.

TRADE SECRET PROTECTION

Eaton also protects some of its

software by treating it as trade secrets. To maintain trade secret protection of the software or a portion of the software, the software must be held as confidential at all times. This may be difficult due to the fact that maintaining trade secret protection is difficult to preserve over a long period of time. The copyright notice is applied to any software to be maintained as a trade secret to protect the software in case it ever has any exposure outside of Eaton.

HOW TO PROFIT FROM PROPRIETARY SOFTWARE

The following are examples of how Eaton benefits from the protection of software products:

Software Included in Products

When Eaton develops software and incorporates it into a product, Eaton hopes to have a superior product that it will be able to sell as a profit. This software should be covered by copyright and/or patent protection as discussed above and the source code should be held confidential as a trade secret.

If a customer or others require access to the confidential software, such as the source code, a written agreement is required to limit use of and require confidentiality of the code. If the code is to be circulated, other appropriate restrictions are negotiated, such as only allowing the use of the code to interface with Eaton products. Normally, this type of software is not licensed to others unless they are manufacturing the products under license from Eaton.

Software Per Se Which Eaton Provides to Its Customers

Eaton's attempts to cover this software with copyright and patent protection is discussed above. This software may be utilized as a sales tool to sell more Eaton products or may be a marketed product per se. Normally, source code is not distributed. Copying may be restricted depending on the type of software. In some instances, increased use of Eaton's software enhances Eaton's reputation and the sale of its products. In these instances, Eaton may not wish to restrict duplication

in order to strive for widespread distribution of its software. In other instances, Eaton may take just the opposite position and not want widespread distribution. In such cases, encryption or other antecopying schemes can be utilized in addition to copyright and/or patent protection.

Custom Software Products

These products are generally protected by copyrights and patents. Where custom software is being developed for a customer, it is imperative to negotiate and agree by written agreement with the customer, prior to the development of the software, as to which party will own rights to the developed product. Eaton strives to have the right to use the customized software and sell more products. It is preferable, if possible, that the software is owned by Eaton and the third party agrees to purchase products using the software from Eaton.

Custom Software Created for Internal Use

Copyright and patent protection are generally applicable to software to be used exclusively within Eaton. In some instances, Eaton may want to hold the software confidential so knowledge of its mere existence or how it functions could be of benefit to the competition. In some instances, the custom software can be licensed to others to generate income to Eaton, subject to the competitive side-effects. In many instances Eaton can license software and generate additional income without decreasing Eaton's competitive position. For example, a communications package may be developed that would allow a computer to communicate with a different brand of computer. Eaton would generally use this internally for Eaton's benefit only but may

license it to a third party to sell to others with Eaton receiving a royalty on each sale.

A second example would be where Eaton licenses a package from a software company and develops a custom module for use with the package. The software company may have other customers who can use this custom software module. Eaton may license the module to the software company and receive a royalty on the sales by the software company to its customers. Another example would be where Eaton develops a software package that controls a manufacturing process. Eaton may license this to a third party which is not competitive with Eaton.

HOW ELSE CAN EATON PROTECT SOFTWARE

Eaton strives to create an atmosphere in which its employees know that software is a valuable property right of Eaton and must be protected and controlled with the same degree of care that Eaton protects its other proprietary information. Signage can be utilized to indicate attention to the fact that software is important to Eaton, but as Eaton's employees would not give a competitor Eaton's proprietary drawings or customer lists, they should also protect access to Eaton's proprietary software. Such interviews should be conducted with employees and consultants when they leave Eaton's employment or retention, reminding them of their contractual and fiduciary obligations, including maintenance of confidentiality of proprietary software.

WARRANTIES REGARDING EATON SOFTWARE

When software is incorporated in

a product that Eaton sells, it is Eaton's practice to warrant that the product will function according to its specifications. The exact warranty will vary depending on the type of product. Software incorporated in a product generally will have the same warranty as the product per se.

It is well recognized that software can be very complex, may take many man-years to develop and may have bugs or errors. Thus, a limited warranty, if any, is generally provided when Eaton sells or licenses software per se. This is particularly true when the software is a custom package or is extremely complex.

Eaton's warranty on software is generally limited to the following:

1. Eaton owns the software.
2. Eaton has the right to license or sell the software.

3. To the best of Eaton's knowledge, the software does not violate the proprietary rights of others.

Eaton generally does not warrant that a complicated software product will perform to certain specifications. The software will be sold "as is" only with the above warranties. All other warranties are specifically disclaimed.

Conclusion

Software should be recognized as a valuable proprietary right and should be protected to the fullest extent permitted by law. Trade secrets should be used to protect code. Copyright protection of the software should generally be used to protect all software and patent protection of the software should be obtained if possible. An intellectual property attorney should be consulted to help negotiate reasonable terms and conditions of software use, purchase or license, which protect the proprietary aspects of the software.