Diplom/Master-Thesis

(Diese Arbeit kann auch als Studien/Bachelor-Arbeit vergeben werden oder als studienbegleitendes Projekt.)

Best Practices of Adopting Open Source Software in Products

Technology	Software Process	Legal/Law	Business/Economics

The thesis can be written in either English or German. Description last revised 31.01.2010.

Summary

A software vendor can save money, speed up development, and increase product quality by using off-the-shelf open source components in its products. However, embedding open source comes with a risk: If not handled properly, the vendor may have to open source its source code, may be sued for patent infringement, or may end up depending on an open source community that acts against its interests. This thesis analyses these threat scenarios and collects best practices for coping with them.

Problem and Work Description

Many open source components are of high-quality yet (appear to be) free to get. Linux, Apache, MySQL, etc. (i.e. the whole LAMP stack) are good examples. It may seem obvious then that developers of software packages like business applications or manufacturers of hardware devices that use a lot of software employ open source software to speed up development, improve product quality, and save money. A couple of factors speak against this, however. For example, "viral" open source code may require the vendor to open source its own source code. Or, the developers of an open source component may decide on a direction that does not fit the vendor's interests.

This thesis analyses the situation, determines the top three threat scenarios from the vendor's perspective, and collects best practices for coping with these threats. The best practices are analyzed, streamlined, and integrated into a suggested process for adopting open source software in a software vendor's products.

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