Diplom/Master-Thesis

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

Continuous Deployment

Technology	Software Process	Legal/Law	Business/Economics

The thesis can be written in either English or German. Description last revised 06.01.2011.

Summary

Continuous deployment is the name of an engineering practice where a commit to a project's code repository is put into production without any intermediate human intervention. It is the next step after continuous integration and it is all the rage in agile methods circles and for web applications. This (Studien/Diplom/Bachelor/Master) thesis reviews the current practice of continuous deployment and applies it to the Open Source Research Group's wiki platform project.

Problem

Continuous deployment is an emerging practice of agile methods and open source software development [1] [2]. It is not well-defined yet but promises yet short feedback cycles that make software development faster and bring a product closer to its users. Current continuous deployment practice is based on metaphors with no or limited precision. Terms like experiments, immune system, deployment manager etc. are waiting for clarification and definition.

This thesis work first reviews current emerging practice. Review sources are blogs and tool discussions. In a second step, the review results are codified and implemented in a tool chain and practice documentation that supports continuous deployment for one of the Open Source Research Group's main project, the wiki platform. Ultimately, this thesis work clarifies what continuous deployment is, when it works and when it doesn't, and how, if so, it makes software development more effective.

References

[1] Continuous deployment at kaChing.

[2] Continuous deployment at Digg.

Thesis Advisor

Prof. Dr. Dirk Riehle
dirk.riehle@informatik.uni-erlangen.de
Martensstr. 3, Raum 04.135
Sekretariat Raum 05.138