Software Engineering Seminar (SoSe 2016)

Automated Repair of Deployed Software

– Exterminator –

Description

Under certain circumstances, fixing errors in already deployed – or maybe even running – software systems can be necessary. Reasons could be, for example, that the sources of the system are not available to the user, or that the system is indefinitely running and must not be stopped. The applied techniques in this area vary greatly from approaches that deal with the debugging on source code level, obviously.

In this topic, the tool Exterminator shall be examined which aims at automatically correcting heap-based memory errors in C and C++ programs.

References

[1] Gene Novark, Emery D Berger, and Benjamin G Zorn. Exterminator: Automatically Correcting Memory Errors with High Probability. *Communications of the ACM*, 51(12):87, dec 2008.

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