Abstract

Many software tools have been proposed for the purpose of performance analysis and measurement on software executables. The results produced by such tools are visually displayed based on run-time characteristics of software executables without suggesting the fitness of executables at the operational environment. This is because run-time characteristics of an executable are not static for every running instance even in the same platform and same machine configuration. In this paper, an efficient method has been introduced to estimate fitness of software executables to the operational environment by incorporating Software Reliability Growth Models. The objective of this new method is to suggest the level of fitness of software applications based on reliability measures. For this purpose, existing reliability growth models are calibrated and run-time attributes of executables have been employed instead of failure data. The estimation of fitness at the operational environment of software executables will reduce the complexities in both performance analysis and maintenance.

References

- P. K. Kapur, H. Pham, Sameer Anand, Kalpana Yadav, &quot;A Unified Approach for

Index Terms

Computer Science

Software Engineering

Keywords

Application fit  process calling structure  run-time characteristics  operational
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