Towards green computing in Erlang

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Energy efficiency in computing was identified as low energy usage of the hardware for a while. However, nowadays, we can talk about energy efficiency in terms of software as well. Therefore, we have to investigate how the different design decisions and programming language constructs affect the energy consumption. The green computing is a relatively new research area, guidelines are required for the software developers in terms of energy efficiency. In our research we are focusing on the functional programming language Erlang. We have investigated the effect of different language constructs, data structures and styles of programming on energy usage. Additionally we present a tool to measure and visualise the consumed energy.

References


