Abstract

Dynamically migrating code for execution from a device to a remote server has been a topic of active research for nearly a few years now. With the advent and the rapid growth of mobile devices, this area has been extended to mobile operating systems. Although mobile devices such as phones and tablets are available with increasing the hardware specifications to include more RAM and CPU cores, they do not often keep up with the demands of ever growing mobile applications. In the context of mobile devices, this field has come to be known as Mobile Cloud Computing (MCC). It combines mobile computing and cloud computing to achieve dynamic code migration of applications to a remote server, achieve reduced power usage and faster execution. In this paper, a review of the most prevalent techniques of MCC that are shaping this field is done. The paper also covers the complete architecture that is used to achieve these results. Along with various architectures, approaches a study of their advantages and disadvantages, as well as the way forward is discussed.
- Ying Zhang, Gang Huang, Xuanzhe Liu1, Wei Zhang, Hong Mei, Shunxiang Yang. 2012. Refactoring Android java Code for On-Demand Computation Offloading. In the Proceedings of OOPSLA.

**Index Terms**

Computer Science

Distributed Systems

**Keywords**

MCC code offloading code migration class-level offload method-level offload thread-level offload code augmentation
Mobile Cloud Computing.