A Distributed API for Live VM Migration in Cloudlets

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Abstract

Cloud computing is an effective technology in handling computation with dynamically scalable resources. With the growth of multimedia applications, mobile applications have become resource-intensive. To provide better connectivity with the cloud, cloudlets have been introduced, which in turns provide low latency and high bandwidth. In this paper, we discuss the live migration of Virtual machines in Cloudlets using VirtualBox as hypervisor. We have proposed and implemented a distributed API Viper particularly for cloudlets, which provides users, interfaces for operating with Virtual Machines. We also test this API in different scenarios, changing RAM, CPU and CPU Stress.

References


Index Terms

Computer Science Distributed Computing

Keywords

Cloud Computing, Virtualization, Live Migration, Mobile-Edge Computing, Cloudlets.