A Distributed API for Live VM Migration in Cloudlets

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 180
Number 52

Year of Publication: 2018

Authors:
Videet Singhai, Krushi Damania, Shraddha Holmukhe, Prasenjit Bhavathankar

10.5120/ijca2018917357

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

Technologies and Optimization (ICRITO) September 7-9 2016.


**Index Terms**

Computer Science  Distributed Computing

**Keywords**

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