Integrated Management System for Distributed Micro-Datacenters

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Abstract— In this paper, we introduce a Micro-Datacenter (MDC) and Integrated Management System (IMS) that controls and manages the MDCs for supporting several services to users. The MDC is a small and rack-based datacentre system that designed to solve different problems or to handle different workloads that cannot be handled by traditional datacenters. The IMS controls and manages a multitude of MDCs to provide users with several services. And also, we introduce a case study applied to the Korea Advanced Research Network (KOREN).

Keyword— Virtualization, Datacenter, Cloud operating system, OpenStack, Virtual machine, KOREN



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