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RESEARCH ARTICLE

APPLICATION OF CLOUD COMPUTING AS HPC PLATFORM FOR EMBEDDED SYSTEMS

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Abstract— The process for prototype of a High Performance Computing platform for robotics is discussed in this paper. The Cloud-based platform gives advantages of infinite resources, dynamic scalability and better resource utilisation. The different elements and technologies involved in a Cloud will be presented, as well as explaining the building process. The Cloud is compared with using Open stack middleware and KVM with hardware-based virtualization for performance.

Keywords— Eucalyptus; HPC; Virtualization technology; KVM; Cloud Controller

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