

(Pt24)Title of Paper for ICACT Conference

Hyun-suk Roh*, Hyun-woo Lee*, Sang-ho Lee**

**Electronics and Telecommunication Research Institute(ETRI), Daejeon, Korea*

***Computer Science Department, Chungbuk National University, Cheongju, Korea*

ventus@etri.re.kr, hwlee@etri.re.kr, shlee@cbucc.chungbuk.ac.kr

Abstract—This paper proposes a mobile virtualization system based android-x86 virtual machine. The proposed system provides virtual services to a light-weighted device. Those are provided from the android-x86 based virtual machine. Here, light-weighted device is like a phone or a pad just having the ability of H.264 decoding and a virtual machine is based android- x86 using Oracle VirtualBox. In this paper, we propose several methods that android-x86 based applications can operate same way as it does in real smart devices. Those include device virtualization and hardware acceleration schemes.

Keyword— virtualization, virtual machine, android, x86, openGL



Hyunsuk Roh received the B.S. and the M.S. degrees in Computer Engineering from Kyungpook National University, Dae-gu, Korea, in 1995 and 1997, respectively. He was a R&D Engineer at the Network Research Lab. Since 2000, he has been a Staff R&D engineer at the Electronics and Telecommunications Research Institute (ETRI), Korea. His current research interests include Mobile Virtualization, Cloud Virtualization and Multicast/Broadcast Technologies.