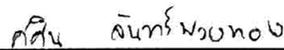


Sasin Janpuangtong 2007: A Porting of μ Clinux and a Development of RTP/RTCP Protocol on an Embedded System. Master of Engineering (Computer Engineering), Major Field: Computer Engineering, Department of Computer Engineering.
Thesis Advisor: Assistant Professor Kemathat Vibhatavanij, Ph.D. 121 pages.

This thesis has proposed the developing of RTP and RTCP protocol for embedded system. These protocols lets the embedded system be able to send / receive real-time data on IP network. That capability is a main function for all communication devices that used for sending / receiving voices and images data on the IP network. In this research, The RTP and RTCP protocols are developed under system call format, on μ Clinux operating system. This operating system is popular with the embedded system, which uses processing unit that dose not have MMU inside. Developing the system call format that works on kernel-mode of the operating system, helps the RTP and RTCP protocols are able to work in the embedded system rapidly and efficiently. The performance is better than an API in a library of the RTP and RTCP protocols, which works on user-mode of the operating system. Moreover, this encourages developers to bring the system call to develop applications or higher protocols, which are used for sending / receiving real-time data on the IP network for working with the embedded system in the future.



Student's signature



Thesis Advisor's signature

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