

REMOTE PROCEDURE CALL MECHANISM ON EMBEDDED CONFIGURABLE OPERATING SYSTEM

**SUBHAKAR M, V. RAGHAVENDRA PRASAD
AND D. R. RAGHAVA REDDY**

Abstract

Current trends in computing include increases in both distribution and wireless connectivity leading to highly dynamic, complex environments on top of which the applications to be built. The task of designing and ensuring the correctness of applications in these environments is becoming more and more complex. Add to this the inherent complexities of using low-level and error prone networking APIs. The goal of much of the research in distributed embedded systems is to provide higher-level abstractions of complex low-level concepts to application programmers, easing the design and implementation of applications. A new and growing class of applications for wireless sensor networks also requires similar complexity encapsulation. In this work, propose is simple implementation of remote procedure call implementation for networked embedded devices (such as wireless sensor networks). The implementation of remote procedure mechanism by using embedded Configurable operating system (eCos) on iPAQ. Its effectiveness when compared with a simple application implemented directly over the network transport layer.

Keywords: eCos, iPAQ, RPM, RPC, TCP, UDP.