

Location of medical equipment based on a maintenance service oriented infrastructure and RFID technology

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Abstract

Service oriented architectures (SOA) are offering a new paradigm to improve the medical equipment maintenance management value chain. In this process, the localization of medical devices is necessary to develop ideal scheduling and maintenance policies oriented to reduce time and cost. Radio frequency identification (RFID) technology offers a solution to the localization of medical devices under several constrains. In this article, the different uses of RFID technology in a hospital environment are analyzed, and an infrastructure to work with RFID embedded in a SOA is proposed. Particularly, the use of RFID for equipment localization is investigated, and a demonstrator shows the feasibility of the approach.