Abstract: Context-Aware Complex Event Processing for Ubiquitous Business Process Management

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Abstract

Modern enterprise information systems are embedding the function of modeling and executing business processes. Moreover, a variety of devices, such as radio frequency identification (RFID) and wireless sensor network (WSN), are providing huge and significant events that should be rapidly processed for business excellence. In this paper, we address how complex event processing (CEP) technology can be applied to ubiquitous business process management on basis of context-awareness. To address the issue, we propose a method for semantic annotation to event processing language (EPL) in which the semantics of a situation drives the transformation EPL templates into executable EPL statements. The proposal method is implemented in the domain of ubiquitous cold chain logistics management. With the proposed method, context-aware event processing can be realized to enhance performance and excellence of business process.

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