An Extensible Event Processing Architecture for RFID-Based Tracking and Tracing

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Abstract

In many applications, it is necessary for customers or operators to be informed of the state or location of an item. There are real-world processes which can not be described with a defined workflow, either because the complexity and the number of tasks is very high, or because the process changes very often. Classical software architectures are not sufficient to solve these problems, due to the dynamics and complexity of these processes. Complex Event Processing is able to handle huge amounts of asynchronous events almost in real-time. This contribution presents a generic framework which allows definition of networks for complex event processing applications. These networks decouple single processing steps and add semantics to them. The functionality of the framework is shown according to a scenario with RFID-based events in a laboratory.