

Complex Event Processing System Based on the Extended ECA Rule

Authors : Kwan Hee Han, Jun Woo Lee, Sung Moon Bae, Twae Kyung Park

Abstract : ECA (Event-Condition-Action) languages are largely adopted for event processing since they are an intuitive and powerful paradigm for programming reactive systems. However, there are some limitations about ECA rules for processing of complex events such as coupling of event producer and consumer. The objective of this paper is to propose an ECA rule pattern to improve the current limitations of ECA rule, and to develop a prototype system. In this paper, conventional ECA rule is separated into 3 parts and each part is extended to meet the requirements of CEP. Finally, event processing logic is established by combining the relevant elements of 3 parts. The usability of proposed extended ECA rule is validated by a test scenario in this study.

Keywords : complex event processing, ECA rule, Event processing system, event-driven architecture, internet of things

Conference Title : ICCSISCT 2014 : International Conference on Computer Science, Information Systems and Communication Technologies

Conference Location : Kyoto, Japan

Conference Dates : November 13-14, 2014