

## 摘要

服務導向架構 (Service-Oriented-Architecture, SOA) 與事件導向架構 (Event-driven Architecture, EDA) 的結合應用將成為未來 Real-Time Enterprise 軟體應用系統架構的主流趨勢，雖然兩架構的結合可以整體提升應用系統之反應、整合與溝通的能力，但若無良好的事件管理機制及搭配提供服務的配套設計，則難以充分發揮兩架構結合的互補綜效。本研究所提出之調適式 SOA 有效事件模型，以事件價值觀點(Value-driven)分析事件所提供的價值對使用者的重要性與效益。由於使用者所重視的事件價值不同，因此也為各別使用者設計一調適性事件語意資訊模型(Customized Event Ontology Model)，作為篩選事件的依據，另外，事件管理機制也可運用智慧型代理人(Agent)觀察使用者採用事件的行為，透過學習更新事件過濾的規則，並可建議使用者取消訂閱(subscribe)不重視的事件。本研究同時搭配設計一事件與服務對應的機制，並透過此機制連結外部環境所提供的服務。本研究所提出之調適式 SOA 有效事件模型，預期可提供更為健全的服務導向架構(SOA)與事件導向架構(EDA)的結合應用設計，讓使用者可以真正受惠於此種應用軟體架構結合的好處與效用。

## **ABSTRACT**

The combination of Service-Oriented-Architecture (SOA) and Event-driven Architecture (EDA) will become the main trend of application architecture of Real-Time Enterprise in the future. Although the combination of these two architectures can enhance an application system's capabilities in response, integration and communication as a whole, it's hardly to extend these two architectures' complemented advantages unless there is a sound mechanism for advanced event and service management. This paper presents a novel methodology which can analyze the importance and impacts of events' values to users. Based on different emphases on events' values among users, this research can also develop a Customized Event Ontology Model used as the basis for filtering events for an individual user. The event management mechanism designs an intelligent agent in order to observe the records of a user's history events and to learn new filtering rules of events. The mechanism can also suggest the user to cancelling events which are insignificant to him. Furthermore, this study devises a mechanism to bridge the connections between events and services. The contribution of my methodology aims to provide an advanced solution of combining the architectures of SOA and EDA in order for a user to exert up-to-date information for personalized competitive advantage.