

Event Processing – concepts, state of the practice and future trends

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Event processing is the fastest growing segment of enterprise middleware software over the last couple of years (according to analysts). The term event processing refers to software systems that are based on reaction to events, and employ a decoupled collection of components that react to events, and communicate through events. These components typically employ specific logic to filter, transform, or detect patterns in events as they occur. Recent years have seen the appearance of various commercial products and open source offerings that serve as generic event processing software platforms, they are mostly spin-off of research projects in academia and research institutes. The talk will discuss various categories of applications that benefit from event processing technology in various ways, positioning of event processing in the IT world with respect to other concepts. The talk will further discuss the seven basic building blocks which issue the main functions of an event processing applications, providing some examples. The various approaches taken in various products will be explained providing some glance to products that have used different programming styles. The talk will conclude with a discussion of trends for the future of event processing and open research challenges.

Biography

Dr. Opher Etzion is IBM Senior Technical Staff Member, and Event Processing Scientific Leader in IBM Haifa Research Lab, Previously he has been lead architect of event processing technology in IBM Websphere, and a Senior Manager in IBM Research division, managed a department that has performed one of the pioneering projects that shaped the area of “complex event processing”. He is also the chair of EPTS (Event Processing Technical Society), and has been *blogging** about event processing since August 2007. He is the co-author of the book "Event Processing in Action"** . In parallel he is an adjunct professor at the Technion – Israel Institute of Technology, has supervised 6 PhD dissertations and 20 MSc. theses, and has published nearly 80 papers in refereed journals and conferences. Prior to joining IBM in 1997, he was a faculty member and founding head of the Information Systems Engineering department at the Technion, and held professional and managerial positions in industry and in the Israel Air-Force. He completed his Ph.D. in computer science at Temple University, under the supervision of Professor Giorgio Ingargiola.

* <http://epthinking.blogspot.com/>

** <http://www.manning.com/etzion/>