Designing and Implementing Enterprise Service Bus (ESB) and SOA Solutions

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Abstract:

Service-Oriented Architecture (SOA) has been proven to be a flexible and extensible architecture for designing and realizing industry solutions and applications. Enterprise Service Bus (ESB) is a hub for integrating different kinds of services through messaging, event handling, and business performance management. This tutorial will focus on a SOA solution framework; the critical role and value proposition of an ESB in SOA and Web Services; ESB (and SOA) analysis and design methodology; Best practices for the practical design and implementation of an ESB, including ESB design using the enterprise integration and application integration patterns; ESB and business process integration tools and techniques for ESB implementation; and Performance, security and transaction management. This tutorial is based on numerous projects and solution architectures that the authors and colleagues have been engaged in the last 3 years in various industries, including government, financial, retail, electronics and distribution.

About the presenters

Min Luo has over 16 years of IT industry experience with more than 9 years of managing the whole life cycle of software application design and development. He has successfully designed and implemented solutions for transportation, financial, manufacturing industries, and large-scale government social services. He also has expertise in designing and developing integrated data warehouses with on-line analytical processing and data mining, application of various operations research, and management science techniques. Before joining IBM in 2000, Dr. Luo served as Senior Manager and Director for two of the Fortune 400 companies. He has also served as adjunct graduate faculty at several universities since 1997. He holds a B.S. (1982) and M.S. (1987) in Computer Science and a Ph.D. (1992) in Electrical and Computer Engineering.

Benjamin Goldshlager began his computer career with IBM in 1975. His experience includes consulting, software development and system programming in AIX, Linux, SUN, VM, VSE, MVS, VTAM, TCP/IP environments. He architected, designed and developed "MQSeries Security Channel Exits using Entrust/PKI" SupportPac., MS0C. He co-authored 3 IBM redbooks ranging in topics from security to IBM's AIX/ESA. Benjamin is Sun Certified Programmer for Java 2. He also teaches relational database, object oriented programming and Operating System courses at the City University of New York's Baruch College.

Liang-Jie (LJ) Zhang is a research staff member and the chair of Services Computing PIC at IBM T. J. Watson Research Center. He is leading SOA & Web services research for industry solutions and services. Dr. Zhang is an IEEE Senior Member and the chair of IEEE Technical Committee on Services Computing in Computer Society.

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