Innovation in Database Management: Computer Science vs. Engineering

Kenneth R. Jacobs
Vice President Product Strategy
Oracle8 Program Manager
Server Technologies Division
kjJacobs@oracle.com

Oracle Corporation
400 Oracle Parkway
Redwood Shores, CA 94065

Abstract

Vendors of commercial database management system face many challenges in incorporating into their products innovative technologies developed in academia. Pragmatic considerations and operational requirements can limit the viability of applying promising research. Technology leadership in commercial products is often the result of taking unconventional approaches rather than following "conventional wisdom", as illustrated with several examples of technologies in Oracle8 and its predecessors. The challenge shared by researchers and practitioners alike: "making what we do matter."

1 Short Biography

Ken Jacobs is vice president of Product Strategy for Oracle's Server Technologies Division. He is responsible for a number of technology planning activities for the Oracle database product family, including parallel processing, object technology and high performance systems. He has most recently acted as the senior manager responsible for coordinating all company activities surrounding the release of Oracle's next generation database product, Oracle8. Mr. Jacobs is a frequent speaker at industry symposiums and conferences.

Previous to his current role, Mr. Jacobs was vice president of Product Management for the Server Technologies Division, where he managed a team responsible for product management and marketing for the Oracle7 database server and related technologies. Mr. Jacobs joined Oracle in July 1981 and has held a variety of positions with technical, managerial and marketing responsibilities in field and corporate roles.

Mr. Jacobs has contributed to several industry-wide activities including the development of the SQL database language. For many years, he served as Oracle's representative on the American National Standards Institute (ANSI) SQL Committee, the technical committee on databases (X3H2). He also initiated and led efforts to enhance the security features of the Oracle database server, working with the National Computer Security Center and other key government agencies. Mr. Jacobs has also represented Oracle at the Transaction Processing Performance Council.

Prior to joining Oracle, Mr. Jacobs was with Inslaw Inc., where he managed a team providing computing support to social science survey data research. Prior to this, he worked as a programmer and systems analyst for several companies including: ADP Network Services, The Urban Institute, Oberlin College and The Brookings Institution.

Mr. Jacobs received a bachelor's degree from Oberlin College and performed graduate work in computer science at George Washington University.