

# Next Generation Data Management in Enterprise Application Platforms

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## ABSTRACT

As a leading provider of applications and application infrastructure software, SAP has been always interested in the entire spectrum of enterprise data management from transactional to analytical, structured and unstructured, as well as high-volatility event data streams. The underlying architecture for enterprise applications has fundamentally changed in the last decade, with the adoption of service-oriented architectures representing the latest shift. However, DBMS architecture has not evolved sufficiently to meet the challenges that these new application characteristics pose. As a result, at SAP we have been rethinking the way enterprise applications manage their data. In this talk, we will present some key aspects of this rethinking. We will start with a description of the shift in application architecture and the challenges that this shift poses on data management. We will then describe the failings of a single overarching DBMS architecture against these needs, and then describe some examples of usage-specific data management in enterprise application platforms. In particular we will focus on our approach to managing analytical, transactional and master data. We will present some results that describe how, with a combination of better utilization of main-memory based data management techniques, addressing the needs of the next generation application infrastructure and advances in the underlying computing and storage infrastructure, we can do significantly more efficient data management.

application development and integration. Vishal joined Peregrine following the acquisition of Bodha, Inc., where he served as founder and CEO. Bodha developed technology for non-invasive, service-based integration of enterprise applications and information. Vishal holds a Ph.D. in Computer Science from Stanford University and his experience includes work in modeling, information management, application development, and artificial intelligence at Stanford and two startups.

## ABOUT THE SPEAKER

Dr. Vishal Sikka is Senior Vice President and GM of SAP's architecture group with responsibility for roadmap and architecture governance for SAP's products and technology. In addition, he is the CTO of SAP's products and technology group with responsibility for technology direction, innovation and partnerships in strategic product and technology areas. Prior to joining SAP, Dr. Sikka served as area vice president of platform technologies at Peregrine Systems (Remedy) responsible for

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