Keynote Address

Delivering Dependability: A Moving Target

Keynote Speaker: Dr. Ambuj Goyal
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Abstract: Are we thinking broadly enough about dependable systems? Just what are the most influential factors that contribute to dependability? Is it the manufacturing process? Is it circuit design? Or software design? Or network capacity? Or perhaps implementation? The answer could be none of these and most certainly it's changed dramatically from even five years ago. Technology and best practices around its use have evolved to the point where dependable systems are gated by factors that go far beyond one's normal purview. Today, political, cultural and societal issues may well have an equal if not greater impact. We must challenge ourselves to consider all the dimensions of today's world and think about non-obvious relationships. This keynote will challenge the audience to think outside the box and consider the realities of today's world and its impact on dependable systems.

Bio: Dr. Goyal was named General Manager, Information Management Software in August 2005. He served in his previous position as the General Manager of Workplace, Portal, and Collaboration Software (WPLC) from January 2003 to August 2005. In that position, Dr. Goyal architected the transformation of Lotus software by expanding its focus beyond the traditional “Collaboration” marketplace to encompass the “People Productivity” market. He was responsible for setting the business strategy and direction for the Websphere Portal product set, the Lotus Software product set, and the IBM Workplace product set.

Prior to serving as General Manager of Workplace, Portal, and Collaboration Software, Dr. Goyal served as the General Manager, Solutions and Strategy, IBM Software Group, from February 2001, to January 2003. In that position, he was responsible for setting business strategy for IBM’s Software Group, the WebSphere Business Integration product set, and delivering industry-specific middleware solutions. Prior to serving as the General Manager of Solutions and Strategy, Dr. Goyal served as Chief Technology Officer, Application & Integration Middleware Division, which includes the WebSphere and MQ product families.

Dr. Goyal joined IBM Corporation in 1982 as a research staff member at the T.J. Watson Research Center. He was named Vice President, Services and Software, and Director, Computer Sciences in 1996. In this dual role, he was responsible for setting IBM's long-term research direction in computer sciences, as well as ensuring that the best emerging technologies contribute to IBM's services offerings and software products. He had approximately 1500 researchers reporting to him in seven labs worldwide.

Dr. Goyal's main research interests are in high performance systems, databases and distributed systems. His early work in scalable databases led to IBM's Universal Database (DB2) family. He was also responsible for setting the early direction in web application servers which led to the WebSphere product family. He also led the research efforts to create the RS/6000 SP supercomputer and the Deep Blue World Chess Champion computer.

Dr. Goyal has authored over 25 articles in various fields and has received five outstanding innovation awards from IBM for his work. He was elected an IEEE Fellow for his contributions to the theory and practice of highly dependable systems; elected an ACM Fellow in recognition of outstanding technical and professional achievements in the field of information technology.

Dr. Goyal received his Ph.D. degree in Electrical Engineering from the University of Texas at Austin in 1982, and his Bachelor's degree from the Indian Institute of Technology at Kanpur in 1978.