

Keynote

The need for ease: development principles for successful autonomic computing projects

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Abstract

Autonomic Computing has emerged as a paradigm for self managing IT systems to stem the tide of rapidly increasing administration costs in the face of rising IT system complexity. The development of self managing systems poses special challenges to research and development teams. This talk will explore some of the development paradigms that lead to successful software projects in autonomic computing. Examples from IBM's DB2 UDB Autonomic Computing project will be used as to highlight recent successes illustrating software engineering principles, algorithmic/mathematical techniques such as on-line simulation and close loop adaptive control, and experimental results

Biography

Sam Lightstone is a Senior Technical Staff Member and Development Manager with IBM's DB2 Universal Database development team. Sam is cofounder and leader of DB2's autonomic computing R&D effort. His current research includes numerous topics in autonomic computing and relational database management systems including: automatic physical database design, adaptive self tuning resources, automatic administration, and benchmarking methodologies. He is a member of IBM's Autonomic Computing Architecture Board and a member of the IEEE Computer Society Task Force on Autonomous

and Autonomic Systems. In 2003 he was elected to the Canadian Technical Excellence Council the Canadian affiliate of the IBM Academy of Technology. Sam is an IBM Master Inventor with over 25 patents and patents pending; he has published widely on Autonomic Computing for relational database systems. He has been with IBM since 1991

References

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