UNIVERSITÄT SALZBURG

Department of Computer Science

Reliable Large-Scale Peer-to-Peer Storage

by Dr. Marcel Waldvogel, Universität Konstanz

Most processes in modern organizations rely on fast access to vital data. Spreading data over widely distributed heterogeneous systems promises to evade the increasing risks to critical infrastructure. I first present a short overview of my vision of future storage systems providing a unified user and systems view on file storage, backup, and archival, including foundations and criteria for such a system. The second part presents three components paving the way towards resilient storage and access of data: a distributed hash table with geographical layout as a basis, metadata-free replication, and a mechanism to insure the cooperation of nodes.

Marcel Waldvogel holds a doctorate in technical sciences from ETH Zürich, for his work on improving Internet router scalability. In 1999, he became an assistant professor at Washington University in St. Louis and returned to Switzerland in 2001 to join IBM Research. Since 2004, he is full professor at the University of Konstanz, Germany, holds the chair for distributed systems, and is director of the computing centre. More information can be found at http://www.inf.uni-konstanz.de/~marcel/

Where Jakob-Haringer-Straße 2, Room 0.04

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Host: Prof. Wolfgang Pree