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Invited Talk

Structure in P2P Networks

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Design Issues and Challenges for RDF- and Schema-Based Peer-to-Peer Systems

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Abstract. Databases have employed a schema-based approach to store and retrieve structured data for decades. For peer-to-peer (P2P) networks, similar approaches are just beginning to emerge. While quite a few database techniques can be re-used in this new context, a P2P data management infrastructure poses additional challenges which have to be solved before schema-based P2P networks become as common as schema-based databases. We will describe some of these challenges and discuss approaches to solve them, basing our discussion on the design decisions we have employed in our Edutella infrastructure, a schema-based P2P network based on RDF and RDF schemas.

K. Aberer et al. (Eds.): VLDB 2003 Ws DBISP2P, LNCS 2944, p. 1, 2004.