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Jochen Kokemueller
Fraunhofer IAO

Holger Kett
Fraunhofer IAO

Oliver Hoess
Fraunhofer IAO

Anette Weisbecker
Fraunhofer IAO

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An Architecture for Peer-to-Peer Integration of Interorganizational Information Systems

Jochen Kokemüller, Holger Kett, Oliver Höß, Anette Weisbecker
Fraunhofer IAO, Stuttgart, Germany.

Abstract:
On the business case of independent sales agencies we discuss the requirements of tiny sized enterprises for data integration. If a multitude of independent enterprises need to be integrated, we argue that those are best represented by equal peers and describe the Architecture of VIANA: a Peer-to-Peer architecture for materialized integration of information systems, both in the inter- as well as the intraorganizational domain. VIANA propagates updates on data between peers and continuously monitors data quality. We argue that this type of integration can be accomplished with ideally no alteration of the participating information systems and that the integration may benefit substantially from existing data exchange formats. To this end we formulate the architecture in a way that existing XML technologies and standards may be utilized without the need for alterations.