

Distributed and Heterogeneous eHome Systems in Volatile Environments

Michael Kirchhof

Department of Computer Science III

Aachen University of Technology

Ahornstr. 55, 52074 Aachen, Germany

kirchhof@i3.informatik.rwth-aachen.de

ABSTRACT

eHome Systems consist of integrated and autonomous subsystems, which are installed on house owner's as well as on industry's side. Interaction is not limited to simple 1-to-1 relationships, they can cover arbitrary numbers of participants. When this is the case, it is expected that various middleware platforms come into play. In this paper a middleware called *Distributed Services Framework (DSF)* is proposed, which overcomes the limitations set up by J2EE, .NET, and similar ones. The proposed middleware is light-weight and flexible by incorporating existing middleware technologies instead of replacing them and provides an abstract and homogeneous view. The architecture of our approach is described and implications are analyzed. Furthermore, the proposed technology can be used for further development of Web Services technology.