MOBILITY SUPPORT WITH CORBA DIRECTORIES

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ABSTRACT
In the very near future, various aspects of mobility will play a major role in telecommunications. For the support of user and service mobility, the location-independent storage and retrieval of all kind of user-related information is essential. For this purpose, directories are the basic supporting technology. One of the most widely accepted standards for directories is LDAP. On the other hand, CORBA is becoming the de-facto standard for distributed object technology.

In this paper, we present a CORBA directory service bridging the gap between LDAP and CORBA. In contrast to LDAP, the semantic plausibility of queries can be syntactically checked at compilation time and correctly typed query results are delivered.

We have implemented both pure CORBA servers and LDAP wrappers that we have interconnected to a network of directory servers providing fully transparent access to the entire distributed information base. This paves the path for a smooth migration from LDAP to CORBA directory services.

Our performance results show that the general purpose IIOP protocol performs even better than the dedicated LDAP protocol. The benefit of mobility can be illustrated excellently in the context of IP telephony. Therefore, we demonstrate profile-oriented and downloadable service in a real-life telephony environment.