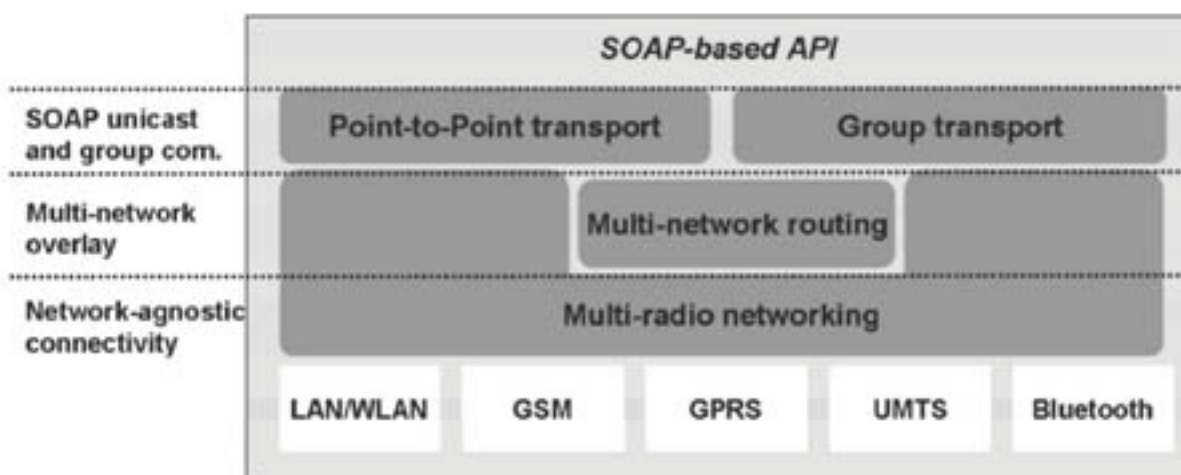


Overview

The ubiSOAP middleware enriches the Web service architecture with key features for services to become truly pervasive by taking full benefit of the rich capacities, including multi-radio interfaces, now embedded in wireless devices.

ubiSOAP brings multi-radio, multi-network connectivity to services through a comprehensive layered architecture:

- The multi-radio device management and networking layers together abstract multi-radio connectivity, selecting the optimal communication link to/from nodes, according to quality parameters.
- The communication layer allows for communication in the pervasive networking environment according to SOAP. ubiSOAP in particular enriches traditional functionalities of a SOAP engine to allow for SOAP-based point-to-point and group-based interactions in the pervasive network. It further enables access to services that may be in distinct networks thanks to multi-network routing.
- The middleware services layer brings advanced distributed resource management functionalities customized for the pervasive networking environment. From that layer, the Discovery Service enables the dynamic advertising and location of networked services, in particular accounting for extra-functional properties.



Last but not least, the ubiSOAP middleware is mobility-aware so that its functionalities adapt to the physical mobility of both clients and services, in particular exploiting the rich multi-radio, multi-network connectivity.

The ubiSOAP middleware has been implemented using Java for both desktop (J2SE) and mobile (J2ME CDC) environments.

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Related Research Projects

- [Service-oriented middleware for ubiquitous networks](#)

Download

- The ubiSOAP middleware is relased under open source license and is available from the following link: [Plastic Middleware Platform Downloads](#)