Overview

The WSAMI middleware supports the abstract specification of Ambient Intelligence applications in the form of software architectures, together with their dynamic composition according to the environment. WSAMI builds on the Web services architecture, whose pervasiveness enables service availability in most environments. In addition, dynamic composition of applications is dealt with in a way that enforces quality of service for deployed applications in terms of security and performance through the systematic customization of connectors that dynamically integrates relevant middleware-related services.

The WSAMI middleware prototype is a Java-based implementation, which builds upon IEEE 802.11b as the underlyingWLAN and integrates the following components:

  - The WSAMI SOAP-based core broker, including the CSOAP SOAP container for wireless, resource-constrained devices.
  - The Naming&Discovery service, including support for connector customization.

The memory footprint of our CSOAP implementation is of 90KB, as opposed to the 1100KB of the Sun's reference implementation. The overall memory footprint of our Web services platform is of 3.9MB, dividing into 3MB for the CVM and 815KB for the Xerces XML parser, in addition to the CSOAP implementation.

Contributors

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Supporting Grant

  - [IST OZONE](#) -- New Technologies and Services for Emerging Nomadic Societies

Related Research Project

  - [Service-oriented middleware for ambient intelligence](#)

Downloads

The WSAMI middleware is an open-source software freely distributed under the terms of the GNU Lesser Public License (LGPL)
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- Download the WSAMI middleware prototype:
- WSAMI Middleware User Guide (PDF)
- WSAMI Middleware Architecture Guide (PDF)
- WSAMI Middleware Developer Guide (PDF)

- Download the CSOAP prototype:
- CSOAP User Guide (PDF)
- CSOAP Architecture (PDF)
- CSOAP Release (Version 1.0 for Linux and windows)

- Donwload the overall WSAMI middleware prototype and related software and docs:
- All in a tar.gz file (19MB)

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