

Smallworld Internet Application Server™ 4.1.2

Overview

GE Energy's Smallworld Internet Application Server™ (SIAS) enables easy and efficient access to spatial and asset data in a Smallworld data base across the entire enterprise, to support key business processes for utility and telecommunication organizations.

SIAS 4.1.2 represents the most advanced Internet offering from GE Energy, based on an optimized architecture to meet the growing needs of the Smallworld customer base who appreciate the high value that geospatial network information can bring to most enterprise activities.

SIAS 4.1.2 delivers:

- Cost effective enterprisewide access to valuable network and geospatial data via Intranet or Internet performant
- Scalable for large organization
- Specific functionality available within a browser, to provide users focused support for their individual roles in the business processes
- Redlining and map markup features to add adhoc information and to exchange annotations and tasks
- User Interface components as portlets for integration into enterprise portal solutions
- Centralized application deployment and administration of Web applications to reduce total cost of ownership.
- Standard technology that complies within the enterprise IT landscape

Benefits

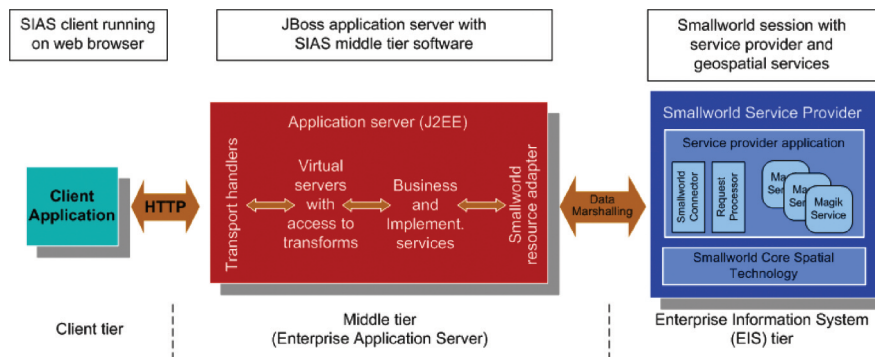
The key benefits of SIAS 4.1.2 include:

- Easy-to-use browser application, with effective deployment and low training needs
- Efficient enterprise access to valuable geospatial information
- Improved user productivity with rich functionality that can be configured to meet specific operational tasks
- Efficient communications of remote and back-office teams by adhoc annotations or persis-tent markup information, e.g., to ensure a high quality assurance process to update network data
- Flexible and low cost integration of geospatial services into existing enterprise portal solutions
- Reduced IT costs to comply with existing large scale application server landscapes

Functions and Architecture

SIAS 4.1.2 is built on a three-tier architecture:

- Enterprise Information System (EIS) tier – The Smallworld Service Provider publishing Smallworld Magik™ Services to application servers.
- Middle tier – The Java Application Server exposing these as Smallworld Business Services.
- Client tier – The SIAS 4.1.2 Client Application accessing the Services.



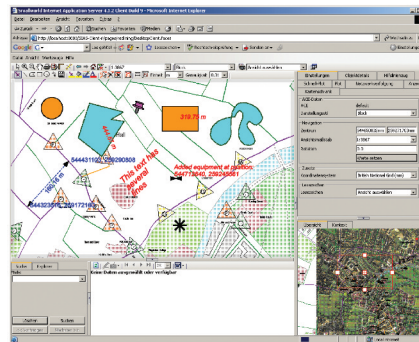
Three-Tier Architecture Features

Smallworld Service Provider

- Built on Smallworld Core Spatial Technology™ with Smallworld industry applications, such as Smallworld Physical Network Inventory™
- Common framework for Smallworld Magik Services like Map, Query and Plot, and further services as provided by an industry application or Custom Services
- Based on Core Smallworld Application Framework™ (SWAF) architecture

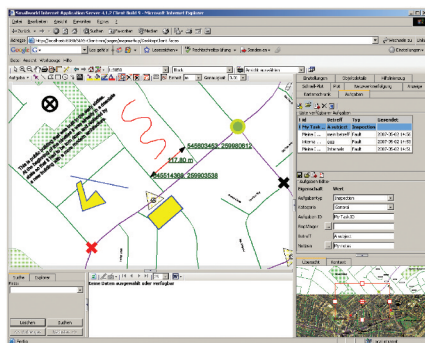
SIAS Application Server

- SIAS 4.1.2 uses a J2EE Industry Application Server
- Delivers a preconfigured version of JBoss Application Server
- Adds support for IBM WebSphere Application Server 6.1 at this release
- Introduces "Virtual Servers" to provide Service APIs for different kinds of clients, including a native virtual server for custom clients, an OGC virtual server supporting WMS 1.3 with GML 3.1, and a virtual server for the SIAS Client
- Provides standard Smallworld Business Services
- Uses standard Java Connector to communicate with Smallworld Service Provider Server farm
- Load balances Magik Server farms for high scalability and performance, including dedicated plot servers



SIAS Client Application

- Based on standard Java Server Faces (JSF), for fast, scalable and dynamic generation of web pages.
- Query wizard for spatial queries within Trail or within current Map.
- Advanced plotting mechanisms — one or more plot boxes that can be moved, rotated and adjusted as required.
- View contexts in parallel maps, e.g., overview map or internal representation.
- A new Redlining Client to create temporary drawings, measurements and texts on the map. They can be printed or copied to other office documents to extend reports or work instructions.
- Redlining functionality includes the ability to create and manipulate various redline geometries and text annotations, to display length of redline geometry, and to measure distances.
- A new Map Markup Client based on the redlining functionality and the Smallworld task management capabilities, to create map annotations and store tasks with redline sketches in your database, to be processed by back office users
- Example code delivered to use the user interface components as portlets in Enterprise Portal solutions (Map Portlet, Object Lister Portlet, Locator Portlet, Object Details Portlet).



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