

Smallworld Business Integrator* 4.1 for use with SAP® ERP

fact sheet

Overview

Smallworld Business Integrator (SBI) is the solution for integrating SAP® and Smallworld systems. It facilitates the synchronization and consistency of data passing between both systems and provides services for business processes navigating between applications in these systems. Based upon open, mainstream technology standards, the Smallworld Business Integrator is a highly extensible solution that allows a wide range of integration strategies including the use of SAP NetWeaver® and other middleware. SBI has been certified "Powered by SAP NetWeaver" by SAP®.

SBI 4.1 represents the most advanced SAP® integration product from GE Energy. It adds support for the SAP® ERP 2005 release of the SAP® Business Suite, and provides the ABAP add-on in a new GE namespace.

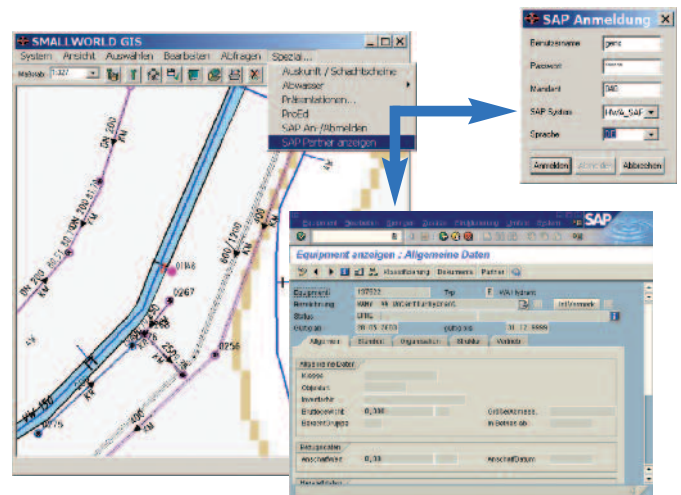
Key Features

Integration between SAP® and Smallworld based on SBI 4.1 provides utilities and telecommunications customers enhanced IT support for a number of key business processes including

- Marketing and customer acquisition
- New customer service
- Outage management
- Asset and network management, service and inspection
- Network extension planning and build
- Network analysis and optimization

To support these processes, SBI provides services for backend-integration to ensure the consistency of asset data in both data bases, and for front-end integration for user interaction and operational processes.

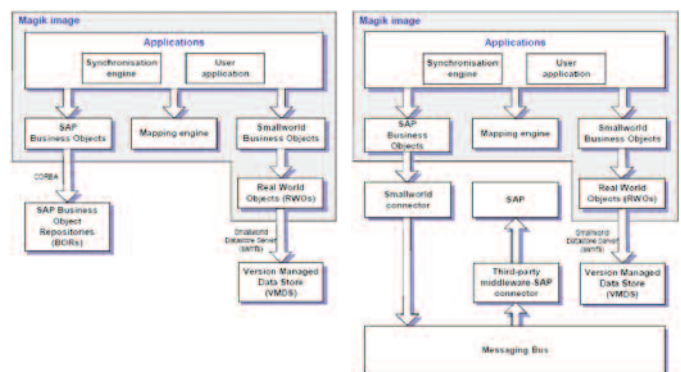
SBI 4.1 integrates the Smallworld products for utility and telecommunication solutions with a range of SAP® systems. It is extensible and can easily be configured to specific end user needs and IT infrastructure landscapes, including the SAP NetWeaver® platform and other solutions such as TIBCO® Enterprise Application Integration solutions.



Functions and Architecture

Smallworld Business Integrator provides a number of base services

- **Application connectivity.** SBI provides runtime connectivity to SAP® Business Suite via XML and Java methods, or with middleware solutions such as SAP NetWeaver® and TIBCO®, e.g., via JMS.
- **Configuration.** SBI configuration tools enable it to be tailored to meet customer-specific requirements.
- **Synchronization.** SBI provides a bi-directional link that can track changes in Smallworld applications and synchronize the changes with mapped objects in SAP® Business Suite, and vice versa. Shared common data can be updated in both systems without the loss of information and the need for duplication.

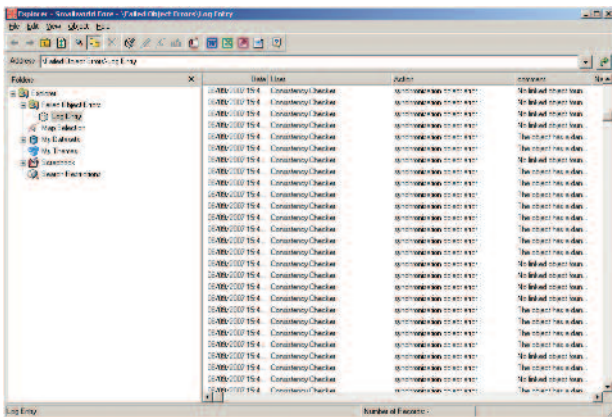


To enable users to process SAP® data in an offline mode, i.e., while not being connected to an SAP® system, SBI provides the ability to cache some of the SAP® data inside the Smallworld



system. Creating a data model replication of the SAP® data on the GIS client enables SAP® data to be viewed and changed, which is further synchronized when the client is reconnected to the SAP® system.

- **Auditing, Reporting, and Error Handling.** The operational integrity of the system is handled through a series of auditing, reporting and error handling functions. These events can be viewed using the Log Viewer. In addition, the Log Viewer allows the configuration of the synchronization engine to handle errors in a number of ways.



- **Mixed Queries.** A generic mechanism allows mixed queries containing criteria from the corresponding SAP® object. This new functionality extends support for the creation of predefined queries in the SAP® system, thereby speeding up the processing.
- **SAP® Module Support.** In addition to the support for the basic SAP® system, to reduce deployment and configuration time, method examples are provided for:
 - Materials Management
 - Plant Maintenance
 - Project Services
 - Service Management
- **Authentication.** User access rights are based on the individual permissions that have been granted. These rights can be maintained within SBI or via an LDAP service. Authentication manages the business process as a user moves from one application to another. The SBI supports two authentication methods:

- Interactive authentication triggers the application's own log-on system
- Direct authentication stores log-on information so that the user does not have to log on when the application is accessed.

The supported versions of SBI 4.1 include:

- Smallworld Core Spatial Technology 4.1
- SAP® R/3 releases 4.6C, 4.6D, 4.7 and SAP® ERP 2005 (ECC 6.00)
- Java 5.0 (JVM 1.5)
- JCo version 2.1.8 or later
- Communication via CORBA and Visibroker/ACB is included for compatibility reasons. It is deprecated at this release. Use of JCo and XML messaging is recommended instead.

Benefits

The key business benefits of using SBI for integrating SAP® and Smallworld systems include:

- Avoiding multiple updates of asset data, with a significant reduction of data administration efforts
- Automated synchronization of data in SAP® and Smallworld, enabling reliable business decisions based on consistent data across applications
- Providing geographical information for business analysis, supporting the optimization of maintenance and investment strategies
- Providing efficient field crew support with local documentation, mobile data update, workforce management
- Significant acceleration of business processes, e.g. in planning, materials allocation, controlling, outage restoration, and maintenance
- Reduced total cost of integration projects by direct link between both systems
- Increased flexibility for business process support when using SAP NetWeaver® integration platform

For more information, please contact us via e-mail at energy.tdsolutions@ge.com, or visit our web site at ge.com/energy



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