Faster and better results are now possible with the second generation of semantic middleware for the unlimited integration and dynamic data linking. In addition to being easy to install and operate, the GIN Server 2.0 features a unique combination of new, lightweight and fully automated processes that do not require any groundwork or maintenance. As such, the GIN Server 2.0 sets the standard for quality, efficiency and scalability for semantic middleware.

- **Standard for semantic technology**
  The iQser GIN Server 2.0 uniquely combines the complexity of semantic technology with the convenience and stability of standard software. The GIN Server 2.0 is easy to install and fully functional after installation, meaning you can use it out-of-the-box.

- **Query linked content and terms**
  With the GIN Server 2.0 the Uniform Information Layer contains extensive functions for semantic searches and inquiries of linked terms and content. In addition to opening linked content for intelligent information logistics, targeted links in the form of statements can also be queried:
  - Which of my products are affected by a change in an industrial standard?
  - Which solutions are already offered by customer service for a current situation?
  This allows hidden information in existing data to be systematically found.

- **Precise context search and smart ranking**
  The GIN Server allows for targeted searches in the context of the selected content, for example, a project or a person, for even greater efficiency. Results are ranked based on the smart ranking process, meaning the relevant results are at the top of the list. The GIN Server 2.0 introduces the relevancy calculation that can otherwise only be used for websites with hyperlinks to the corporate setting by dynamically linking content.

- **Expanded semantic analysis**
  The GIN Server 2.0 uniquely allows for the incremental calculation of a concept and content graph. The combination of lightweight processes allows for high precision with comparatively few resources. The analysis of the user behavior allows the system to learn which information the user needs and to optimize itself.

- **Open interfaces**
  Open interfaces for any data sources, analysis processes, client and customer systems, event-controlled business logistics and user and rights management make the GIN Server 2.0 a flexible platform that complies with recognized industrial standards.

- **Tools for developers**
  The GIN Server 2.0 comes with the integrated Gin Developer development environment to allow for the efficient development of solutions. It supports developers with project templates and wizards for the fast and targeted implementation of special requirements. Available open source plugins allow for individual company and web applications to be developed more quickly.

- **Technical requirements**
  Windows or Linux server with at least 8 GB, at least 6GB hard drive space depending on the integrated data and relational database.
## Functional Area Description

### Uniform Information Layer
- Full text search
- Combined search
- Context search (for a search in the context of a content)
- Metadata search
- Search suggestions (for auto fill-in search terms)
- Smart ranking (for more relevant results)
- Dynamic taxonomy (term tree with choice of entry point)
- Dynamic ontology (as a derived data model)
- Dynamically linked content
- Dynamically linked concepts (terms)
- Reasoning light (for inquiries of derived statements)
- Linked functions (for interaction with content)
- Create and dissolve links
- Consideration for distributed rights management

### Semantic Analysis
- Event-controlled real-time analysis for content
- Incremental calculation of the content graph
- Incremental calculation of the concept graph
- Linked concept and content graphs
- Optimized pattern analysis with use of concept graph
- Expanded syntax analysis for subject-predicate-object relationships
- Relevancy calculation for semantic relationships of concepts and content
- Ad hoc calculation of taxonomies

### Installation and Operation
- Installation program with graphical user interface
- Installation program for console
- Software package with GIN platform and JBoss
- Freedom to select a relational database
- Scalability through optionally operating in a cluster
- GIN Admin web application for administration
- Installation and un-installation of plugins during operation
- Activation and deactivation of any number of instances of plugins with different configurations

### Development
- Integrated IDE for the development of expansions
- Maven artifacts for a quick start of new developments