

# BEXIS 2.1.0 Release Notes 09.09.2013

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This is the second release of the new, completely redesigned BEXIS web application. With this release the entire workflow from data creation to data discovery is supported. Now users are able to design a new data structure, save it as an Excel template, fill in their data into the template offline, upload this Excel file onto BEXIS and make it searchable through the BEXIS search module.

Another highlight of this release is the security feature, which allows users to register with the system and manage a basic profile. Administrators are now able to create, change and delete users and roles and manage associations between them. However, granting or denying permissions on individual datasets and system features or modules is not yet available.

Furthermore, administrators are now able to configure the search component through a Web interface.

## I. Software Information

- Name: BEXIS
- Code Name: BEXIS++
- Version: 2.1.0
- Application Type: Web Application
- Platform: Windows

## II. License Agreement

The contents included in this software are licensed to you, the end user. Your use of BEXIS software is subject to the terms of an End User License Agreement (EULA) accompanying the software and located in the \License subdirectory. You must read and accept the terms of the EULA before you access or use BEXIS software. If you do not agree to the terms of the EULA, you are not authorized to use BEXIS software.

## III. System Requirements

- Operating System: Windows Server 2003 or 2008. For personal or small installations the software is able to run on Windows 7 too.
- Application Server: IIS 7.0 +. For IIS settings see the installation manual
- DBMS:
  - IBM DB2 Express C 10 (version 10.1.2) 32 or 64 bits. BEXIS is not tested on other versions!
  - PostgreSQL: not yet supported.
- Dependencies
  - .NET Framework 4.0, created by Microsoft
  - ASP.NET MVC 3.0, created by Microsoft
  - Lucene.Net 3.0.3, created by Lucene.Net Community
  - Lucene.Net Contrib 3.0.3, created by Lucene.Net Community
  - SharpZipLib 0.86.0, created by ICSharpCode

- NHibernate 3.3.3.4001 created by NHibernate Community
- Telerik MVC Extensions 2012.3.1018, created by Telerik
- Unity Application Block 2.1.505.2, created by Microsoft
- Disk Space:
  - The Software: 20-30 MB
  - The Workspace: 10 MB and more, based on the number of modules and the amount of data

## IV. Installation/ Upgrade

To install the software, follow the instructions defined in installation\_manual.pdf located in the \Manuals subdirectory.

## V. System functionality

The software consists of a two main types of components; 1) core components that include Data Lifecycle Management (DLM), Web Interface, Security and some other internally used ones. 2) A collection of coherent features and use-cases bundled as modules so that each module is designed around one or a small set of steps of DLM workflow i.e., Data Submission, Quality Control/ Assurance, Data Publication and so on. This document describes the functionalities provided by the modules as they are more likely to be requested and used by the end users, but in case of usefulness or clarification underlying core features are also introduced here.

### a) Data Discovery Module

Searching among the metadata, semantic information, and geographical information in an integrated way is the main responsibility of this module. Search results provide access to full metadata and some of the public attributes of the data i.e., version history, views available on the dataset, status of the data and publishing information if any. Based on the access rights the user may have access to the data, one of its views or a combination of them, otherwise s/ he can request for an access right.

### Existing Features

- **Discover data using metadata dimensions (aspects, facets) and attributes** (version 2.0.0)

### New Features

- **Configure search module through a user interface**  
With this interface administrators are able to customize the search component and define what fields of the metadata are searchable and how they appear in the application. Changes made through the interface will alter the configuration file on the server. A detailed description of each parameter is provided in the search User Manual.

### Changed/ Enhanced Features

- NA

### Dropped Features

- NA

### Fixed Issues

- NA

## Breaking Changes

- NA

## Known Issues

- After adding/changing the configuration the SearchProvider needs to be re-initialized, which is currently only possible by restarting the application on the server.

## b) Data Collection Module

The purpose of the data collection module is to allow users to submit data alongside with metadata. The module processes the data in accordance with its data/ metadata structure rules to find any inconsistencies and communicates with the user to overcome the issues. The module may also notify or trigger other internal services such as the search indexing engine to make the dataset ready for discovery. Based on the settings of the associated research context/ plan, the dataset get versioned.

## Existing Features

- NA

## New Features

- **Uploading an Excel file**

With this feature users are able to create a new dataset within BEXIS and upload their offline data file into the system. The currently supported file format is an Excel spreadsheet. Ideally such Excel files are based on a template created with the BEXIS Research Planning Module.

## Changed/ Enhanced Features

- NA

## Dropped Features

- NA

## Fixed Issues

- NA

## Breaking Changes

- NA

## Known Issues

- NA

## c) Security Module

Authentication and authorization of users against the application and modules' functionalities as well as data are main duties of the security module. Defining and managing all security related entities such as users, roles, groups, actions, grants and denies on data and so on are also done by the module. Communicating with the users regarding security issues i.e., password change or loss is also conducted here.

## Existing Features

- NA

## New Features

- **User self-registration**  
Users are able to register themselves with the system by providing a login name and password
- **Users and roles management for an administrator**  
With this feature administrators are able to add, change and delete users and roles within the system. Managing the relationship between users and roles is also part of that feature. The user interfaces of this feature contain a number of validations (e.g. existence, duplication, consistency).

## Changed/ Enhanced Features

- NA

## Dropped Features

- NA

## Fixed Issues

- NA

## Breaking Changes

- NA

## Known Issues

- NA

## d) Research Planning Module

The purpose of the planning module is to provide and manage contextual information related to data management. This covers many different aspects such as supporting users in defining data and metadata structures, units of measurements, workflows, procedures, administrative bindings (projects, institutions, people), as well as time and resources planning.

Every research context may have its specific copyright rules, publishing policies, quality control procedures and so on. Entities such as data and metadata structures, units and so on can be shared among different research contexts and users.

A conceptual model showing the connection and relationship between the different terms and entities is available at: <http://fusion.cs.uni-jena.de/bppCM/index.htm>

## Existing Features

- NA

## New Features

- **Data structure manager**  
With the data structure manager a user is able to create, change and delete a data structure and manage its relationship with other entities (e.g. variables, data types, units of measurement, and datasets). Once a data structure has been defined it can be downloaded as an Excel template.

- **Data attribute manager**  
With the data attribute manager a user is able to create, change and delete a data attribute and manage its relationship with other entities (e.g. data structures).
- **Data type manager**  
With the data type manager a user is able to create, change and delete a data type and manage its relationship with other entities
- **Measurement Unit manager**  
With the measurement unit manager a user is able to create, change and delete a unit and manage its relationship with other entities (e.g. data attributes).

### Changed/ Enhanced Features

- NA

### Dropped Features

- NA

### Fixed Issues

- NA

### Breaking Changes

- NA

### Known Issues

- NA

## VI. Troubleshooting

NA

## VII. Contact

### Help desk:

- Website: <http://fusion.cs.uni-jena.de/bexis>
- Email address: [bexis-support@uni-jena.de](mailto:bexis-support@uni-jena.de)
- Telephone: +49-(0)3641-948968
- Fax: +49-(0)3641-946302
- Issue Tracking System: NA