

# BEXIS 2.3.0 Release Notes 17.04.2014

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With this release of the BEXIS data management application a new workflow for creating, editing and submitting datasets has been introduced. While creating a new dataset users are now able to choose a metadata schema (e.g. ABCD standard) and enter metadata accordingly through a wizard.

A milestone of this release is that BEXIS 2 now fully supports PostgreSQL as a database backend. So system administrators are now free to run BEXIS on either PostgreSQL or IBM DB2.

Further, the Security Module has been extended by a user interface to easily set permissions on software components (modules, features) for individual users and roles.

Besides these new features, extensive testing has been conducted on all components, resulting once more in number of bugs and improvements being identified and fixed.

## I. Software Information

- Name: BEXIS
- Version: 2.3.0
- 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 has not been tested on other versions!
  - PostgreSQL: (version 9.3) 32 or 64 bits. BEXIS has not been tested on other versions!
- 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 ICSsharpCode
  - 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

To install the software, please follow the instructions in the `Install_Manual_BPP230.pdf` located in the `\Manuals` subdirectory.

## V. System Functionality

The software consists of 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 the DLM workflow i.e., Data Submission, Quality Control/ Assurance, Data Publication and so on.

### a) Data Discovery Module

The main purpose of this module is to enable users to search for data available within the system. The module executes user defined queries against the metadata catalog and provides advanced features such as facets, keywords, categories, filters, grouping, and sorting. Depending on individual user permissions the system may provide access to full metadata records, the underlying data structure or the primary data.

#### Existing Features

- **Discover data using metadata dimensions (aspects, facets) and attributes** (version 2.0.0)
- **Configure search module through a user interface** (version 2.1.0)

#### New Features

- NA

#### Changed/ Enhanced Features

- NA

#### Dropped Features

- NA

#### Fixed Issues

- The keyword search does not support certain special characters (e.g. “:”, “-”, “!”, “\”, “+”, “?”)

#### Breaking Changes

- NA

#### Known Issues

- NA

## 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, datasets get versioned.

### Existing Features

- **Uploading an Excel file** (version 2.1.0)
- **Uploading an ASCII file (CSV, TXT)**, (version 2.2.0)
- **Adding data to an existing dataset** (version 2.2.0)

### New Features

- **Create New Dataset:** With this feature users are able to create a new dataset and associate it with a research plan, a data structure and a metadata schema (e.g. ABCD). This feature contains a wizard for guided metadata entry in accordance to the selected metadata schema.

### Changed/ Enhanced Features

- The **Upload Data Wizard** has been adapted to be in line with the new Create Dataset workflow.

### 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, and permissions are also part of this module.

### Existing Features

- **User self-registration** (version 2.1.0)
- **Users and roles management for an administrator** (version 2.1.0)
- **Feature security** (version 2.2.0)

### New Features

- NA

### Changed/ Enhanced Features

- **security management** The management of the security system has been improved by providing a new user interface to assign feature permissions to individual users and roles.

### 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, 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

- **Data structure manager** (version 2.1.0)
- **Data attribute manager** (version 2.1.0)
- **Data type manager** (version 2.1.0)
- **Unit manager** (version 2.1.0)

### New Features

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### Changed/ Enhanced Features

- NA

### Dropped Features

- NA

### Fixed Issues

- Database connections were not closed properly
- User communication/error messages

## Breaking Changes

- NA

## Known Issues

- NA

## e) Data Dissemination Module

The main purpose of this module is to provide users with access to primary data and metadata managed by the system. In the future this module shall also provide support for publishing, orchestrating and harvesting data of the system by external resources.

## Existing Features

- **Primary data download as Microsoft Excel file**

## New Features

- NA

## Changed/ Enhanced Features

- The metadata viewer has been updated to support the new metadata schema(s).

## Dropped Features

- NA

## Fixed Issues

- NA

## Breaking Changes

- NA

## Known Issues

- NA

## VI. Contact

Help desk:

- Website: <http://fusion.cs.uni-jena.de/bexis>
- Email address: [bexis-support@uni-jena.de](mailto:bexis-support@uni-jena.de)
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