

# BEXIS 2.12

## Search UI, Data Discovery Module

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### *User Guide*

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#### **Acknowledgement**

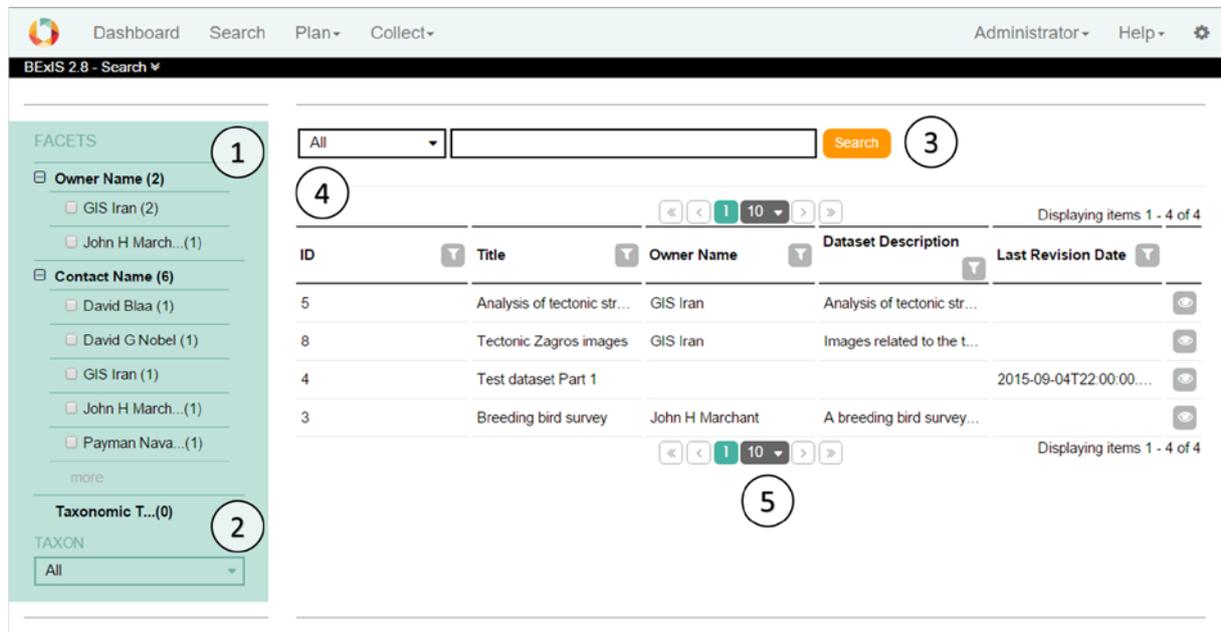
The development of the BEXIS 2 software would not be possible without the German Research Foundation (DFG) funding the BEXIS++ project. BEXIS++ is a collaboration of the Friedrich-Schiller-University Jena (Dept. of Computer Science, Dept. for Geography), the Max-Planck-Institute for Biogeochemistry Jena, the Technical University Munich (Dept. Ecology and Ecosystem Management), the Gesellschaft für wissenschaftliche Datenverarbeitung mbH Göttingen (GWDG), and the Georg-August-University Göttingen.

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# 1 Search UI

Search UI contains some parts to make search easier. In this way, you are able to look for all details of datasets, but not for the uploaded data. You can control the search UI via search manager explained in section 3.



## 1.1 Categories

Categories are defined by number 1 in the image above. The main nodes like “Project Name” are based on nodes in the metadata. The elements are values in the metadata from a main node and can be used to restrict the current selection. The numbers next to the elements and main nodes show the number of existing data sets in the database. This list changes according to the current selection. After selection the results and the facets updated. With the “more” button it is possible to select more than one element at the same time.

## 1.2 Properties

Number 2 in the image above is related with properties. In this section there are predefined UI Components like dropdown, radio button or slider to filter the data. There is only one possible choice for every component. After selection the results and the facets are updated accordingly.

## 1.3 Free text search with Autocomplete

The free text search, number 3 in the image above, works as in any common search engine. It includes Autocomplete where words or phrases are being predicted once three letters or figures are entered. It supports also different languages.

## 1.4 Selected Filter

You can find selected filter part by number 4 in the image above. Every filter applied from section 1.1-1.3 is displayed here. Filters can be deselected just by clicking on it. In point 1 by the categories you are able to select more than one option to a category. If there are more than 2 you will see only the category. Click on the category and a window will open to define your selection for this category.

## 1.5 Results

The matching results are displayed in a table or in the list view. It marks by number 5 in the image above. Basic functions like sorting, filtering, paging are available in the table header. By right clicking on the header, you can change visibility of columns.

The details button opens the detailed view of the selected dataset.

## 2 Data Details

About each dataset created in the BEXIS 2, you can find a detail contains Meta Data, Primary Data, Data Structure, Dataset Permissions, Publish and Attachments explain later.

### 2.1 Meta Data

On this tab you have access to the Meta data of the selected datasets. You are able edit this dataset or make a copy of that.

Dashboard Collect Search Plan dblaa Help

BEXIS 2.12 - Show Data : Breeding bird survey

### Breeding bird survey

Dataset Id: 8, Version: 5

Download Dataset

Metadata Primary Data Data Structure Dataset Permissions Publish Attachments

Edit Copy show all fields

Basic

Technical Contacts

Technical Contact ( 1 )

Name Nafiseh Navabpour

Technical Contact ( 2 )

Name Roman Gerlach

Address Jena Germany

## 2.2 Primary Data

On this tab you have access to the primary data of the selected dataset. A User can download selected data in an Excel file, comma separated in a CSV file, or tab separated in a TXT or TSV file. Also a user can filter and sort the data before and download only a subset of the dataset. For filtering use the funnel button next to the variable.

Dashboard Collect Search Plan dbla Help

BEXIS 2.12 - Show Data : Breeding bird survey

### Breeding bird survey

Dataset Id: 8, Version: 5 [Download Dataset](#)

Metadata **Primary Data** Data Structure Dataset Permissions Publish Attachments

[Download Excel](#) [Download Text](#)  Fit table to screen

« < 1 100 > » Displaying items 1 - 30 of 30

Species	Main habitat types	Squares occupied	Total birds	Mean birds	Std error
Wren	F,G,S,W	48	612	12.75	5.96
Robin	F,G,S,W	48	513	10.69	5.45
Blackbird	F,G,S,W	48	898	18.71	7.29
Great Tit	G,W	48	318	6.63	3.47
Chaffinch	F,G,S,W	48	531	11.06	4.97
Dunnock	F,G,S,W	47	286	6.09	3.33
Magpie	F,G,S,W	47	254	5.4	4.08

## 2.3 Data Structure

On this tab you have access to the data structure of the selected datasets.

Dashboard Collect Search Plan dbla Help

BEXIS 2.12 - Show Data : Breeding bird survey

### Breeding bird survey

Dataset Id: 8, Version: 5 [Download Dataset](#)

Metadata Primary Data **Data Structure** Dataset Permissions Publish Attachments

generated import structure Mon, 24 Sep 2018 13:58:16 GMT (4)  
 automatically generated structured data structure by user nafiseh for file Bird Survey on Mon, 24 Sep 2018 13:58:16 GMT

« < 1 10 > » Displaying items 1 - 6 of 6

Variable Name	Optional	Variable Id	Short Name	Description	Unit	Data Type
Species	<input checked="" type="checkbox"/>	7	id_char		none	string
Main habitat types	<input checked="" type="checkbox"/>	8	id_char		none	string
Squares occupied	<input checked="" type="checkbox"/>	9	quantity		none	double
Total birds	<input checked="" type="checkbox"/>	10	quantity		none	double
Mean birds	<input checked="" type="checkbox"/>	11	quantity		none	double
Std error	<input checked="" type="checkbox"/>	12	quantity		none	double

« < 1 10 > » Displaying items 1 - 6 of 6

## 2.4 Dataset Permissions

On this tab you have access to the Dataset Permissions Manager.

Breeding bird survey ( 1 )

Metadata Primary Data Data Structure Dataset Permissions

Displaying items 1 - 8 of 8

Create	View	Update	Delete	Down...	Grant	Subject Id	Subject Name	Subject Type
<input type="checkbox"/>	2	Admin	Group					
<input checked="" type="checkbox"/>	3	Administrator	User					
<input type="checkbox"/>	7	Group1	Group					
<input type="checkbox"/>	8	Group2	Group					
<input type="checkbox"/>	9	Group3	Group					
<input type="checkbox"/>	4	user1	User					
<input type="checkbox"/>	5	user2	User					
<input type="checkbox"/>	6	user3	User					

Displaying items 1 - 8 of 8

## 2.5 Publish a Dataset Version

On this tab you are able to publish the latest version of your dataset. In this Version a Zip file will be generated and prepared for download for a specific defined datacenter. More information can be found in the data dissemination manual.

Breeding bird survey

Dataset Id: 8, Version: 5

Download Dataset

Metadata Primary Data Data Structure Dataset Permissions Publish Attachments

Select Publish

Version Id	Broker	DataRepo	Creation Date	Status	Link
52	GFBIO		10/8/2018 4:47:38 PM	no status available	Website

## 2.6 Attachments

On this tab the user with the upload rights is able to manage the attachments for the dataset. Other users can only see or download the attachments.

The screenshot shows the 'Attachments' tab for a dataset. The dataset ID is 8 and the version is 5. There is a 'Download Dataset' button. The interface includes a navigation bar with 'Metadata', 'Primary Data', 'Data Structure', 'Dataset Permissions', 'Publish', and 'Attachments'. The main content area is titled 'Attach files to this dataset' and contains instructions, a note about network connection, and a maximum file size of 1024 MB. There is a 'Description:' field with a text input box and a 'Push' button. A 'Files' table lists two files: 'Bird Survey.xlsxm' (17 KB) and 'Bird Survey.xlsx' (10 KB). The BExIS logo and 'Powered by' text are at the bottom.

## 3 Search Manager

With the help of the search manager, you can make search UI more operative. This part is available from **Setup > Manage search**.

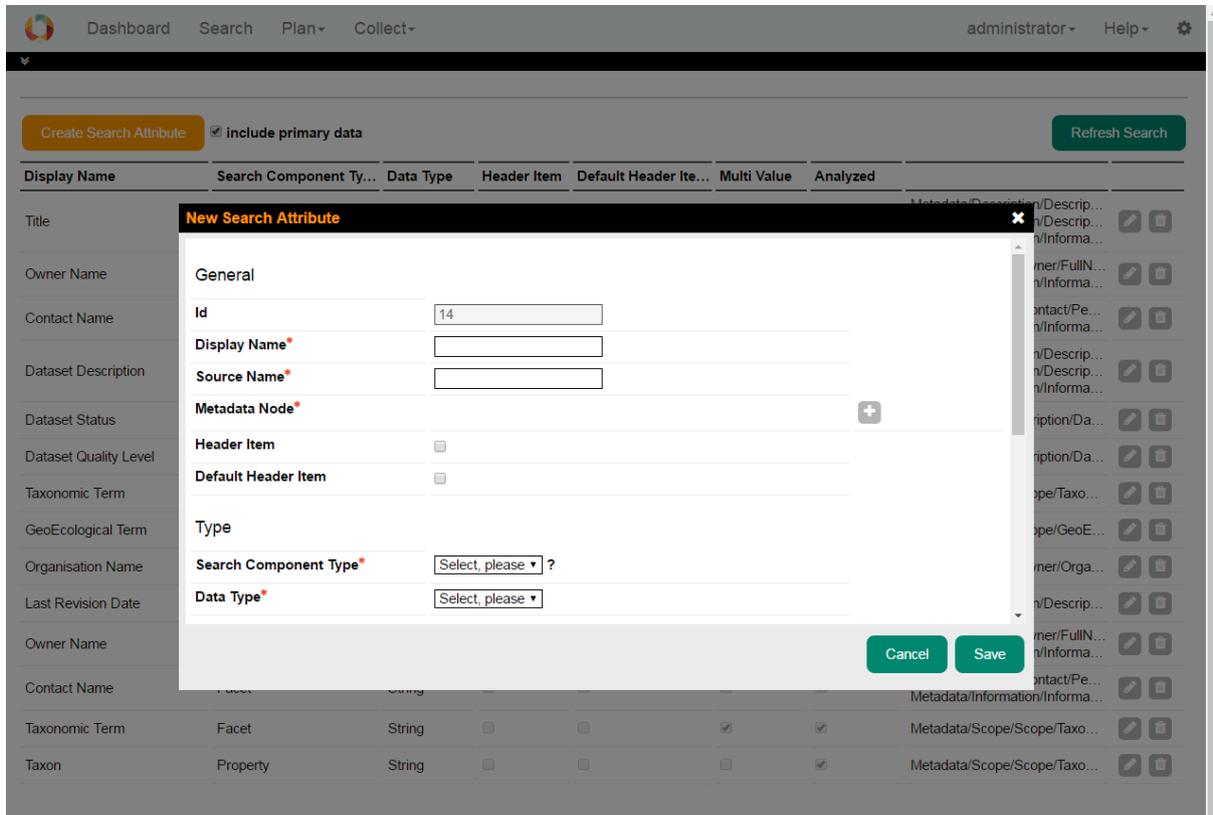
You need to click on the Refresh Search button, to make the search result effective.

The screenshot shows the 'Manage Search' interface. It includes a 'Create Search Attribute' button, a checkbox for 'include primary data', and a 'Refresh Search' button. A table lists search components with columns for 'Display Name', 'Search Component Ty...', 'Data Type', 'Header Item', 'Default Header It...', 'Multi Value', and 'Analyzed'. The table contains 10 rows of search components.

Display Name	Search Component Ty...	Data Type	Header Item	Default Header It...	Multi Value	Analyzed	
Title	Category	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/Description/Descriptio... Metadata/Description/Descriptio...
Owner Name	Category	String	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/Owner/Owner/FullNa...
Contact Name	Category	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/ContentContact/Perso...
Dataset Description	Category	String	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/Description/Descriptio... Metadata/Description/Descriptio...
Dataset Status	Category	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/DataDescription/Data...
Dataset Quality Level	Category	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/DataDescription/Data...
Taxonomic Term	Category	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/Scope/Scope/Taxono...
GeoEcological Term	Category	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/Scope/Scope/GeoEco...
Organisation Name	Category	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metadata/Owner/Owner/Organis...

You can use  for edit and  for delete a search component.

To add a new search component, click on the Create Search Attribute button. The configuration files consist of one element – the field element, and several attributes. The element represent each lucene field and its attribute are used to configure indexing, searching, and display. Take mouse over each question mark near by a field and you can see the help information.



We, therefore, go through each of the elements attributes of the configuration file.

**Display Name:** This is the name which is displayed in the search UI for the field.

**Source Name:** This is the name of the field in the lucene index.

**Metadata Node:** Add one or more xpaths from the metadata elements to be mapped against the lucene field.

**Header Item:** Tick if this item should be available as a category (e.g. as a grid column).

**Default Header Item:** The header item is be visible upon page load.

**Search Component Type:** This specifies the search pattern that will be should be used against this field (as discussed in the introduction). Therefore, the value of this attribute can be any of “Category” for creating a category-based search field, “Facet” for creating faceted search field, “Property” for creating a property search field, and “General” which creates an indexed field which is not displayed in the UI, but however, searched.

**Data Type:** This specifies the primitive data type of the value to be indexed. E.g. string, integer, double, date.

**Store:** This specifies if the field value should be stored. If the field is not stored, you can only search against the terms in the field, however, you cannot retrieve the value. For minimal display of the search result, it is recommended that some fields be store. This value of the store attribute can be either yes or no.

**Multi Value:** This specifies if there are several values of a metadata element in a given field. E.g. if a dataset can have several owners in a metadata, then, the owners field in the index in this case, will be multi-valued

**Analyzed:** This specifies if the field should be analyzed or not. Only analyzed field can be searched.

**Norm:** This can have a value of yes or no and it is used to specify if a norm should be created for the field. Norms can be used for similarities search between documents. They can also significantly increase index sizes. So, you must take care to of what field should contain norms

**Boost:** This specifies the importance or weight of a field relative to others in a search. E.g. you may want the terms in “title” of a document to carry more weight than the content of the “footnotes” while indexing and searching.

**UI Component Type:** Choose a UI component Type according to the number of options (1-3 = item, 3-15 = list, >15= range).

**Selection Type:** Choose a selection type based how many choices should be allowed (single, multiple).

**Direction:** Default sort direction for this item (ascending, descending).

## 4 Dashboard

### 4.1 My Datasets

On this page, users can see which datasets they are accessing and which rights they have on the datasets.

Dashboard Collect- Search Plan- dblaa- Help-

BEXIS 2.12 - Dashboard

Dataset

- My Datasets
- Requests
- Decisions

ID	Title	Description	Read	Download	Write	Delete	Grant	
1	Bird Observations in ...		✓	X	X	X	X	
2	Jena Experiment Pl...	This dataset contain...	✓	X	X	X	X	
3	BM_Species_082018		✓	X	X	X	X	
4	Bird Observations in ...		✓	X	X	X	X	
5	Aerial Photography ...		✓	X	X	X	X	
6	Plant Coverage 201...		✓	X	X	X	X	
7	Plant Coverage 201...		✓	X	X	X	X	
8	Breeding bird survey	A breeding bird surv...	✓	✓	✓	✓	✓	
9	Bird Images	Fotos from birds	✓	X	X	X	X	
10	Focal Mechanism	This is a description ...	✓	X	X	X	X	

Displaying items 1 - 10 of 16

## 4.2 Requests

This page lists all your requests.

Dashboard Collect- Search Plan- dschöne- Help-

BEXIS 2.12 - Dashboard

Dataset

- My Datasets
- Requests
- Decisions

Instance Id	Title	Rights	Request Status
21	test	3	0

Displaying items 1 - 1 of 1

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## 4.3 Decision

The page lists open requests for your datasets. You can accept or decline the request by clicking the buttons on the right.

Dashboard Collect- Search Plan- dblaa- Help-

BEXIS 2.12 - Dashboard

Dataset

- My Datasets
- Requests
- Decisions

Instance Id	Title	Applicant	Rights	Status	
21	test	dschöne	3	0	

Displaying items 1 - 1 of 1

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