iKnowBase Development Reference

Reference Documentation for the programmer

Version 8.3

Table of Contents

iKnowBase Development Reference . . . 1
1. Crop areas . . . 2
1.1. Properties . . . 2
2. Database Functions . . . 3
2.1. Properties . . . 3
2.2. Database function signatures . . . 5
2.3. Register a Database Function . . . 9
3. Domains . . . 10
3.1. Properties . . . 10
4. Event . . . 14
4.1. Document Event Properties . . . 14
4.2. Metadata Event Properties . . . 16
4.3. Indexing event(SOLR) Properties . . . 18
4.4. View batch log . . . 23
5. Export . . . 25
5.1. Properties . . . 25
5.2. Tasks . . . 32
6. External Data sources . . . 35
6.1. Properties . . . 35
7. External Search . . . 41
7.1. Properties . . . 41
8. Forms . . . 43
8.1. Properties . . . 43
8.2. Using a custom WYSIWYG-editor . . . 63
8.3. Testing your Form . . . 64
9. Homeplaces . . . 65
9.1. Properties . . . 65
9.2. Validate and test . . . 68
10. Image Metadata . . . 70
10.1. Properties . . . 70
11. Import . . . 71
11.1. Properties . . . 71
11.2. Creating an Import definition . . . 76
11.3. Importing Data . . . 76
12. Installation properties . . . 77
12.1. Properties . . . 77
13. Java SDK portlets . . . 78
13.1. Properties . . . 78

14. Language . . . 79
14.1. Properties . . . 79
14.2. Create a new language set . . . 82
15. LDAP Profiles . . . 83
15.1. Properties . . . 83
16. LDAP Sync . . . 85
16.1. Properties . . . 85
17. Menus . . . 94
17.1. Properties . . . 94
17.2. Creating a Menu Based on a Dimension Tree . . . 98
17.3. Re-synchronize a menu based on a dimension tree . . . 99
18. Mimetypes and formats . . . 100
18.1. Properties . . . 100
19. Newsletter . . . 102
19.1. Newsletter Properties . . . 102
19.2. Testing a Newsletter . . . 108
19.3. Sending a newsletter . . . 108
19.4. Scheduling a Newsletter . . . 108
20. Package alias . . . 110
20.1. Properties . . . 110
20.2. Package/procedure info . . . 110
20.3. Procedure signature . . . 111
21. Page cache strategy . . . 112
21.1. Properties . . . 112
22. Pages . . . 114
22.1. Properties . . . 114
22.2. Testing your Page . . . 119
23. Parameter . . . 120
23.1. iKnowBase Parameter Properties . . . 120
23.2. SQL Parameter Properties . . . 122
24. Presentation Style . . . 124
24.1. Template-based presentation style properties . . . 124
24.2. FreeForm presentation style properties . . . 134
25. Preview Pages . . . 135
25.1. Properties . . . 135
26. Quick Links . . . 136
26.1. Properties . . . 136
27. RSS feed . . . 139
27.1. Properties . . . 139
28. Schedule . . . 142
28.1. Properties . . . 142

29. Search Sources . . . 144
29.1. Properties . . . 144
30. Solr Configuration . . . 159
30.1. Properties . . . 159
31. Stylesets . . . 164
31.1. Styleset iKnowBase Properties . . . 164
31.2. Styleset Menu Properties . . . 167
31.3. Substitution Tags . . . 170
32. Subsystem . . . 171
32.1. Properties . . . 171
33. Targets . . . 172
33.1. Properties . . . 173
34. Task Wizard . . . 178
34.1. Properties . . . 178
34.2. Creating a Task Wizard . . . 182
34.3. Testing a Task Wizard . . . 182
35. Template set . . . 183
35.1. Concept . . . 183
36. Templates . . . 186
36.1. Properties . . . 186
37. Web Widget Profiles . . . 189
37.1. Properties . . . 189
37.2. More about TinyMCE . . . 190
37.3. Testing your Web Widget profile . . . 190
38. Transformation . . . 191
38.1. Properties . . . 191
39. Viewer . . . 193
39.1. Properties . . . 193

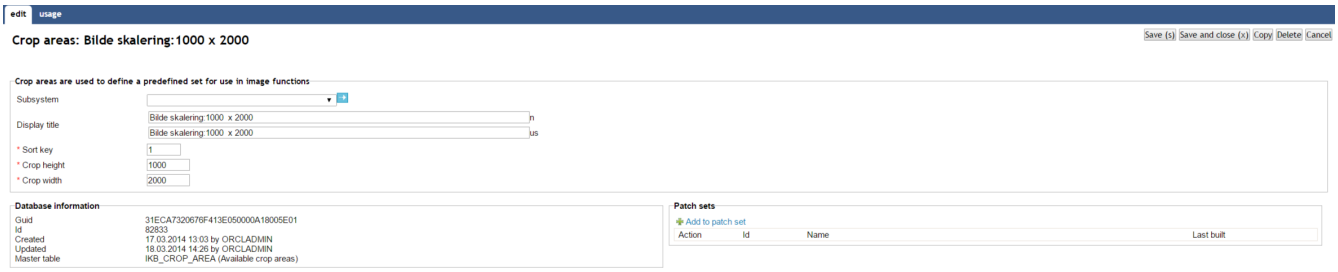
iKnowBase Development Reference

Chapter 1. Crop areas

Crop areas are predefined definitions used in image processing functions where cropping is part of the functionality. Use of crop areas guarantees the same scaling attributes.

1.1. Properties

This section describes the properties of a crop area, as shown on the corresponding Edit pane.



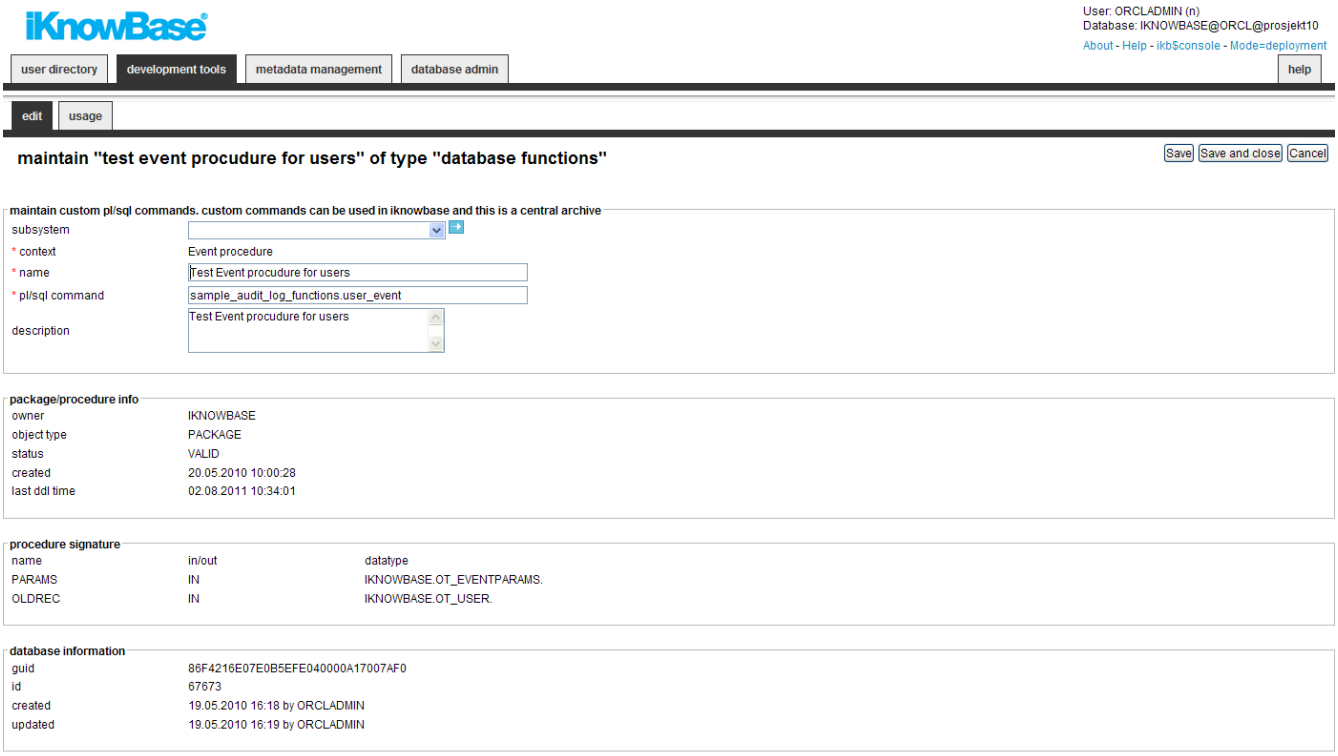
Property	Description
Subsystem	Select the appropriate subsystem.
Display name	Name to describe the crop area.
Sort order	Used to order the records of crop sizes.
Crop width	Enter the width of the image.
Crop height	Enter the height of the image.

Chapter 2. Database Functions

Several components of iKnowBase can be configured to use database functions (written in Oracle PL/SQL) for customization. Rather than specify the names of the functions at each use, they are collected in this module. Database functions come in several flavors, depending on their intended usage scenarios.

2.1. Properties

This section describes the properties of a database function, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the subsystem the profile belongs to

Property	Description
Context	Select the appropriate context for which you want to call the PL/SQL command. Available values are: • **Event procedure**: The function can be used from iKnowBase events only. • **Form:Custom Show**: The function can be used from Forms • **Form:Custom Save**: The function can be used from Forms • **Parse/build url from a listener url**: The function handles build/parse URLs where a listener_url is used on a target. Listener_urls enables functionality for readable URLs. • **Portlet:Run PL/SQL function**: The function can be used from the "Run PL/SQL function" portlet • **Pres.Style:Database function**: The function can be used from presentation styles (advanced and simple) • **Pres.Style:Format clause**: The function can be used to format data from a presentation style • **Target/Homeplace:Database function**: The function can be used from a target and a target selector. • **Solr - GetDocument**: The function can replace the default behavior in ikb_solr.get_document, used by the indexing prosess to SOLR Search Engine. • **Solr - attribute functions**: The function extends the default behavior in ikb_solr.get_document, used by the indexing prosess to SOLR Search Engine. Can be called either pr document or for a single attribute. • **Tooltip functions**: Select a special add link to create tooltip functions.
Name	Type the name of the database function.
PL/SQL Command	Type the PL/SQL command that you want to call from the iKnowBase Oracle database.
Description	Type a description for this database function.
Does the function execute dml-statements?	If the function executes insert, update or delete statements, it must be executed differently (but not as efficient) than functions without it. The flag is only applicable for Presentation style functions. If you experience the error : ORA-14551 cannot perform a DML operation inside a query, the flag should most likely be checked.
Package/Procedure info	Displays info about the database object like owner, object type, status, created date and last ddl time.

Property	Description
Procedure signature	Displays the signature of the function/procedure.

2.2. Database function signatures

2.2.1. Event procedure - document events

```
<package>.<procedure name> (
    p_event_params      in      ot_eventparams,
    p_old_record        in      ot_document
);
```

2.2.2. Event procedure - user events

```
<package>.<procedure name> (
    p_event_params      in      ot_eventparams,
    p_old_record        in      ot_user
);
```

2.2.3. Event procedure - group events

```
<package>.<procedure name> (
    p_event_params      in      ot_eventparams,
    p_old_record        in      ot_group
);
```

2.2.4. Event procedure - acl events

```
<package>.<procedure name> (
    p_event_params      in      ot_eventparams,
    p_old_record        in      ot_acl
);
```

2.2.5. Event procedure - File upload events

```
<package>.<procedure name> (
    p_event_params      in      ot_eventparams,
    p_old_record        in      ot_upload_temp_document
);
```

2.2.6. Parse/build url from a listener url

The function names must support two methods: if p_method=BUILD then you will receive a set of values and return the values to be shown in the URL. p_method=PARSE must do the opposite.

```
Function <function name> (
    p_method    in varchar2,
    p_target_guid in varchar2,
    p_fragments in ct_portlet_runtime_fragments default
ct_portlet_runtime_fragments())
  return ct_portlet_runtime_fragments;
```

2.2.7. Target/Homeplace: Database function

```
<package>.<procedure name>;
```

2.2.8. Form:Custom Show

```
<package>.<procedure name> (
    p_style_id          in      number
    p_document_id       in      number,
    p_parent_id         in      number,
    p_site_id           in      number,
    p_reference_path    in      varchar2,
    p_page_url          in      varchar2,
    p_back_url          in      varchar2
);
```

2.2.9. Form:Custom Save

```
<package>.<procedure name> (
      p_back_url                 IN VARCHAR2,
      p_site_id                  IN NUMBER,
      p_style_id                 IN NUMBER,
      p_request                  IN VARCHAR2 DEFAULT 'save',
      p_page_url                 IN VARCHAR2 DEFAULT NULL,
      p_document_id              IN NUMBER DEFAULT NULL,
      p_parent_id                IN NUMBER DEFAULT NULL,
      p_document_type_id         IN NUMBER DEFAULT NULL,
      p_title                    IN VARCHAR2 DEFAULT NULL,
      p_acl_id                   IN NUMBER DEFAULT NULL,
      p_url                      IN VARCHAR2 DEFAULT NULL,
      p_description              IN CLOB DEFAULT NULL,
      p_text_indexed             IN CLOB DEFAULT NULL,
      p_attribute_clobs          IN ct_value_clobs DEFAULT ct_value_clobs(),
      p_long_text_ids            IN ikb_portal_api.vc_arr DEFAULT
```

```
ikb_portal_api.empty_vc_arr,
      p_valid_from               IN VARCHAR2 DEFAULT NULL,
      p_valid_to                 IN VARCHAR2 DEFAULT NULL,
      p_status_id                IN NUMBER DEFAULT NULL,
      p_external_key             IN VARCHAR2 DEFAULT NULL,
      p_file                     IN VARCHAR2 DEFAULT NULL,
      p_document_format          IN VARCHAR2 DEFAULT NULL,
      p_attrib_value             IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_old_attrib_value         IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_attribute_id             IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_line_no                  IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_line_no_ref              IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_external                 IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_dav_external_guid        IN VARCHAR2 DEFAULT NULL,
      p_template                 IN NUMBER DEFAULT NULL,
      p_document_id_ref          IN NUMBER DEFAULT NULL,
      p_attachment               IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_task_guid                IN VARCHAR2 DEFAULT NULL,
      p_task_step_guid           IN VARCHAR2 DEFAULT NULL,
      p_version                  IN VARCHAR2 DEFAULT NULL,
      p_version_no               IN NUMBER DEFAULT NULL,
      p_version_comment          IN VARCHAR2 DEFAULT NULL,
      p_handle_redirect_local    IN BOOLEAN DEFAULT FALSE,
      p_reference_path           IN VARCHAR2 DEFAULT NULL,
      p_session_id               IN VARCHAR2 DEFAULT NULL,
      p_return_type              IN VARCHAR2 DEFAULT NULL,
      p_callback_function        IN VARCHAR2 DEFAULT NULL,
      p_last_timestamp           IN VARCHAR2 DEFAULT NULL,
      p_attribute_file_ident     IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_attribute_file           IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_files_guid_remove        IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr,
      p_files_attribute_remove   IN ikb_portal_api.vc_arr DEFAULT
ikb_portal_api.empty_vc_arr
      );
```

2.2.10. Portlet:Run PL/SQL function

```
<package>.<procedure name>;
```

2.2.11. Tooltip function (PLSQL)

```
<package>.<function name>  (
      p_site_id          IN   NUMBER,
      p_document_id      IN   NUMBER,
      p_attribute_id     IN   NUMBER,
      p_page_url         IN   VARCHAR2,
      p_back_url         IN   VARCHAR2,
      p_reference_path   IN   VARCHAR2,
      p_language_id      IN   VARCHAR2,
      p_version_no       IN   NUMBER
   )
      RETURN VARCHAR2
```

2.2.12. Solr - GetDocument

```
<package>.<function name>  (
        p_solr_message in ot_solr_message,
        p_indexerType in varchar2 default 'SOLR')
    return ct_solr_rows;
```

2.2.13. Solr - attribute functions

```
<package>.<Procedure name>  (
        p_document_id           in number,
        p_attribute             in ot_document_attribute default null,
        p_solr_data             in out ct_solr_rows default ct_solr_rows())
        );
```

2.2.14. Pres.Style:Database Function (Advanced function)

Advanced function has two variants depending on the datasource in the presentation style. If the datasource is set to DOCUMENT use this signature:

```
<package>.<function name>  (
    p_site_id           IN   NUMBER,
    p_document_id       IN   NUMBER,
    p_attribute_id      IN   NUMBER,
    p_page_url          IN   VARCHAR2,
    p_back_url          IN   VARCHAR2,
    p_reference_path    IN   VARCHAR2,
    p_language_id       IN   VARCHAR2
) RETURN VARCHAR2/CLOB/NUMBER/DATE
```

and if the datasource is VERSIONED_DOCUMENT, this is the correct signature:

```
<package>.<function name>  (
    p_site_id           IN   NUMBER,
    p_document_id       IN   NUMBER,
    p_attribute_id      IN   NUMBER,
    p_page_url          IN   VARCHAR2,
    p_back_url          IN   VARCHAR2,
    p_reference_path    IN   VARCHAR2,
    p_language_id       IN   VARCHAR2,
    p_version_no        IN   NUMBER
) RETURN VARCHAR2/CLOB/NUMBER/DATE
```

Good advice is to use the latest one, so it can be used for both datasource. You must then make a test in the function to check if it's a version or not you are working with. If returning a number or a date, make sure to set the corresponding return type to the same, it will enable a correct sort command (not only alphanumeric sort).

2.2.15. Pres.Style:Database Function (Simple function)

Simple functions don't take any parameters (e.g. dbms_random.random).

```
<package>.<function name> or <sql-function>
```

2.2.16. Pres.Style:Format Clause

Use an SQL-function like char/date-functions, arithmetic functions or SQL built ins. #value will be substituted with the attribute value. Examples:

```
to_char(#value,'hh24.mi');
```

```
dbms_random.random;
```

2.2.17. Target/Homeplace: Database function

```
<package>.<procedure name>;
```

2.3. Register a Database Function

You must register database functions, which will be called through the URL in iKnowBase Page Engine. For Custom Save Functions (used in forms) this will be done automatically for you. If you need to verify/register manually, use the screen for Package Aliases.

Chapter 3. Domains

An iKnowBase installation may serve multiple uses at the same time. For example, it may serve an external site (http://www.example.com), an intranet (http://intra.example.com), a partner site (https://partner.example.com) and a customer service site (https://service.example.com).

iKnowBase Domain defines a preference set that apply to a particular host name, to allow the user experience to differ between them.

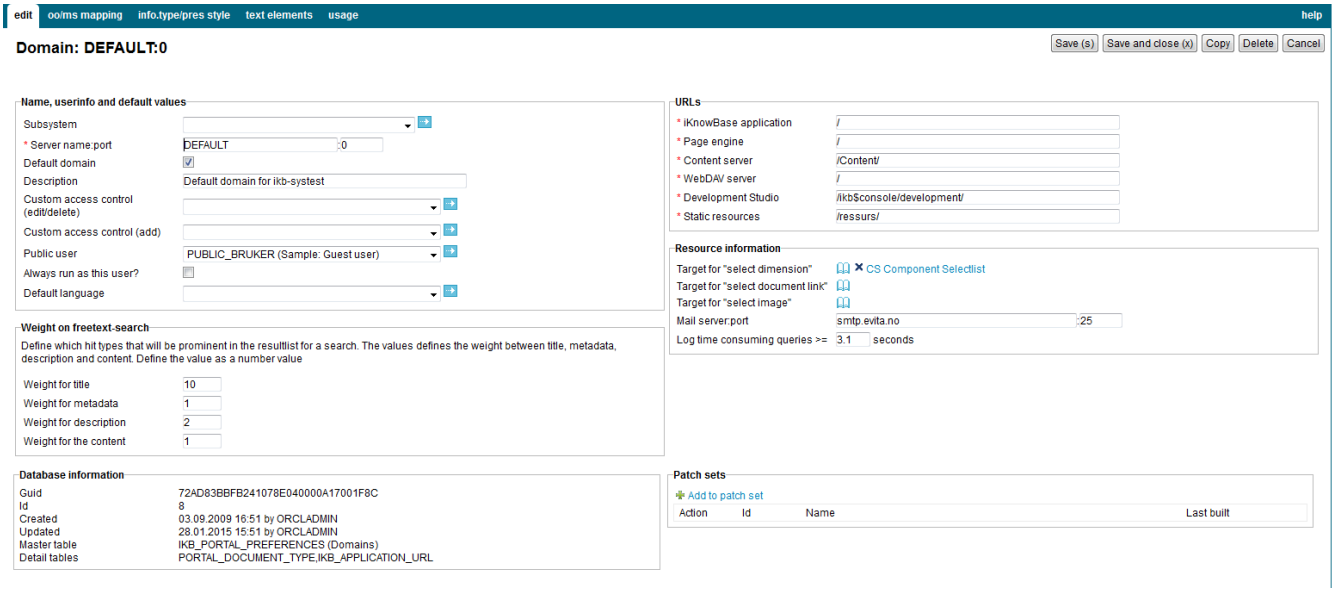
See *Development Guide* for further information.

3.1. Properties

This section describes the properties of a domain, as shown on the corresponding Edit pane tabs.

3.1.1. Edit Tab

The Edit tab contains general information about the domain.



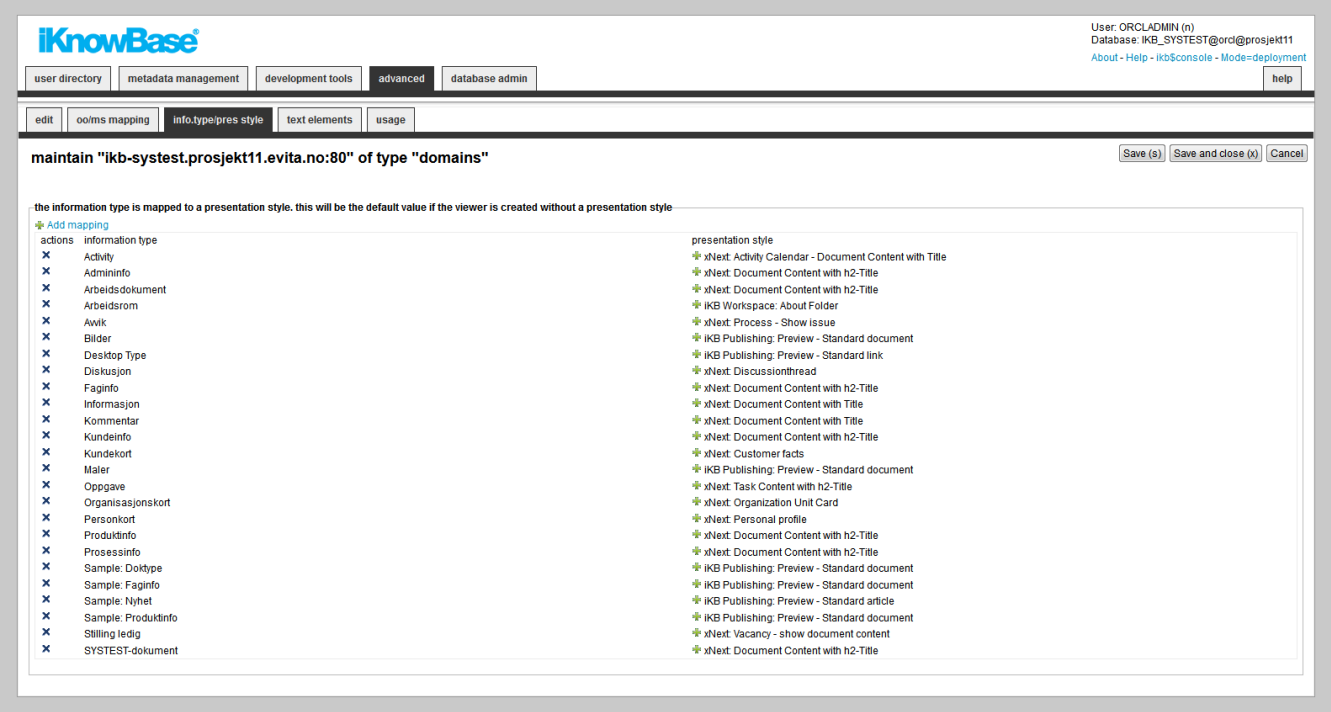
Property	Description
Subsystem	Select the appropriate subsystem.
Server name:port	The servername and port this domain applies to, for example www.example.com : 80.
Default domain	Indicates the default domain. Default domains will be used where the domain context is unknown, e.g. sendmail functions. For that reason, it must always be one default domain defined.
Description	Type a description for this domain.

Property	Description
Custom access control (edit/delete)	Select a custom access control function, used to extend or override the default access control when editing and deleting documents.
Custom access control (add)	Select a custom access control function, used to extend or override the default access control when adding documents.
Public user	The name of the iKnowBase user used for clients that are not logged on. This property displays all the guest users defined in User administration.
Always run as this user	Indicates whether to always run as the public user, even for clients that are in fact logged on.
Default language	The default language used when iKnowBase does not find a language on the individual portlet, the user or the browser language.
Weight for title	Search score weight for hits in the document title. Value must be between 0.1 and 10.
Weight for metadata	Search score weight for hits in the document metadata. Value must be between 0.1 and 10.
Weight for description	Search score weight for hits in the document description. Value must be between 0.1 and 10.
Weight for Content	Search score weight for hits in the document content (URL, body, text, or file). Value must be between 0.1 and 10.
iKnowBase application	Path to the deployed iKnowBase ikbViewer application, including the trailing slash. For a default installation, use "/".
Page engine	Path to the iKnowBase page engine, including the trailing slash. For a default installation, use "/page/".
Content server	Path to the iKnowBase content server, including the trailing slash. For a default installation, use "/Content/".
WebDAV server	Not in use.
Development Studio	Path to the iKnowBase Development Studio, including the trailing slash. For a default installation, use "/ikbStudio/".
Static resources	Path to the deployed resource directory. For a default installation, use "/ressurs/"

Property	Description
Target to dimension page	Target to the dimension selector popup, typically used when selecting dimensions for search or categorize.
Target to archive page	Target to the document archive page, typically used when selecting "related documents" during publishing. Default value should be set to null.
Target to image page	Target to the image archive page, typically used when selecting images during publishing. Default value should be set to null.
Mail server : port	The servername and port used when sending e-mail from this domain.
Log time consuming queries	When a viewer use longer time than the time entered here, the query will be logged to sql_logger automatically. The value should be in seconds e.g. (5 or 0.5).

3.1.2. Document Type / Presentation Style Tab

The info.type/pres.style tab contains information on the default presentation styles for the various document types. This information is used for viewers without a presentation style, normally for viewers presenting one single document.

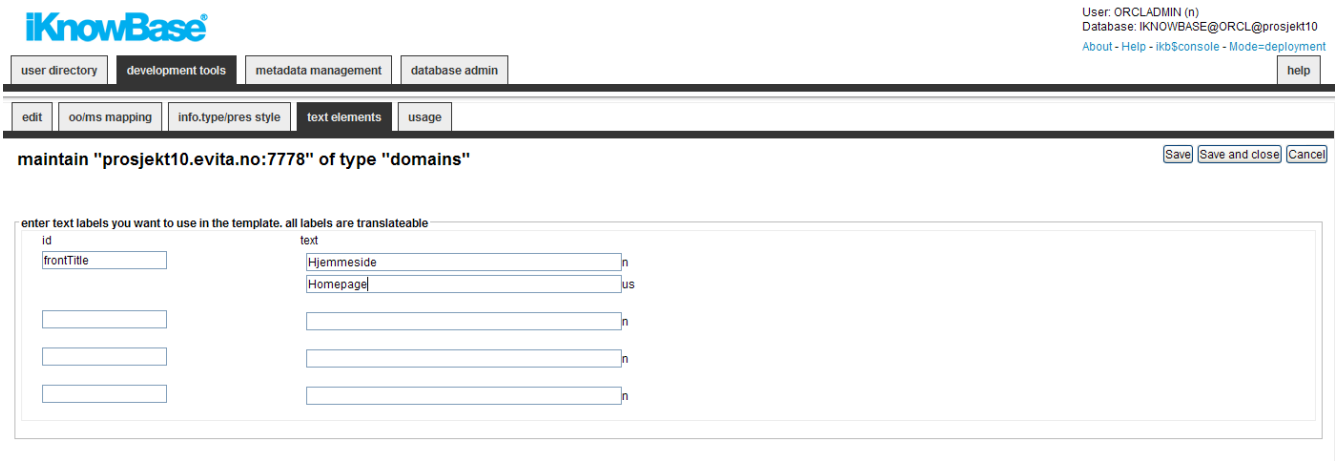


Property	Description
Add mapping	Selector of available document types.
Document type	List of all document types defined in the system.

Property	Description
Presentation style	Specifies which presentation style will be used for displaying information if a viewer does not specify a presentation style.

3.1.3. Text Elements Tab

The properties on this tab enable you to define texts to be used in the component. The texts are available as FreeMarker model objects. Multiple languages are supported.



Property	Description
Id	Type an identifier for the text element.
Text	Type the text labels that you want to use in the template. If multiple languages are supported in the solution, clicking the text input item expands hidden input items for all the languages, the language codes are specified behind the input fields.

Chapter 4. Event

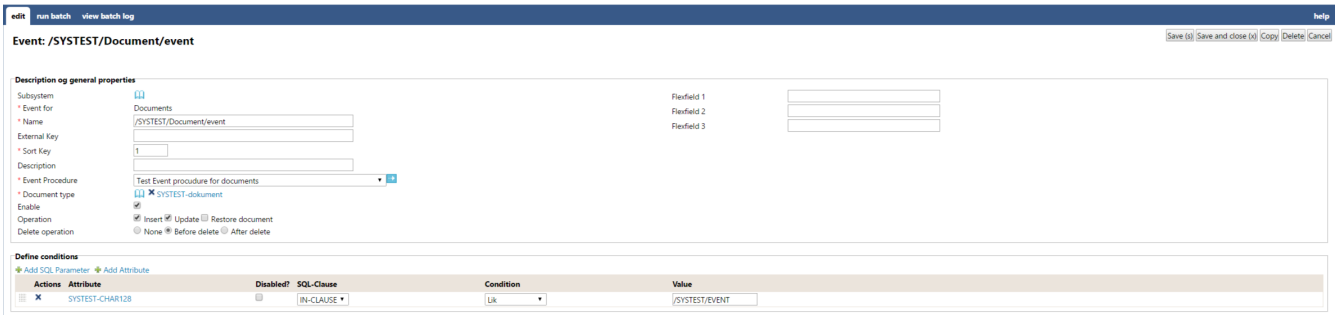
Whenever iKnowBase stores or updates a document (an information object), file uploads or a metadata object (user, group, acl) in the content repository, it can send a notification about this to the outside world. Such a notification is called an event, and it is implemented by having iKnowBase to call a custom PL/SQL procedure.

The event definition specifies which procedure should be called and under what conditions the procedure should be called.

An event is an action performed when certain operations like insert and update are carried out on a given object. For document, in addition to the operations, the document can have some conditions that need to be satisfied in order to execute the event.

4.1. Document Event Properties

This section describes the properties of a document event, as shown on the corresponding Edit pane.



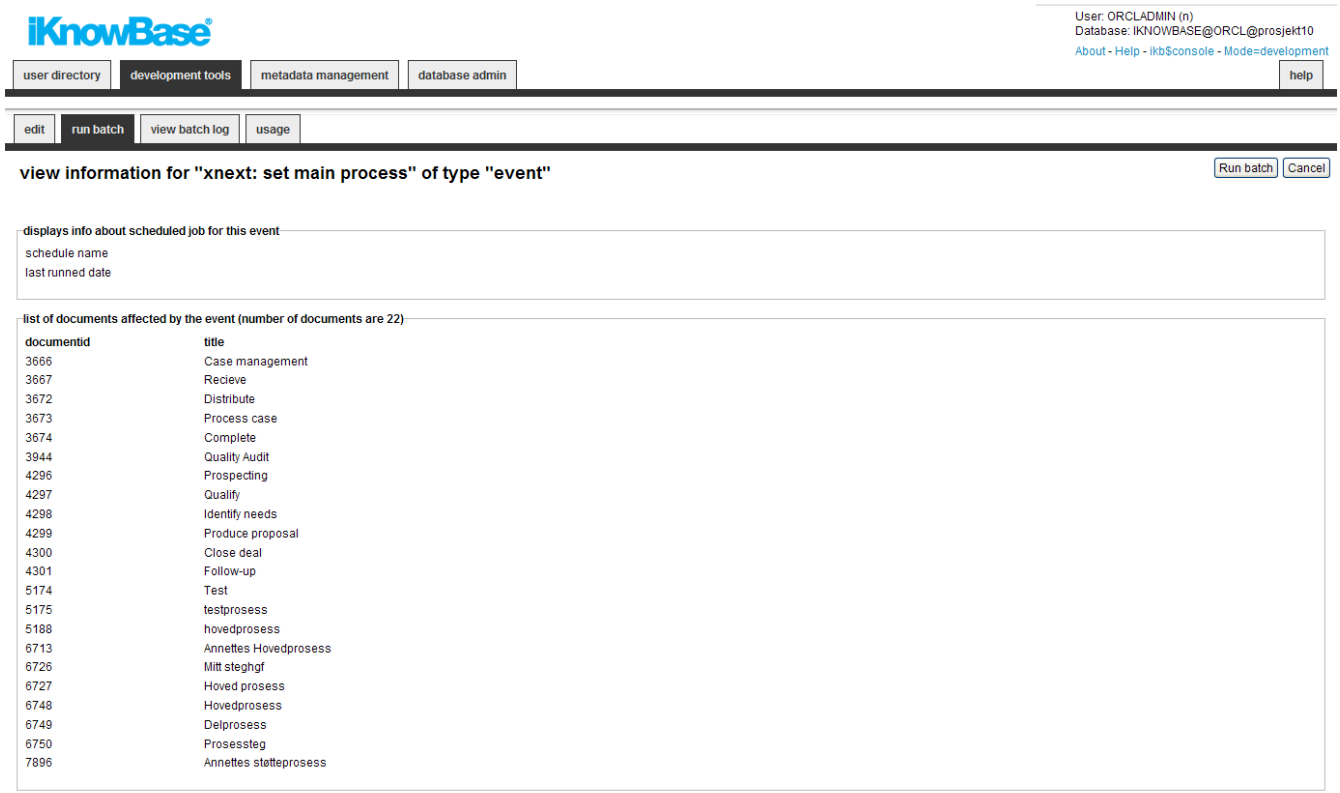
Property	Description
Subsystem	The subsystem the profile belongs to
Event for	Set automatically to documents.
Name	Type a name for the event.
Sort Key	A number that defines the order in which several events are sorted. If a document operation triggers several events, the event with the lowest sort key value is executed first.
Description	Type a description of the event.
Event procedure	Select the database procedure that will be called when the event triggers.
Document types	Select the document types that this event applies to.
Enable	Enable applies to enabling or disabling a event

Property	Description
Operation	Select which operations this event applies to, and specify whether the event is enabled or not. The set of operations that this event applies to: • Insert applies when a new document is inserted • Update applies when an existing document is updated • Restore document applies when a document is restored from the trash bin • Delete applies when an existing document is deleted • Enable applies to enabling or disabling a event
Delete operation	Select if the event should run when deleting an object, and if it should be executed before or after the actual delete. • None - will not execute on delete • Before delete - executes immediate before the object is about to be deleted • After delete - executes immediate after the object is deleted
Flexfield 1, 2 and 3	A user selectable text value that is sent to the event procedure.
Define condition	You can choose between two types of parameters: • SQL parameter: Parameters defined as SQL parameters • Attribute: iKnowBase attributes, used to set constant values in the query. When the parameter is selected, you must save before you can set any values.
Actions	Delete the parameter by clicking the icon
Attribute	Displays the names of the selected attributes to use as conditions for the event.
Disabled?	You can for debugging reasons disable attributes.
sql-clause	For performance reasons and only for advanced users: Defines how the query condition is built (IN or EXISTS)
Condition	Select the appropriate conditions for the selected attributes. The conditions depend on the type of attribute. **NOTE** You cannot select a condition for parameters.

Property	Description
Value	Select or enter the appropriate values for the selected attributes. Available options depends on the attribute/parameter type. Not applicable to SQL parameters.

4.1.1. Run Batch

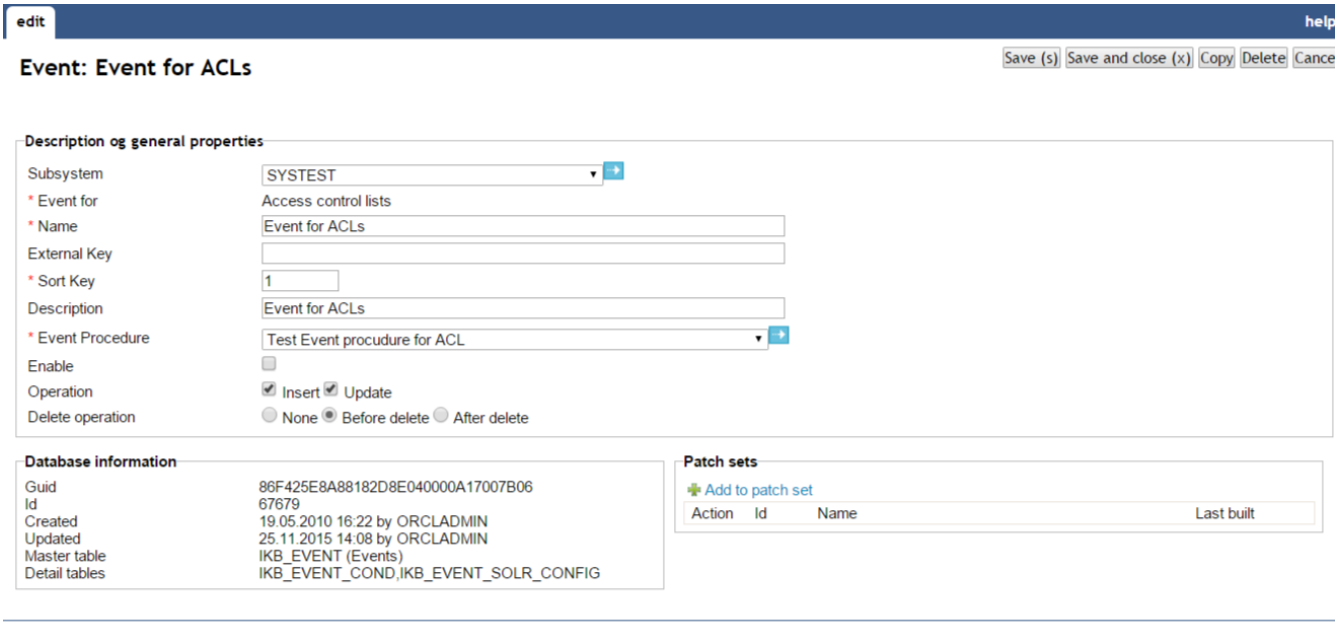
You can run an event in batch mode. It will select all documents matching the conditions set for the event. In your custom event procedure the eventmode will have the value 'BATCH'. Make sure you know the consequences before running an event as a batch job.



Property	Description
Schedule name	If running, if will display the schedule name here.
Last runned date	Will display the last time it was run as a batch job.
DocumentId / title	Displays a list of documents that corresponds to the conditions for the event.

4.2. Metadata Event Properties

This section describes the properties of a metadata event, as shown on the corresponding Edit pane.

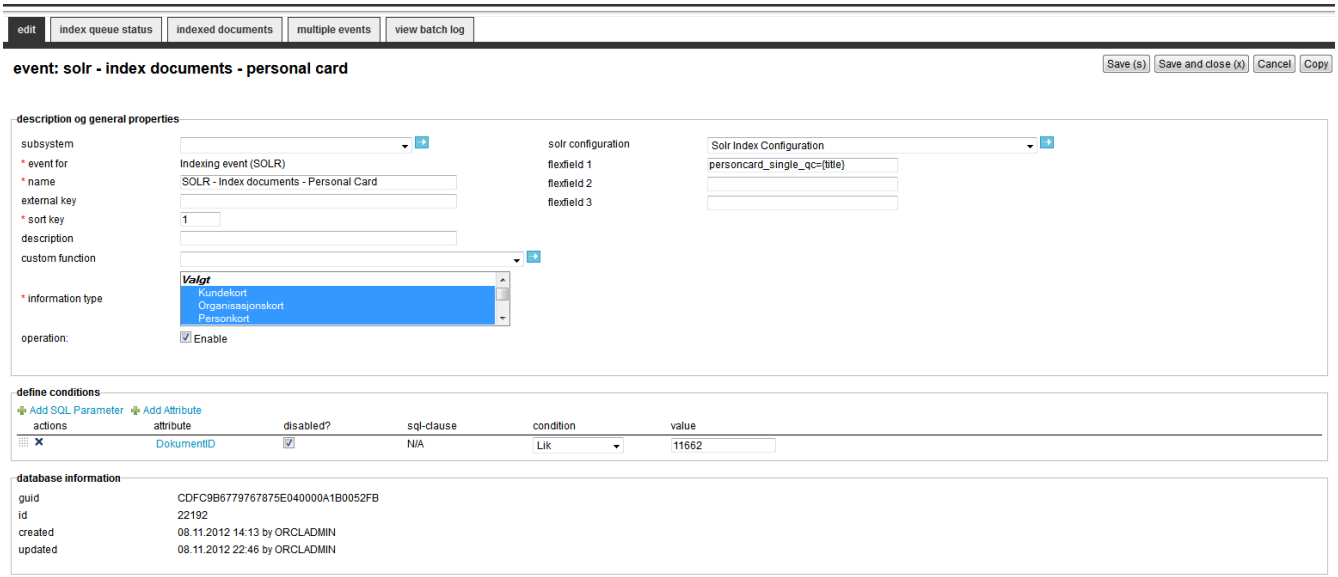


Property	Description
Subsystem	The subsystem the profile belongs to
Event for	Enter what type of object you define the event for. You can choose between • Users. No conditions can be defined. • Access control lists. No conditions can be defined. • Groups. No conditions can be defined. • Upload event. Will be triggered when uploading a new document to iKnowBase (e.g. DragAndDrop-function). No conditions can be defined.
Name	Type a name for the event.
Sort Key	Type a sort key. A number that defines the order in which several events are sorted. If a document operation triggers several events, the event with the lowest sort key value is executed first.
Description	Type a description of the event.
Event procedure	Select the database procedure that will be called when the event triggers.

Property	Description
Operation	Select which operations this event applies to, and specify whether the event is enabled or not. The set of operations that this event applies to: • Insert applies when a new row is inserted • Update applies when an existing row is updated • Delete applies when an existing row is deleted • Enable do activate/enable the event
Guid	Displays a globally unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Id	Displays a unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Created	Displays when the component was created and by whom it was created.
Updated	Displays when the component was last updated and by whom it was updated.

4.3. Indexing event(SOLR) Properties

This section describes the properties of a SOLR event, as shown on the corresponding Edit pane. The purpose of a SOLR event is to notify the content indexer about documents that should be indexed by Apache Solr search engine. In contrast to a regular document event, the result from a SOLR event will always be a AQ-message notifying the content indexer to either update or delete the document in Apache Solr. The event procedure will always be the same, but you can create a custom function as a replacement of ikb_solr.get_document function. A changelog is managed by the event and you do have administrative functions to maintain the message queue, exception queue, changelog and document list for the event.



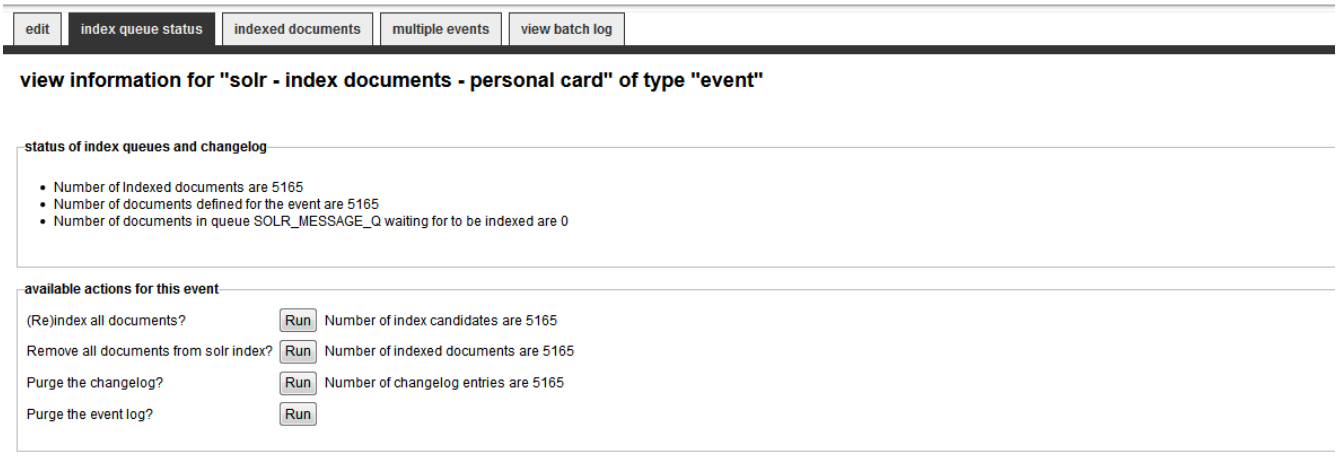
Property	Description
Subsystem	The subsystem the profile belongs to
Event for	Set automatically to Indexing Event (SOLR).
Name	Type a name for the event.
External key	Type a unique external key for the event.
Priority / Sort Key	A number that defines the order in which several events are sorted. If a document operation triggers several events, the event with the lowest sort key value is executed first. For SOLR events, the priority is used in AQ and can force processing of some message before the others.
Description	Type a description of the event.
Custom function	The content indexer calls an iKnowBase function to retrieve the document for indexing. This function can be replaced by a custom function instead if you need a specialized version of the function.
Document types	Select the document types that this event applies to.
Operation	Enable applies to enabling or disabling a event
Solr Configuration	Select the Solr configuration set. Try to use the same Solr configuration between different events.

Property	Description
Flexfield 1, 2 and 3	A user selectable name=text syntax that is sent to the content indexer as a Solr field. The flexfields have these options/formats : • `<name>=<value>` e.g. subtype=NewsItem. If the name already exists in the value set to the content indexer, it will be replaced by the value given here. • `<name>={solrfield}` e.g. mycard_qc={title}. {title} will be retrieved from an existing value in the Solr configuration. Can be useful to copy values to e.g. query completion fields.
Define condition	You can choose between two types of parameters: • SQL parameter: Parameters defined as SQL parameters • Attribute: iKnowBase attributes, used to set constant values in the query. When the parameter is selected, you must save before you can set any values.
Actions	Delete the parameter by clicking the icon
Attribute	Displays the names of the selected attributes to use as conditions for the event.
Disabled?	You can for debugging reasons disable attributes.
sql-clause	For performance reasons and only for advanced users: Defines how the query condition is built (IN or EXISTS)
Condition	Select the appropriate conditions for the selected attributes. The conditions depend on the type of attribute. **NOTE** You cannot select a condition for parameters.
Value	Select or enter the appropriate values for the selected attributes. Available options depend on the attribute/parameter type. Not applicable to SQL parameters.
Guid	Displays a globally unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Id	Displays a unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Created	Displays when the component was created and by whom it was created.

Property	Description
Updated	Displays when the component was last updated and by whom it was updated.

4.3.1. Index queue status

To administer the index process for the documents matching the event, you will find several functions to do bulk operations against Apache Solr. First part of the screen gives an overview over number of indexed documents, number of messages in queue/exception queue, number of documents in the changelog and a notification if metadata defined as part of the Solr configuration has changed for the document but not in the index. All of these notifications and more can be handled from here.



Property	Description
Status of index queue and changelog	Prints info about the queue, changelog and running jobs for the event

Property	Description
Available actions for this event	The actions you can do will only available if it's necessary. (e.g. no need for a Purge changelog if the changelog is empty): • (Re)index all documents? The job will queue all documents in the event for indexing. Documents that no longer meet the event criteria will be removed from the index. • (Re)index a single document? The job select a random document for reindexing. • Remove all documents from Apache Solr index? The job will queue all documents in the event for removal from the index. If any other events also handle the document, it will not be removed. • Add new documents? The job will queue all new documents not already in the changelog for the event. • Remove documents from Apache Solr that no longer exist for this event? • Reindex documents affected by metadata changes? A document can be tagged to e.g. a dimension. If the dimension label is changed, the value should also be populated to the index if it exists in the Solr configuration. • Resend all documents in exception queue? Messages can be moved to a exception queue if e.g. the Apache Solr server is down. Run this job is you want to move the messages back to the message queue. • Delete all documents in exception queue? Messages can be moved to a exception queue if e.g. the Apache Solr server is down. Run this job is you want to remove the exception messages. • Purge the message queue? The job will remove all queued messages. • Purge the changelog? The job will remove all entries from the changelog. If you purge the changelog, the documents will remain in Apache Solr. • Purge the event log? The job will remove all entries from the event log.
Index failures - List of documents failed to index/reindex	If the exception queue has any entries, they will be displayed here. You can resend or delete a single entry.

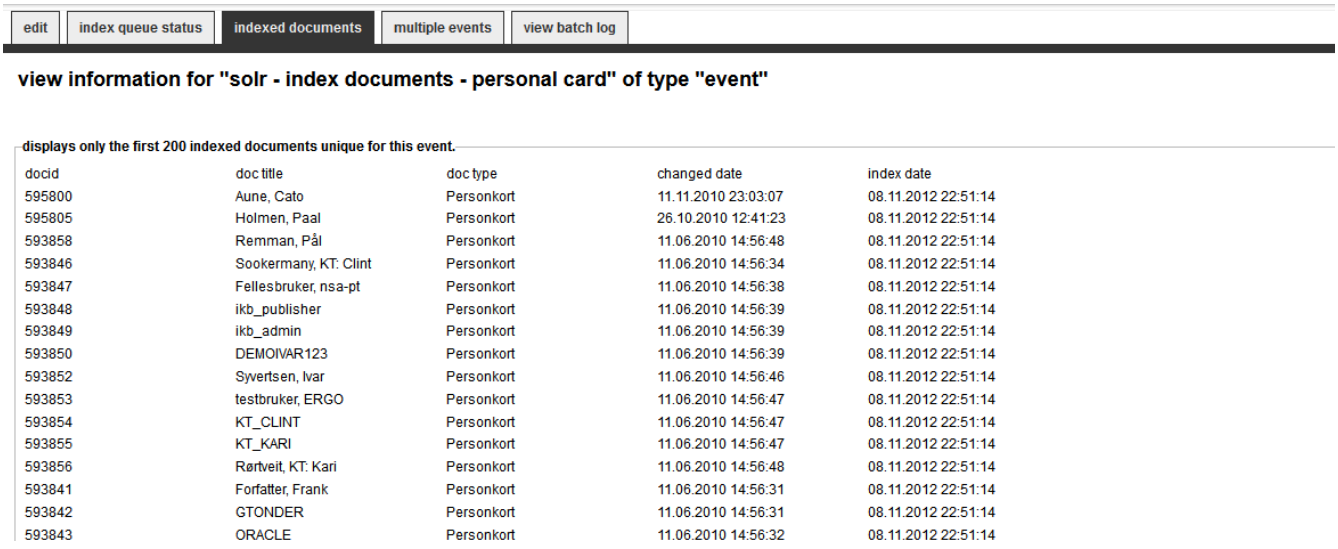
4.3.2. Exceptions (index failures)

The Contentindexer can fail to index a document for some reasons (e.g. invalid tika format). If so, it will end up in an exception queue.

Property	Description
Index failures - List of documents failed to index	If any documents has failed during indexing, it will end up here. You can resend or delete a single entry.

4.3.3. Indexed documents

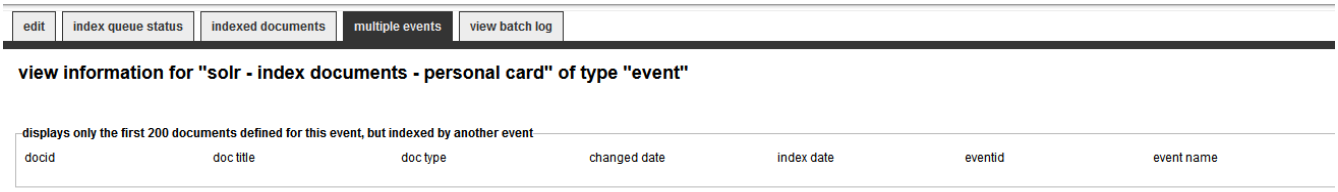
Used for a SOLR event and displays the first 200 documents defined for the event.



Property	Description
Document field	Will display Document ID, title, document type and changed date.
Index data	Will display index date.

4.3.4. Multiple events

Used for a SOLR event and displays the first 200 documents defined for the event, but 'owned' by another event. You should try to avoid events matching the same documents. You can let this event take ownership over the documents.



Property	Description
Document field	Will display Document ID, title, document type and changed date.
Index data	Will display index date, event ID and event name.

4.4. View batch log

You can create debug/warning messages in your custom event procedure. Use the procedure portlet_manage_event.log_batch(`<eventGuid>`, '<text>') to log messages. All messages are shown here.

Property	Description
Schedule name	Displays the schedule name here.
Last runned date	Will display the last time if was run as a batch job.
View a log from the last batch run	Will display the last time if was run as a batch job.

Chapter 5. Export

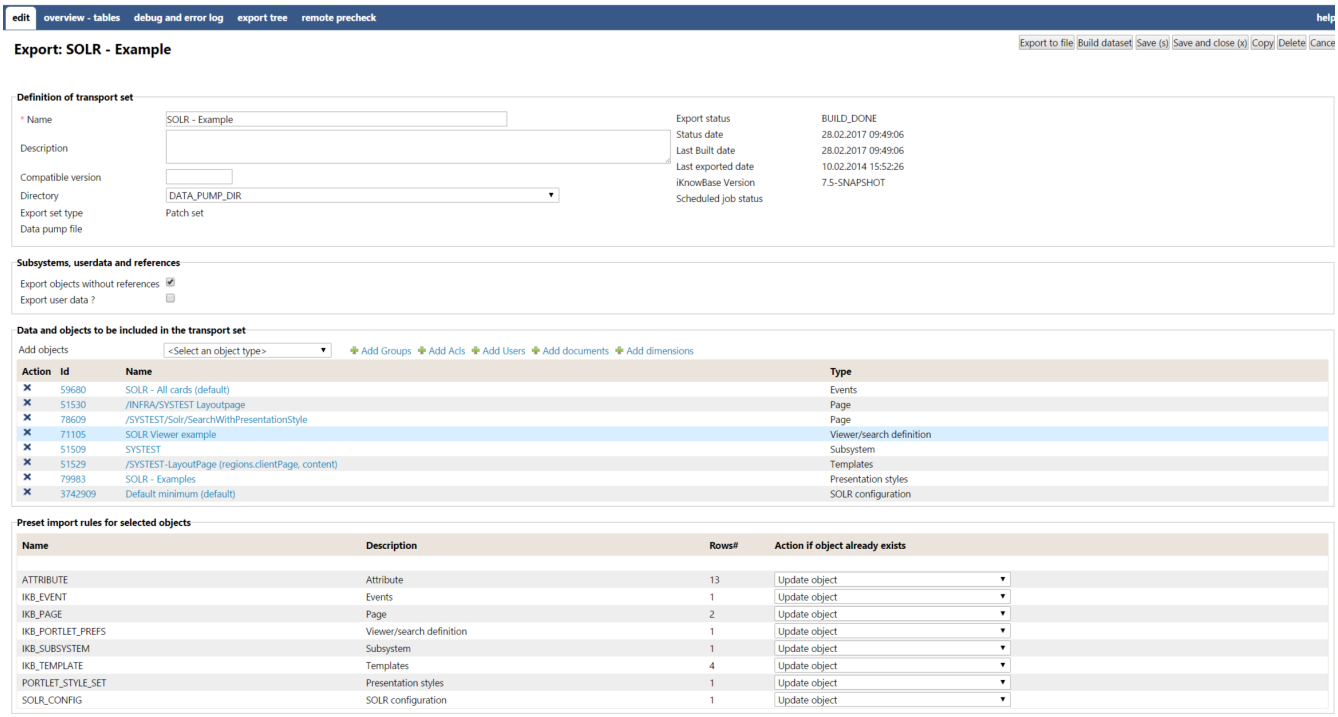
The export feature is part of the export/import utility in iKnowBase. With the export feature you can define and build transport sets and export data. Components, metadata, and content can be exported. The import feature lets you import previously exported data.

5.1. Properties

This section describes the properties of an export definition, as shown on the corresponding Edit pane.

5.1.1. Edit Tab

The Edit tab contains general information about the domain.



Property	Description
Name	Type a name for the export.
Description	Type the description of the export.

Property	Description
Compatibility version	The version of the database you are importing to. Some objects are database version dependable, and you might need to identify the target database version before exporting the data. Legal values for this parameter are as follows: • COMPATIBLE: the version of the metadata corresponds to the database compatibility level and the compatibility release level for feature (as given in the V$COMPATIBILITY view). • LATEST (default): the version of the metadata corresponds to the database version. • A specific database version for example, '11.2.0'. • none: Version will be set to LATEST
Directory	Select a directory where to place the export file.
Export set type	When you create a new export definition you must select between Transport Set or Patch Set. A Patch set will be available from components where you can add an instance directly to the patch set. Patch sets should also have Export objects without references checked so only the object itself is exported and not all the references.
Data pump file	Name of the created dump file and URL to download it. Only visible after running the export.
Export status	The status of the export transport set: • CREATED: The transport set is created, but not yet built or exported. • BUILD_STARTED: Building of the transport set is started. • BUILD_DONE: The transport set is built. • BUILD_FAILED: Building the transport set failed. Check the log • EXPORT_DUMP_BEGIN: Export of the transport set is started. • EXPORT_DUMP_COMPLETED: The data is exported. • EXPORT_DUMP_FAILED: Export of the transport set failed. Check the log
Date	Date of the last status change
Last built date	Date of the last time the transport set was built (by pressing the button Build dataset)
Last exported date	Date of the last time the transport set was exported (by pressing the button Export)

Property	Description
iKnowBase version	Displays the iKnowBase repository version. Make sure the import side has the same version of iKnowBase before importing.
Scheduled job status	If the job is running in batch mode, the job status is displayed here.
Export object without references	Select this check box if you want to export the object itself without all references, only the ones owned by the object (like detail data, labels and template text)
Export user data	Select this check box if the export should include members in ACLs and groups.
Exclude data from subsystem	Select subsystems you do not want data from. If the export set contains data from a excluded subsystem it will be skipped and expected to exist on the target site.
Exclude data without subsystem	Select this check box if you want to ignore data without any subsystem set.

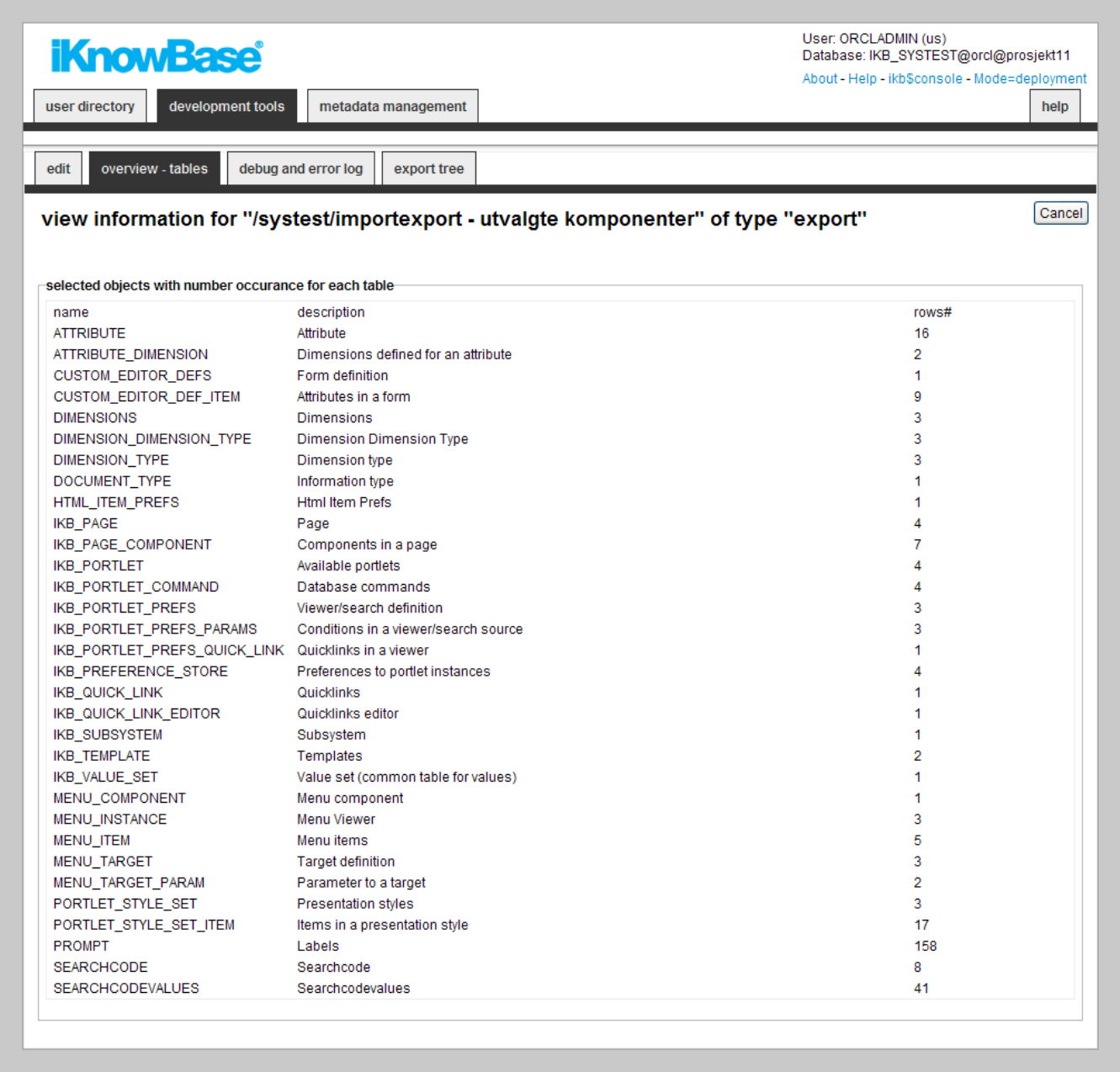
Add objects	Display all object types possible to export. Select one, and you then can choose instances of the object type. The table storing all selections is EXP_IMP_OBJ_SELECTION. A hint; if you are about to export loads of documents and you can identify these documents by a select, is to insert them into this table manually instead of selection one by one. The syntax will be like this:
	`insert into exp_imp_obj_selection (export_guid, table_name, object_guid)`
	`select '<the export Guid>','DOCUMENT',document_guid from document where <condition>;`

Add groups	Use the picklist to select groups to export. The selection will be saved immediately.
Add acls	Use the picklist to select access control lists (ACL) to export. The selection will be saved immediately.
Add users	Use the picklist to select users to export. The selection will be saved immediately.
Add documents	Use the picklist to select documents to export. The selection will be saved immediately.

Property	Description
Add dimensions	Use the picklist to select dimensions to export. The selection will be saved immediately.
Preset import rules for selected objects	When the dataset is built, you can add import rules for each object before you export the dataset. The values can be changed on the import side.
Name	Displays names of the database tables which are included in the import.
Description	Displays descriptions of the database tables which are included in the import.
Rows#	Displays the total number of rows in the transport set.
Action if object already exists	The valid operations if an object exists on target are: • Do nothing (leave as is): The object is unchanged • Update object: The object will be updated and new details will be inserted. • Replace object: The object will be updated, all details will be replaced. • Only insert new details: The object is unchanged, but new details will be inserted

5.1.2. Overview - tables Tab

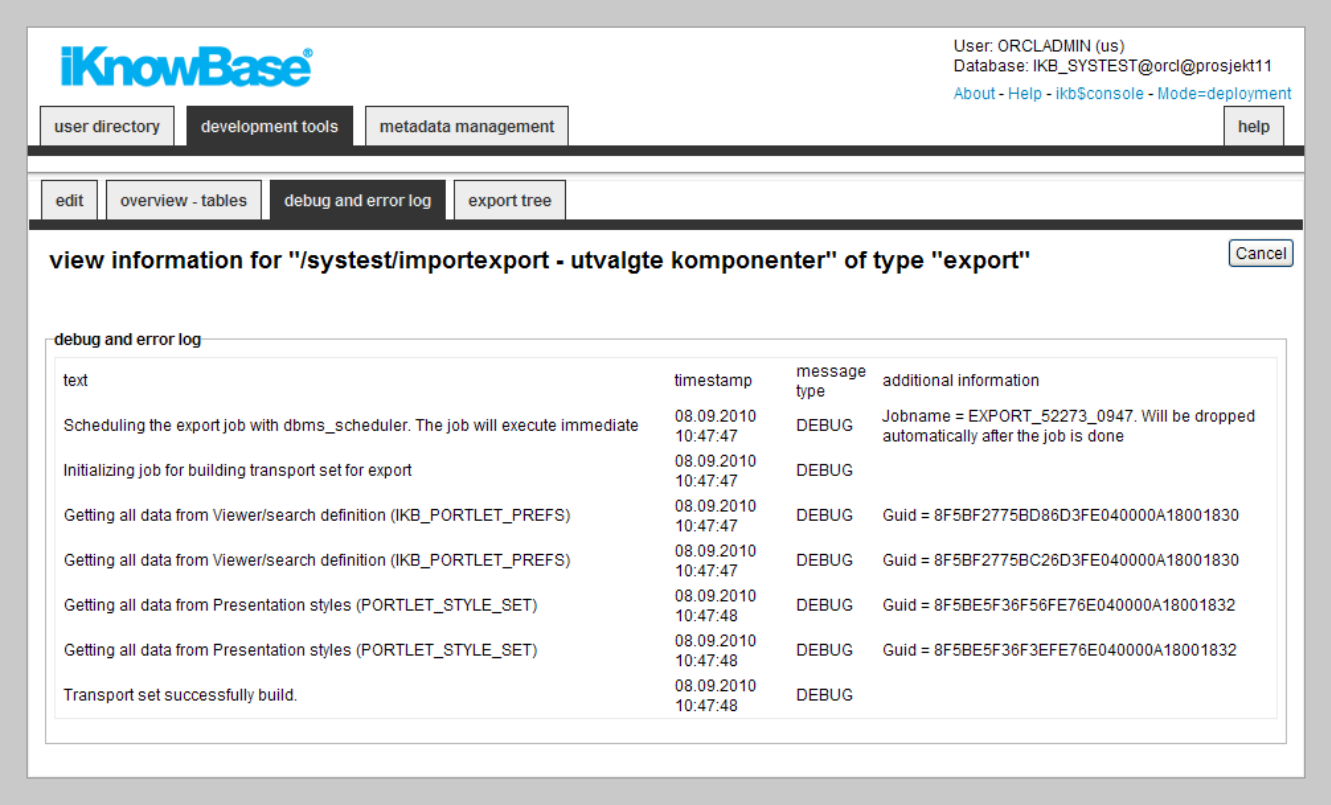
The Overview - tables tab contains information on tables chosen for export. The content of this tab is available after the transport set is built or data is exported.



Property	Description
Name	Displays the name of the tables which holds data to be exported for the selected objects (with dependencies).
Description	Displays the descriptions for the tables.
Rows#	Displays the number of rows to be exported per table.

5.1.3. Debug and error log Tab

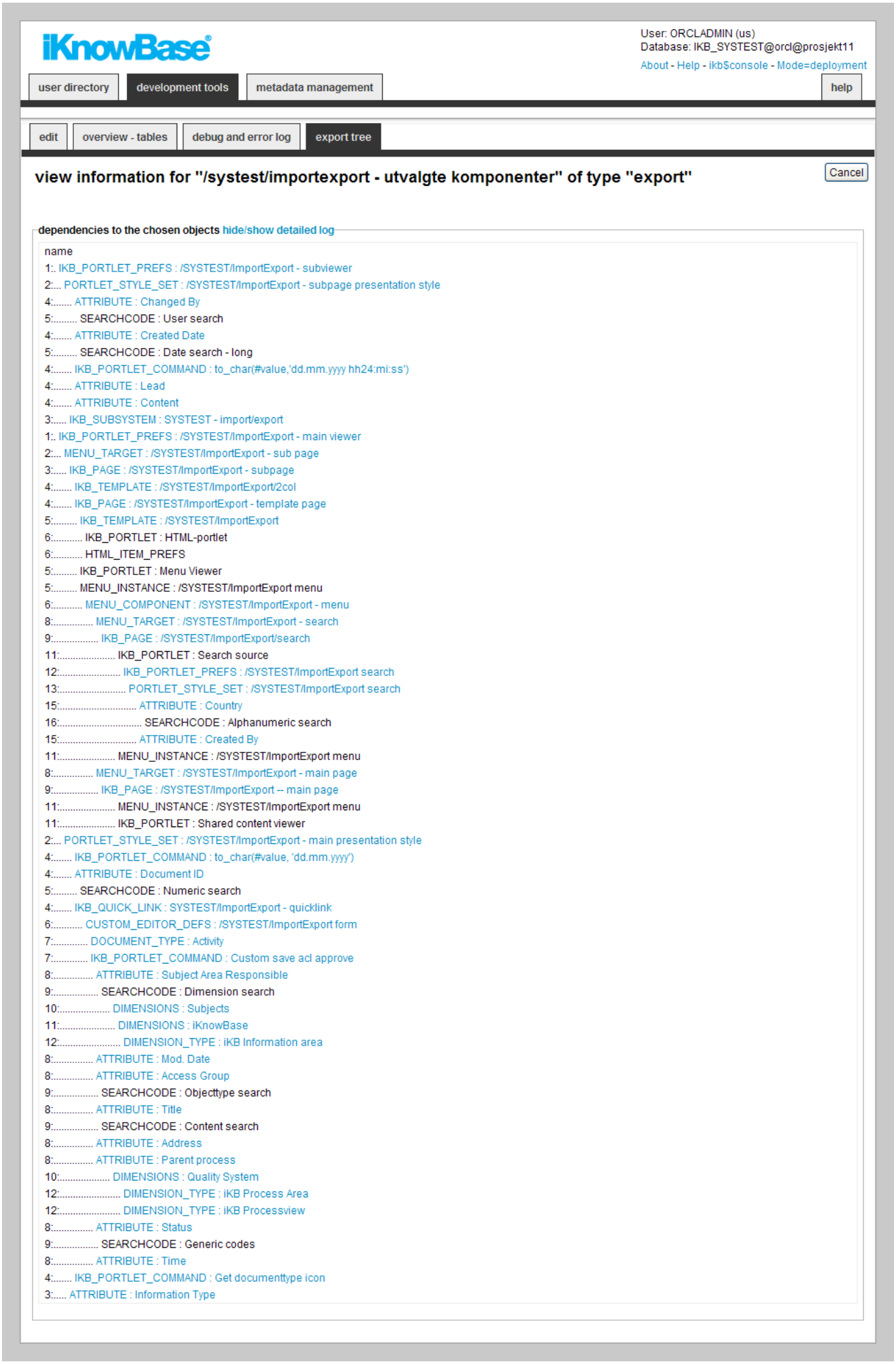
This tab contains information on actual export process. The content of this tab is available after the building of the transport set or export of data is started.



Property	Description
Text	Displays the messages generated during the last build or export.
Timestamp	Displays the timestamp for the messages.
Message type	Displays the message types.
Additional information	Displays additional information.

5.1.4. Export tree Tab

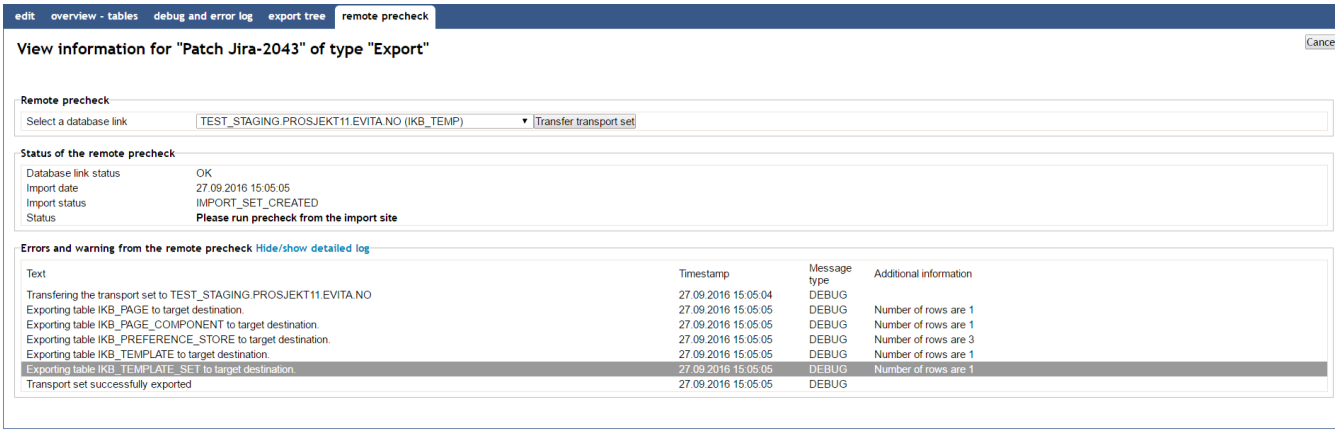
This tab contains information on all exported objects. The content of this tab is available after the building of the transport set or export of data is started.


iKnowBase
User: ORCLADMIN (us)
Database: IKB_SYSTEST@orcl@prosjekt11
About - Help - ikb$console - Mode=deployment
user directory
development tools
metadata management
help
edit
overview - tables
debug and error log
export tree
view information for "/systest/importexport - utvalgte komponenter" of type "export"
Cancel
dependencies to the chosen objects hide/show detailed log
name
1:. IKB_PORTLET_PREFS : /SYSTEST/ImportExport - subviewer
2:... PORTLET_STYLE_SET : /SYSTEST/ImportExport - subpage presentation style
4:..... ATTRIBUTE : Changed By
5:..... SEARCHCODE : User search
4:..... ATTRIBUTE : Created Date
5:..... SEARCHCODE : Date search - long
4:..... IKB_PORTLET_COMMAND : to_char(#value,'dd.mm.yyyy hh24:mi:ss')
4:..... ATTRIBUTE : Lead
4:..... ATTRIBUTE : Content
3:..... IKB_SUBSYSTEM : SYSTEST - import/export
1:. IKB_PORTLET_PREFS : /SYSTEST/ImportExport - main viewer
2:... MENU_TARGET : /SYSTEST/ImportExport - sub page
3:..... IKB_PAGE : /SYSTEST/ImportExport - subpage
4:..... IKB_TEMPLATE : /SYSTEST/ImportExport/2col
4:..... IKB_PAGE : /SYSTEST/ImportExport - template page
5:..... IKB_TEMPLATE : /SYSTEST/ImportExport
6:..... IKB_PORTLET : HTML-portlet
6:..... HTML_ITEM_PREFS
5:..... IKB_PORTLET : Menu Viewer
5:..... MENU_INSTANCE : /SYSTEST/ImportExport menu
6:..... MENU_COMPONENT : /SYSTEST/ImportExport - menu
8:..... MENU_TARGET : /SYSTEST/ImportExport - search
9:..... IKB_PAGE : /SYSTEST/ImportExport/search
11:..... IKB_PORTLET : Search source
12:..... IKB_PORTLET_PREFS : /SYSTEST/ImportExport search
13:..... PORTLET_STYLE_SET : /SYSTEST/ImportExport search
15:..... ATTRIBUTE : Country
16:..... SEARCHCODE : Alphanumeric search
15:..... ATTRIBUTE : Created By
11:..... MENU_INSTANCE : /SYSTEST/ImportExport menu
8:..... MENU_TARGET : /SYSTEST/ImportExport - main page
9:..... IKB_PAGE : /SYSTEST/ImportExport -- main page
11:..... MENU_INSTANCE : /SYSTEST/ImportExport menu
11:..... IKB_PORTLET : Shared content viewer
2:... PORTLET_STYLE_SET : /SYSTEST/ImportExport - main presentation style
4:..... IKB_PORTLET_COMMAND : to_char(#value, 'dd.mm.yyyy')
4:..... ATTRIBUTE : Document ID
5:..... SEARCHCODE : Numeric search
4:..... IKB_QUICK_LINK : SYSTEST/ImportExport - quicklink
6:..... CUSTOM_EDITOR_DEFS : /SYSTEST/ImportExport form
7:..... DOCUMENT_TYPE : Activity
7:..... IKB_PORTLET_COMMAND : Custom save acl approve
8:..... ATTRIBUTE : Subject Area Responsible
9:..... SEARCHCODE : Dimension search
10:..... DIMENSIONS : Subjects
11:..... DIMENSIONS : iKnowBase
12:..... DIMENSION_TYPE : iKB Information area
8:..... ATTRIBUTE : Mod. Date
8:..... ATTRIBUTE : Access Group
9:..... SEARCHCODE : Objecttype search
8:..... ATTRIBUTE : Title
9:..... SEARCHCODE : Content search
8:..... ATTRIBUTE : Address
8:..... ATTRIBUTE : Parent process
10:..... DIMENSIONS : Quality System
12:..... DIMENSION_TYPE : iKB Process Area
12:..... DIMENSION_TYPE : iKB Processview
8:..... ATTRIBUTE : Status
9:..... SEARCHCODE : Generic codes
8:..... ATTRIBUTE : Time
4:..... IKB_PORTLET_COMMAND : Get documenttype icon
3:..... ATTRIBUTE : Information Type

Property	Description
Name	Displays a graph of all the objects included in the export, including all objects that the selected objects are dependent of.

5.1.5. Remote precheck tab

This tab lets you verify a transport set at the target side. It depends on a database link where the iKnowBase version must be the same on both sides. A typical use case is deploying new functionality from a development site to test site.



Property	Description
Select a database link	Select a database link to a defined target. The iKnowBase version has to be the same on both sides.
Transfer transport set	By pressing this button you first build the transport set locally, than tranfer it to the target. The precheck has to be executed on the destination.
Status of the remote precheck	Displays the validity of the database link and if the transport set has been imported on the destination. If precheck has been executed, you can then download the log from the destination. If any missing references are discovered, a list will be produced where you can manually add each object and then try again. If any of the data in the transport set contains XML-data, you need to download the export set as a file and import if on target side because XMLDATA is not transferable over database links. A warning about this will be given.
Errors and warning from the remote precheck	This is the report from the precheck on the target instance.

5.2. Tasks

5.2.1. Adding Objects to an Export Tab

To add objects (e.g. components configured in Development Studio or database tables) to an export, perform the following steps:

1. On the edit tab of the Edit pane for the export, select the appropriate object type in the select objects dropdown. The region select objects, which displays a list of all existing objects of the given type, appears.
2. In the select objects region, select the objects that you want to include in the export.
3. Click Apply or OK. The selected objects are added to the export definition, and will appear as selected objects in the region selected objects and tables in the transport set in the Edit pane.

NOTE	You can add objects of multiple object types to an export. After you have added objects of one object type and saved the export, you can repeat the steps above for a different object type.

To remove an object from an export definition, perform the following steps:

1. On the Edit pane for the export, click on the checkbox for the object you want to remove in the region selected objects and tables in the transport set.
2. Click Save. The object is removed from the list.

5.2.2. Adding Documents to an Export

To add documents to an export, perform the following steps:

1. On the Edit tab of the Edit pane for the export, click the document archive link next to select documents. The document archive opens in a new browser window.
2. In the document archive, find and select the documents to be included in the export.
3. Click OK. The list of documents to include in the export will appear next to select documents in the Edit pane. Note: It is possible to remove a document by clicking on the X icon in front of the document.
4. On the Edit pane for the export, click on Apply. The selected documents are added to the export definition, and will appear as selected objects in the region Selected objects and tables in the transport set in the Edit pane.

To remove a document from an export definition, perform the following steps:

1. On the Edit pane for the export, click on the checkbox for the document you want to remove in the region Selected objects and tables in the transport set.
2. Click Save. The document is removed from the list.

5.2.3. Exporting Data for iKnowBase PageEngine use

1. Create an export definition, defining which data you want to export.
2. Click on the Build dataset button on the Edit pane of the export definition. The dataset is built,

and a debug and error log become available on the Debug and error log tab. An overview of how many rows from which tables will be exported becomes available on the Overview — tables tab and a graphical overview of object dependencies becomes available on the Export tree tab.

3. If you want to define import rules for each table (replace on import/delete details) you can preset values before you export the file.
4. Check the Debug and error logs tab.
5. When the dataset is built, click on the Export button on the Edit pane of the export definition. The specified data is exported to the server data pump directory. The exported data file will be named EXP-SchemaName-ExportDefGuid-ExportDefName.dmp, where SchemaName is the name of the database schema, ExportDefGuid is the guid of the export definition, and ExportDefName is the name of the export definition. An iKnowBase document with the document type "iKnowBase Transport Set" with the dump file will be created. It will be given the title Export(DMP), where Export is the name of export definition. A debug and error log becomes available on the Debug and error log tab. An overview of how many rows from which tables are exported becomes available on the Overview - tables tab and a graphical overview of object dependencies become available on the Export tree tab.
6. Download the dump file through the web interface, or retrieve it directly from the database server.

Chapter 6. External Data sources

The iKnowBase Viewer, the component responsible for presenting information from iKnowBase, is capable of displaying content not only from the iKnowBase content store, but also from other database tables. The mechanism for this is the external data source.

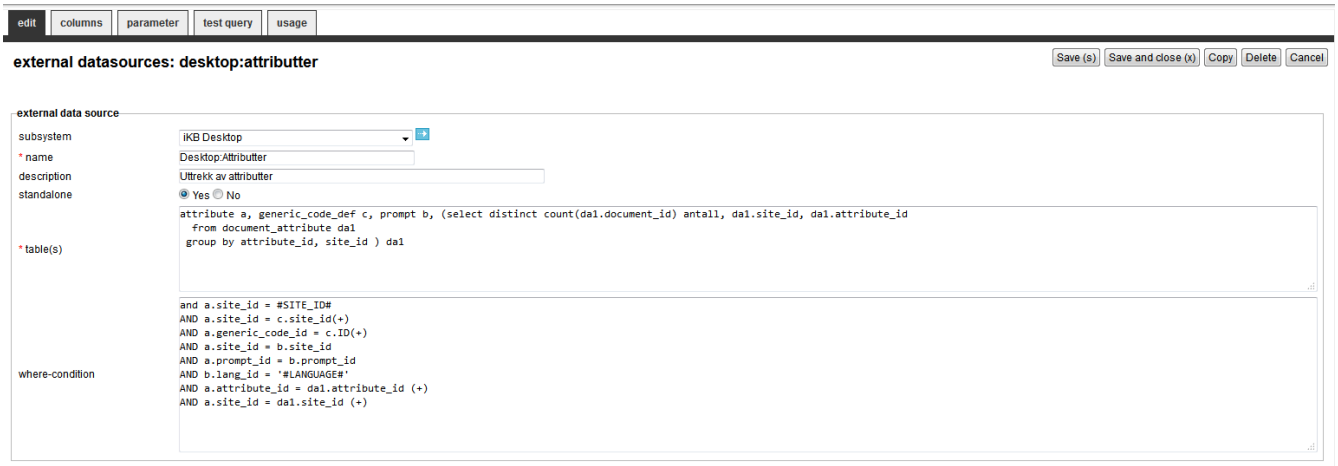
You define an external data source with the source table(s), columns, permanent conditions, and potential parameters. You define it as a standalone data source, or as dependent data source, e.g. a data source which is joined with the iKnowBase document table.

In order to use an external data source, you must first create a presentation style. In this presentation style you select the external data source, which will give you access to the columns defined in the external data source. These columns will be available as attributes and can be presented with the same flexibility as iKnowBase attributes. Then you must create a viewer or a search source, and set it up to use the presentation style for the external data source. This will give you access to the parameters defined for the external data source. The parameters will be available as attributes which you may use to build the where condition. The extracts made by using this viewer or search source will be based on the external data source.

6.1. Properties

This section describes the properties of an external data source, as shown on the corresponding Edit pane tabs.

6.1.1. Edit tab



Property	Description
Subsystem	Select the appropriate subsystem.
Name	Type a name for the external data source.
Description	Type a description for this external data source.

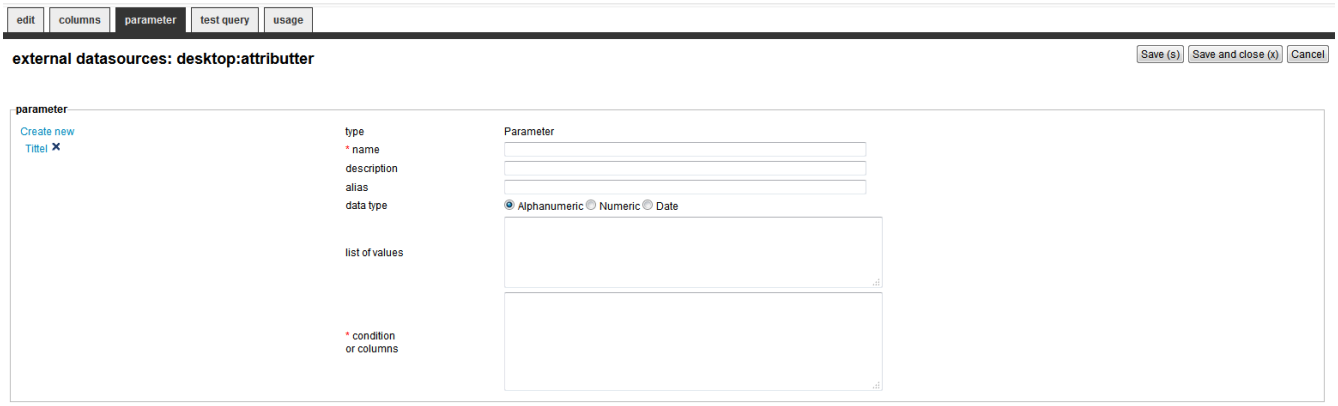
Property	Description
Standalone	Click the appropriate option to join the search source with the iKnowBase table document or make it independent. For example, if you want a list that shows how many times a document has been read, you can join it with the document table. You are then dependent on specifying a value in tables and where-condition that joins with the document table. If you want a list outside a document context, for example a list of all users, you can click Yes and specify the table for users in the table-field.

Table(s)	Type the names of the tables that are a part of the external datasource. If you select more than one, you have to join these with each other in the Where-condition.
	
	You can also define functions that are executed within the condition. The function must return a value. Functions are specified within curly brackets: {*functionName*}.
	
	Note: The execution is done only once, rather than one time per document that are extracted, and might be smart regarding performance.
	
	For example:
	
	`ikb_user iu1,`
	`(select count(*) number, site_id, user_id, document_id`
	`from log_documents ld1`
	`where ld1.action=3 group by site_id, user_id, document_id ) ld1`

Property	Description

Where condition	Type the where condition to join the tables that are selected for extraction.
	
	If you select the Standalone option as No, join the document table with the prefix oi1.
	
	You can enter SITE_ID, LANGUAGE USER_ID with the meta tags #SITE_ID#, #LANGUAGE# and #USER_ID#/#USERID# .
	
	You can also define functions that are executed within the condition. The function must return a value. Functions are specified within curly brackets: {functionName}.
	
	Note: The execution is done only once, rather than one time per document that are extracted, and might be smart regarding performance.
	
	For example:
	
	`and ld1.document_id = oi1.document_id`
	`and ld1.site_id = oi1.site_id`
	`and iu1.id = ld1.user_id`
	`and iu1.id = #USER_ID#`
	
	These where-conditions are in synchronization with the example stated in the Table(s) property.

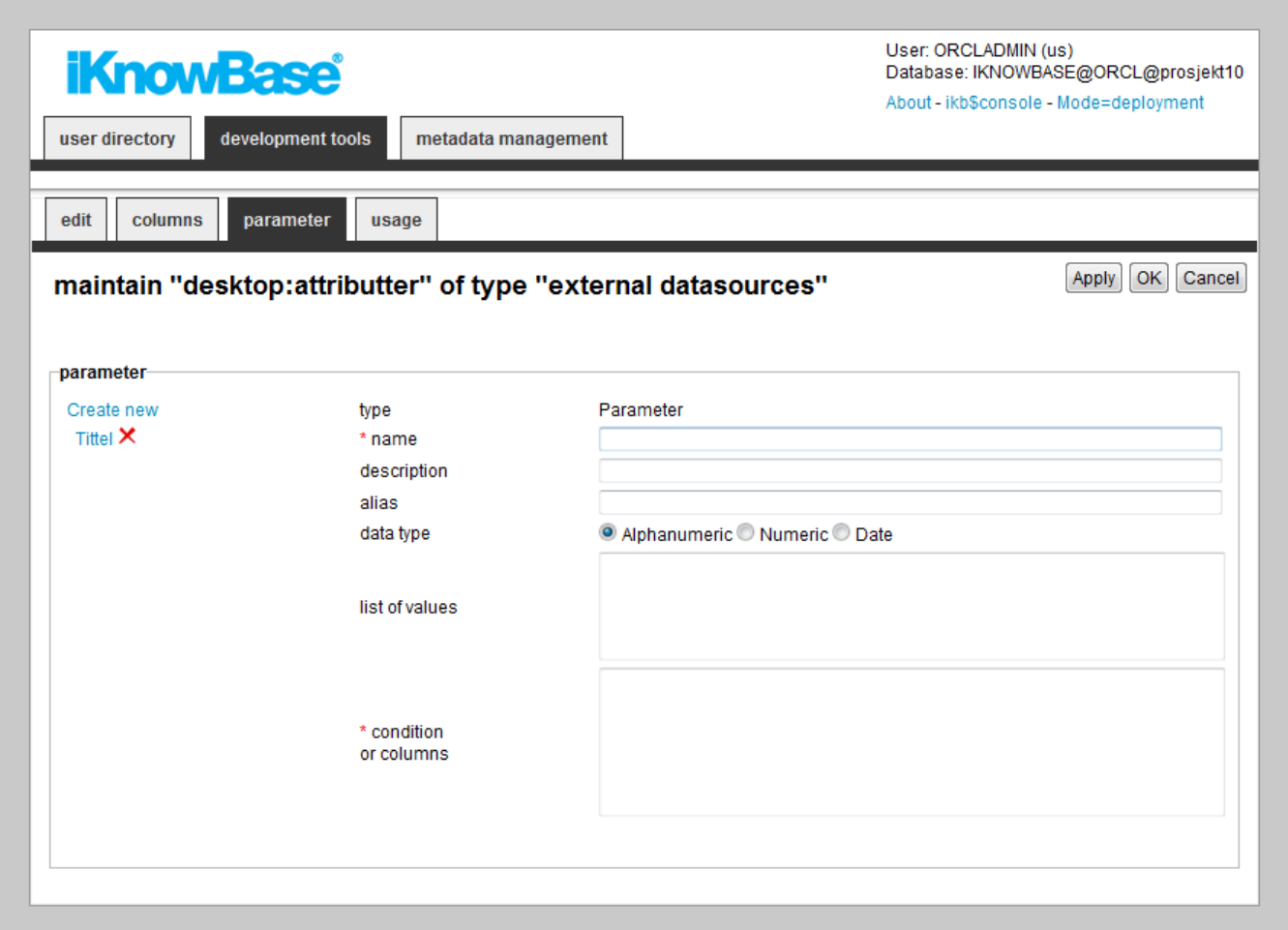
6.1.2. Columns Tab



Property	Description
Create new	Click the Create new link to create a new column. The list below the Create new link displays the links corresponding to existing columns. To view and edit a column, click on the respective link. To remove a column, click on the respective icon.

Property	Description
Type	Displays the type as Columns.
Name	Type a name of the column. When this external data source is used with a presentation style component, the columns defined for the external data source will be available as attributes in the presentation style.
Description	Type a description for this column.
Data type	Select the datatype for the column. Choose between Alphanumeric, Numeric, Date or Clob.
External column or function	Type the database name of the column or function. Remember to prefix the names.

6.1.3. Parameter Tab

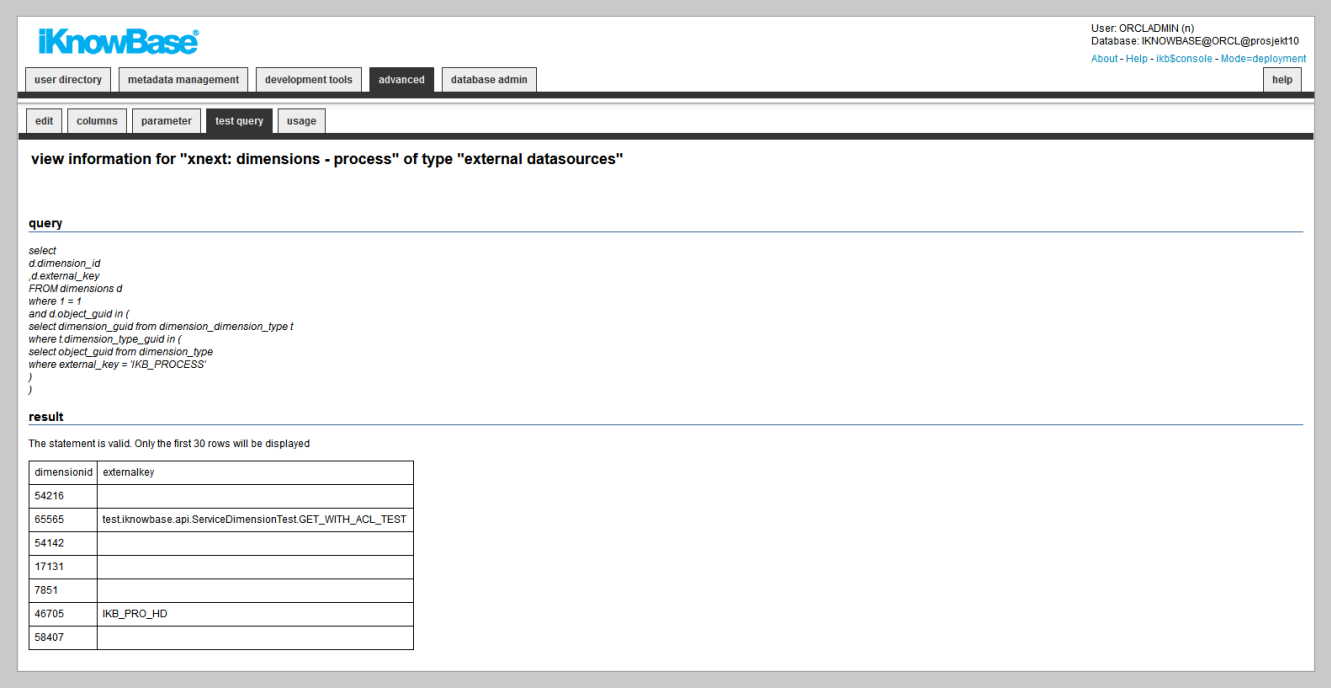


Property	Description
Create new	Click the Create new link to create a new parameter. The list below the Create new link displays the links corresponding to existing parameters. To view and edit a parameter, click on the respective link. To remove a parameter, click on the respective icon.
Type	Displays the type as Parameter.
Name	Type a name of the parameter. The parameters defined for the external source will be available as attributes in viewers and search sources that are configured to use a presentation style which uses this external data source.
Description	Type a description for this parameter.
Alias	Type a name that is used in the URL.
Data Type	Click the appropriate data type.

List of Values	Type the SQL expression to build up value lists in a search filter. Use the following syntax for the SQL expression:
	
	`Select <idfield>, <description> from <table>`
	
	Example:
	
	`select msg1.name, msg1.display_name`
	`from owf_mgr.wf_messages_tl msg1`
	`where msg1.type = 'KT'`
	`and msg1.language = 'N'`
	`order by msg1.display_name`

Property	Description
Condition or Columns	Type the condition to be built. #COND# is used when the user want to choose which condition (such as equal or different from) the search will be run as, while #PARAM# specifies the value the user enters. The condition must start with AND since it is joined with the rest of the where condition. Example: `and not1.message_name \#COND# \#PARAM#`

6.1.4. Test query tab



This page will run the query defined for the external datasource. If it succeeds it will display the first 30 rows. If if fails, it will display the error message so you can fix the errors.

Property	Description
Query	Displays the query.
Result	Displays the result of the query.

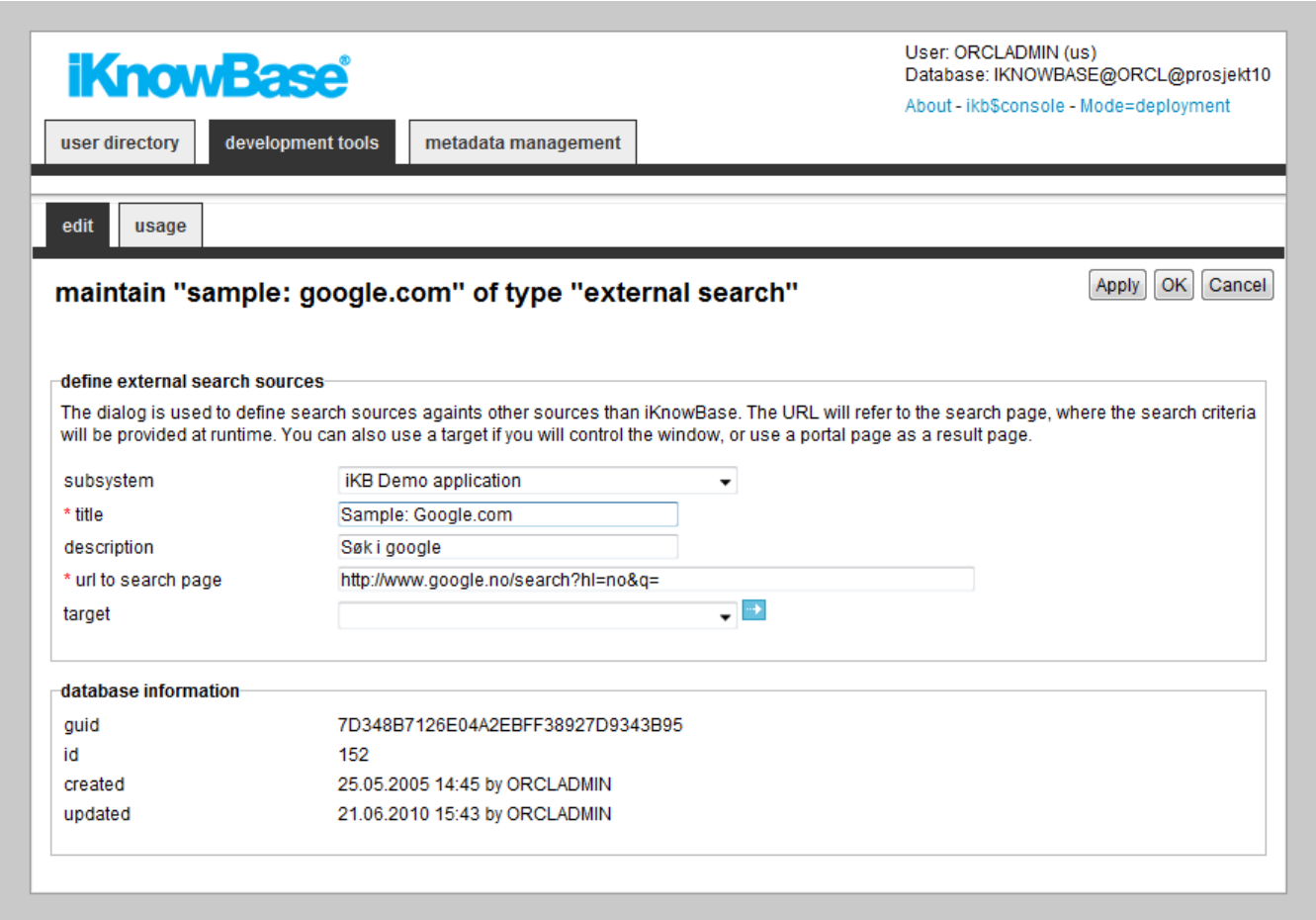
Chapter 7. External Search

An external search defines the interface used to perform a query in an external system, either a public search engine such as Google or Yahoo!, or a private internal search engine.

You can use the Build search dialog portlet to expose the external search feature.

7.1. Properties

This section describes the properties of an external search, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a name for the external search.
Description	Type a description for this external search.

Property	Description
URL to search page	Type the URL for the search page without the search string. At runtime, when executing the search, the search criteria will be appended at the back of this URL. For example, for Google the search URL is: http://www.google.no/search?hl=no&q=
Target	When the end user performs an external search, the search result is displayed in a new browser window. Select a Popup target to specify properties of the new window, such as height and width.

Chapter 8. Forms

Forms enable you to add, modify, and delete content in the iKnowBase portal. You use the form component to configure the forms to use in your iKnowBase application. At run time an advanced form generator builds forms as required based on the configured form components.

Forms are used for publishing and editing content, such as documents or other information objects, in the iKnowBase content store. A form must be associated with one document type. You will need at least one form per document type that should be available for publish and maintenance in your iKnowBase application. Default behavior of a form is to write its form identification to the information object upon saves. The next time the information object is opened for edit, the form which was last used to edit it will be used.

In order to use a form, you must create a page with a Form portlet and a Target for this page. Configure the form to use this target (target on show). **Note**: This target may be reused for different forms.

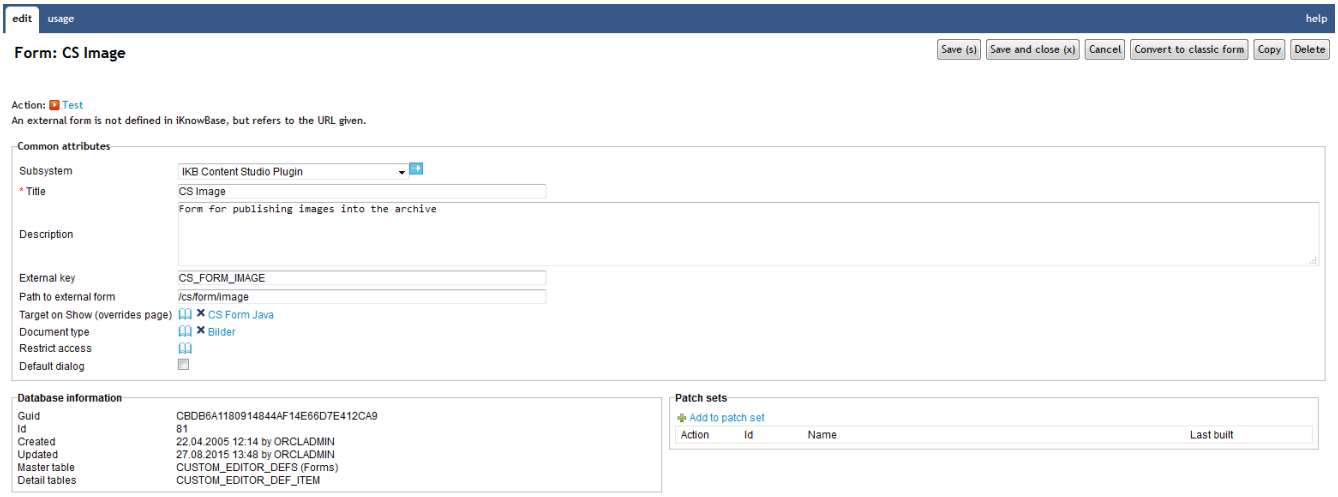
There are two types of forms:

- **External form**: developed in Java with a controller endpoint
- **Java form**: developed in Java with a form bean
- **Classic form**: all configuration is done within this component

8.1. Properties

This section describes the properties of a form, as shown on the corresponding Edit pane tabs.

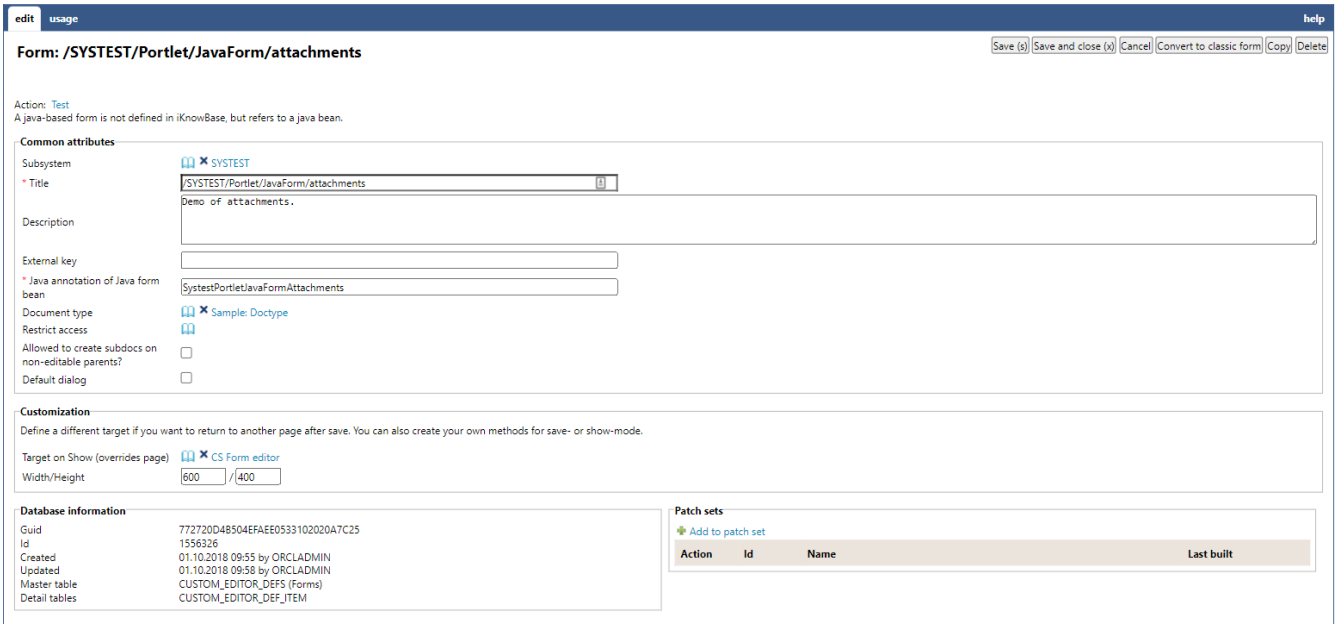
8.1.1. Edit Tab External Form



Property	Description
Subsystem	Select the appropriate subsystem.

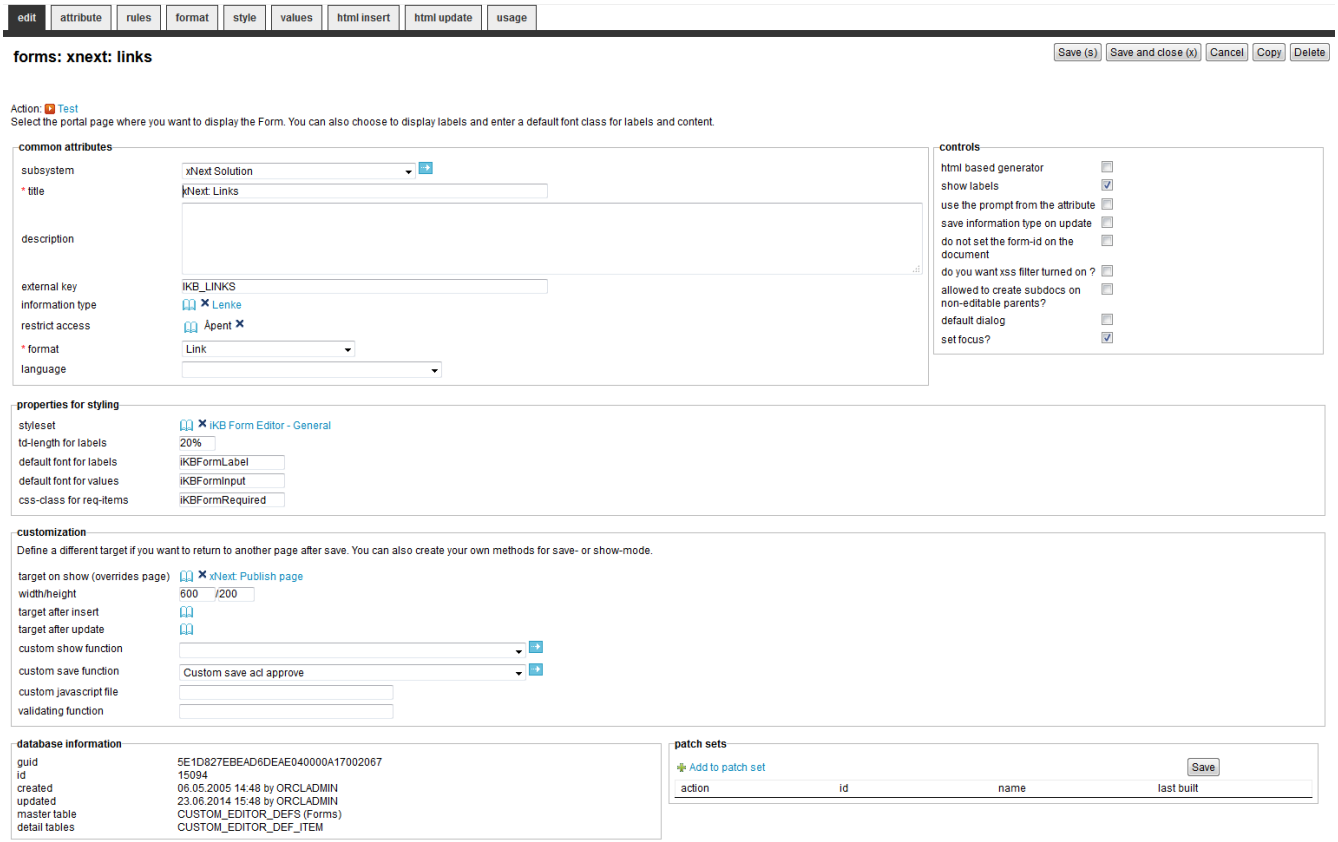
Property	Description
Title	Type a title for this form.
Description	Type a description for this form.
External key	Enter an unique external key if you need to refer to the form in code.
Path to external form	Enter a relative path to the external form
Target on Show (overides page)	Select an iKnowBase target . This is used as the location for displaying a form, when the form is opened as a separate page or as a popup page.
Document type	Select the document type to use for documents created using this form. **Note**: Only used to present links and actions. The form implementation should include restrictions to only display and save documents of this type.
Restrict access	Select the appropriate access control list. To access and use the form, the user must be a member of this access control list, and must also have the permission to publish content. If you do not specify an access control list, everyone can access the form. **Note**: Only used to present links and actions. The form implementation should include restrictions for view and save to this access control list.
Default dialog	Select this check box to edit the documents that have no forms associated with them. iKnowBase searches for forms with the same document type or format, and selects the first form with this property set.

8.1.2. Edit Tab Java Form



Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a title for this form.
Description	Type a description for this form.
External key	Enter an unique external key if you need to refer to the form in code.
Java annotation of Java form bean	The name of the form used in the @Form annotation (com.iknowbase.api.presentationservices.form.annotation.Form)
Document type	Select the document type to use for documents created using this form. **Note**: Only used to present links and actions. The form implementation should include restrictions to only display and save documents of this type.
Restrict access	Select the appropriate access control list. To access and use the form, the user must be a member of this access control list, and must also have the permission to publish content. If you do not specify an access control list, everyone can access the form. **Note**: Only used to present links and actions. The form implementation should include restrictions for view and save to this access control list.
Allowed to create subdocs on non-editable parents?	Select this check box to override the edit permissions for the parent document. This will enable the end user to create a sub document for a parent document he doesn't have edit permissions for.
Default dialog	Select this check box to edit the documents that have no forms associated with them. iKnowBase searches for forms with the same document type or format, and selects the first form with this property set.
Target on Show or select a page	Select an iKnowBase target . This is used as the location for displaying a form, when the form is opened as a separate page or as a popup page.
Width	Enter the width of the popup window used when the form is opened as a popup page.
Height	Enter the height of the popup window used when the form is opened as a popup page.

8.1.3. Edit Tab Classic form



Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a title for this form.
Description	Type a description for this form.
External key	Enter a unique external key if you need to refer to the form in code.
Document type	The document type to use when creating new documents. The form will also be restricted (view, update) to documents of this document type. If you wish to use this form for multiple document types, then leave this blank and specify the valid set of document types in the style tab.
Restrict access	To access and use the form, the user must be a member of this access control list with privilege • `creatable` to publish content. • `read` to display content. • `modify` to update content. If you do not specify an access control list, everyone can access the form.

Property	Description
Format	Select the appropriate content format. • **Text** enables the user to add text-based content using a text area or an HTML editor directly in the form. • **File** enables the user to add file-base content, e.g. upload a file. • **Link** enables the user to add an address of a resource on the internet or private intranet (URL). • **XML** enables the user to add xml-based content using a text area directly in the form. • **Optional** enables the user to select the content format at run time. Non-optional format will also restrict the form to that type of content.
Language	Select the appropriate language for the form. If you do not select a language, it is automatically set according to: a) the user language, b) the browser language, c) the domain language in the given order.
HTML based generator	Select the appropriate form generator for generating the form at run time. • Unchecked : means Rule-based, the form is generated based on the properties of the form component. Only applicable for content forms. • Checked: maens HTML-based, the form is generated based on the html templates that are specified on the HTML tabs of the form component.
Show labels	Select this check box to make the labels of the attributes visible in the form. If you do not select this check box, only the input field appears.
Use the prompt from the attribute	Select the check box to retrieve the labels from the attribute definitions.
Save document type on update	Select this check box if you want to update the document type of the document when the document is modified. Otherwise, the document type is only set for new documents. This feature enables you to change document type for an existing information object.
Do not set the form-id on the document	Select this check box, if you don’t want to save the form identification together with the document. Default behavior is to write the form identification to the document upon each save.

Property	Description
Enable XSS filter?	Select this check box to specify the use of a cleaning routine which deactivates all attempts on cross site scripting (XSS). Primarily for forms to be used in an open solution such as response forms. XSS is used by hackers to enter an executable JavaScript code that executes after a period of time.
Allowed to create subdocs on non-editable parents?	Select this check box to override the edit permissions for the parent document. This will enable the end user to create a sub document for a parent document he doesn't have edit permissions for. If not selected, the security model in iKnowBase validates the new sub-document to ensure that you have edit permissions for the parent document (the document that becomes the master document).
Default dialog	Select this check box to edit the documents that have no forms associated with them. iKnowBase searches for forms with the same document type or format, and selects the first form with this property set.
Set focus	Select this check box if you want the cursor placed in the first available input field.
Styleset	Select styleset to use for this form. For all form generators the header- and footer text apply. The following tags apply just for the rule-based generator: • Table tags • Table tags for status line • Html tags for the text on the status line
TD-length for labels	Displays the default width of the `<td>`-cell for the labels. You can use this value when you create a new form or insert new attributes. If you change this value, none of the existing attributes for the form are affected.
Default font for labels	Type the standard font classes for the labels. You can use this value when you create a new form or insert new attributes. If you change this value, none of the existing attributes for the form are affected.
Default font for values	Type the standard font classes for the value field. You can use this value when you create a new form or insert new attributes. If you change this value, none of the existing attributes for the form are affected.

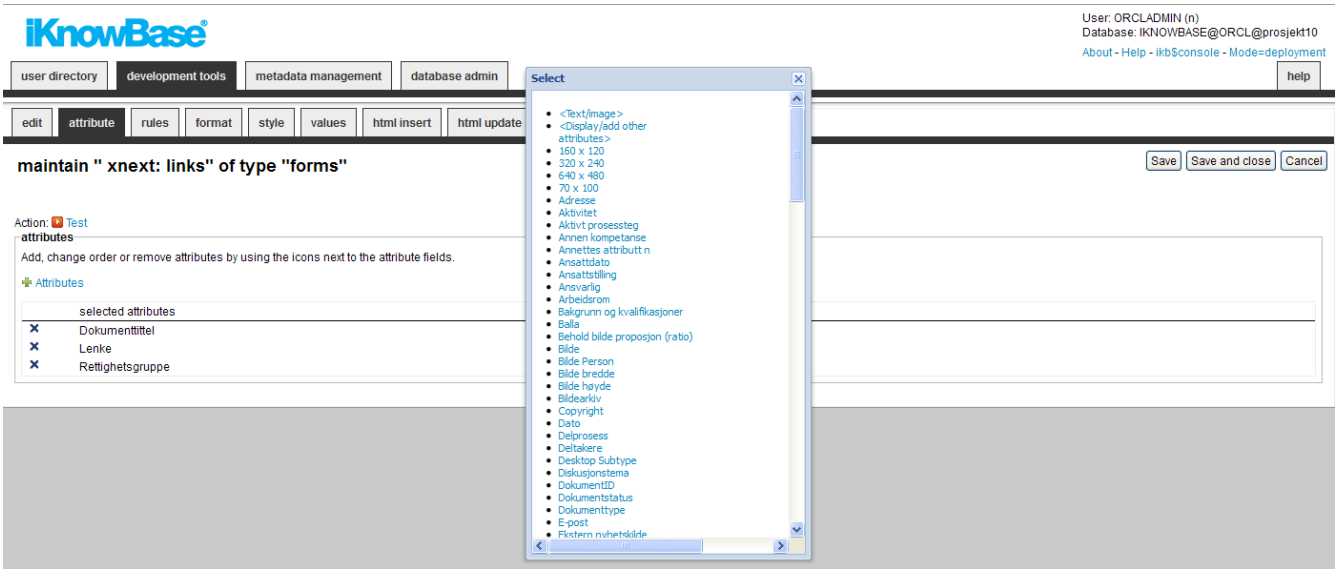
Property	Description
CSS-class for req-items	Type the CSS class that is used in the mandatory fields in the form.
Target on Show or select a page	Select an iKnowBase target . This is used as the location for displaying a form, when the form is opened as a separate page or as a popup page.
Width	Enter the width of the popup window used when the form is opened as a popup page.
Height	Enter the height of the popup window used when the form is opened as a popup page.
Target after insert	Select the iKnowBase target that will be opened when a document has been inserted from this form. You can also override the default behavior if you want a JSON object as a return value when you save the document. This is ideal for forms opened with EXT where you programmatically keep the control of the windows. To do this, you need to add a hidden input control to the HTML insert form (p_return_type = JSON)
Target after update	Select the iKnowBase target that will be opened when a document has been updated from this form. You can also override the default behavior if you want a JSON object as a return value when you save the document. This is ideal for forms opened with EXT where you programatically keep the control of the windows. To do this, you need to add a hidden input control to the HTML update form (p_return_type = JSON)
Custom show function	For advanced use only, you can create a specific PL/SQL procedure to generate the iKnowBase form. Select the appropriate Database function if you want to override the default. **Note**: The default database function for generating a form is ikb_ce_custom_editor_portlet.run_show. You can copy this as a starting point for you own custom show function, and then customize it. You must register you new procedure as a Database function.

Property	Description
Custom save function	For advanced use only, you can create a specific PL/SQL procedure to handle saves through this form. Select the appropriate Database function if you want to override the default. **Note**: The default database function for save through Form is ikb_ce_custom_editor_portlet.save_document. It handles the save and navigation after the save. You can copy this as a starting point for you own custom save function, and then customize it. You must register you new procedure as a Database function.
Custom JavaScript file	Enter the URL for a custom JavaScript file, which will be included in the form by the iKnowBase forms engine. The URL will be passed on to clients without conversion, and must be accessible from any web client.

Validating function	Type the name of the JavaScript function that you want to use for the additional validating functions. Use the complete URL or relative path that is known to the application server such as /resource/file.js.
	
	Default validating function validates required fields and input-format for date fields.
	
	The function does not take any parameters and returns either TRUE (Validating OK, continue) or FALSE (Validating not OK, terminate).
	
	Example:
	
	`function test()`
	`{`
	`  if (checksomething) {`
	`  alert(writeanerror);`
	`  return false;`
	`  }`
	`  else {`
	`  return true;`
	`  }`
	`}`

8.1.4. Attributes Tab

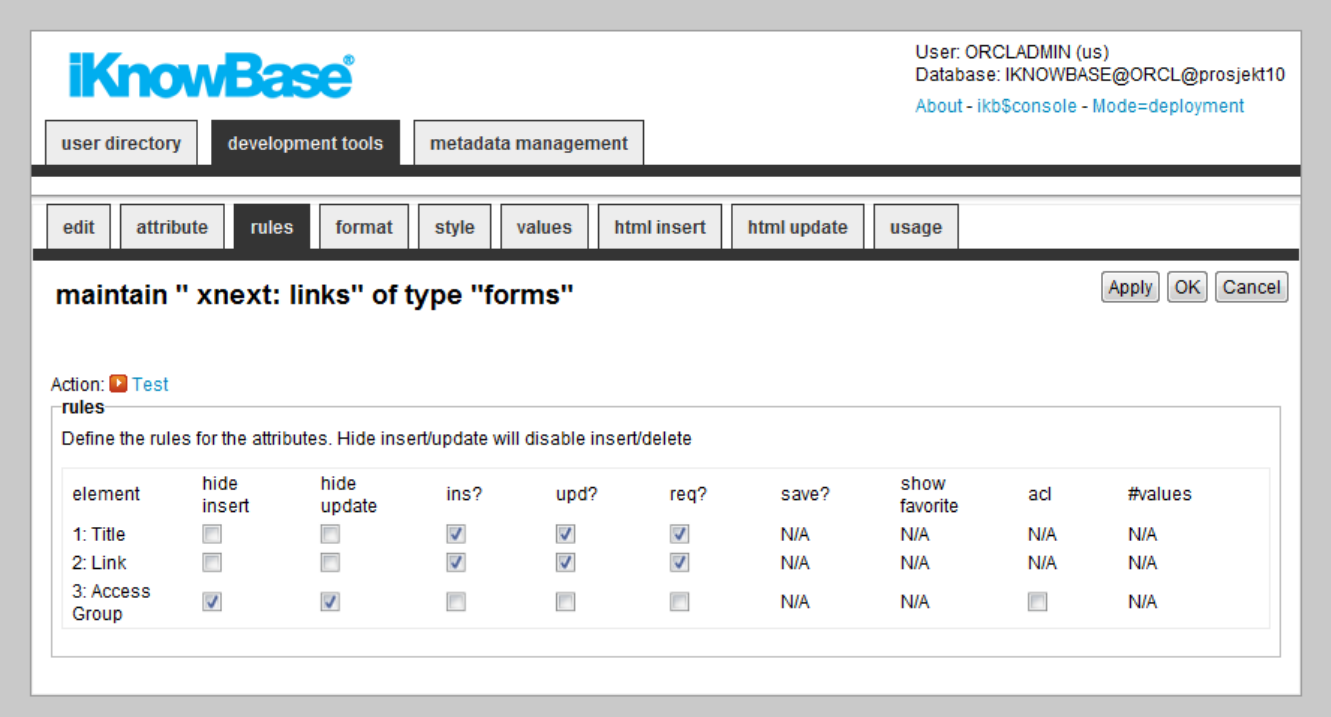
You can add, change the order of, or remove attributes from the form. When you create a form, all the attributes related to the document type selected for the form are added as suggestive values.



Property	Description
Attributes	Defines the attributes included in the form. Select new attributes by clicking the link Attributes. You can reorder the attributes by drag/drop functionality. If you want to remove an attribute, click the delete-icon and the press Save. The `<Text/image>` attribute is used to display text or pictures among attributes. You can specify this in the later tabs. The `<Display/add other attributes>` attribute enables the end user to view or add attributes other than the ones that you define in the form, at runtime. The attributes associated with the document type will be available for selection. When the form is executed, two things will happen: • Attributes that are defined on the actual information object (not the information object type, but the object itself) will be displayed. • The form will display a drop-down list for all attributes that are referred on the information object type, but not included in the form. This mechanism makes it possible to allow custom attribute combinations on a document, without having to create forms for every possible combination of attributes. The "Format" attribute is available if you select Optional format for the form. This attribute enables the end user to select the content format at runtime. Remember that you also need to select the content attributes (file, link or content) that you will let the user choose from. The Folder attribute enables the end user to change the parent document.

8.1.5. Rules Tab

The Rules tab enables you to define behavior and validation rules that apply to each attribute.



Property	Description
Element	List of all attributes in the form.
Hide insert	Select this check box to hide this field, when new documents are created.
Hide update	Select this check box to hide this field, when existing documents are updated.
Ins?	Select this check box to allow the user to enter values while creating documents. Does not apply if `<Hide insert>` is checked. If unchecked, the field will display, but no be editable. For the special attribute `<Display/add other attributes>`, check this box to allow the user to add new attributes.
Upd?	Select this check box to allow the user to enter values while updating documents. (Does not apply if `<Hide update>` is checked). If unchecked, the field will display, but no be editable. For the special attribute `<Display/add other attributes>`, check this box to allow the user to edit the attribute values that are not specified on the form.
Req?	Select this check box to specify if the attribute is mandatory (required) while creating or editing documents.

Property	Description
Save?	Select this check box to save this attribute in iKnowBase. In some cases, an attribute is used only during forms processing, and may be processed by a custom save function. An example would be a checkbox indicating whether to send an e-mail: The custom save function will use the value, but it should not be saved on the document.
Show favorite	Used for dimension attributes only, select this check box to display the favorite values for dimension attributes in a list. The list displays the last ten values that the user used for an attribute.
Acl	Used for the ACL attribute only, select this check box to enable the user to create access control lists.
#values	Displays the number of values a user can enter for this attribute. The value is retrieved from the attribute definitions, but can be overridden.

8.1.6. Format Tab

The format tab lets you enter formatting rules for each form item.

Property	Description
Element	Displays the name of the attribute.

Property	Description
Label	Type a label for the attribute. This property will be used when you have selected the Show label property and deselected the Use the prompt from the attribute property on the Common attributes tab. You may use HTML codes in this field. This property does not have language support. You may use labels stored in the NLS tables to achieve this. The syntax is #ObjectId.StringId#, where ObjectId is the value in the IKB_NLS_STRING.OBJECT_ID column and StringId is the value in the IKB_NLS_STRING.STRING_ID column. The NLS tables may be overwritten in case of an upgrade.
New line	Select this check box to add the attribute to a new line.

Tags prompt	Type the HTML tags that display the labels. If the code does not have the correct syntax, there can be an error when the form is generated. By default, the field gets the values from Default font for labels and TD-length for labels property.
	
	Using this format value:
	
	`align="left" valign="middle" width="20%" class="PortletText1"`
	
	renders this HTML-code:
	
	`<td align="left" valign="middle" width="20%" class="PortletText1">MY PROMPT</td>`

Property	Description

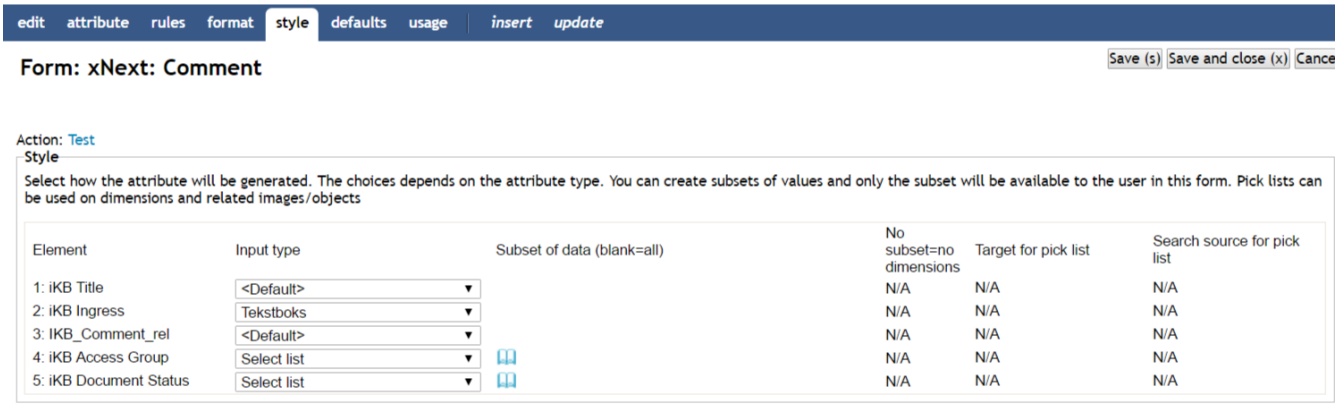
Tags value	Type the HTML tags that display the value field. If the code does not have the correct syntax, there can be an error when the form is generated. By default, the field gets the values from Default font for labels and TD-length for labels property.
	
	Using this format value:
	
	`align="left" align="TOP" width="80%" class="iKBFormInput"`
	
	renders this HTML-code
	
	`<td align="left" align="TOP" width="80%" class="iKBFormInput"><input > </td>`

Tags input	Type the HTML tags that are used within input fields that are generated. For example, the size of a select box that can be specified with a font class or a style tag directly (style="width:249px")
	
	Using this format value:
	
	`class="iKBFormInput"`
	
	renders this HTML-code
	
	`<input class="iKBFormInput" ...> ... </input>`

Width and Height	Type the width or Height of the text field for CLOB attributes (description and body text). The selected style decides the measuring unit that you must use. • If you use the TinyMCE style, you must specify pixel values. • If you use a text box, you must specify the rows and columns for a text area field.

8.1.7. Style Tab

The Style tab lets you select the input type and subset of data of the selected attributes.



Property	Description
Element	Displays the name of the attribute.

Property	Description
Style	Select the appropriate style. This property specifies how the input field is generated. The available options depend on the attribute type. • **Text Attributes**: Text box: By default, text attributes provide the input type = TEXT, while the text box creates a TEXTAREA box. The text area box has a limit of 4,000 characters. After you select the text box, you must define the height and width of the text box on the Format tab. • **Numerical Attributes**: Will always generates `<INPUT type="text" ⋯>` • **File**: Will always generate `<INPUT type="file" ⋯>` • **Description/Body text/Clob attributes**: Plain text area, or one of the defined editor widget profiles (such as a TinyMCE Editor). **Note**: See *Using a custom WYSIWYG-editor* for more info. • **Status**: Select, Radio. • **XML content/XML attributes**: Text box • **Acl**: Select, Radio, Popup • **Value lists**: Select, radio, check, multi-select. • **Dimensions**: Dimension navigator(default), picklist, select, radio, check, multi-select. By default, the user gets access to the dimension navigator. You can implement your own picklist using a target and a search source. **Note**: For selections other than `<default>` or picklist, you must enter a sub-set of values in the Values tab. • **Date Attributes**: Date (dd.mm.yyyy), Date/time (dd.mm.yyyy hh24:mi:ss). • **Template**: Select, Radio button. • **Folder**: document archive(default), picklist: By default, the user gets access to the document archive where he can choose the parent document for the document being created. You can implement your own picklist using a target and a search source. **Note**: The folder attribute is used only by creation of new documents through office integration. • **Related objects / images**: Gives a selector box where you can select documents related to the document that is created. You can implement you own pick list using a target and a search source.

Property	Description
Subset of data (blank=all)	Define a subset of values for an attribute to limit the values that a user can choose. You can define subsets for the following attribute types: document type, value lists, dimension, status codes, access control lists and templates. **Note**: For dimensional attribute, if the style is checkbox, radio or select-box, a blank subset will generate all nodes for the attribute. Only do this if the size of the dimensional structure is limited. For dimensional attributes you can select a subset with the dimension navigator. For the other attribute types you can select a subset of values from the list box. For document type, the subset will restrict the form to only view and edit documents of these types.
No subset=No dimensions	For dimension attributes, if no subset is chosen, you must decide to show all (default) or none of the dimensions for the attribute. If you select none (checked), only already stored values (on update) will be displayed.
Target for pick list	Select the target where your pick list is placed. This target is used when you select the pick list as a style (only for Dimensions, Folder, and Related objects or images).
Search source for pick list	Select the pick list that is used to select dimensions or documents. This search source is used where you have selected a pick list as a style (only for Dimensions, Folder and Related objects or images). **Note**: For related objects or images, the picklist must return document IDs. For dimensions, the picklist must return dimensions.

8.1.8. Values Tab

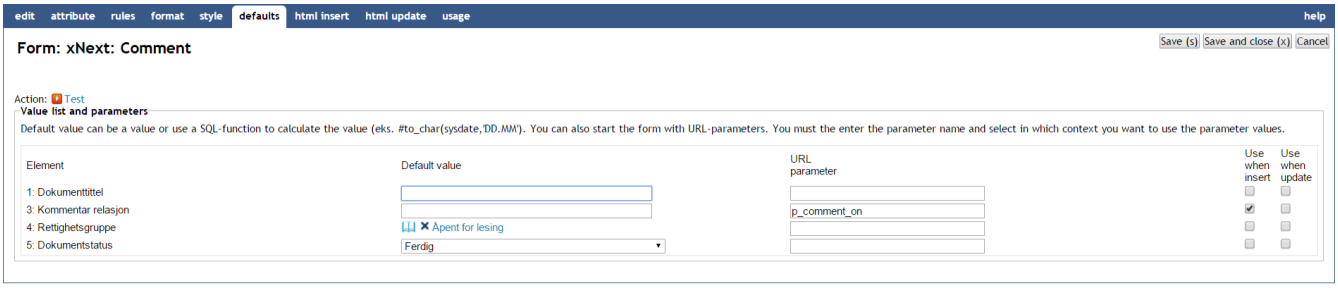
It is possible to specify default values for the various form attributes.

Per attribute, you can create a subset of values that will be available for the end user during categorization, as well as defining a default value which will be prefilled in the form when the user opens it to create a new document.

Note: You can use SQL functions to calculate values. Example:

```
#to_char(sysdate,'DD.MM')
```

Parameters are used to receive values from a URL that calls the form. You can choose if you want to use a parameters while creating a document or updating a document through a form, or in both modes.



Property	Description
Element	Displays the name of the attribute.

Property	Description

Default value	Type the default value for the attributes when a document is created.
	
	For text fields, type a value in the field.
	
	For dimension values, select the desired value. If the style is different from the dimension navigator, you must select a value from the subset. These values are available when the subset is created. If the dimension navigator is available, you can select the values from the dimension selector.
	
	For lists, select the appropriate value in the drop down box.
	
	You can also specify a function to retrieve a dynamic default value. You must always specify functions with the character # before the function name. The function can be either an SQL function such as TO_CHAR or a stored PL/SQL function. You can also send context-based parameters. Available variables are:
	
	• :DOCUMENT_ID: If the document exists (edit-modus), the document ID is sent.
	• :PARENT_ID: Identifier for the portlet instance.
	• :REFERENCE_PATH: Identifier for the portlet instance.
	• :STYLE_ID : Identifier for the form definition.
	
	Examples:
	
	To return today's date:
	
	`#to_char(sysdate,'dd.mm.yyyy')`
	
	To run the function "get_process_state", sending the current document's parent_id as the parameter:
	
	`#get_process_state(:PARENT_ID)`
	
	Note: Specifying a default value will allow submitting this value for create regardless of the insert/hide insert setting in the rules tab.

URL parameter	Type the URL parameter to set the suggested value to the current field over the URL string. The value differs between parameters that are active when documents are created or updated. The URL parameters override any default values. The URL is built upon the quick link where the parameter is given a value. It is available for selection on the Parameters tab on the Edit pane of a quick link.

Property	Description
Use when insert	Select this check box to insert the URL parameter when documents are created. **Note**: Specifying a use when insert will allow submitting this value for create regardless of the insert/hide insert setting in the rules tab.
Use when update	Select this check box to insert the URL parameter when documents are updated. **Note**: Specifying a use when insert will allow submitting this value for update regardless of the update/hide update setting in the rules tab.
Attachment	The Attachment attribute lets you attach subdocuments to the document being edited in the form. At run time, users can upload multiple files as attachments to the current document. They will not use a separate form to edit the metadata for the attachments. At design time, you need to select the form to use for later editing of the attachment. This form also defines the document type and possible attributes of the attachments. You can also choose to display already existing attachments by checking "display existing attachments". All sub documents created with the form provided in "select form for attachments" will be displayed. If you want to remove the "delete"-link, simply create the form as an HTML-form, generate HTML code for update and remove the tag "DELETE_ATTACHMENT".

8.1.9. HTML Insert and HTML Update Tabs

iKnowBase enables you to design and create the form layout using your own HTML markup, rather than using the automatically generated forms. The notation in the setup is based on HTML with several extensions to generate dynamic fields for iKnowBase. See chapter 1.108 HTML Template support for further information.

You can write the HTML template code in the HTML Insert and HTML Update tabs. The HTML Insert code is used to generate the form for a new document, the HTML Update code is used to generate the form for an existing document.

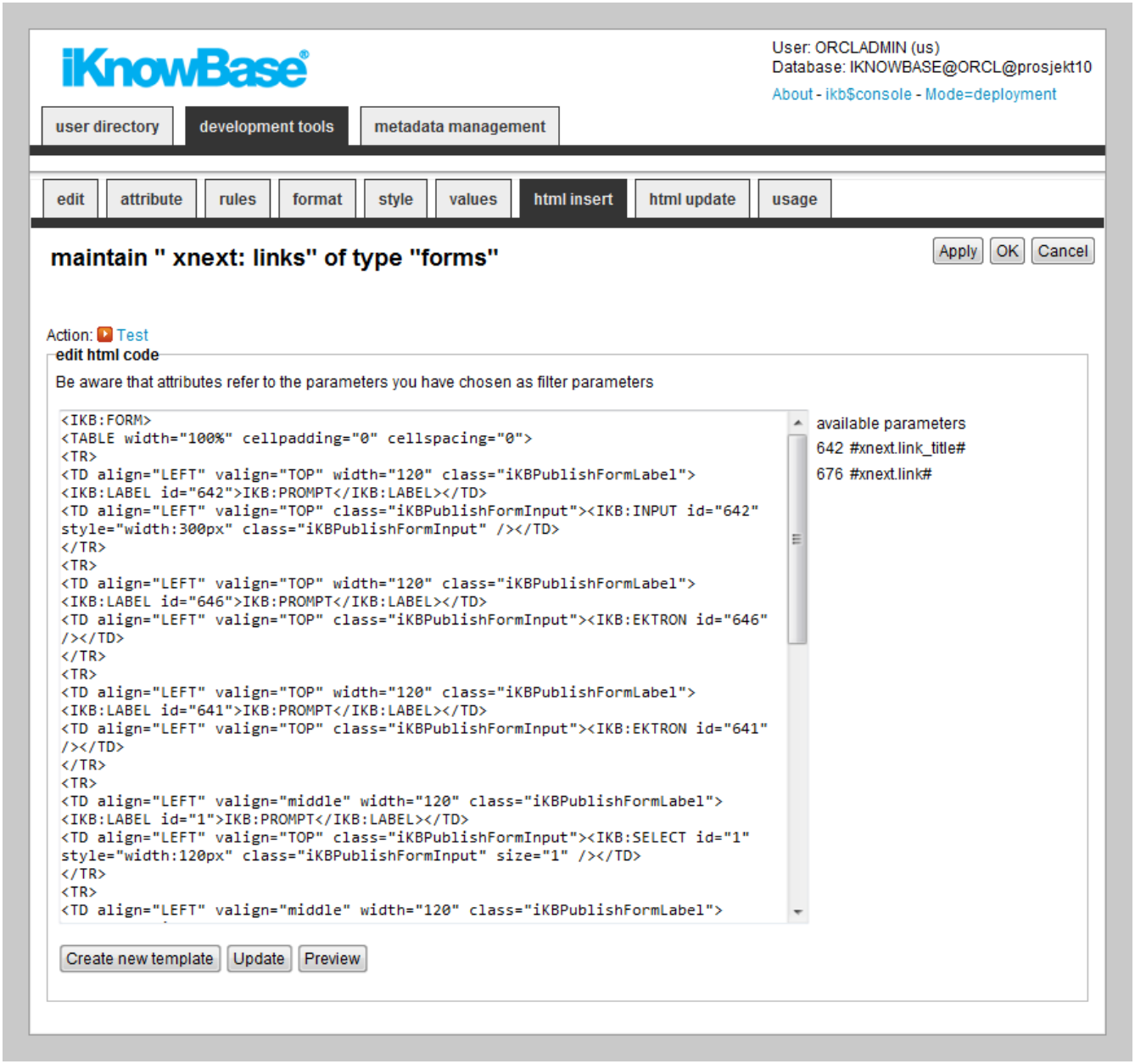
Note: If you update the selected attributes in the form, you must also update the HTML templates to reflect the changes. You can generate a new template or manually update the template, and insert IKB tags for new attributes or delete old tags.

There are three action buttons available:

- **Create new template**: Click this button to generate a default template, with placeholders for the

attributes in the form. You may then change this template as needed. If you do in fact not need to change this template, then a rule-based form is generally a better choice.

- **Update**: Click this button to update your template with new attributes. iKnowBase will scan the existing template, and find attributes that are missing. Then, it will generate default template code to edit these attributes, and add to the bottom of the template. Move this code around as required.
- **Preview**: Click this button to open a popup window showing the template code as it will look from the client browser.



Property	Description
HTML code	Type the HTML template code. Use the action buttons `Create new template` or `Update` to automatically create or update HTML template code. To modify the HTML in a full window, use the link `(open full screen editor)`.

Property	Description
Available attributes	A list of available attributes and their IDs available for use in the HTML template code.

8.2. Using a custom WYSIWYG-editor

To edit description, body text, and clob attributes in a form you can either use a plain HTML textarea or a WYSIWYG-editor. Which one to use is configured on the Form Style tab.

iKnowBase bundles a version of TinyMCE, and also provides a TinyMCE plugin to add buttons for the iKnowBase link and image picklists. But you may set your site up with a different version of TinyMCE or a different editor.

WYSIWYG editors are named "w"

To use a custom WYSIWYG-editor for a form element, do the following:

- Specify textarea style for the element on the Form Style Tab
- If you want to use different editor configurations for different elements, specify a css class for the input tag for the element on the Form Format Tab
- Add the necessary Javascript to the iKnowBase page running the form; this can be done in several ways, e.g. by adding it to a Template viewer on the page

NOTE	Standard iKnowBase includes TinyMCE plugins f

8.2.1. Example: TinyMCE 4 editor

This example illustrates how to use the TinyMCE 4 editor for the body text of a form.

Prerequisites:

- an iKnowBase Form configured with a text content field
- an iKnowBase Page with a Form portlet configured with the form above

First you must configure the form to use style textarea for the text element (Style Tab). Then you must add a Template Viewer to the page with the following Javascript:

```
<script src="//tinymce.cachefly.net/4.0/tinymce.min.js"></script>
<script type="text/javascript">
    tinymce.init({
        selector: "textarea"
    });
</script>
```

8.2.2. Example: TinyMCE editor with different configurations and iKnowBase Plugin

This example illustrates how to use the TinyMCE 4 editor for both the ingress and the body text in a form. The editor should be configured differently for the two elements. For the ingress element, an editor with a simple toolbar should be used. For the body text, an editor with a more complex toolbar, containing the iKnowBase image and link buttons, should be used.

Prerequisites:

- an iKnowBase Form configured with an ingress and a body text
- an iKnowBase with the form

First, you must configure the form to use style textarea for both the ingress and the body text element (Style Tab). Then you must add css classes for the input tags for the ingress and body text elements, class="tinySimple" and class="tinyFull" respectively (Format Type). Finally, you must add a Template Viewer to the page with the following Javascript:

```
<script src="//tinymce.cachefly.net/4.0/tinymce.min.js"></script>
<script src="/ressurs/iknowbase/libs/tinymce4-plugins/iknowbase/plugin.js"></script>

<script type="text/javascript">
    tinymce.init({
        selector: "textarea.tinySimple",
                menubar: false,
        toolbar: "bold italic underline strikethrough | undo redo | bullist numlist"
    });

    tinymce.init({
        selector: "textarea.tinyFull",
        plugins: "searchreplace code iknowbase",
        toolbar1: "bold italic underline strikethrough | styleselect  formatselect
fontselect fontsizeselect",
        toolbar2: "cut copy paste | searchreplace | bullist numlist | outdent indent |
undo redo | code | iknowbase.link iknowbase.image"
    });
</script>
```

8.3. Testing your Form

To test your form, either click the Test action for the form on the List pane, or click the Test action link on the Edit pane tabs for the form.

NOTE	The Test actions become available for a form after you specify the target Target on show for the form.

Chapter 9. Homeplaces

A homeplace is a mechanism used to dynamically decide the destination of navigation when you click on a document. Using a homeplace, it is possible to have a single link go to different destinations depending on the document context. The purpose is to view a document in the proper context.

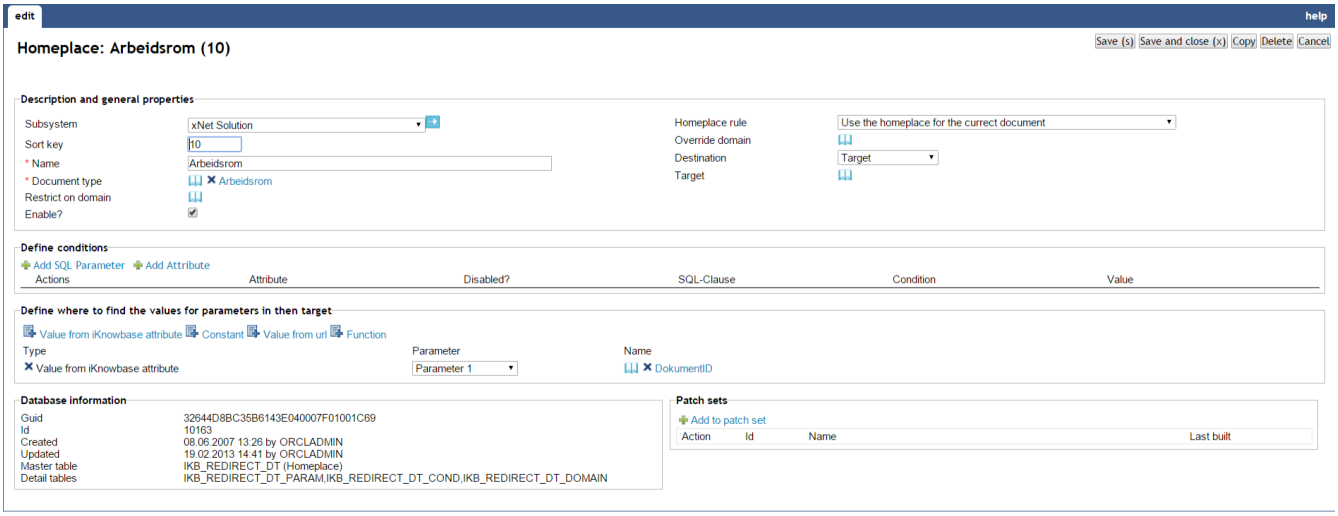
A homeplace comprises the following information:

- A single target (destination), typically a page or a URL.
- A set of criteria that must be satisfied to use this particular target selector.
- Parameters that will be passed to this target selector.

If you specify the target for the homeplace as an an iKnowBase target of type Page or Parameter, parameters may be transmitted as URL parameters.

9.1. Properties

This section describes the properties of a target selector, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Sort key	Type the relevant sort key that is used to sort the target selectors so that the system evaluates the target selectors in the order that you want. If the sort key is not specified then, the system uses the first target selector it hits in no specific order.
Name	Type a name for this target selector.
Document type	Select the document types the target selector applies to.

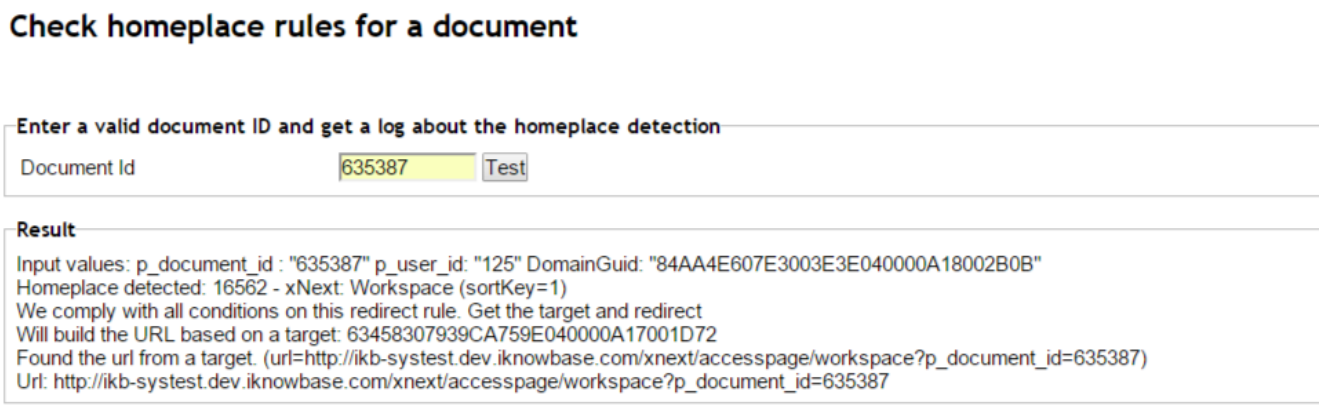
Property	Description
Restrict on domain	If you want the target selector to apply only to a single domain, select this domain here. If no domain has been selected, the target selector will apply to all domains.
Enable?	Define if the homeplace is enabled. Disabled homeplaces are considered as non-active homeplaces.
Homeplace rule	Select the appropriate target selector rule. This specifies whether to traverse upwards in the document structure, or not, when deciding which target selector to use. This may be relevant if you want to display a subdocument using the target selector for its parent document. Available options: • **Use the homeplace for the current document**: Use the target selector of the document itself. • **Use the homeplace for the parent document**: Use the target selector of the document's parent document. If not defined, use the target selector of the document itself. • **Use the homeplace for the top document**: Use the target selector of the upper most document related to the document.
Override domain	Used to create URLs to a different domain. e.g. a document link displayed on intranet.com should be opened in internet.com
Destination type	Select destination type for the homeplace. You can choose between target, iKnowBase Page, constant url or menu.
Target	If you want the target selector to point to a iKnowBase target, select this target here.
iKnowBase page	If you want the target selector to point to a iKnowBase page, select this page here.

Property	Description
Url	If you want to go to a specific URL, type the URL here. You can specify the URL in three ways: • Enter an absolute URL, starting with `http://`. The specified URL will be used as is. • Enter a relative URL, starting with `/`, to avoid hardcode of domain. The `/` will be substituted by the current domain. Example: `/ikbViewer` will produce `http://www.example.com/ikbViewer`. • Enter a relative URL, starting with `#`, to call a pl/sql procedure. The notation is `<provider>.procedure` where `procedure` should be replaced by the name of the pl/sql procedure. The `<provider>` will be substituted by the current domain and the appropriate provider. Example: `<provider>.portlet_manage_redirect.redirect` will produce `http://www.example.com/pls/portlet_manage_redirect.redirect`
Menu	If you want to go to the destination specified by a menu, select the menu used to lookup the destination here. Note that you must also select an attribute for the property **Attribute to specify menu item**, to be used for looking up the destination. At runtime, when looking up the destination for a document, iKnowBase will find the value of the specified attribute, and find the menu item for that attribute value in the specified menu, and go to the specified destination.
Attribute to specify menu item	If you want to go to the destination specified by a menu, select the attribute that you want to use for menu lookup.
Define conditions	
Add SQL Parameter	A selector for SQL parameters. Select the appropriate attribute by clicking the link.
Add attribute	A selector for document attribute. Select the appropriate attribute by clicking the link. You can deselect by clicking the x-arrow infront of the attribute.
Actions	Clickable icon for deleting the attribute
Attribute	Displays the names of the selected attributes to use as conditions for the target selector.
Disabled?	If set, the condition is not used in the validation. Normally used for debugging issues.

Property	Description
Sql Clause	Used for performance reasons for advanced users. Will generate a SQL with either IN or EXISTS.
Condition	Select the appropriate conditions for the selected attributes. The conditions depend on the type of attribute.
Value	Select the appropriate values for the selected attributes.
Define where to find the values for parameters in then target	
Type	Displays the type of parameters selected for the target selector. The following parameter types are supported: • **Value from iKnowBase attribute**: Select the iKnowBase attribute which contains the value you want to pass on to the parameter. The value is looked up from the document which is being evaluated by the target selector. Use this type if you want to pass a document attribute value as a parameter. The value is looked up from the document which is being evaluated by the target selector. • **Constant**: Use this type if you want to pass a constant value as a parameter. • **Value from url**: Use this type if you want to pass a value from a URL parameter as a parameter. • **Function**: Use this type if you want to run a database function to look up the value to pass as a parameter.
Parameter	Define the order of the parameters. You can define up to nine parameters.
Name	This property depends upon the parameter type: • **Value from iKnowBase attribute**: Select the appropriate attribute. • **Constant**: Type the constant value. • **Value from url**: Type the name of the URL parameter. • **Function**: Select the appropriate database function. The function must be defined as a Database Function to be available for use.

9.2. Validate and test

This section describes how to discover which homeplace is selected for a document



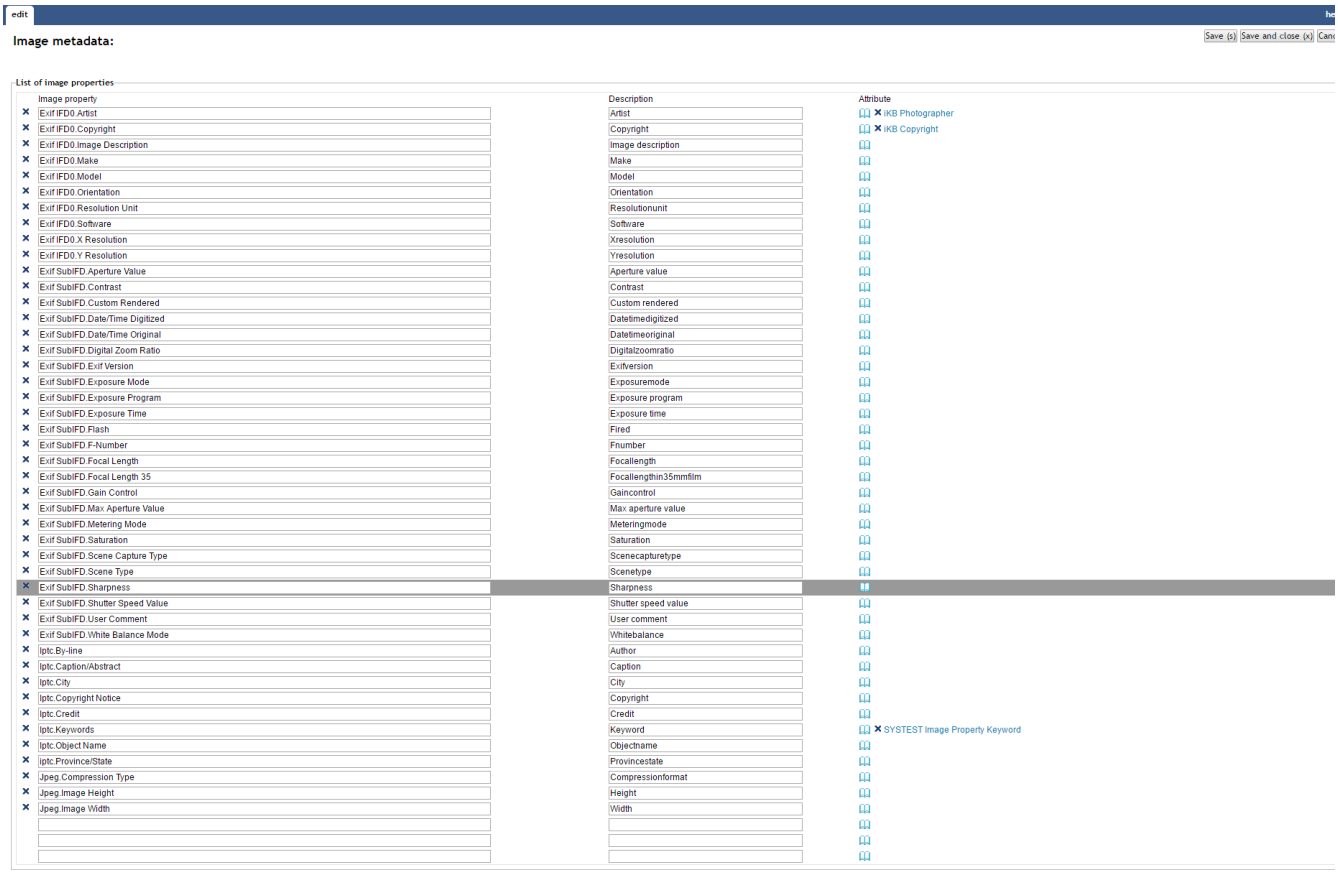
Property	Description
Document ID	Enter a valid document and press Test or return. The result section will contain a debug log from the homeplace detection function. Useful for debugging reasons.

Chapter 10. Image Metadata

Image metadata can be used to extract image information directly from an image in a presentation style. To see available properties for an image, use tools to show image metadata and use the same metadata name as given there.

10.1. Properties

This section describes the properties of an image metadata, as shown on the corresponding Edit pane.



Property	Description
Image property	The given name for an image property
Description	Short description of the property.
Attribute	When you save an image, you can automatically extract information from the image and store it as a regular attribute on the document.This information can later be used in viewers and presentation styles. Define the attribute use will use to store this image attribute.

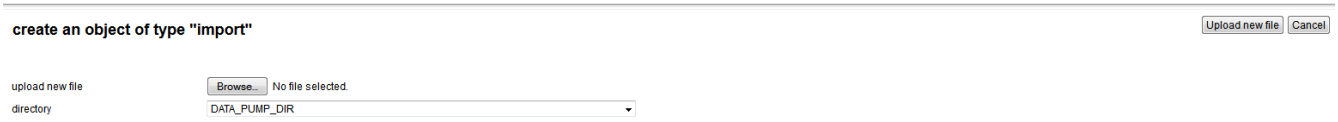
Chapter 11. Import

The import feature is part of the export/import utility in iKnowBase. With the import feature you can upload a dump file previously exported from an iKnowBase instance, and import it into this iKnowBase instance.

11.1. Properties

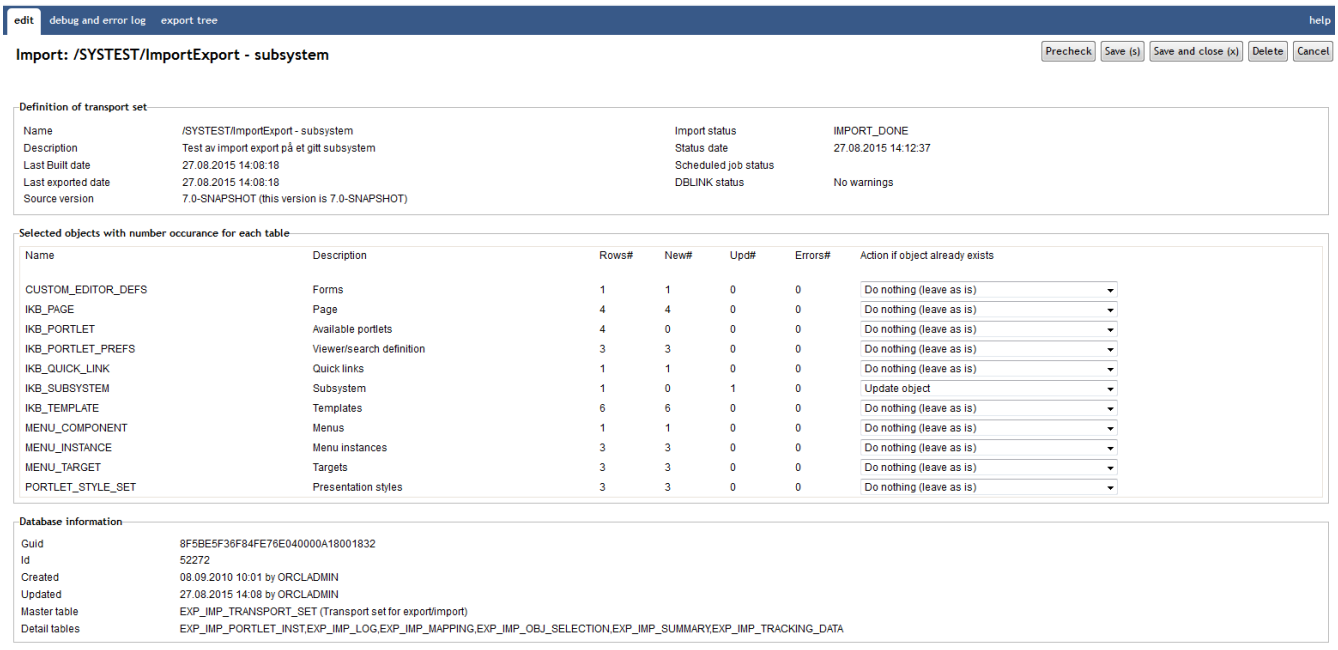
This section describes the properties of an import, as shown on the corresponding **Edit** pane tabs.

11.1.1. Upload a new file



Property	Description
Upload a new file	Upload a new datapump file exported by iKnowBase Export utility. Select a directory where you want to place the file. After the file is successfully loaded into the database, you will be redirected to the configuration screen.

11.1.2. Edit tab

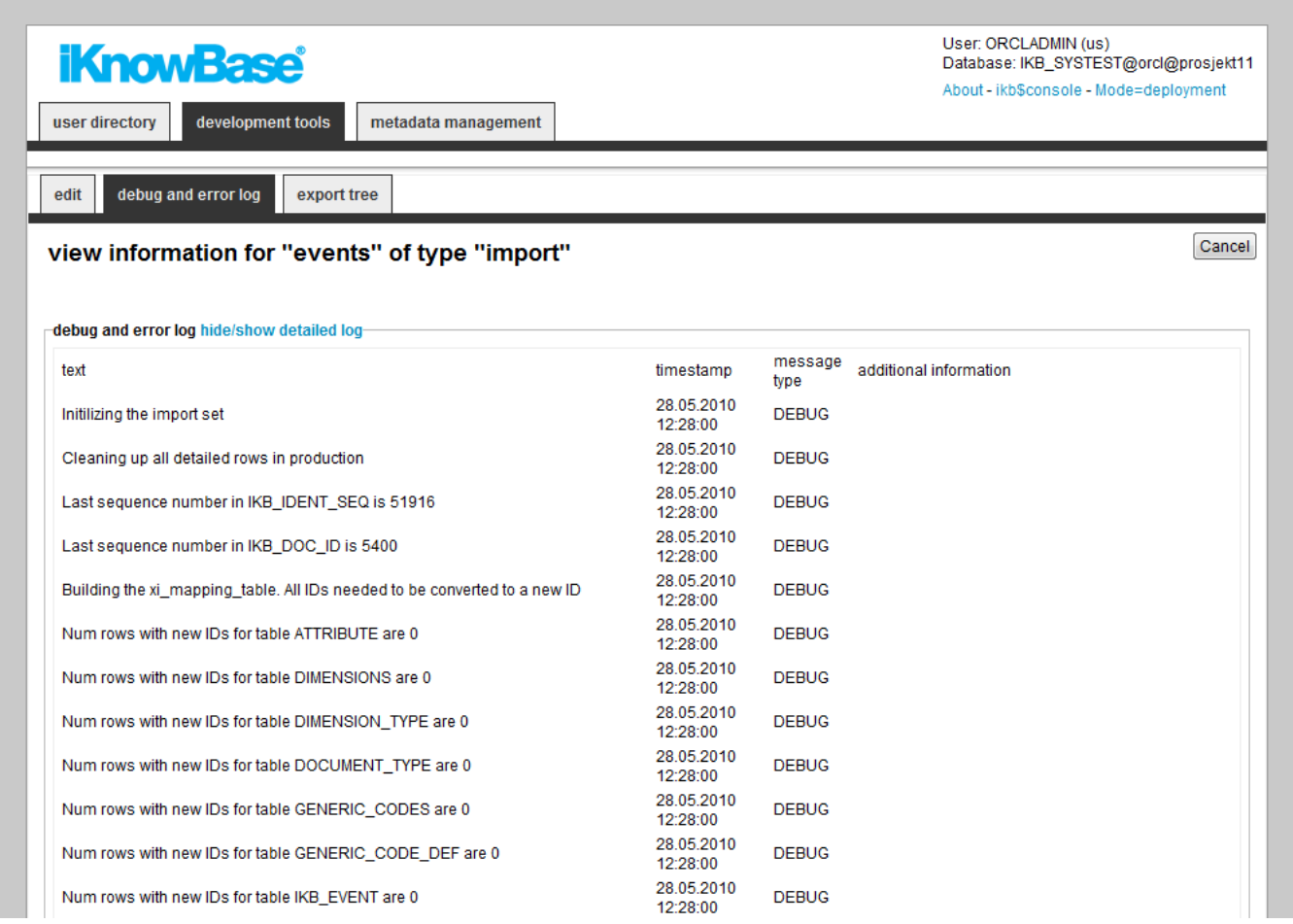


Property	Description
Name	Displays the name of the transport set.
Description	Displays the description of the transport set.

Property	Description
Last built date	Date of the last time the transport set was built.
Last exported date	Date of the last time the transport set was exported.
Source version	Displays the iKnowBase repository version from the source of the transport set. Make sure the import side has the same version of iKnowBase before importing.
Import status	Displays the import status: • IMPORT_SET_CREATED: The transport set is created based on the uploaded dump file. • IMPORT_SET_FAILED: The transport set failed on import. • PRECHECK_DONE: Precheck completed with success. • IMPORT_DONE: The data is imported. • PRECHECK_FAILED: Precheck failed with errors.
Status date	Displays the time of the last precheck or import, alternatively the import creation time.
Scheduled job status	It the job is running in batch mode, the job status is displayed here.
DBLINK status	If the transport set was uploaded by the remote precheck option in the export routine, a status of the completeness of the transport set is shown here. The message "No warnings" is displayed if the transport set is ready for import. Otherwise, you need to download the file from the exporting side and upload the file on the import side. The reason for this is XML-data, which cannot be uploaded over a database link.
Selected objects with number occurrence for each table	
Name	Displays names of the database tables which are included in the import.
Description	Displays descriptions of the database tables which are included in the import.
Rows#	Displays the total number of rows in the transport set.
New#	Displays the number of rows to be inserted (rows that don’t already exist) per table.
Upd#	Displays the number of rows to be updated per table.

Property	Description
Errors#	Displays the number of rows that failed during pre-check or import.
Action if object already exists	The valid operations if an object exists on target are: • Do nothing (leave as is): The object is unchanged • Update object: The object will be updated and new details will be inserted. • Replace object: The object will be updated and all details will be replaced. • Only insert new details: The object is unchanged, but new details will be inserted

11.1.3. Debug and error log Tab

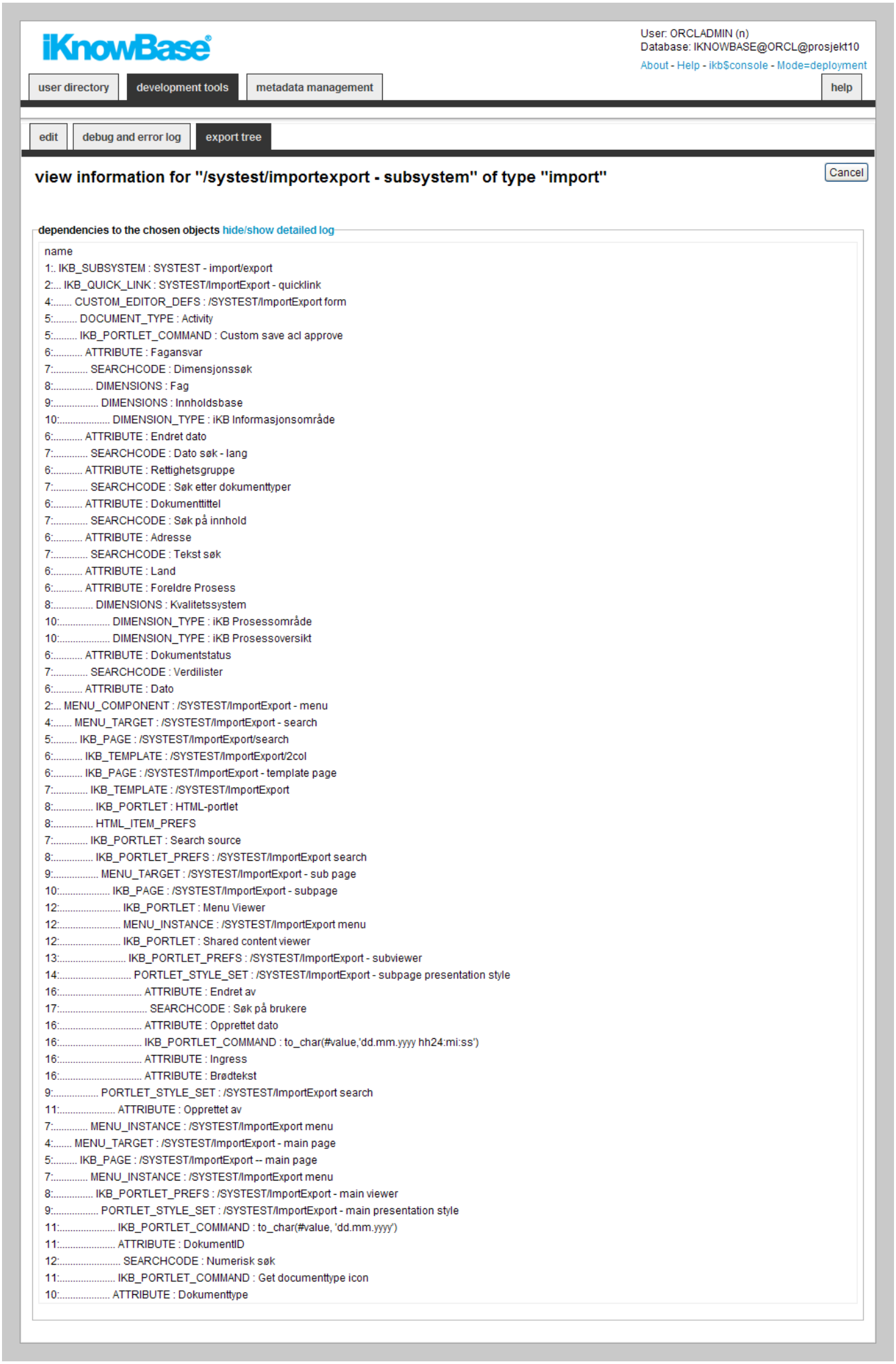


Property	Description
Text	Displays the messages generated during the last pre-check or import.
Timestamp	Displays the timestamp for the messages.
Message type	Displays the message types.

Property	Description
Additional information	Displays additional information.

NOTE	The content of this tab is available after pre-check of the transport set or import of data is started.

11.1.4. Export tree Tab


iKnowBase
User: ORCLADMIN (n)
Database: IKNOWBASE@ORCL@prosjekt10
About - Help - ikb$console - Mode=deployment
user directory
development tools
metadata management
help
edit
debug and error log
export tree
view information for "/systest/importexport - subsystem" of type "import"
Cancel
dependencies to the chosen objects hide/show detailed log
name
1:. IKB_SUBSYSTEM : SYSTEST - import/export
2:... IKB_QUICK_LINK : SYSTEST/ImportExport - quicklink
4:..... CUSTOM_EDITOR_DEFS : /SYSTEST/ImportExport form
5:..... DOCUMENT_TYPE : Activity
5:..... IKB_PORTLET_COMMAND : Custom save acl approve
6:..... ATTRIBUTE : Fagansvar
7:..... SEARCHCODE : Dimensjonssøk
8:..... DIMENSIONS : Fag
9:..... DIMENSIONS : Innholdsbase
10:..... DIMENSION_TYPE : iKB Informasjonsområde
6:..... ATTRIBUTE : Endret dato
7:..... SEARCHCODE : Dato søk - lang
6:..... ATTRIBUTE : Rettighetsgruppe
7:..... SEARCHCODE : Søk etter dokumenttyper
6:..... ATTRIBUTE : Dokumenttittel
7:..... SEARCHCODE : Søk på innhold
6:..... ATTRIBUTE : Adresse
7:..... SEARCHCODE : Tekst søk
6:..... ATTRIBUTE : Land
6:..... ATTRIBUTE : Foreldre Prosess
8:..... DIMENSIONS : Kvalitetssystem
10:..... DIMENSION_TYPE : iKB Prosessområde
10:..... DIMENSION_TYPE : iKB Prosessoversikt
6:..... ATTRIBUTE : Dokumentstatus
7:..... SEARCHCODE : Verdilister
6:..... ATTRIBUTE : Dato
2:... MENU_COMPONENT : /SYSTEST/ImportExport - menu
4:..... MENU_TARGET : /SYSTEST/ImportExport - search
5:..... IKB_PAGE : /SYSTEST/ImportExport/search
6:..... IKB_TEMPLATE : /SYSTEST/ImportExport/2col
6:..... IKB_PAGE : /SYSTEST/ImportExport - template page
7:..... IKB_TEMPLATE : /SYSTEST/ImportExport
8:..... IKB_PORTLET : HTML-portlet
8:..... HTML_ITEM_PREFS
7:..... IKB_PORTLET : Search source
8:..... IKB_PORTLET_PREFS : /SYSTEST/ImportExport search
9:..... MENU_TARGET : /SYSTEST/ImportExport - sub page
10:..... IKB_PAGE : /SYSTEST/ImportExport - subpage
12:..... IKB_PORTLET : Menu Viewer
12:..... MENU_INSTANCE : /SYSTEST/ImportExport menu
12:..... IKB_PORTLET : Shared content viewer
13:..... IKB_PORTLET_PREFS : /SYSTEST/ImportExport - subviewer
14:..... PORTLET_STYLE_SET : /SYSTEST/ImportExport - subpage presentation style
16:..... ATTRIBUTE : Endret av
17:..... SEARCHCODE : Søk på brukere
16:..... ATTRIBUTE : Opprettet dato
16:..... IKB_PORTLET_COMMAND : to_char(#value,'dd.mm.yyyy hh24:mi:ss')
16:..... ATTRIBUTE : Ingress
16:..... ATTRIBUTE : Brødtekst
9:..... PORTLET_STYLE_SET : /SYSTEST/ImportExport search
11:..... ATTRIBUTE : Opprettet av
7:..... MENU_INSTANCE : /SYSTEST/ImportExport menu
4:..... MENU_TARGET : /SYSTEST/ImportExport - main page
5:..... IKB_PAGE : /SYSTEST/ImportExport -- main page
7:..... MENU_INSTANCE : /SYSTEST/ImportExport menu
8:..... IKB_PORTLET_PREFS : /SYSTEST/ImportExport - main viewer
9:..... PORTLET_STYLE_SET : /SYSTEST/ImportExport - main presentation style
11:..... IKB_PORTLET_COMMAND : to_char(#value, 'dd.mm.yyyy')
11:..... ATTRIBUTE : DokumentID
12:..... SEARCHCODE : Numerisk søk
11:..... IKB_PORTLET_COMMAND : Get documenttype icon
10:..... ATTRIBUTE : Dokumenttype

Property	Description
Name	Displays a graph of all the objects included in the import.

11.2. Creating an Import definition

Before you can create an import definition, you must create the appropriate dump file by exporting data.

To create an import definition, perform the following steps:

1. On the **List** pane for import, click on the **Upload new file** action.
2. Select the file to upload.
3. Click the `Upload file` button. The import definition is created, and displayed in the **Edit** pane.

11.3. Importing Data

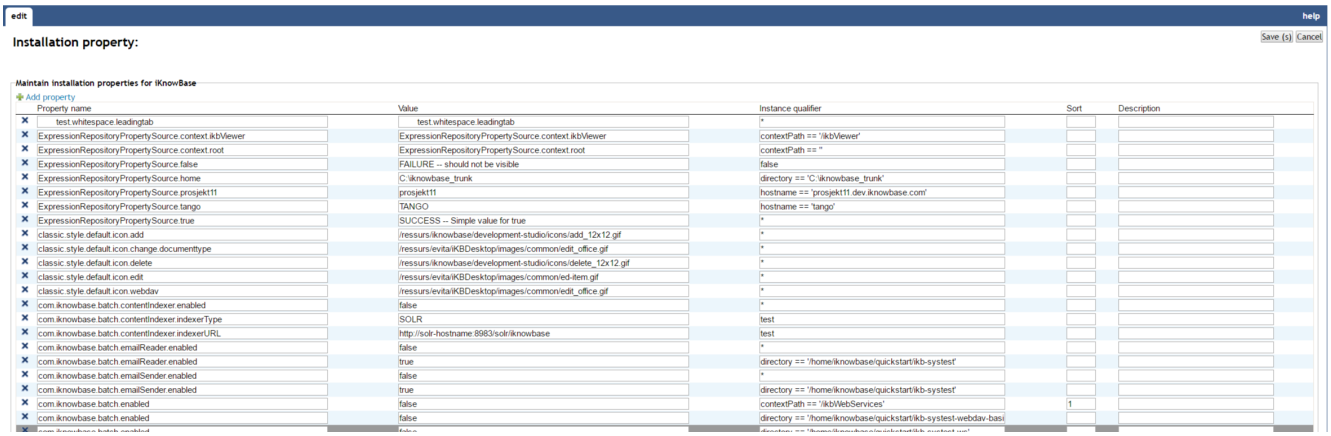
1. Create an import definition. If the import definition already exists, it will be overwritten.
2. Per table, define whether you will do a merge, or an insert. To do a merge, select the **Replace on import?** check box. To do an insert, with no update, deselect the **Replace on import?** check box.
3. Per table, define whether you will do a delete and upload, or not. To do a delete, select the **Delete details and load again** check box. To not do a delete, deselect the **Delete details and load again** check box.
4. After you have created the import definition, make sure to clean both the web cache (http://www.example.com:9400/) and the iKnowBase Java cache (http://www.example.com/ikb$developer/admin.do) before you validate the new import definition.
5. Click on the **Precheck** button on the **Edit** pane of the import definition. The import is validated, and a debug and error log becomes available on the Debug and error log tab. A graphical overview of object dependencies becomes available on the Export tree tab.
6. Check the debug and error logs.
7. When the import definition validates, the **Merge to iKnowBase** button becomes available on the **Edit** pane. Click on this button to import data. The uploaded data is imported as specified in the import definition. A debug and error log becomes available on the **Debug and error log** tab. An overview of how many rows from which tables are exported becomes available on the Overview — tables tab and a graphical overview of object dependencies becomes available on the Export tree tab.

Chapter 12. Installation properties

This screen is used to administer system properties for the environment of iKnowBase. They are typically given a default value during installation. As one of the first step after installation you should verify the values here.

12.1. Properties

This section describes the properties of an installation property, as shown on the corresponding Edit pane.



Property	Description
Property name	Name of the corresponding property. The value is typical defined during installation of iKnowBase (or upgrade where new properties are introduced).
Value	Defines the current value of the property. You are allowed to change the value here.
Instance qualifier	Define the instance qualifier; see the "Configuration" chapter in the Installation Guide for more information.
Sort	Define the priority if there are more than one instance of a property name.
Description	Define a short description of the property.

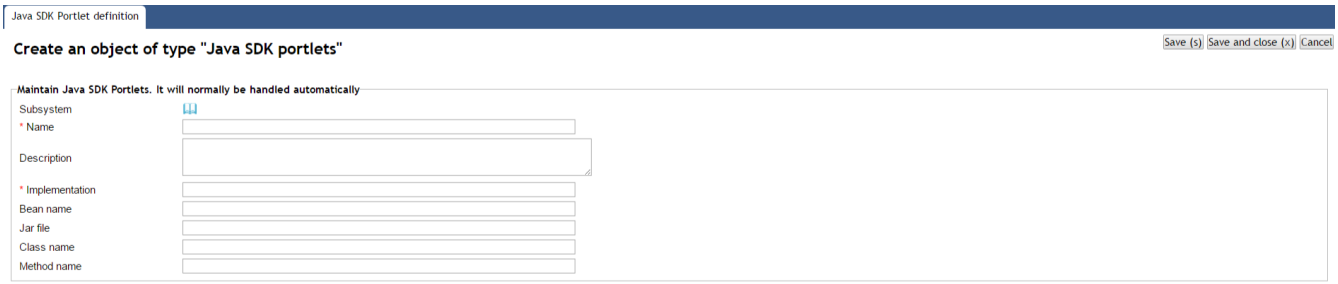
Chapter 13. Java SDK portlets

Java SDK portlets are standalone java components available from an iKnowBase page. To add a Java SDK portlet you first add a page component portlet of the type `Java SDK` and then select one of the registered JavaSDK portlets.

Maintain Java SDK portlets; add, edit or delete portlet definitions.

13.1. Properties

This section describes the properties of a Java SDK portlet, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a display name for the portlet.
Description	Type a description.
Mapping key	The unique @PortletMapping key used on the implementation method.
Class name	Last seen class name of the portlet
Jar file	Last seen jar file containing the portlet
Method name	Last seen name of the implementation method
Bean name	Last seen name of the java bean

Chapter 14. Language

Use the language component to enable language support for multiple languages in your portal. This enables you to create and maintain language texts, and mapping between the languages defined in iKnowBase and web browser languages.

There are two key items to understand the iKnowBase language properties:

- iKnowBase uses the defined languages to enable a wide variety of language features. By defining a new language, you make it possible to enter texts and translations for that new language.
- Different browsers and web technologies have different concepts of a language. For example, the language formally known as "Norwegian Bokmaal" is identified by several language codes by different browsers, with "no", "no_nb", "no-nb" and "nb" being the most common.

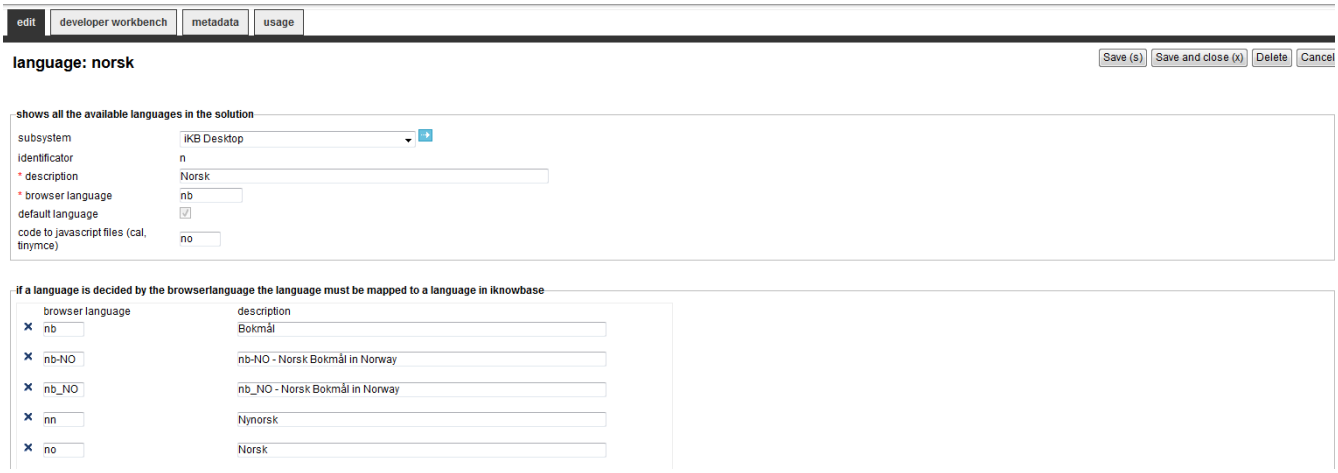
Language texts are stored in the IKB_NLS_* tables in the database.

NOTE	The text elements defined on various components, such as pages and presentation styles, are not available through this component.

14.1. Properties

This section describes the properties of a language, as shown on the corresponding Edit pane tabs.

14.1.1. Edit tab

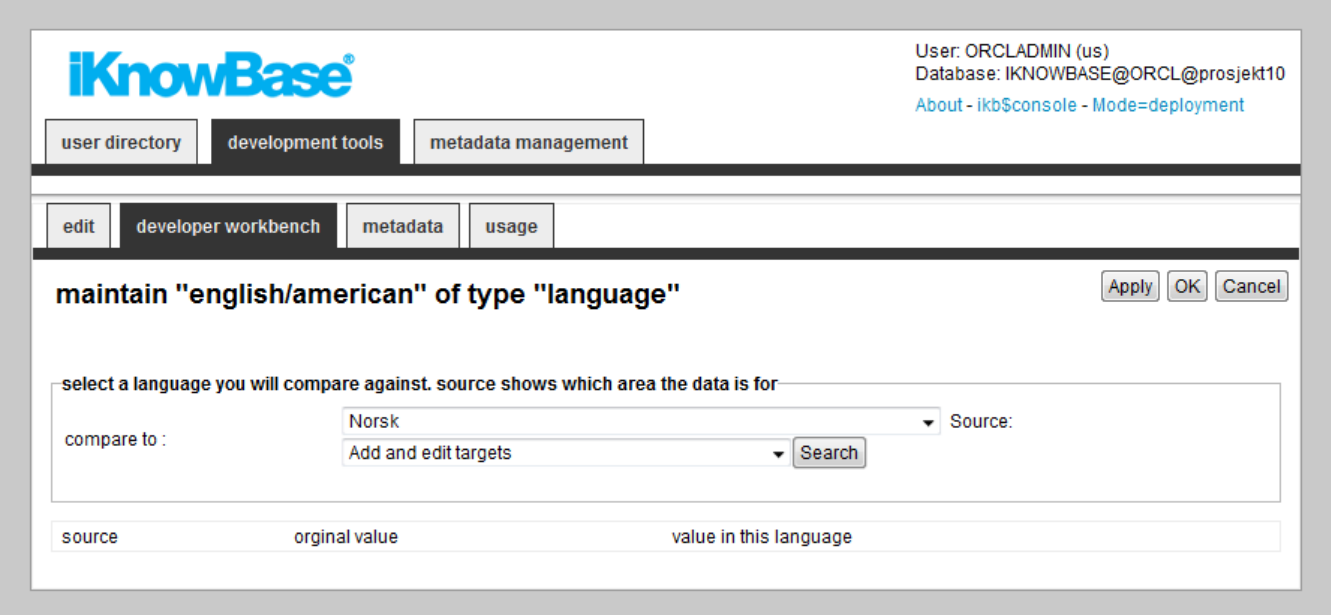


Property	Description
Sub system	Select the appropriate subsystem.
Identifier	Type the iKnowBase language code. This language code must be given in lowercase. It is not possible to update this property after creation.

Property	Description
Description	Type a description of this language.
Browser language	Type the code of the web browser locale-language for which this iKnowBase language should be used. For example, type "nb" for "Norwegian Bokmål".
Default language	Set this language as default language. Only one language can be the default language.
Code to JavaScript files (cal, tinymce)	Type the extension/prefix of language-specific JavaScript files.
Browser language	Type the codes of all the web browser locale-languages for which this iKnowBase language should be used.
Description	Type a description for these language codes.

14.1.2. Developer Workbench Tab

iKnowBase enables you to translate the language of the labels for all the components defined in the Development Studio. This is easily done from the metadata tab in the Edit pane.

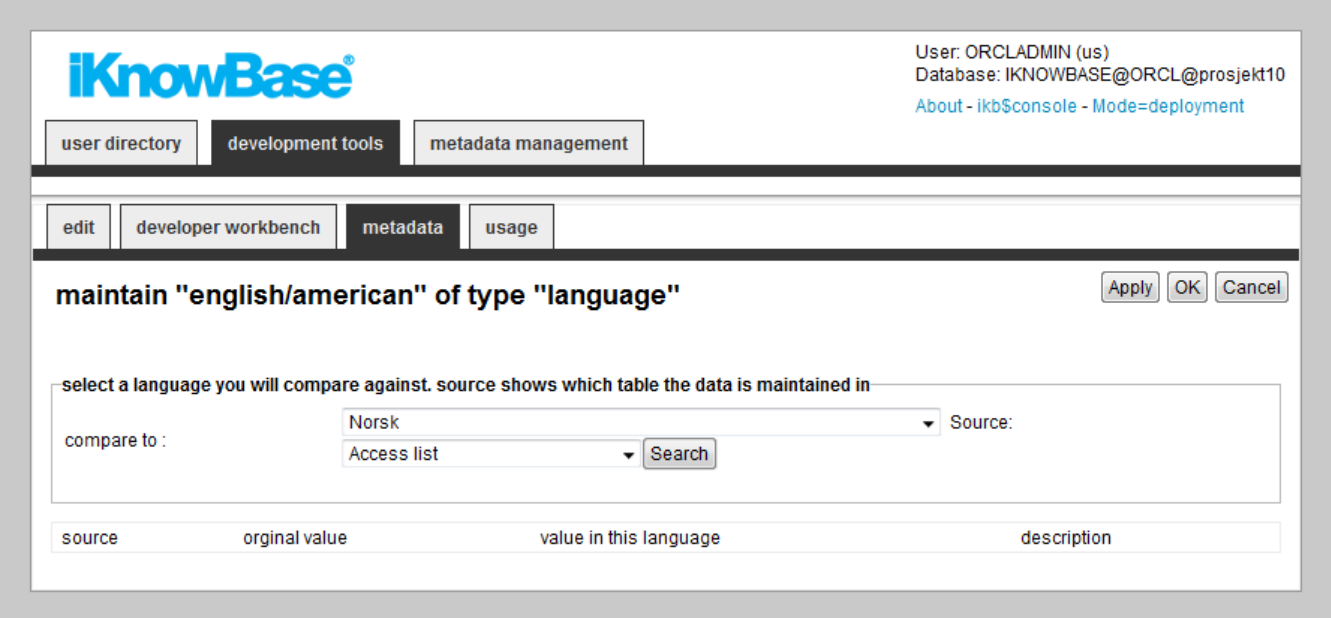


Property	Description
Compare to	Select the language to compare the texts with.
Source	Select the source of the texts that you want to maintain. Fetched from the database table IKB_NLS_DEFINITION.

Property	Description
Source	Displays the identifications of the source texts in the database table IKB_NLS_STRING.
Original value	Displays the texts for the language you are comparing this language to.
Value in this language	Displays the texts for the language being edited. You can type or change the value if desired.

14.1.3. Metadata Tab

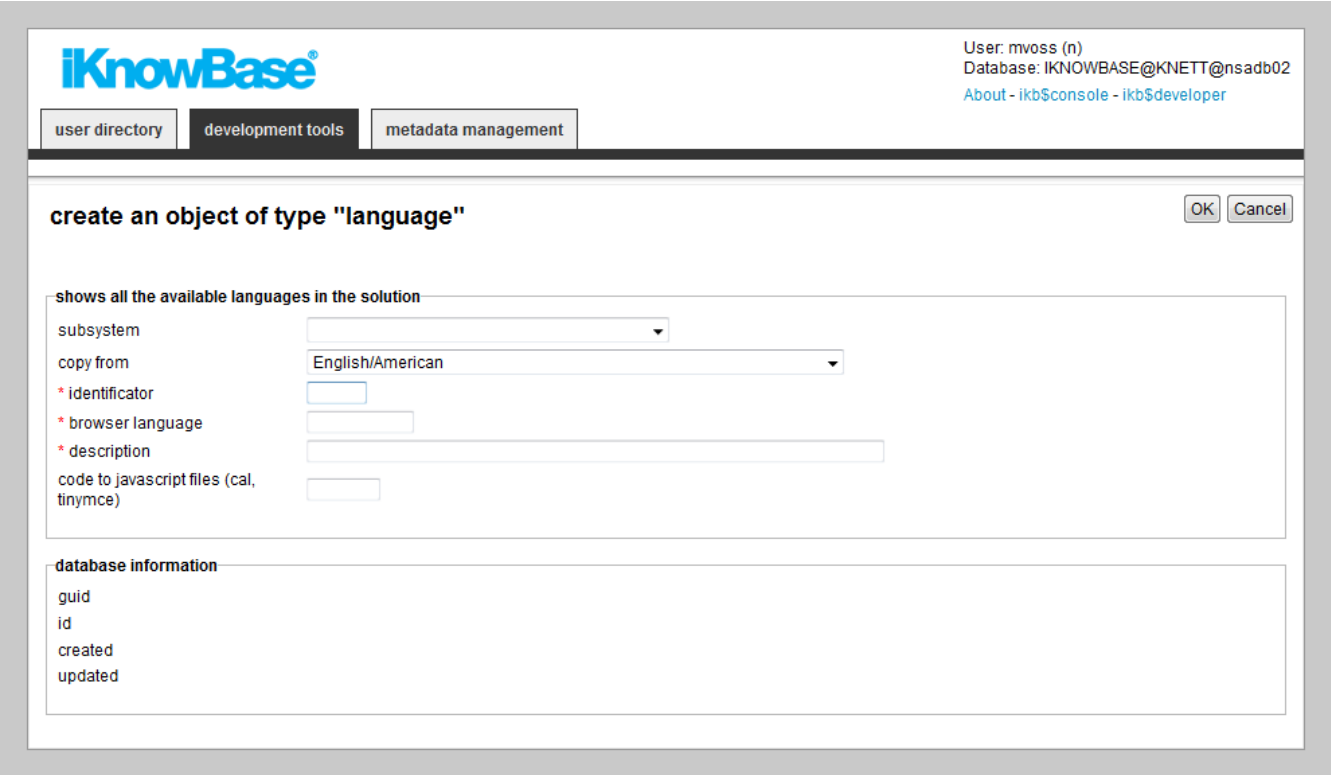
iKnowBase enables you to translate the language of the labels for all the metadata in the information model. This is easily done from the metadata tab in the Edit pane.



Property	Description
Compare to	Select the language to compare the texts with.
Source	Select the source of the texts that you want to maintain.
Source	Displays the name of the database tables in which the texts are stored.
Original value	Displays the texts for the language you are comparing this language to.
Search result : Value in this language	Displays the texts for the language being edited. You can type or change the value if desired.
Search result : Description	Displays the descriptions for the texts for the language being edited. You can type or change the value if desired.

14.2. Create a new language set

iKnowBase enables you to create new language sets. You will always start the job by copying a language set from an existing language.



To create and copy a language, perform the following steps:

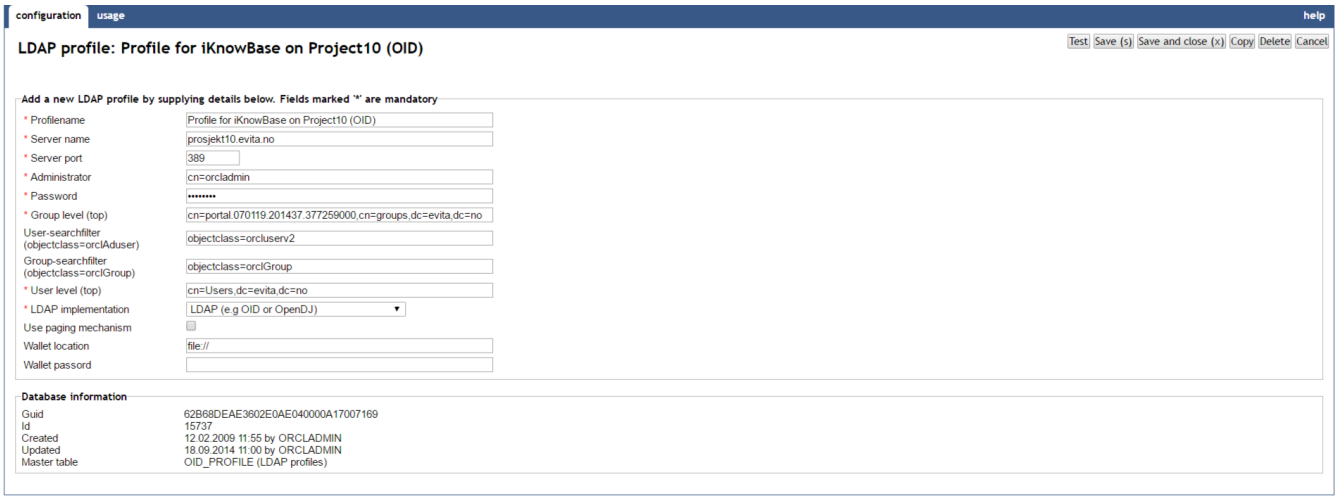
1. On the **List** pane for languages, click on the `Add Language` action. An empty **Edit** pane, without any tabs, opens.
2. On the **Edit** pane, select the appropriate language to copy from in the **Copy from** drop down box, and enter the appropriate information in each field. It is not possible to create a new language without making a copy from an existing language.
3. Click **Apply**. iKnowBase creates the language and saves all the information that you provided for the new language. If you chose to copy from another language, all the texts defined for this language will be copied to the new language. The Edit pane remains open, now split into tabs with all the properties of the language available.

Chapter 15. LDAP Profiles

An LDAP profile is used for login and extraction of information from an LDAP directory. Tested LDAP-servers includes Oracle Internet Directory, OpenDJ and Microsoft Active Directory (AD).

15.1. Properties

This section describes the properties of an LDAP profile, as shown on the corresponding Edit pane tabs.



Property	Description
Profilename	Type the name of the profile.
Server name	Type the name or the IP of the remote directory from which the user information will be synchronized.
Server port	Type the port number the remote directory is listening on. The default LDAP port is 389.
Administrator	Specify the super-user of the remote directory. In Oracle Internet Directory this is cn=orcladmin but there might be other users as well. This user will need extended privileges. It must be given privileges to read the change log of the remote directory, and the privileges to create new objects (groups) in the remote directory, since this is a choice in the configuration.
Password	Type the password of the administrator.

Property	Description
Group level (top)	Specify the top level of the remote directory. A typical top level would be `cn=portal.070104.174902.679720000,cn=Groups,dc=demo,dc=iknowbase,dc=com`.
User-searchfilter	Specify a filter to use when searching for users to synchronize. There might be cases where not all objects placed under the LDAP user top level should be used. This can be accomplished by providing a filter here. By default the filter is `objectClass=orclAdUser`. This means that only objects with an attached object class called orclAdUser, will be synchronized. If all objects are to be synchronized, you may use a wildcard search filter like `objectClass=*`.
Group-searchfilter	Specify a filter to use when searching for groups to synchronize. There might be cases where not all objects placed under the LDAP user top level should be used. This can be accomplished by providing a filter here. By default the filter is `ObjectClass=orclgroup.` This means that only objects with an attached object class called orclgroup, will be synchronized. If all objects are to be synchronized, you may use a wildcard search filter like `objectClass=*`
User level (top)	Specify the top level of the remote directory where the objects to be synchronized are placed. These objects are referred to as users, but they might be other type of LDAP objects as well.
ldap implementation	Select between LDAP/AD (Microsoft Active directory) or LDAP (e.g. OID or OpenDJ).
Use paging mechanism	Can be used when the number of users are high. When bootstrapping, the number of users returned can be limited to e.g. 20000 (in LDAP). If the result set exceeds this limitations, it fails. You can then use this flag to let the bootstrap function fetch sets of users instead. Note : using this flag might have an impact on the performance.
Wallet location	Enter the location of the wallet file
Wallet password	Enter the password to the wallet file

Chapter 16. LDAP Sync

Many organizations have established a central repository (a directory service) for user and group information, making it possible to edit that information independently from all the different systems that need it. However, iKnowBase needs a local copy of that information in order to support security and context operations.

Use the LDAP Sync profile to set up a replication link, which enables information to automatically flow into iKnowBase when it is changed in the source user directory.

iKnowBase comes with a PL/SQL procedure, oid_sync.synchronize_users, which you can run to perform the synchronization based on the configured LDAP Synchronizing profiles. Typically you will create a Schedule which executes the synchronization job at given times and at given intervals. Every time the synchronization job runs, it will read the LDAP change log to understand what kind of changes have happened in the source user directory. The change log will contain entries indicating that users, groups or group memberships have changed. The synchronization job will copy these changes into the corresponding iKnowBase objects as specified in the LDAP Synchronizing profiles.

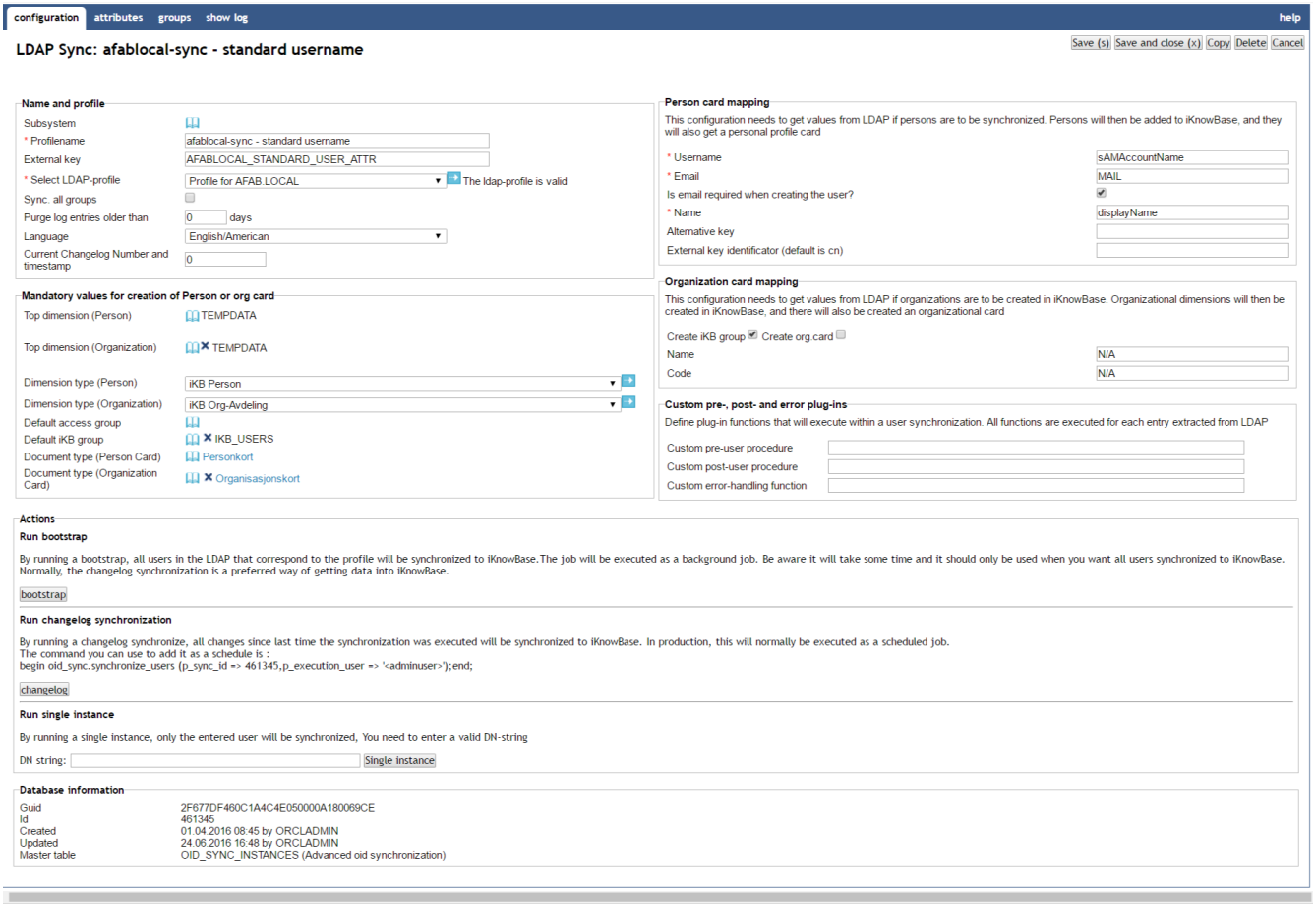
See the Development Guide for further information.

16.1. Properties

This section describes the properties of an LDAP Sync profile, as shown on the corresponding Edit pane tabs.

16.1.1. Configuration Tab

The configuration tab contains general information on the LDAP Sync profile.



Property	Description
Subsystem	Select the subsystem the profile belongs to.
Profile name	Type the name of the profile.
External key	Type the external key of the profile. This can be used as the id when you start the synchronization.
LDAP-profile	Select the LDAP-profile which manages access to the LDAP-server to use. To the right, the connection status will be shown. It the profile is a valid one, the message "The ldap-profile is valid".
Sync. all groups	Select this check box to map synchronize all groups automatically.
Purge log entries older than xx days	Enter the number of days you want to keep log entries for. Use 0 if you not want an automatic purge of old log entries.
Language	Specify the language that will be set on the user when its created.

Property	Description
Current Changelog Number and timestamp	This is the last known change number from the LDAP server. All updates will start after this change number. The LDAP sync engine will automatically update this number after each run, to avoid having to redo many updates. It will also update the last successful run time. If required, you can type a change number yourself, to redo changes or to skip corrupt entries.
Top dimension (Person)	Select the top dimension for user dimensions. Dimensions with an external key are available in the drop down box. By default, the objects that are retrieved from the remote directory are organized in a dimension structure in iKnowBase. Dimensions representing the synchronized user objects will be placed under this top dimension.
Top dimension (Organization)	Select the top dimension for organization dimensions. Dimensions with an external key are available in the drop down box. You can configure the user synchronization to create organization information based on information in user objects. Dimensions for the synchronized organization information will be placed under this top dimension.
Dimension Type (Person)	Click the appropriate dimension type. In iKnowBase, a dimension can be associated with a dimension type. This type segments the dimensions in iKnowBase. Dimensions representing users will be associated with the dimension type given in this field.
Dimension Type (Organization)	Click the appropriate dimension type. In iKnowBase, a dimension can be associated with a dimension type. This type segments the dimensions in iKnowBase. Dimensions representing organizations will be associated with the dimension type given in this field.
Default access group	Select the access control list (ACL) to be used for the person and organization cards that are created when synchronizing user objects.
Default ikb group	Select the group to be used as the default group for synchronized users. When a user is created in iKnowBase, it is provided with a default group. The value of this property is the name of the default group.

Property	Description
Document type (Person Card)	Select the document type to be used for person cards. When a user is synchronized, iKnowBase creates a person card for this user that has some standard attributes. This person card may contain the attributes and dimensions that a developer chooses to transfer from the external user directory to iKnowBase.
Document type (Organization Card)	Select the document type to be used for organization cards. You can create an organization card that contains the information that the developer chooses to synchronize from the remote user directory as organizational information.
Person card mapping	To create a user profile, some information has to be extracted from LDAP in order to create a valid account. The user account will then be added to iKnowBase, and they will also get a personal profile card. The mandatory attributes are: • **Username**: The name of the LDAP-attribute that identifies the username (login name). Mandatory. • **Email**: The name of the LDAP-attribute that identifies the user's e-mail address. Mandatory. • **Is email required when creating the user?**: If email is not required, the user will be created without an email address. Otherwise it will terminate the processing for the actual user and return an error message. • **Name**: The name of the LDAP-attribute that identifies the user's display name. Mandatory • **Alternative key**: When bootstrapping w/paging, you might run into a sizelimit-error if a large number of users starts with the same letter (normally not before 1000 entries). If so, you can define an alternative LDAP key used when bootstrapping with paging. • **External key identificator (default is username attribute)**: Defines the LDAP-attribute used as external key when creating person cards (documents) and person dimensions. If null, username attribute will be used as key. The external key will be prefixed with IKB_OID_SYNC:.

Property	Description
Organization card mapping	• **Create org.card**: Check this flag if you want the LDAP Sync engine to create organization cards and dimensions corresponding to the organization information on the user object in LDAP. • **Create IKB Group**: Check this flag if you want the LDAP Sync engine to create a group corresponding to the organization information on the user object in LDAP. • **Name**: The name of the LDAP-attribute that will be the external key of the organization card. Required when creating organization cards. • **Code**: The name of the LDAP-attribute that identifies the code of the organization.

Property	Description

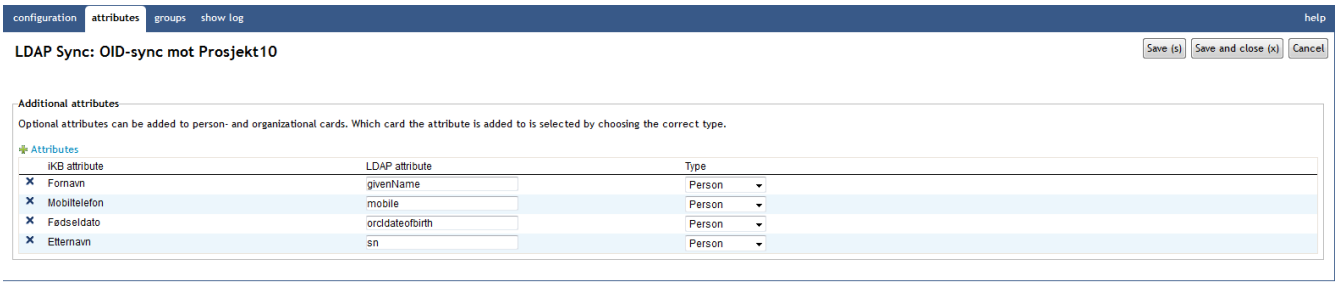
Custom pre- and post and error procedures	It's possible to create plug-ins that will execute during a user synchronization. There are three different types:
	• **Custom Pre-user procedure**: Type the name of the database procedure that should be called before the synchronization of each entry. The signature must look like this and as you can see the two out parameters can be used to define if the synchronization should continue or not for an ldap entry:
	`PROCEDURE <package>.<procedure name> ( sync_id in number, ldap_entry in varchar2, session_id in DBMS_LDAP.session, changetype in varchar2, entrytype in varchar2, cn in varchar2, do_continue out number, do_create_card out number );`
	• **Custom Post-user procedure**: Type the name of the database procedure that should be called after the synchronization of each entry. The signature must look like this :
	`PROCEDURE <package>.<procedure name> ( sync_id in number, ldap_entry in varchar2, session_id in DBMS_LDAP.session, userId in number, PersonCardId in number, OrgCardDocId in number, changetype in varchar2, );`
	• **Custom error-handling function**: Type the name of the database function that should be called if creation of a user account/person card fails. If you return -1, the synchronization will terminate. The signature must look like this :
	`FUNCTION <package>.<function name> ( sync_id in number, person_record in ot_ldap_person_rec, session_id in DBMS_LDAP.session, sqlerrm in varchar2, sqlcode in number ) return number;`

Property	Description
Run bootstrap	By running a bootstrap, all users in the LDAP that correspond to the profile will be synchronized to iKnowBase. The job will be run as a background job. Be aware it will take some time and it should only be used when you want all users synchronized to iKnowBase. Normally, the changelog synchronization is a preferred way of getting data into iKnowBase. This function is only available if the LDAP profile is valid.
Run changelog synchronization	By running a changelog synchronize, all changes since last time the synchronization was run will be synchronized to iKnowBase. In production, this will normally be run as a scheduled job. The command you can use to add it as a schedule is : begin oid_sync.synchronize_users (p_sync_id ⇒ 'id',p_execution_user ⇒ 'adminuser');end;. This function is only available if the LDAP profile is valid.
Run single instance	By running a single instance, only the entered user will be synchronized, You need to enter a valid DN-string. This function is only available if the LDAP profile is valid.

16.1.2. Attributes Tab

The attributes tab contains information about the user and group attribute mappings from the LDAP directory to iKnowBase.

Figure 13: LDAP Sync Edit pane - attributes



Property	Description
IKB attribute	Select the iKnowBase attribute for the target information object. The select list will only be populated by iKnowBase attributes tagged with an external key. The iKnowBase attribute selected will be the attribute that the LDAP value is synchronized to.
LDAP attribute	Type the name of the LDAP attribute of the LDAP object (user or group) to be synchronized from the LDAP to iKnowBase.

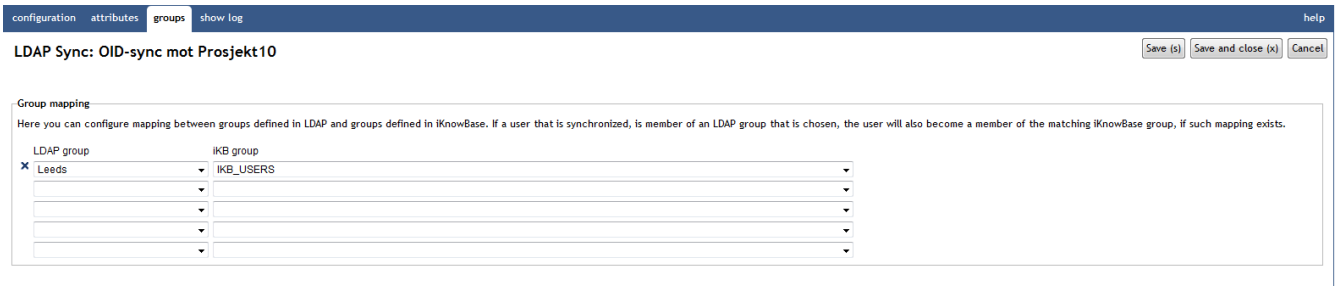
Property	Description
Type	Select the appropriate object type of this entry. Select Person if the attribute should be synchronized to the person card. Select Organization if the attribute should be synchronized to the organization card.

16.1.3. Groups Tab

The groups tab contains information on the mapping between groups in the LDAP server and in iKnowBase.

If the property "Sync all groups" is set, this tab is a pure information tab, displaying the information on the actual mapping.

Otherwise, if the property "sync all groups" is not set, this page lets you specify which groups you want to synchronize, and which iKnowBase-group you want to map to. Note: that when you use manual mapping, you need to create the iKnowBase groups before you can map to them.

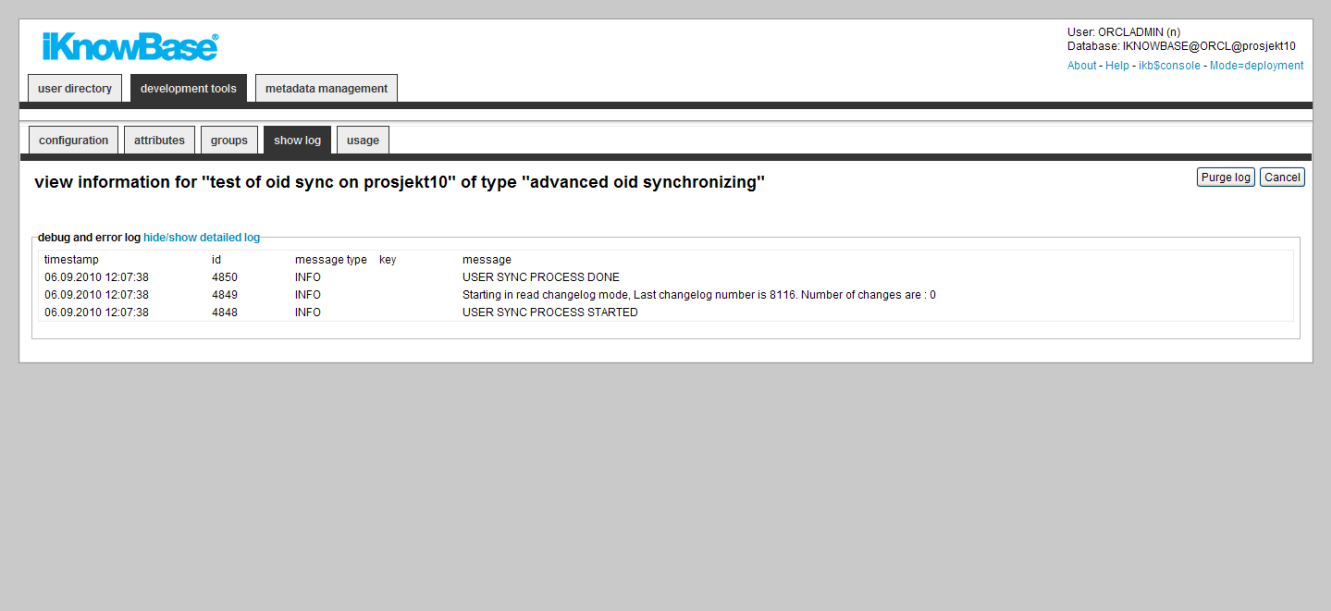


Property	Description
LDAP group	Select the LDAP group to be synchronized from the LDAP to iKnowBase. Existing groups in the LDAP specified by the Select LDAP-profile property on the Configuration tab are available in the dropdown boxes.
IKB group	Select the iKnowBase group which the given LDAP group will be synchronized to.

16.1.4. Show log

The tab contains a detailed log generated for each run of the synchronization.

When the synchronization is run it will log info available here. You can choose between a detailed log or a overview of operation run during synchronization.



Property	Description
Timestamp	Displays when the log info was created.
ID	Displays the id in the log table.
Message type	Displays the severity of the message. INFO, DEBUG and ERROR are the valid values.
Key	Displays normally the key (DN) handled in the operation.
Message	Displays a status/error message for each line.
Trace info	Displays trace info (only available when running i debug mode).

Chapter 17. Menus

The menu component enables you to create menu structures which may be presented in various formats. You can create a new menu component, and then build its structure by creating submenus and menu items. You can link menu items to a portal page, URL, iKnowBase page, form, task wizard, or quick link. You can apply various menu styles, such as rollover effects, to menus, and insert images or icons to identify menu items.

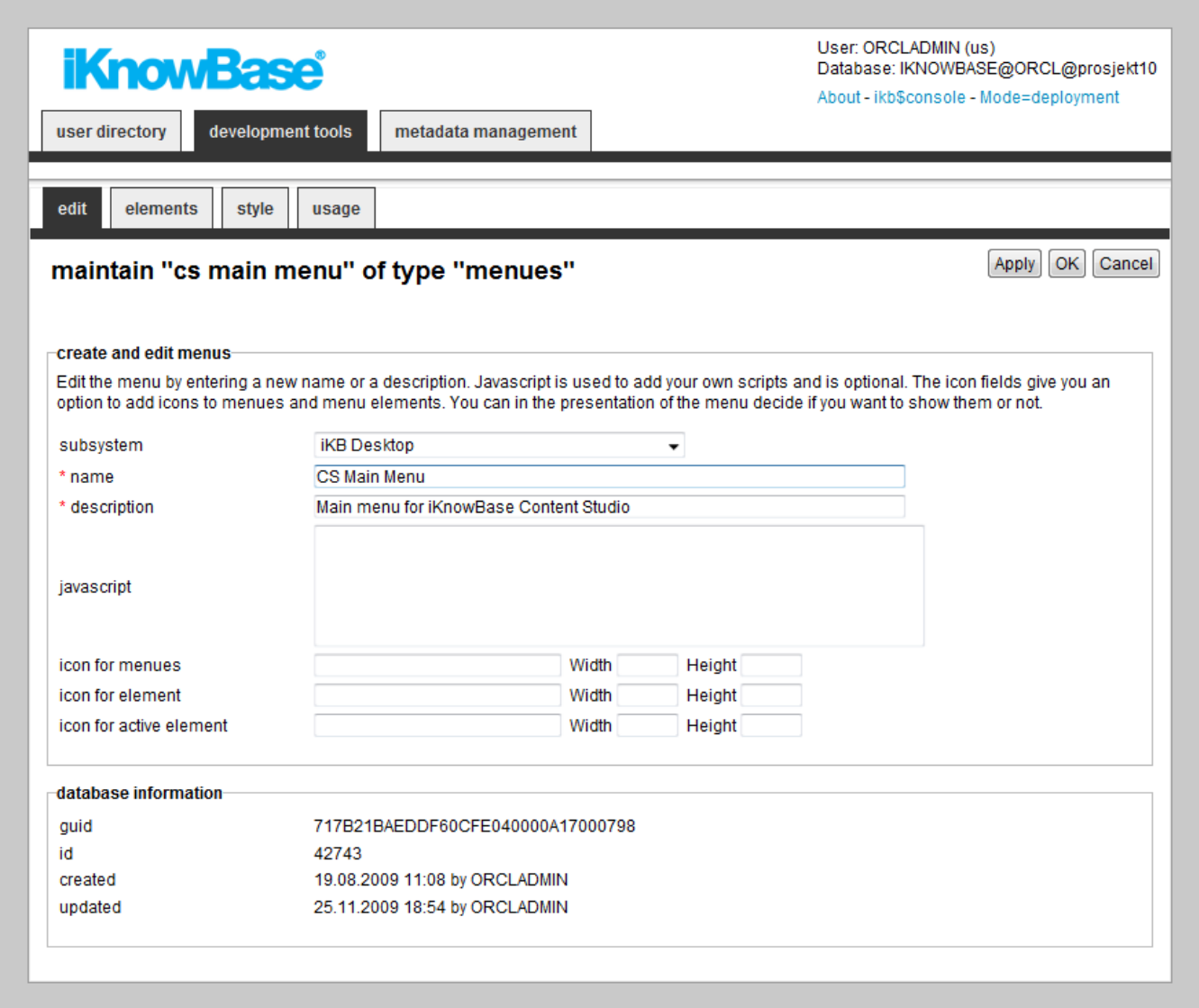
In iKnowBase, you can create a menu either manually or by importing a menu structure from an existing dimension tree.

Use the menu portlets to make menus available to users.

17.1. Properties

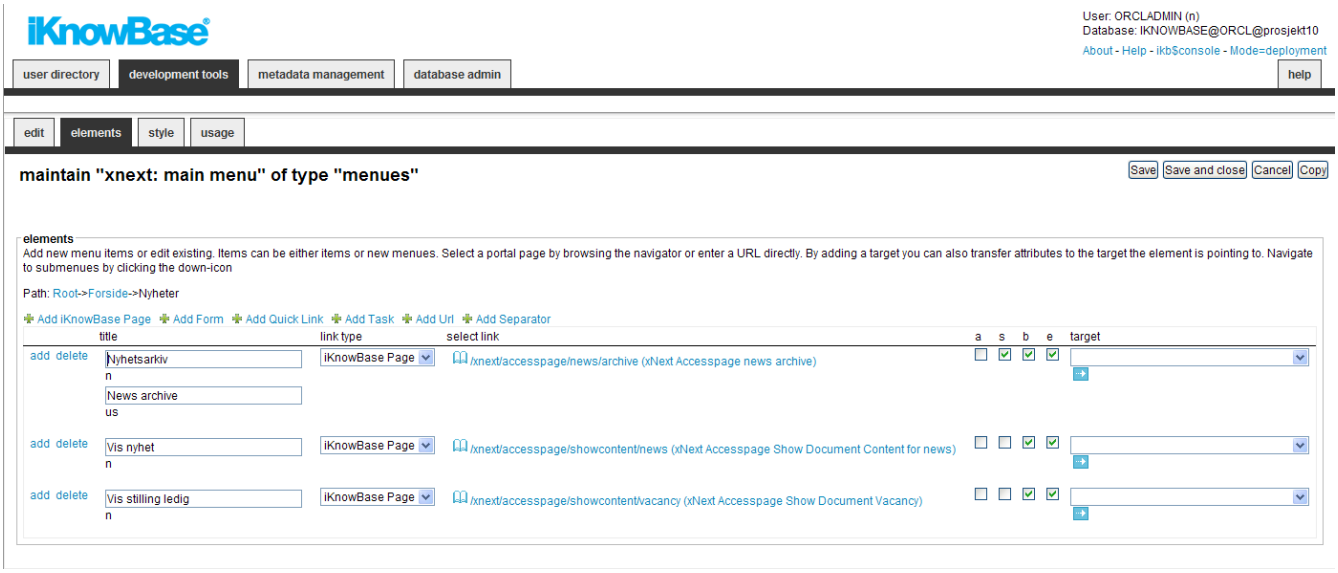
This section describes the properties of a menu, as shown on the corresponding Edit pane tabs.

17.1.1. Edit tab



Property	Description
Subsystem	Select the appropriate subsystem.
Name	Type a name for this menu.
Description	Type a description for this menu.
JavaScript	Type JavaScript code which may be used from the portlet rendering the menu. The standard iKnowBase menu portlets don't require any JavaScript code. This may be relevant if you write your own menu portlet.
Icon for menus	Some of the presentation forms of menus support the use of icons. These are used slightly different depending on the form of presentation. Type the reference to the icon, together with its width and height, to be used for menus. The file must be reachable from the application server.
Icon for element	Some of the presentation forms of menus support the use of icons. These are used slightly different depending on the form of presentation. Type the reference to the icon, together with its width and height, to be used for menu items. The file must be reachable from the application server.
Icon for active element	Some of the presentation forms of menus support the use of icons. These are used slightly different depending on the form of presentation. Type the reference to the icon, together with its width and height, to be used for the active menu item. The file must be reachable from the application server.

17.1.2. Elements tab



You can choose between six types of menu elements:

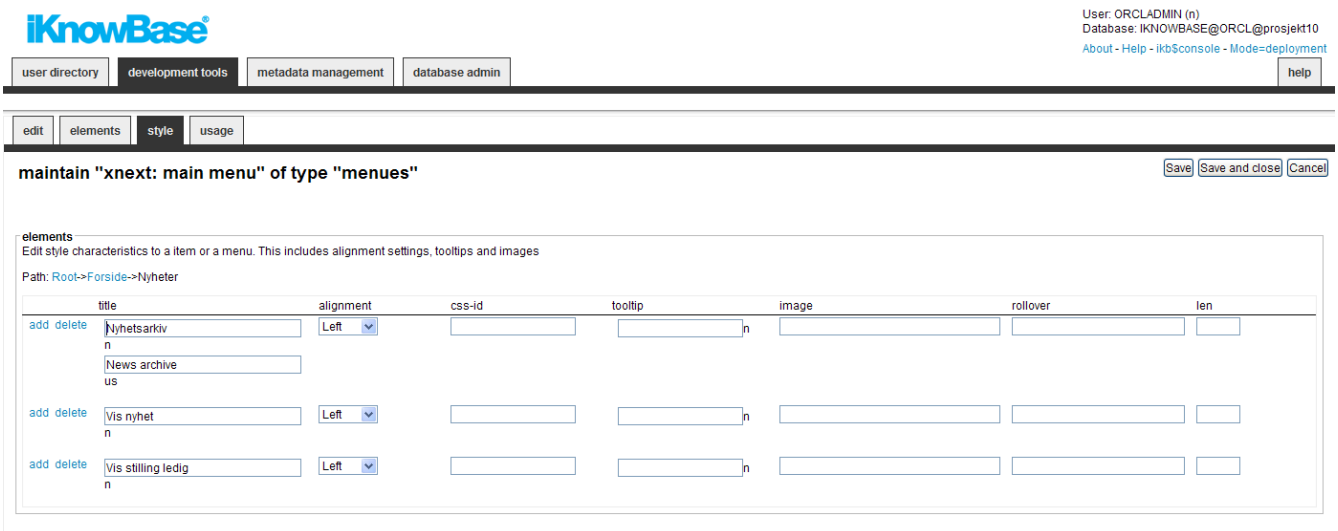
- **iKnowBase page**: Select this link type to link the element with an iKnowBase page.
- **URL**: Select this link type to link the element with a URL.
- **iKnowBase Form**: Select this link type to link the element with form.
- **Quick link**: Select this link type to link the element with a quick link.
- **Task wizard**: Select this link type to link the element with a task wizard.
- **Separator**: Used when you want to create a blank line

To change the menu item order, simply drag and drow the element where you want it.

Property	Description
Down	If subitems exists, the link will navigate to the next level.
Add	If subitems don't exist, the link will navigate to the next level where you can add subitems.
Delete	Will delete (when Save or Save and Close is pressed) menu items or submenues.
Title	Type the name of the menu, or the item that appears in the menu. If multiple languages are supported in the solution, each language displays in a separate input field. The language code is displayed behind the input field.

Property	Description
Link type	Select the type of link that is connected to the menu item. • **iKnowBase page**: Select this link type to link the element with an iKnowBase page. • **URL**: Select this link type to link the element with a URL. • **iKnowBase Form**: Select this link type to link the element with form. • **Quick link**: Select this link type to link the element with a quick link. • **Task wizard**: Select this link type to link the element with a task wizard.
Select Link	Select the proper link destination.
A (all)	For protected destinations, enabling this option will show the menu element regardless of login status. With this option deselected, protected destinations will only be shown to logged in users with the proper permission. When users who are not logged on are given access to protected pages, they will normally be asked to log on.
S (Sitemap)	Check this option to allow the menu item to appear in a sitemap.
B (Breadcrumb)	Check this option to allow the menu item to appear in a breadcrumb.
E (Enabled)	Check this option to enable the menu item.
Target	Select target to be used. URL parameters may be used together with targets. If both **Select link** and **Target** are defined, the former will be passed as a parameter to the latter.

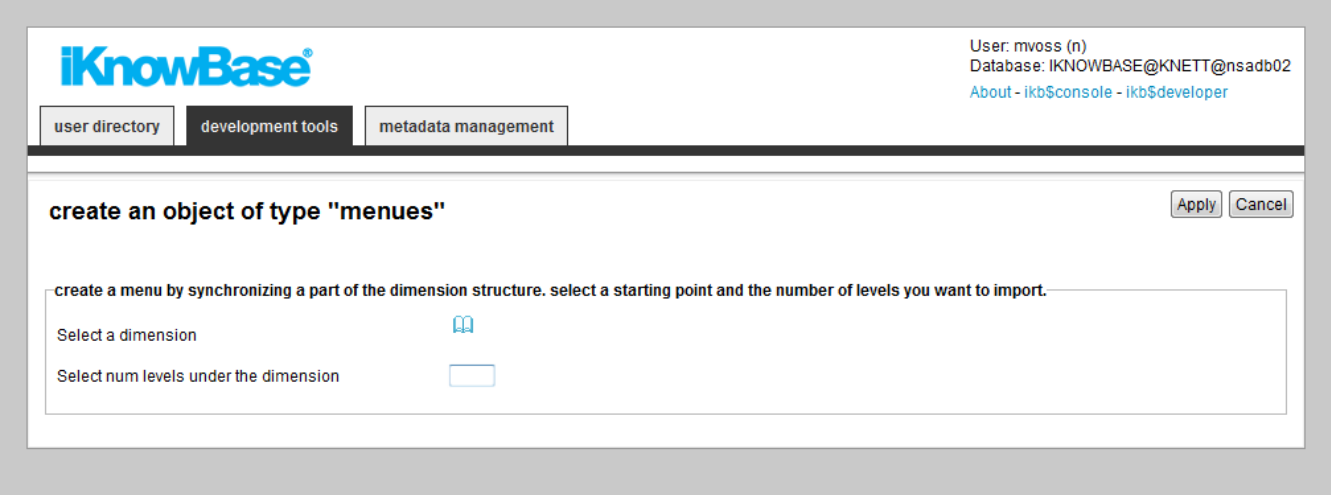
17.1.3. Style tab



Property	Description
Title	Type the name of the menu, or the item that appears in the menu. If multiple languages are supported in the solution, each language displays in a separate input field. The language code is displayed behind the input field.
Alignment	Select the appropriate alignment for the text.
CSS-ID	Type the ID of the CSS class that is associated with the elements in the HTML code. This CSS class can be used for styling of the menu element.
Tooltip	Type a tooltip for the menu item. If multiple languages are supported in the solution, each language displays in a separate input field. The language code is displayed behind the field.
Image	Type the file path of the image that you want to display as the element. The file path is the application server path of the image file that is displayed.
Rollover	For menus that support rollover effects, type the reference to the icon that is displayed. The file must be referenced so that it can be accessed from the application server.
Len	Type the length of the image. This property is used for some presentation forms.

17.2. Creating a Menu Based on a Dimension Tree

If you choose to create a menu based on an existing dimension tree (Menu with import from iKnowBase), you will need to choose the starting dimension and number of levels to include. When you click Apply the menu will be created with menu elements corresponding to your specification.



Property	Description
Select a dimension	Select a start node in the dimension tree. Node below this point will be imported into the menu structure
Select num level under the dimension	The import will travese down to this level

17.3. Re-synchronize a menu based on a dimension tree

When you create a menu based on a subset of the dimension tree, iKnowBase will copy the dimension information into the menu structure. If the dimension tree changes, the menu will not change automatically.

Use the Synchronize menu link to re-synchronize a menu based on a dimension tree. When you select this command, iKnowBase will display the same input form as when creating the menu for the first time. Input the correct value, click apply, and iKnowBase will update the menu structure with updated dimension information.

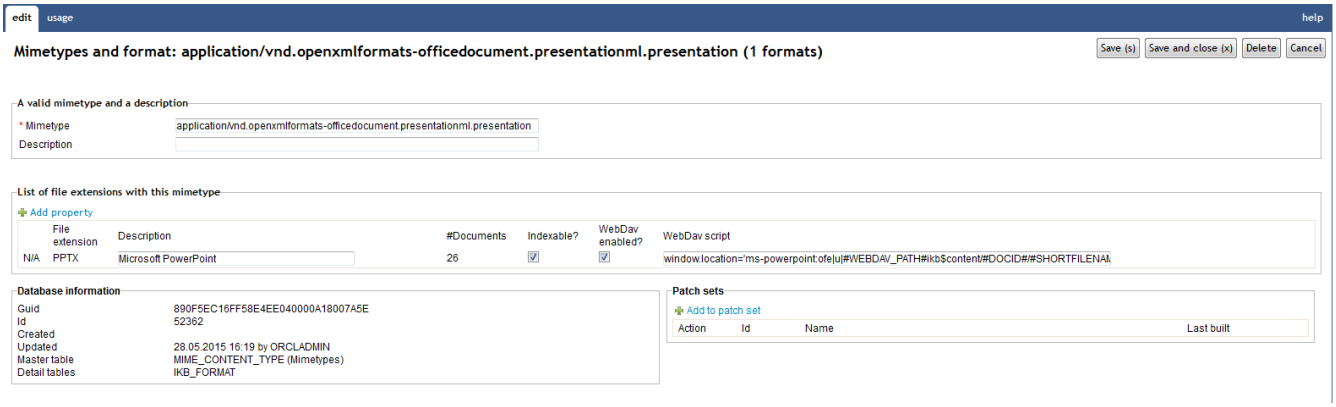
Chapter 18. Mimetypes and formats

An Internet media type, originally called a MIME type after MIME (Multipurpose Internet Mail Extensions) and sometimes a Content-type after the name of a header in several protocols whose value is such a type, is a two-part identifier for file formats on the Internet. A media type is composed of at least two parts: a type, a subtype, and one or more optional parameters. For example, subtypes of text type have an optional charset parameter that can be included to indicate the character encoding, and subtypes of multipart type often define a boundary between parts. In iKnowBase they are used to describe a page.

Format in iKnowBase is a suffix to the name of a computer file applied to indicate the encoding convention (file format) of its contents. In iKnowBase they describe how to store and index the content of the file.

18.1. Properties

This section describes the properties of a Mimetype, as shown on the corresponding Edit pane tabs.



Property	Description
Mimetype	A media type is composed of at least two parts: a type, a subtype, and one or more optional parameters. For example, subtypes of text type have an optional charset parameter that can be included to indicate the character encoding, and subtypes of multipart type often define a boundary between parts.
Description	A short description of the mimetype should be placed here.
Content disposition	Content-Disposition response header sent by Content Server. "none" will not send any Content-Disposition header.
Delete icon	Will only be available if any documents with this extension is store in iKnowBase.
File extension	Specify the extension of the file (e.g. GIF).

Property	Description
Description	A short description of the format.
#documents	Shows the number of documents with this format.
Indexable?	If SOLR is in use, "indexable?" decides if the file should be indexed in SOLR.
WebDAV enabled?	Not in use
WebDAV Script	Not in use

Chapter 19. Newsletter

Newsletter enables you to send content to specific subscribers at periodic intervals by e-mail. You can specify various formats for each newsletter, and schedule it for publication to the subscribers of the newsletter.

The newsletter component can use one of the following method to extract the content:

- A page driven newsletter will run a page and email the content for that page. When running page based newsletters, please note that iKnowBase Batch Server (ikbBatch) has to be running in addition to the page engine server.
- A search source driven newsletter will use a search source to extract the content. This is the old-fashion way with less flexibility than the page option. This option will however log which documents have been sent out in a newsletter, and only send a letter when there are new documents, so the same documents are automatically not sent twice.

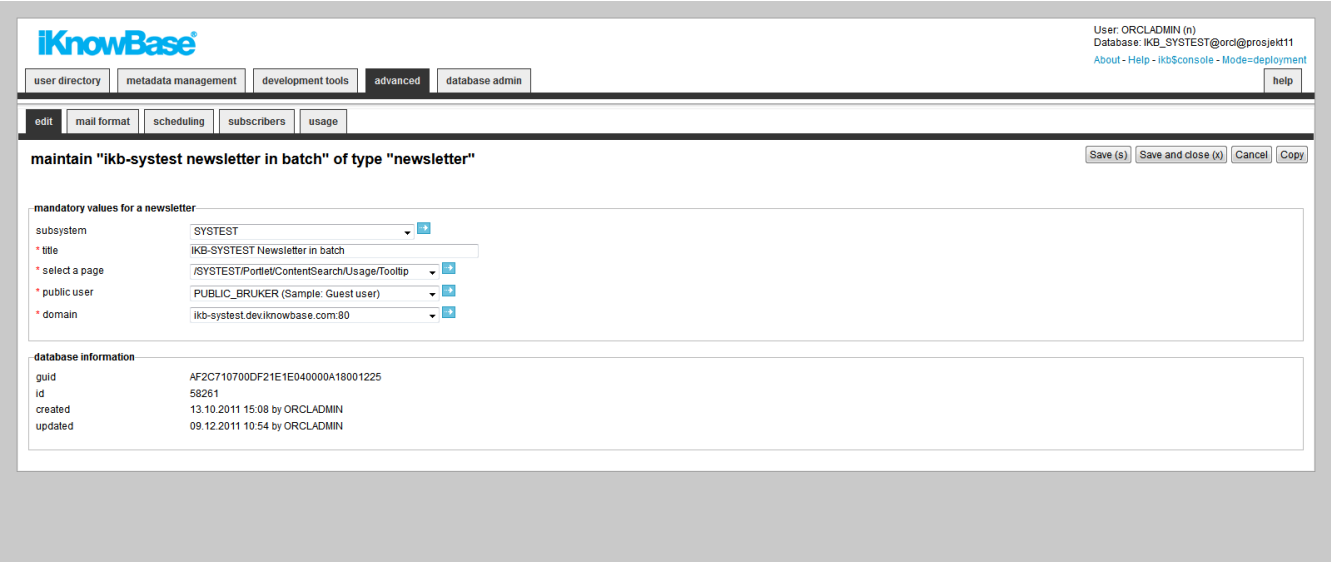
A page based newsletter may include the string `send_newsletter=false` (e.g. in a html comment) to abort sending, which is useful if the viewer is selecting documents based on time so that it could be that no documents are selected and the page is rather empty (e.g. a page showing the news from last week, when no news has been published).

You can also administer the subscribers of the newsletter in this component, but for end users you will need the newsletter portlet to allow subscribe and unsubscribe to the newsletter.

19.1. Newsletter Properties

This section describes the properties of a newsletter, as shown on the corresponding Edit pane tabs.

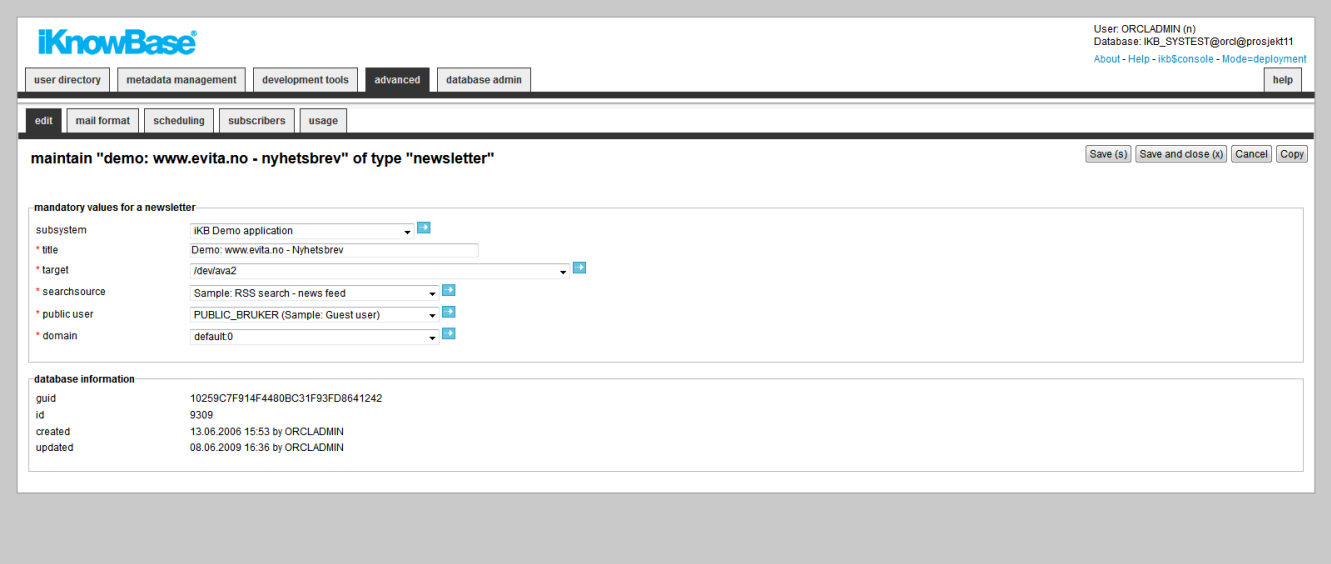
19.1.1. Edit Tab (Page driven variant)



Property	Description
Subsystem	Select the appropriate subsystem.

Property	Description
Title	Type a title for this newsletter.
Select a page	Select the page you want to use as a newsletter. When creating this page you should include your css and scripts with full path.
Public user	Select the user whose permissions will apply when extracting content for the newsletter. The user must be marked as a "public user" in the user directory.
Domain	Select the domain definition used when sending the newsletter. Necessary to build the correct links in the newsletter.

19.1.2. Edit Tab (Search Source variant)



Properties	Description
Subsystem	Select the appropriate subsystem.
Title	Type a title for this newsletter.
Target	Select the target where you want to present the content of the newsletter. This property will be used when a user clicks on a document link in the newsletter.
Search source	Select the search source that represents the content (documents) you want included in the newsletter. **NOTE** This search source should not be configured with a presentation style. Specify how to present the content of the newsletter in the mail format tab.

Properties	Description
Public user	Select the user whose permissions will apply when extracting content for the newsletter. The user must be marked as a "public user" in the user directory.
Domain	Select the domain definition used when sending the newsletter. Necessary to build the correct links in the newsletter.
Guid	Displays a globally unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Id	Displays a unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Created	Displays when the component was created and by whom it was created.
Updated	Displays when the component was last updated and by whom it was updated.

19.1.3. Mail Format Tab (Page driven variant)

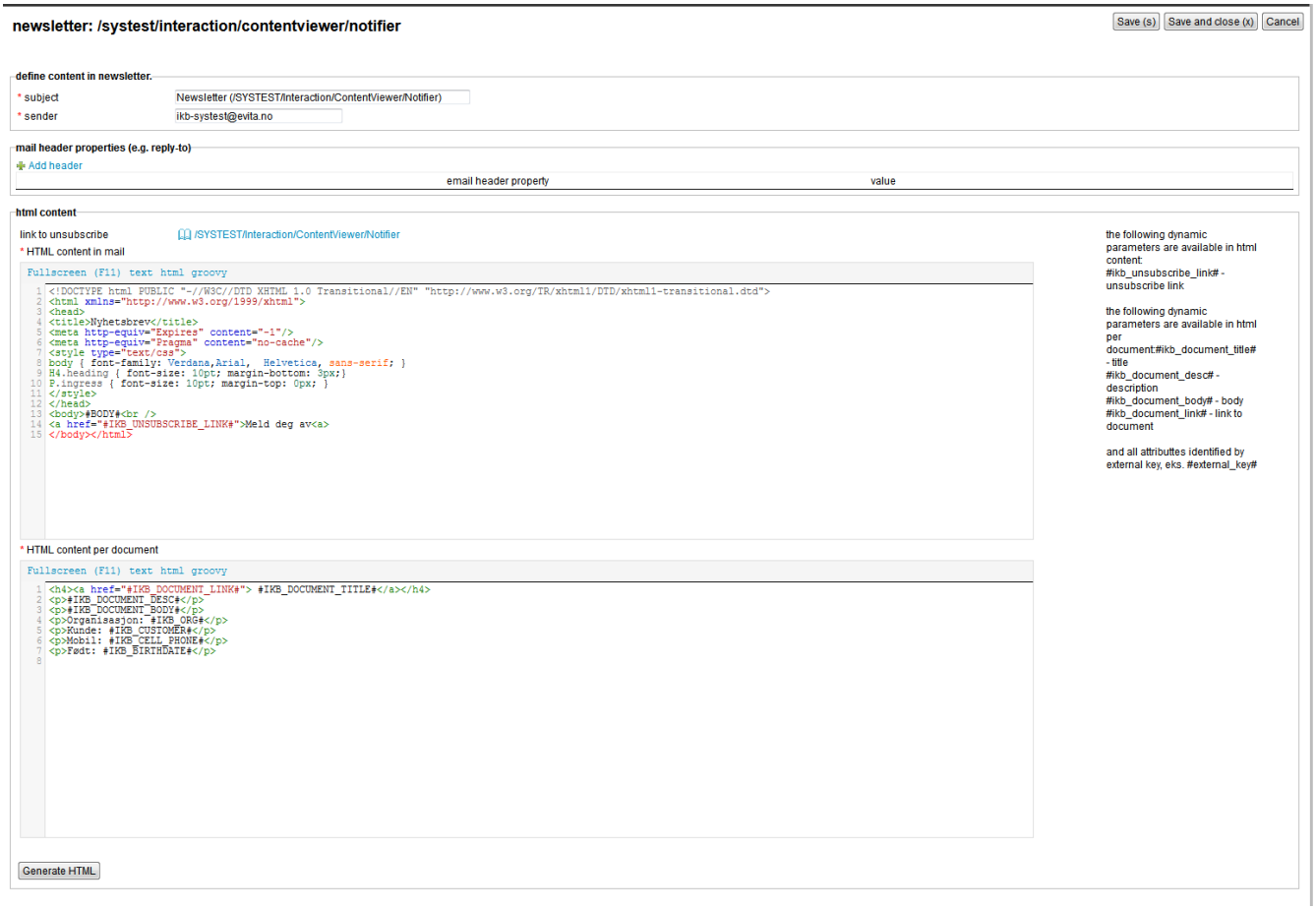
You need to specify sender, subject and profile.

Property	Description
Subject	Type a subject for this newsletter e-mail.
Sender	Type the e-mail address of the sender of the e-mail. This address can contain aliases.
Mail server profile	The profile field is only available when using the batch mail function instead of the database sendmail function. Profile points to ikb_installation_properties where you can define profiles to different mailservers. The value should be the second last name (PROFILE) from the installation property "com.iknowbase.emailsender.PROFILE.host"

Property	Description
Mail header properties	The list can contain valid email header properties added to the email, e.g. Reply-to, Return-Path and so on. Check Internet message Header

19.1.4. Mail Format Tab (Search Source Variant)

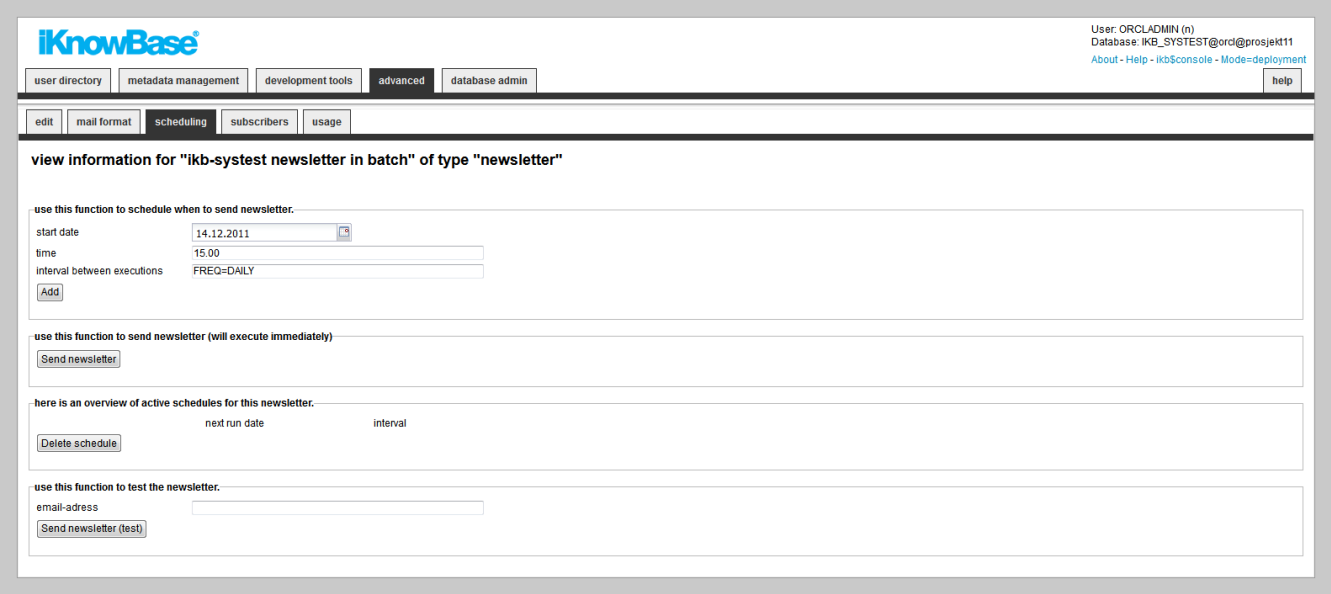
You must specify the HTML code for the newsletter in the Mail format tab. Click the Generate HTML button to populate the HTML fields with default HTML code. This HTML code can be used as the starting point for the e-mail that is defined.



Property	Description
Subject	Type a subject for this newsletter e-mail.
Sender	Type the e-mail address of the sender of the e-mail. This address can contain aliases.
Profile	The profile field is only available when using the batch mail function instead of the database sendmail function. Profile points to ikb_installation_properties where you can define profiles to different mailservers. The value should be the second last name (PROFILE) from the installation property "com.iknowbase.emailsender.PROFILE.host"

Property	Description
Email header property/Value	The list can contain valid email header properties added to the email, e.g. Reply-to, Return-Path and so on. Check Internet message Header
Link to unsubscribe	Select the appropriate target to be used to unsubscribe from the newsletter. The target must contain a newsletter portlet configured for unsubscribe. This target is used when the user clicks a link to unsubscribe from the newsletter.
HTML content in mail	Type the format of the e-mail that is sent. The format contains the HTML code for building the newsletter. The #BODY# tag must be included in the HTML code. This is where the content of the newsletter is inserted, as specified by the property HTML content per document. The format supports one dynamic parameter: • #IKB_UNSUBSCRIBE_LINK#: This parameter creates a link to unsubscribe, based on the Link to unsubscribe property. **NOTE** Use the HTML Generate button to generate default HTML code.
HTML content per document	Type the format of the HTML code to present for each article in the newsletter. The content is inserted in the #BODY# tag in the HTML content in mail property. This field supports several dynamic parameters: • #IKB_DOCUMENT_TITLE#: The document title. • #IKB_DOCUMENT_DESC#: The document description (often used as lead paragraph). • #IKB_DOCUMENT_LINK#: Link to the document. This parameter uses the target page. • #EXTERNAL_KEY#: All document attributes that are identified by an external key are supported. For example, if the attribute news type has the external key: IKB_NEWSTYPE, this attribute can be included in the document by inserting #IKB_NEWSTYPE# in the HTML code. **NOTE** Use the HTML Generate button to generate default HTML code.

19.1.5. Scheduling Tab



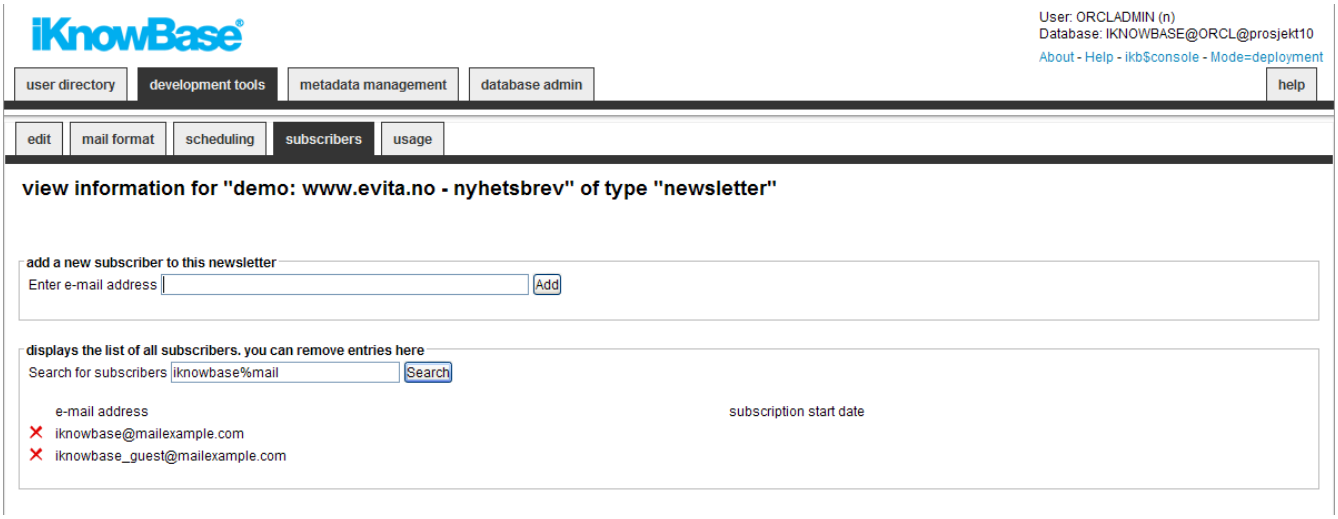
Property	Description
Start date	Enter the start date for the newsletter schedule.
Time	Enter the time for running the newsletter routine.

Interval	Type the frequency of sending the newsletter, using the Oracle Database syntax.
	
	Examples:
	
	`FREQ=HOURLY`
	`FREQ=DAILY`
	`FREQ=WEEKLY`
	`FREQ=MONTHLY; BYDAY=MON; BYHOUR=10;`
	`FREQ=WEEKLY; INTERVAL=2; BYDAY=MON; BYHOUR=10;`
	
	Note: Click the **Add** button to add this schedule. You can add several schedules per newsletter.

Next run date	Displays the next date and time when the newsletter will be sent.
Interval	Displays the interval between sending the newsletters.

19.1.6. Subscriber Tab

You can add and remove subscribers for this newsletter here.



Property	Description
Add a new subscriber to this newsletter	Enter the email address and press the Add button. Next time the newsletter is sent, this subscriber will also get the newsletter.
Displays a list of all subscribers	Use the search button to filter the search result. If you want to delete a subscriber, press the delete icon placed before the email you want to delete.

19.2. Testing a Newsletter

On the Scheduling tab on the **Edit** pane of the newsletter there is a button **Send newsletter (test)**. Specify an e-mail address to send the test newsletter to, and click on this button to send the newsletter to the specified address.

If there are no documents to send out in the newsletter (search source based), the recipient receives an e-mail with the text: No documents ready for mailing.

If there are documents to send out in the newsletter, the recipient receives an e-mail with the prefix TEST in the subject field. The newsletter is identical to the one that is sent out in a regular newsletter e-mail.

19.3. Sending a newsletter

On the Scheduling tab on the **Edit** pane of the newsletter there is a button **Send newsletter**. Click on this button to immediately send the newsletter by e-mail to all subscribers.

19.4. Scheduling a Newsletter

On the Scheduling tab on the **Edit** pane of the newsletter you can specify a schedule for the newsletter.

Enter **start date**, **time**, and **interval between executions**. Click on the **Add** button to add this schedule as an active schedule for the newsletter. The schedule will appear in the region **Here is an overview of active schedules for this newsletter**. The newsletter is sent by e-mail to all the

subscribers at the specified intervals. **Note**: This scheduled job will also appear as a Schedule component and can be maintained from the Schedule pages.

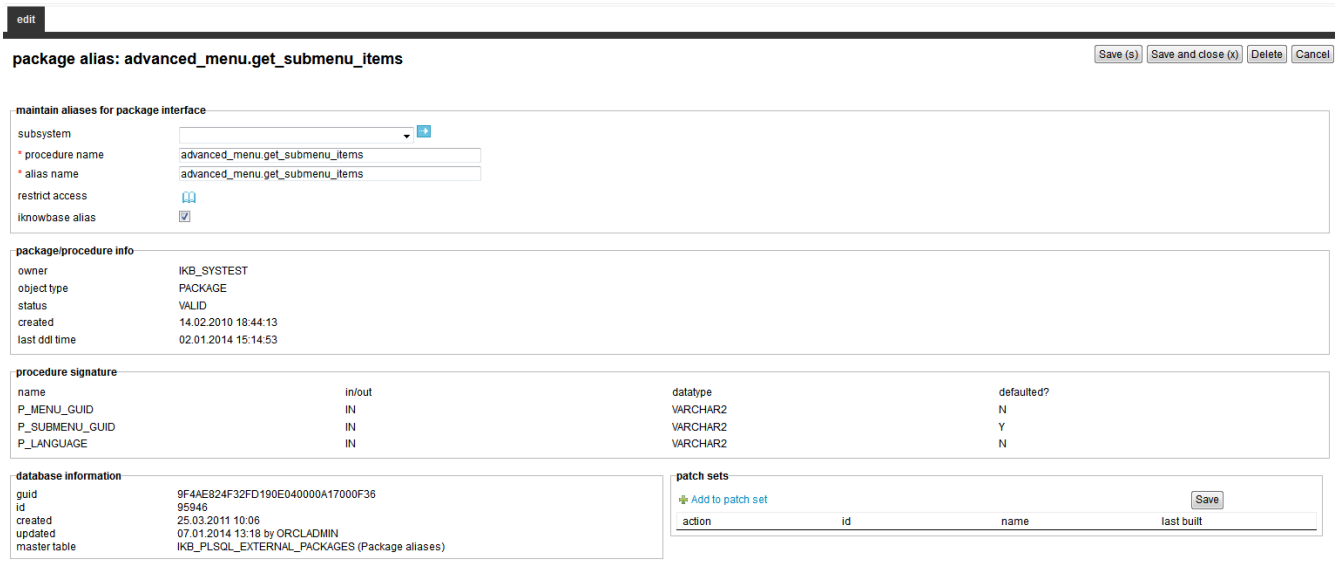
To remove an active schedule you must select the checkbox to the left of the schedule, and click on the **Delete schedule** button. The schedule will no longer appear in the region **Here is an overview of active schedules for this newsletter**.

Chapter 20. Package alias

Package aliases are needed for all PL/SQL functions called from a URL (like a custom save from a form).

20.1. Properties

This section describes the properties of a package alias, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the subsystem the profile belongs to.
Procedure name	Type the PL/SQL command that you want to call from the iKnowBase Oracle database. Use the syntax `<package>.<procedure>`, or `<owner>.<package>.<procedure>` if the package is owned by another schema than iKnowBase.
Alias Name	Type the alias of the database function.
Restrict access	Select a ACL if you want to restrict the access to the function.
iKnowBase alias	If checked, the procedure is a part of iKnowBase and should be untouched.

20.2. Package/procedure info

This section shows information about the procedure such as object type, status, created date and last DDL time.

20.3. Procedure signature

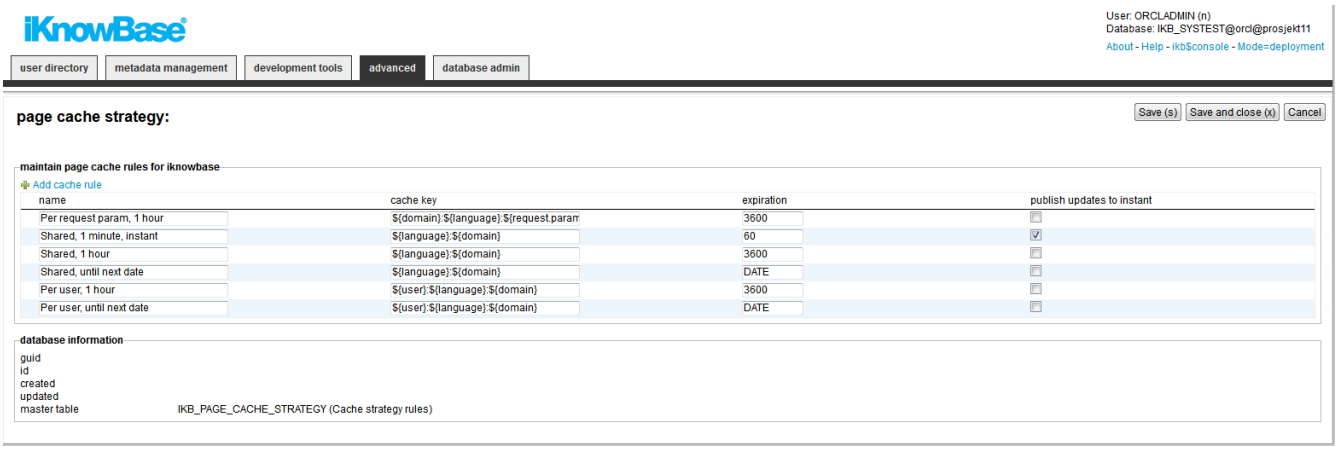
This section shows the signature of the procedure.

Chapter 21. Page cache strategy

Page cache strategies are applied on page components and define cache rules for a specific component. Cache keys can be a combination of several context variables like user, domain or language.

21.1. Properties

This section describes the properties of an page cache stategy, as shown on the corresponding Edit pane.



Property	Description
Name	Enter the name of the cache rule.
Cache key	Defines the key used for caching. The following model objects are available: • ${objectGuid} is the unique identifier of the portlet / page component being cached. • ${domain} is the unique identifier of the domain currently being serviced. • ${language} is the language code of the iKnowBase language currently in use. • ${user} is the userid of the iKnowBase user currently being serviced. • ${request} is a RequestModel containing most information pertaining to the request, including parameters. See the APIReference for more details on this model object. Combine values like objectGuid, domain, language, user and request.param to create a desired cache key. A typical minimal cache key will contain at least objectGuid, domain and language. Note that you should take care to avoid unlimited proliferation of cache keys, in particular if you were to include a document id parameter as part of the cache key.

Property	Description
Expiration	Enter how long the component should be cached in seconds. The value DATE tells the cache engine to cache the object until next date.
Publish updates to instant	Set to checked if you want a message published to iKnowInstant when the object is expired.

Chapter 22. Pages

An iKnowBase page, simply referred to as page in this document, enables you to display and receive content from the end user through iKnowBase Page Engine.

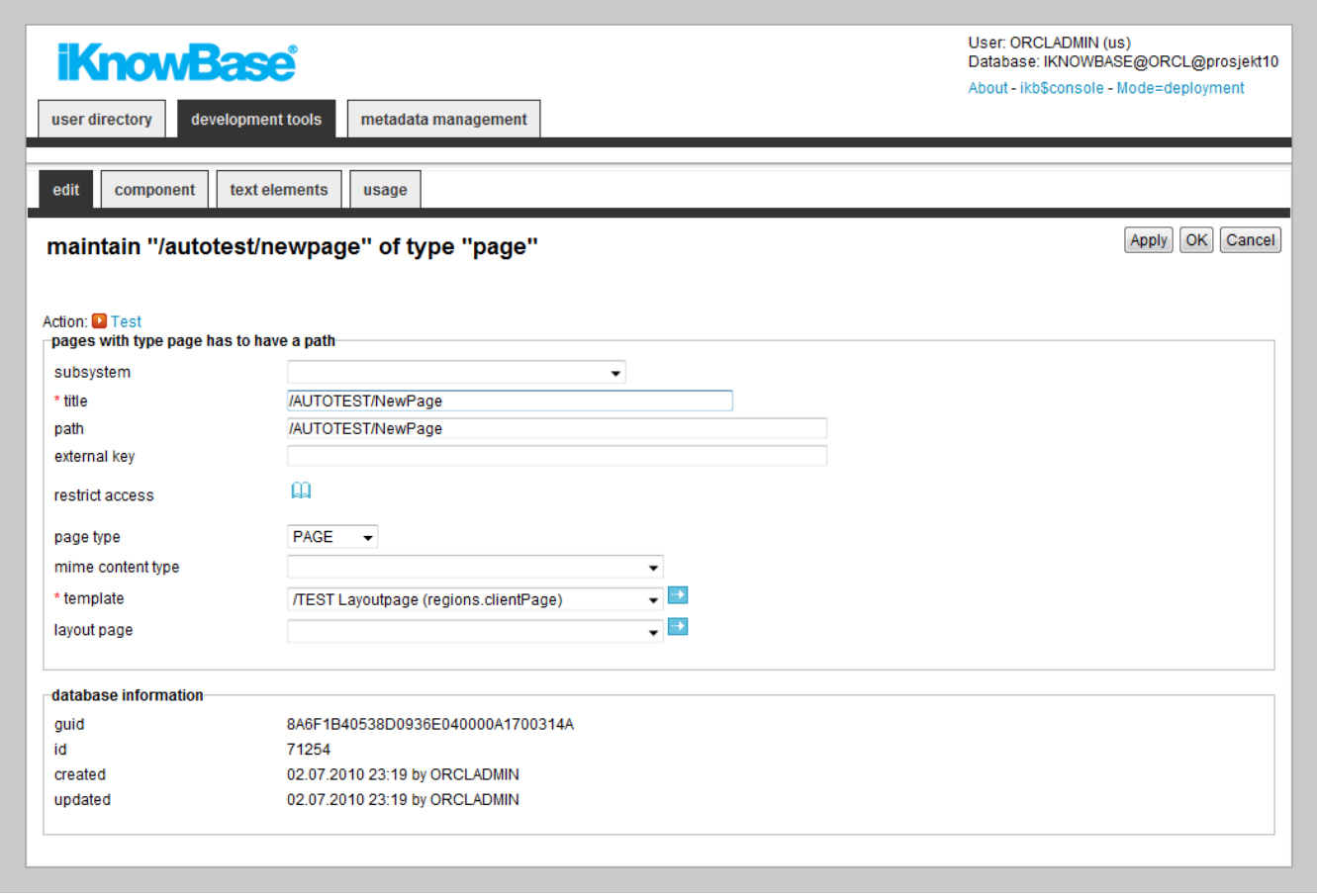
A page can consist of various components, such as Menu portlets and Shared content viewers. These components are referred to as portlets.

While creating a page, you can specify the template, path or URL for the page, the ACL reference that sets access permissions for the page, and the portlets that you want to display, such as forms, menus, and content viewers.

22.1. Properties

This section describes the properties of a page, as shown on the corresponding Edit pane tabs.

22.1.1. Edit Tab



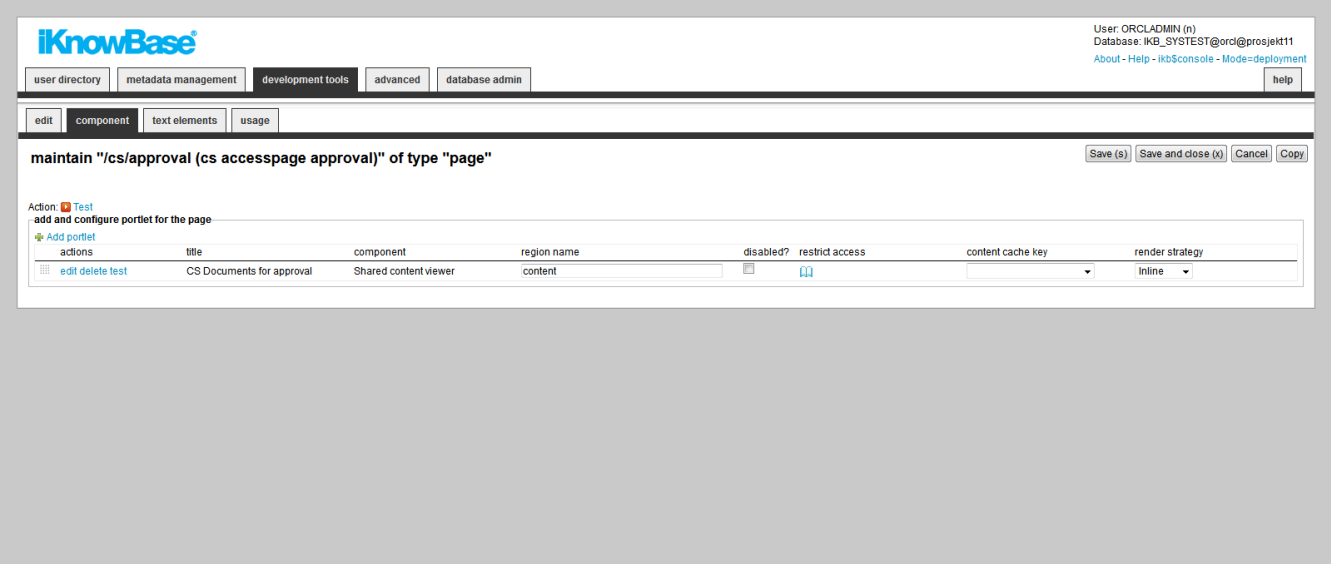
Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a title for this page.

Property	Description
Path	Type the reference to the URL that is used to access the page. The reference is relative to the page URL specified on the domain, so the actual URL for a value "/iknowbase/about/" could be http://www.example.com/page/iknowbase/about, but also http://www.example.com/iknowbase.about, depending on your setup. If this field is blank, you cannot access the page directly from a browser. You can still include the path in another page, or use it as a layout page. The path name must be a unique name.
External key	Type the external key. This value is used for external integration.
Restrict access	Select the appropriate access control list (ACL) for the page. To view the page, the user must have read rights to the specified ACL.
Page Type	Click the appropriate page type. This page type specifies whether the page that is created is used as an iKnowBase page or iKnowBase layout page.
Mime Content Type	Click the appropriate content type that identifies the type of content on the page. For example, text/html or text/xml.
Template	Select the template type you want to use for this spage • Select **iKnowBase Classic Template** to create a template in Development Studio. When selected, a Template Set field set will appear. • Select **Java method** to use a Java method to render the page. In the field below, enter the text value used to look up the Java method (the method must be annotated with a @PageMapping annotation, and reside in a class annotated with @PageController).
Layout page	Select the layout page you want to use for this page • Select **No layout page** to not use a layout page for this page. • Select "iKnowBase Classic Page" to render this Page inside another Page. Select a page in the field set below. • Select "Forward to path" to have the server use the servlet forward mechanism to forward to another resource (typically a Java @Controller) for rendering. Enter the resource path in the field below.

22.1.2. Component Tab

On this tab you add the portlets to display on the page. The template used for the page decides which regions are available for displaying portlets. You can change the order of the portlets by drag

and drop functionality.



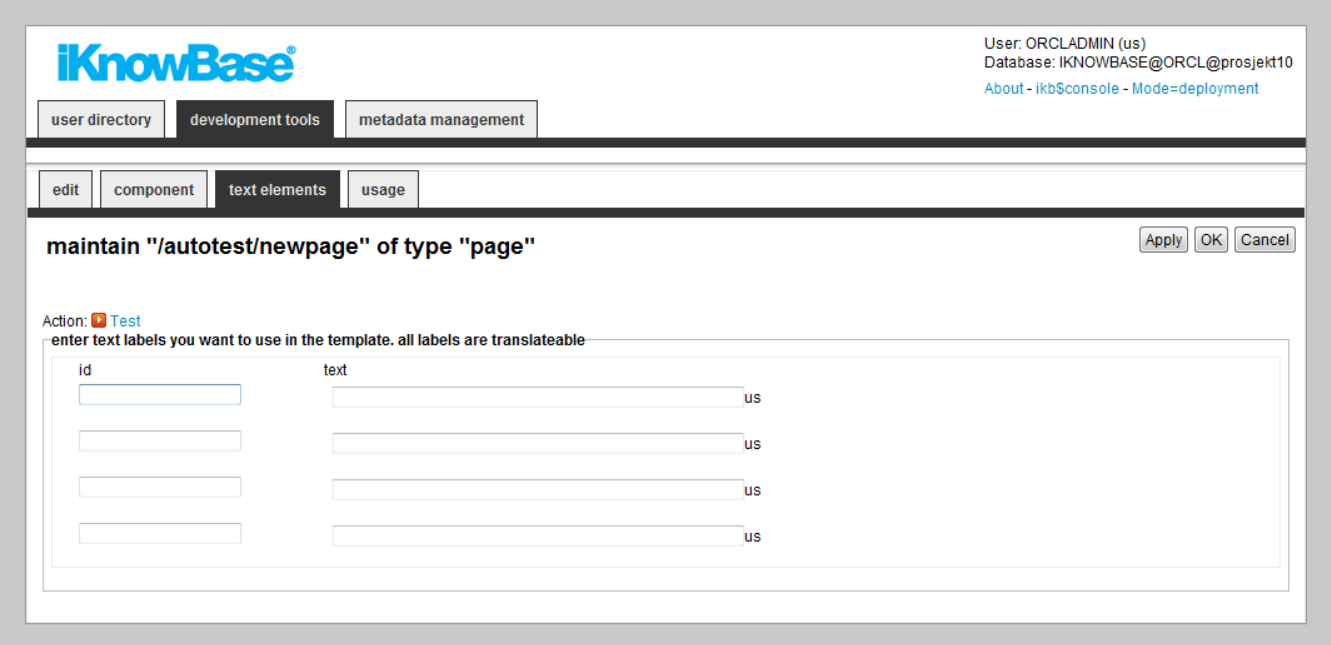
Property	Description
Actions	• Edit (or set) the preferences of the portlet • Delete the portlet from the page • Run a test of this spesific portlet
Title	Will either display : • the title set in the customization. • (Configured, no title). Means the portlet has been configured, but no title has been given. • (Not configured). Means the portlet has not been configured.
Component	Displays the portlet type. **NOTE** This is a read-only property. When you click the "Add portlet" link to add a portlet to the page, you choose which type of portlet to be added.
Region name	Type the name of the region where the component is shown. The underlying template can display this component at a location that is predefined in the template. The regions are defined in the template.

Property	Description
Markup ID	Enter an identifier to be used when identifying the component on the web page, or leave blank for an identifier to be automatically generated. The identifier will be used by automatically generated code in certain components, and can also be used as the identifier in the reloadComponent javascript function. Note that if you enter a value here, this value **must** be unique on the rendered page (including embedded pages and layout pages). Whenever possible, it is recommended that the value is left blank.
Disabled?	Disable the portlet. It will be rendered when running the page. Typically used for debugging reasons.
Restrict access	Select the appropriate access control list (ACL) for the page. The component appears to the end user only if he has read access to the selected ACL.
Content Cache Key	Select the appropriate content cache mechanism to be used for the portlet. Predefined options are: • **Per user, 1 hour**: The content of the portlet will be cached per user, domain, and language. Cached content expires after one hour. • **Per user, until next date**: The content of the portlet will be cached per user, domain, and language. Cached content expires at midnight (i.e. change of date). • **Shared, 1 hour**: The content of the portlet will be cached per domain and language; all users with the same language on the same domain will share the same cached content. Cached content expires after one hour. • **Shared, until next date**: The content of the portlet will be cached per domain and language; all users with the same language on the same domain will share the same cached content. Cached content expires at midnight (i.e. change of date). You can add self-defined options, see the *Page cache strategy* chapter. **Note**: If you leave this property blank, the content of this portlet will not be cached. **Note**: Access control will not be applied to shared cached content. A user who accesses a portlet, which is configured to use shared cache, will see the exact cached content regardless of his access rights. A consequence might be that the user gets access to too much or too little data.

Property	Description
Render Strategy	Select the appropriate render strategy to be used for the portlet. Available options are: • **Inline**: The portlet will load and render together with the rest of the page. • **On load**: The portlet will load and render after the DOM has finished loading for the page. • **Manual**: The portlet will not automatically load and render. You should implement the necessary code to load and render the portlet using the iKnowBase JavaScript function reloadComponent, and the appropriate triggers. **Note**: If you specify other render strategies than **Inline**, portlet decorations will automatically be rendered for the portlet (i.e. a div-tag with id and class attributes).

22.1.3. Text elements Tab

The properties on this tab enable you to define texts to be used in the component. The texts are available as FreeMarker model objects from the Template used for the Page. Multiple languages are supported.



Property	Description
Id	Type an identifier for the label.

Property	Description
Text	Type the text labels that you want to use in the page. If multiple languages are supported in the solution, each language displays a box, in which you can type the display form name. When you place the cursor in the Text field, the language box appears. The language code is placed behind the field.

22.2. Testing your Page

To test your page, either click the Test action for the page on the List pane, or click the Test action link on the Edit pane tabs for the page.

NOTE	The Test actions become available for a page after you specify a path and perform the initial save of the page.

Chapter 23. Parameter

iKnowBase enables you to define parameters and associate them with targets, viewers, search sources, and forms. Parameters are used to transfer values through targets to portlets and components.

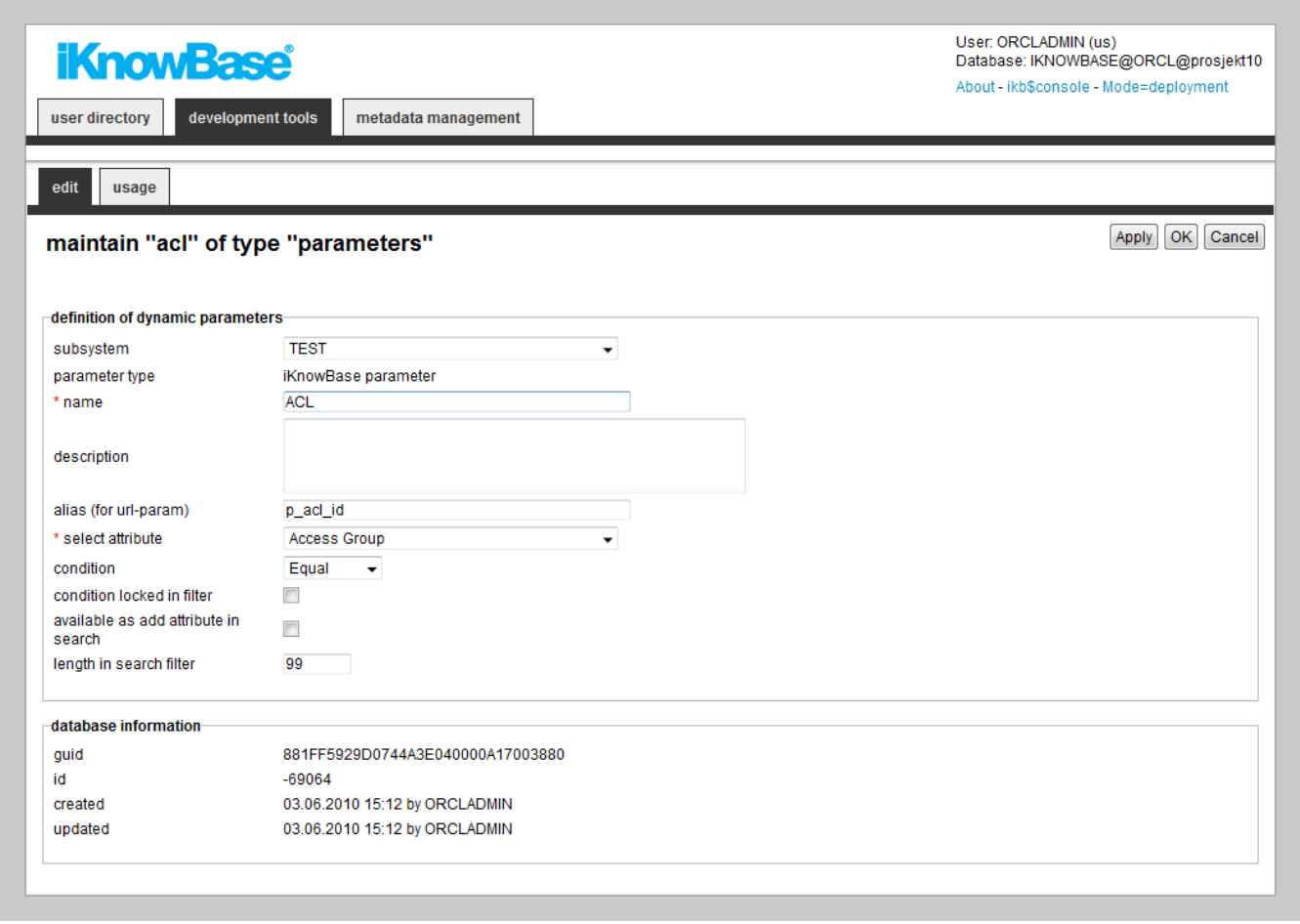
A parameter enables you to specify or filter content that you want to display on target destinations. For example, you can create a parameter and associate it with an attribute named Employee ID. You can then add this parameter to a target and a viewer present on the target destination. The target destination will only display the content that is associated with the given Employee ID.

iKnowBase enables you to create two types of parameters:

- **iKnowBase parameter**: An iKnowBase parameter enables you to create a parameter that is mapped to an iKnowBase attribute.
- **SQL parameter**: An SQL parameter enables you to create dynamic parameters using an SQL string and a WHERE clause.

23.1. iKnowBase Parameter Properties

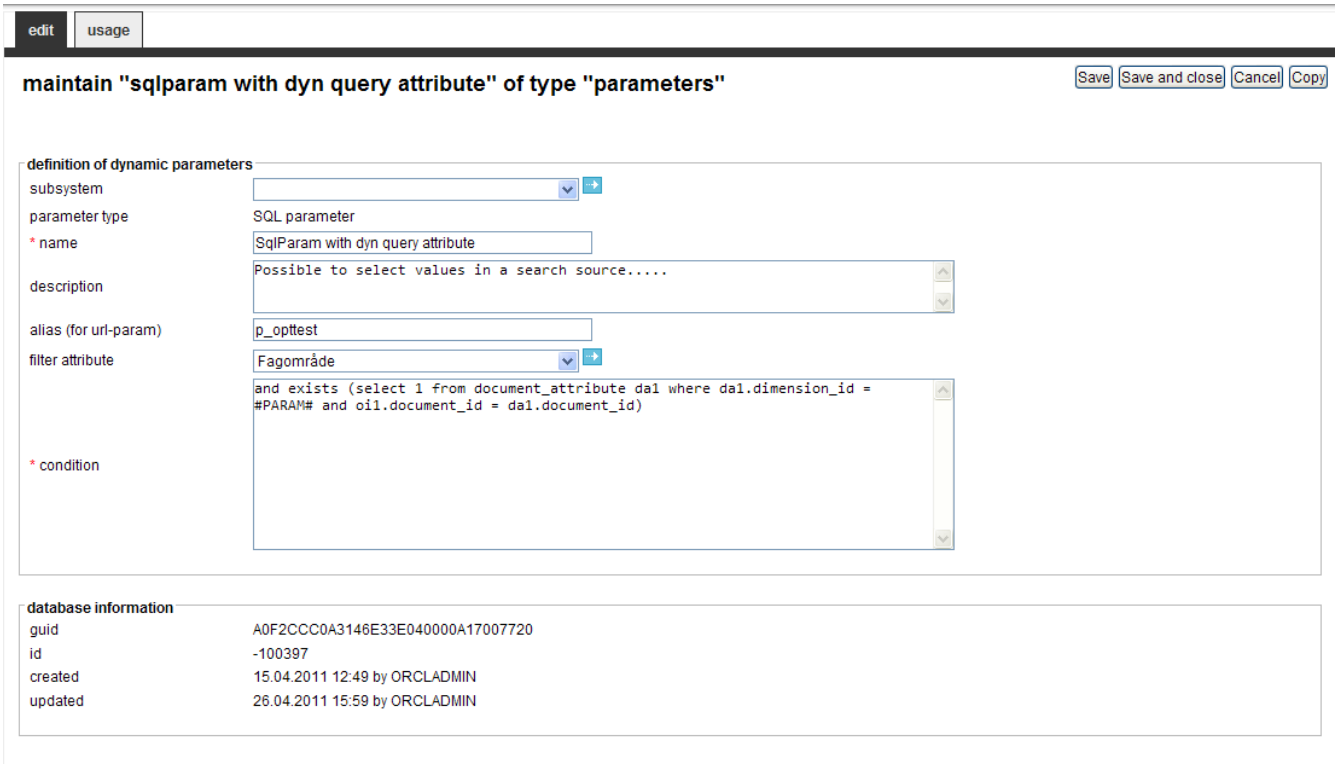
This section describes the properties of an iKnowBase parameter, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Parameter type	Displays the parameter type as iKnowBase.
Name	Type a name for this parameter.
Description	Type a description for this parameter.
Alias (for URL-param)	Type the alias for the parameter. All parameters are sent with the default naming convention such as p_d_i/p_d_v and p_d_c. To increase the readability of the URLs, you can use aliases. For example, the IKB DocumentID attribute has ID = -121. By adding the p_document_id alias, a portlet that uses this parameter can change the URL from `p_d_i=-121&p_d_c=IS&p_d_v=<value>` to `p_document_id=<value>`.
Select attribute	Select the appropriate attribute.
Wildcard condition	Only available for title and search string attribute. When checked, it will add a wildcard when used as a search criteria.
Condition	Select the appropriate condition that is used as default in a search source where the parameter is used. **NOTE** This is applicable only for search sources that are created in the standard mode. Valid values depend on the type of attribute.
Condition locked in filter	Select this check box to lock the selected condition in the filter dialog box. The condition then becomes mandatory for the user, and the user cannot choose to use other conditions for this parameter. **NOTE** This is applicable only for search sources that are generated in the standard mode.
Available as Add Attribute in search	Select this check box to be able to use the iKnowBase parameter in the search filter under the Add Attribute function. This functionality makes the attribute searchable, even if it is not a part of the predefined filter.
Length in search filter	Type the maximum length of the text that a user can type in a search filter box.

23.2. SQL Parameter Properties

This section describes the properties of a SQL parameter, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Parameter type	Displays the parameter type as SQL parameter.
Name	Type a name for this parameter.
Description	Type a description for this parameter.
Alias (for URL-param)	Type the alias for the parameter. All parameters are sent with the default naming convention such as p_d_i/p_d_v and p_d_c. To increase the readability of the URLs, you can use aliases. For example, the IKB DocumentID attribute has ID = -121. By adding the p_document_id alias, a portlet that uses this parameter can change the URL from `p_d_i=-121&p_d_c=IS&p_d_v=<value>` to `p_document_id=<value>`.
Filter attribute	If the condition has a `#PARAM#` notation (means it will use a dynamic value as input) you can define an attribute which can be used as a filter attribute in a search viewer. The value will also define the value list for the filter attribute.

Property	Description

Condition	Type the where-condition that adds itself to the SQL produced by the component in which it is used, typically a viewer or search source. These components extracts data from the DOCUMENT table with prefix oi1. The condition must start with AND.
	
	You can use variables in the where-condition:
	
	• `#USERID#` which will be substituted with numeric user ID.
	• `#SITEID#` which will be substituted with the active site ID.
	• `#PARAM#` which will be substituted by the value of the dynamic parameter that is submitted through a target, where the dynamic parameter is the same as this parameter.
	
	You can also define functions that are executed within the condition. The function must return a value. Functions are specified within curly brackets: {*functionName*}.
	
	Note: The execution is done only once, rather than one time per document that are extracted, and might be smart regarding performance.
	
	Example:
	
	`AND (oi1.document_id_ref IS NOT NULL`
	`AND (oi1.owner_id = #USERID#`
	`OR oi1.owner_id = {dbbruker.get_manager(#USERID#)}))`

Guid	Displays a globally unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Id	Displays a unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Created	Displays when the component was created and by whom it was created.
Updated	Displays when the component was last updated and by whom it was updated.

Chapter 24. Presentation Style

Presentation styles are used by viewers, task viewers and search sources to present data. While the viewer or search source decides which information objects should be shown, the presentation style decides which information to present and the look and feel of the data. By having them separate makes it possible to reuse presentation styles, and thus get a uniform look and feel across your portal. iKnowBase supports two different types presentation styles, with different properties.

NOTE	We recommend that you use FreeMarker templates as much as possible. You can convert existing Form- and Tabular based templates to FreeMarker templates by using the Convert to template, either one by one, or as a bulk operation available from iKnowBase Studio/Development tools/Presentation styles. You can by any time revert the style back to its original state.

Property	Description
Template	Enables you to write your own FreeMarker code to format content.
SOLR	Used by SOLR viewers to enhance a result set from SOLR

In the presentation style you must specify which data source the data should be extracted from. You can choose between data sources for the iKnowBase content store, or external data sources which you define yourself.

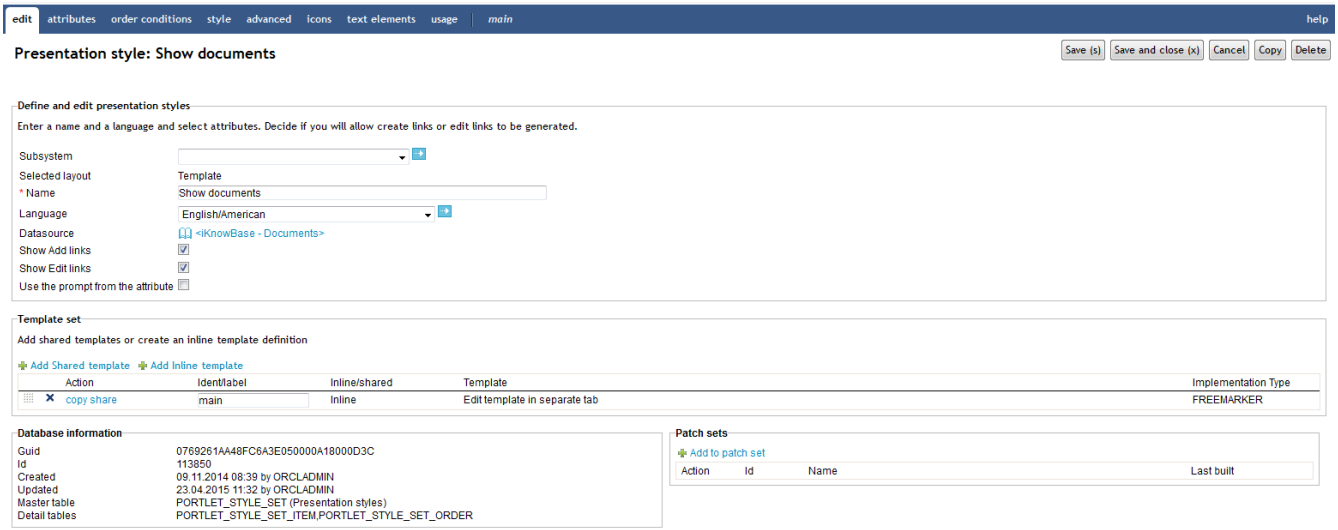
When you specify en external data source, the columns defined for this external data source will be available as attributes in the presentation style. They can be presented with the same flexibility as iKnowBase attributes. They will be displayed as `<External: ColumnName>`, where *ColumnName* is the name that you have given the column in the external data source. If the external data source is independent, only the columns defined for the external data source will be available. Alternatively, if the external data source is dependent, the columns defined for the external data source will be available in addition to standard iKnowBase attributes.

When a presentation style which is set up with an external data source is connected to a viewer or a search source, it automatically builds an expression with the select, from, and where parts from the external data source. The parameters defined for the external data source will be available in the viewer and search source for building the where condition. They will be categorized as **External parameters**.

24.1. Template-based presentation style properties

This section describes the properties of a template-based or SOLR based presentation style, as shown on the corresponding Edit pane.

24.1.1. Edit Tab

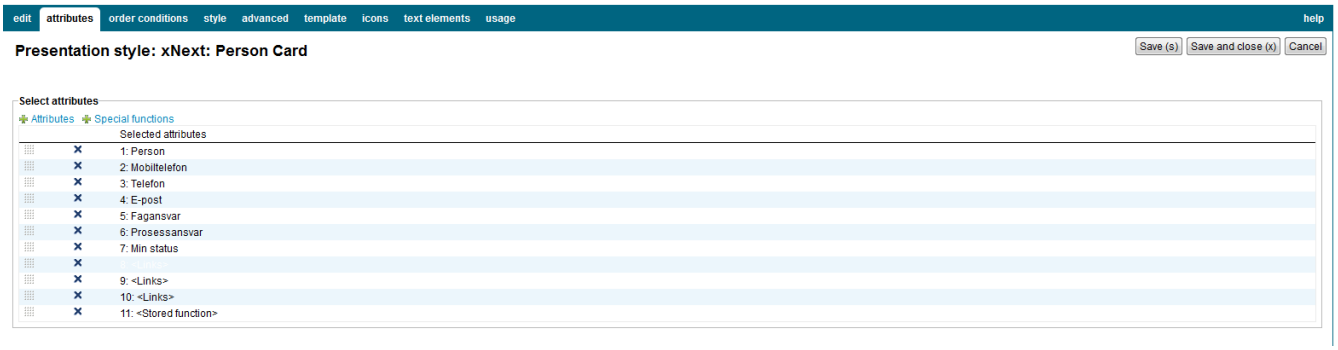


Property	Description
Subsystem	Select the appropriate subsystem.
Selected layout	Displays the type of presentation style.
Name	Type a name for the presentation style.
Language	Select the appropriate language for the form. If you do not select a language, it is automatically set according to: a) the user language, b) the browser language, c) the domain language in the given order.
Datasource	Select the appropriate data source for this presentation style. For SOLR the value is always set to <iKnowBase - Documents>. The following data sources are available: • <iKnowBase - Documents>: Regular iKnowBase documents. • <iKnowBase - Versioned documents>: Versioned iKnowBase documents (current + old versions) In addition to these data sources you will also have access to select all defined external data sources.
Show Add links	Specify whether to generate links to add new documents or not. **NOTE** You need to specify which links to generate in the viewer or search source configuration (on the quick links tab on the Edit pane), and select the `<Add links>` attribute for this presentation style.

Property	Description
Show Edit links	Specify whether to generate icons to modify and delete documents or not. **NOTE** You also need to select the appropriate attributes, such as `<Edit>` and `<Delete>`, for the presentation style.
Use the prompt from the attribute	Select the check box to retrieve the labels from the attribute definition.
Template set	Please see the *Template Set* section for more information.
Guid	Displays a globally unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Id	Displays a unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Created	Displays when the component was created and by whom it was created.
Updated	Displays when the component was last updated and by whom it was updated.

24.1.2. Attributes Tab

On the Attributes tab you can select the attributes or special functions to be used in the presentation style. Make sure to select only the attributes needed.

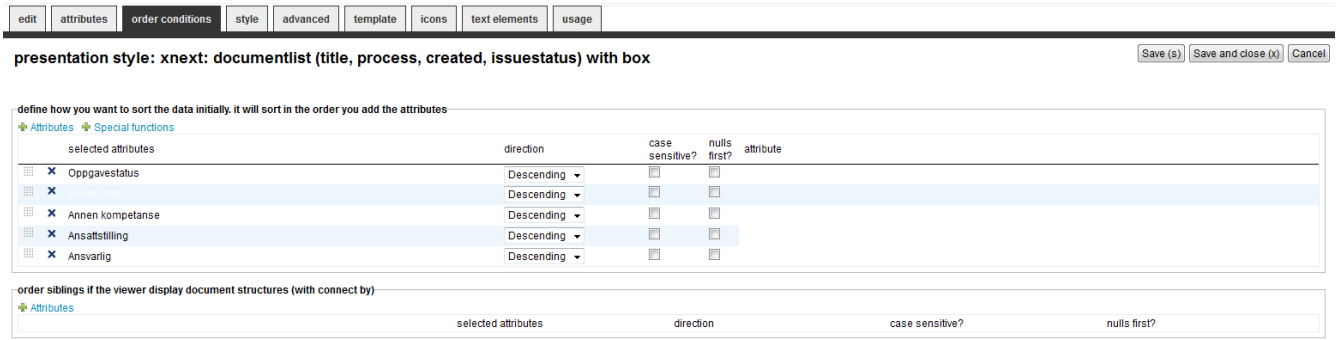


Property	Description
Attributes	Select among all regular attributes defined. Some of the attributes available from iKnowBase content store data sources are in fact special functions.

Property	Description
Special functions	Select among all special functions defined. • `<Title link>` This attribute is used to displays the title field. You can specify how you want to view the attributes on the Advanced tab. You can select this attribute several times. • `<Links>` This attribute is used to create links for an attribute. To define a link, you must specify a target page and the attribute that you want to send as a value. • `<Add subdocument>` This attribute is used to create a link to a form. The document that is created from the form opened from this link becomes a subdocument. • `<Stored function>` This attribute is used to call a database function. You can use this attribute when information is not directly available in the extracted document, but needs to be retrieved from the database. For example, display the author's department where the department is not a part of the extracted document. For configuration see the *Advanced tab*. • `<Image Property>` Will try to extract from the image itself this property. • `<Transformations>` This attribute displays a link that will perform the configured transformation, see the *Advanced tab*. • `<Edit>` This attribute creates a link to form, which may be used to edit the document. **Note**: Ensure that the **Show Edit links** property is set. To display the links, the user must have access to update the document. • `<Change document type>` This attribute generates an icon or link that opens a dialog box to select a new document type. **Note**: You must configure this attribute in the Advanced tab with a quick link that displays the forms for the document types that can be selected. For these forms you must ensure that the **Save document type on update** property is selected. • `<Check in/out>` This attribute generates an icon or link to use the check-in and check-out (CICO) functionality. **Note**: You must activate CICO for the appropriate document types. The links will only be displayed for information objects of these types. An information object with activated CICO will not be available for edit until the user checks it out. It will not be available for checkout if already checked out by another user. • `<Delete>` This attribute creates a link that opens a dialog box to delete the document. **Note**: Ensure that the **Show Edit links** property is set. To display the link, the user must have access to delete the document. You can reorder the attribute list by using drag and drop for each line (click the leftmost icon). You can deselect attributes by clicking on the delete icon and save the data.

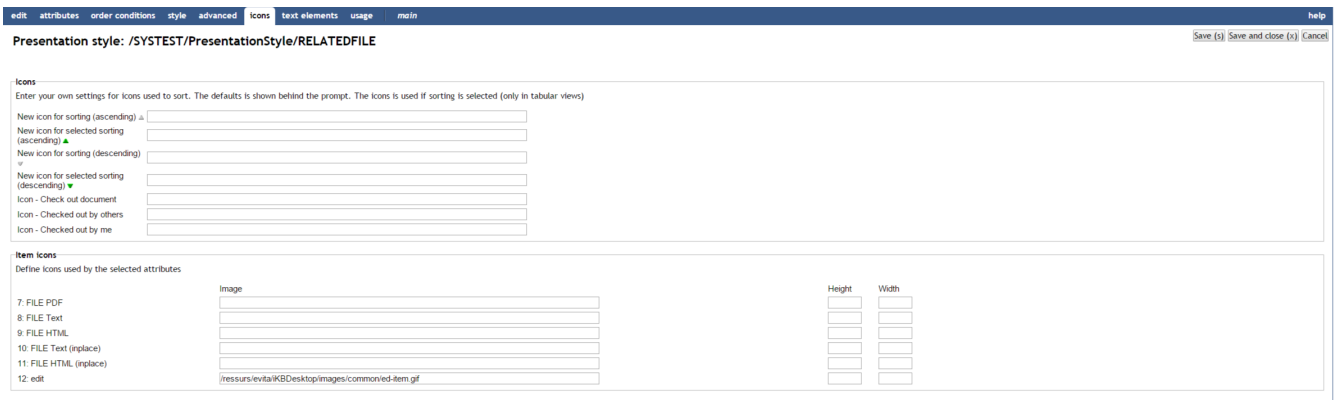
24.1.3. Order conditions

Select the attributes to be used to order the result set. A order condition can either be a regular attribute or a database function. If the viewer extracts tree structures you can also define the sort order of the siblings.



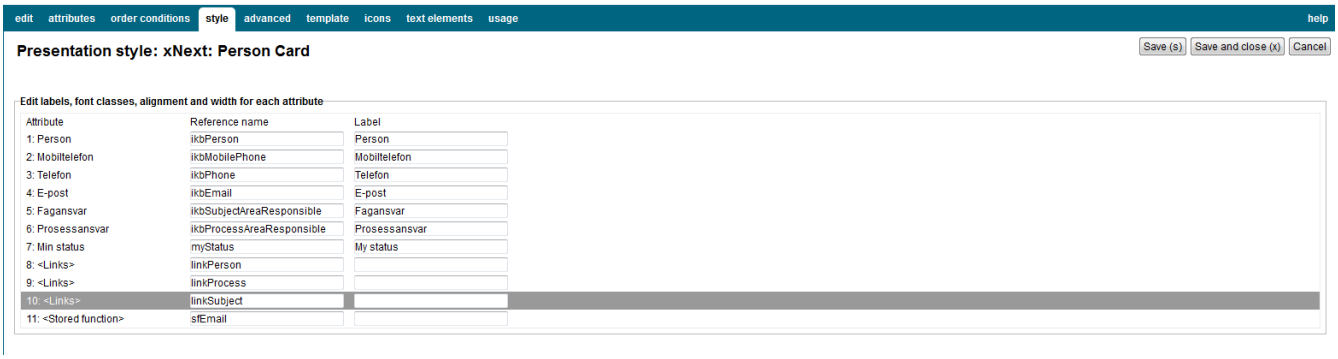
Property	Description
Attributes	Select among the attributes in the list.
Spesial functions	Select among the database functions in the list.
Sort order	You can reorder the conditions by drag-and-drop up or down.
Direction	Decide the sort direction, either Descending or Ascending.
Case Sensitive	Set to Checked if you want to do case sensitive search (e.g. A and a is ordered differently).
Nulls first	Set to Checked if you want to sort null values first (default is last).
Attribute	Select an attribute if its needed by the database function.
Siblings	Only applicable if the viewer returns tree structured data and are used to order the siblings.

24.1.4. Icon Tab



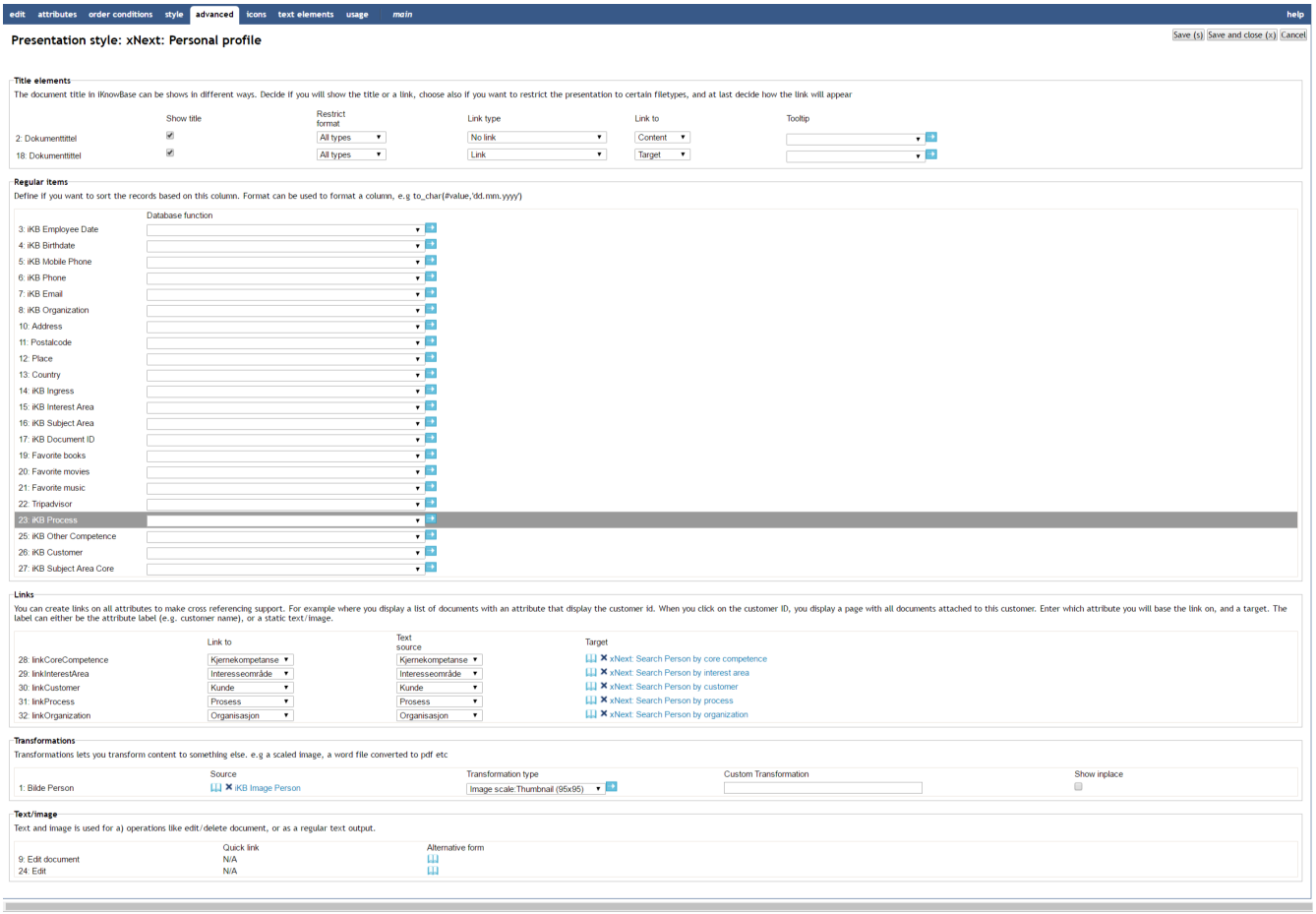
Property	Description
New icon for sorting (ascending)	Enter the path of the icon for an unselected ascending sort, for example /resource/icons/sortxx.png.
New icon for selected sorting (ascending)	Enter the path of the icon for a selected (active) ascending sort, for example /resource/icons/sortxx.png.
New icon for sorting (descending)	Enter the path of the icon for an unselected descending sort, for example /resource/icons/sortxx.png.
New icon for selected sorting (descending)	Enter the path of the icon for a selected (active) descending sort, for example /resource/icons/sortxx.png.
Icon - Check out documents	Enter the path of the icon for the "check out documents" command. You can click the icon and check out a document.
Icon - Checked in by others	Enter the path of the icon to display this status. A ToolTip displays the name of the user who checks in a document and the time of check-in.
Icon - Checked in by me	Enter the path of the icon to display this status. You can click the icon and check in a document.
Image	Type the path to the image. This will override the label, but the label will be used as tooltip for the link. You can define default values in installation properties for edit- and delete operations. Set the instance qualifier to * and the property names needs this syntax: • Edit : classic.style.default.icon.edit • Change document type: classic.style.default.icon.change.documenttype • Delete : classic.style.default.icon.delete
Height	Type the height of the image in pixels.
Width	Type the width of the image in pixels.

24.1.5. Style Tab



Property	Description
Attribute	Displays the list of selected attributes.
Reference name	Type the reference name of the attribute. If you want to identify the attribute in the template, you must provide a reference name. This reference name must be unique.
Label	Type the label that you want to display for the specific attributes. **NOTE** It is recommended to use text elements rather than the **Label** property. This property doesn't have language support.

24.1.6. Advanced Tab



Property	Description
Title elements	
Show title	Select this check box to display the document title itself. Rather that displaying the document title, you can display a label or image for the title attribute. For this, you must define the label or image in the **Label** property on the Style tab.
Restrict format	Select the appropriate format restriction. • All types: The title will be displayed for documents with all content formats. • Text: The title will be displayed only for documents with text content. • File: The title will be displayed only for documents with file content. • Links: The title will be displayed only for documents with link content. • File/link: The title will be displayed for documents with file and link content.
Link type	Select the appropriate link type. • Link: A link is always be generated for the title attribute. • Link only if content: A link will be generated for the title attribute if the document has content (file, URL, or text content) • No Link: No link will be generated for the title attribute.
Link to	Select the appropriate option to display the document when the user clicks on the title link. • Content: The document is displayed on the target destination in case of text-based content. Otherwise, the URL or file is opened in a new browser window. • Target: The document is displayed on the target destination.
Tooltip	Select the appropriate tooltip function. You can use the tooltip to preview an image or display the details of a document. New tooltip functions may be implemented as PL/SQL functions. Have a look at IKB_TOOLTIP.SHOW_ADVANCED_TOOLTIP_INGRESS as an example implementation. Register the new functions in the database table IKB_TOOLTIP_FUNCTION to make them available in the dropdown box.
Regular items	
Show/Hide	Select whether you want to display or hide the attribute.

Property	Description
Database function	By default, iKnowBase applies a default format to the item being displayed. If you want to customize this output, create a database function and use that for column formatting. Normally, you will not need to use a function. For more information on properties of database function, see Properties.
Links	
Link to	Select the attribute value to pass as parameter.
Text source	Select the text to be displayed on the link. Available options are the label for the `<link>` attribute or one of the attributes selected for the presentation style.
Target	Select the target to use for the link.
Transformations	
Source	Select the source attribute for the transformation. Choose among all file attributes and image/document link attributes
Transformation type	Select the a predefined transformation type. It not given, you need to apply a transformation instruction.
Transformation instruction	Enter the transformation instruction yourself.
Stored function	
Show/hide	Select whether to display or hide the title attribute.
Package/function	Select the database function.
Attribute	Select the attribute to pass as parameter to the database function. Use the option `<Simple function>`, if the database function takes no parameters. Otherwise select the appropriate attribute. **NOTE** If the function is not a simple function, it must have the signature described in `<Database Functions>` (Pres.Style:Database Function).
Text/image	
Select quick link	Select the appropriate quick link to use for this link/icon. Applicable to `<Add subdocument>` and `<Change document type>`.

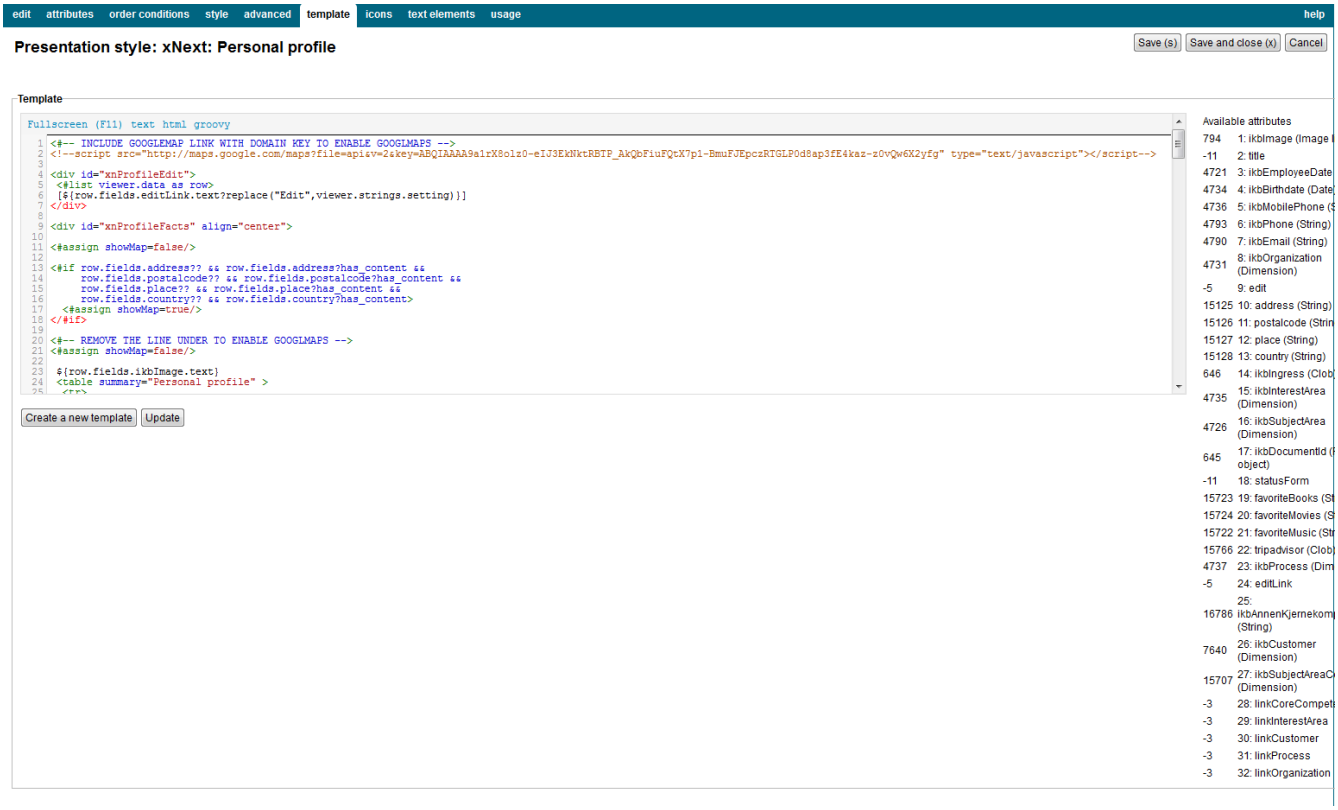
24.1.7. Template Tab (only available for template based style)

iKnowBase enables you to design and create the template-based presentation style layout using your own FreeMarker template. See the FreeMarker reference chapters for information about iKnowBase-specific model objects available for use in the FreeMarker template.

NOTE	If you update the selected attributes in the presentation style, you must also update the FreeMarker template to reflect the changes. You can generate a new template or manually update the template.

There are two action buttons available:

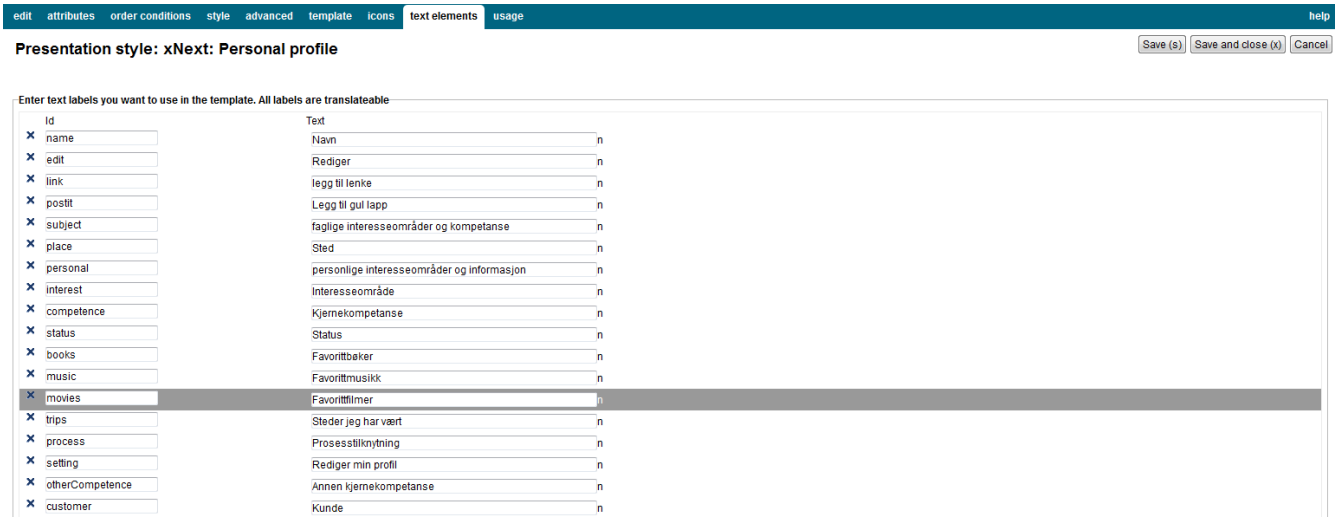
- Create new template: Click this button to generate a default template, with placeholders for the attributes in the presentation style. You may then change this template as needed.
- Update: Click this button to update your template with new attributes. iKnowBase will scan the existing template, and find attributes that are missing. Then, it will generate default template code for these attributes, and add to the bottom of the template. Move this code around as required.



Template	Type the FreeMarker template code.
Available attributes	A list of available attributes and their IDs available for use in the HTML template code.

24.1.8. Text elements tab

The properties on this tab enable you to define texts to be used in the component. The texts are available as FreeMarker model objects. Multiple languages are supported.



Property	Description
Id	Type an identifier for the label.
Text	Type the text labels that you want to use in the template. If multiple languages are supported in the solution, clicking on the text box will display one text box per language, for easy editing.

24.2. FreeForm presentation style properties

The free form presentation style is only available for backward compatibility purposes; this document therefore does not fully describe this feature.

The FreeForm presentation style does not apply any of its own HTML formatting on the content. Instead, you need to use the property `<Text/image>` to enter the HTML formatting you want. At runtime, the viewer will output the formatting specified on the Style tab for each document in the source content.

Chapter 25. Preview Pages

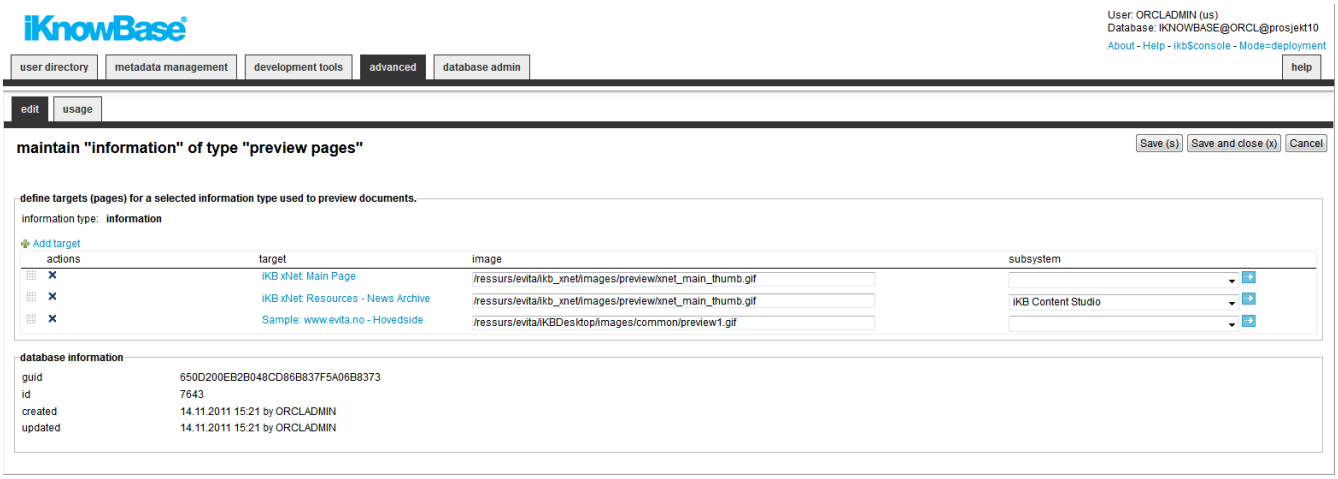
Preview pages are a mechanism you can use to enable document preview, typically during a publishing process.

To accomplish a preview feature in your iKnowBase application, perform the following:

1. Declare one or more preview page components for a given document type. Specify all appropriate targets for documents with the given document type and images representing those targets.
2. Use a Preview portlet to render all the available preview pages for a document with a given document type.

25.1. Properties

This section describes the properties of a preview page, as shown on the corresponding Edit pane.



Property	Description
Document type	Select the document type that you want to map preview pages for. **NOTE** This property is not available for update after initial save of the preview page.
Target	Select a target that can be used for preview.
Image	Type the path of the image which illustrates the target page on the preview page. This image will be a link to the specified target. The image must be placed under the resource directory.
Subsystem	Select the appropriate subsystem.

Chapter 26. Quick Links

iKnowBase enables you to create quick links for one-click publishing in iKnowBase. A quick link is associated with a form or a task wizard, and a target where the form or task wizard is displayed. You can specify parameters for the quick link to pass contextual values in order to populate attributes of the form or task wizard.

You can use quick links from four other iKnowBase components:

- Viewer
- Search source
- Presentation style
- Menu

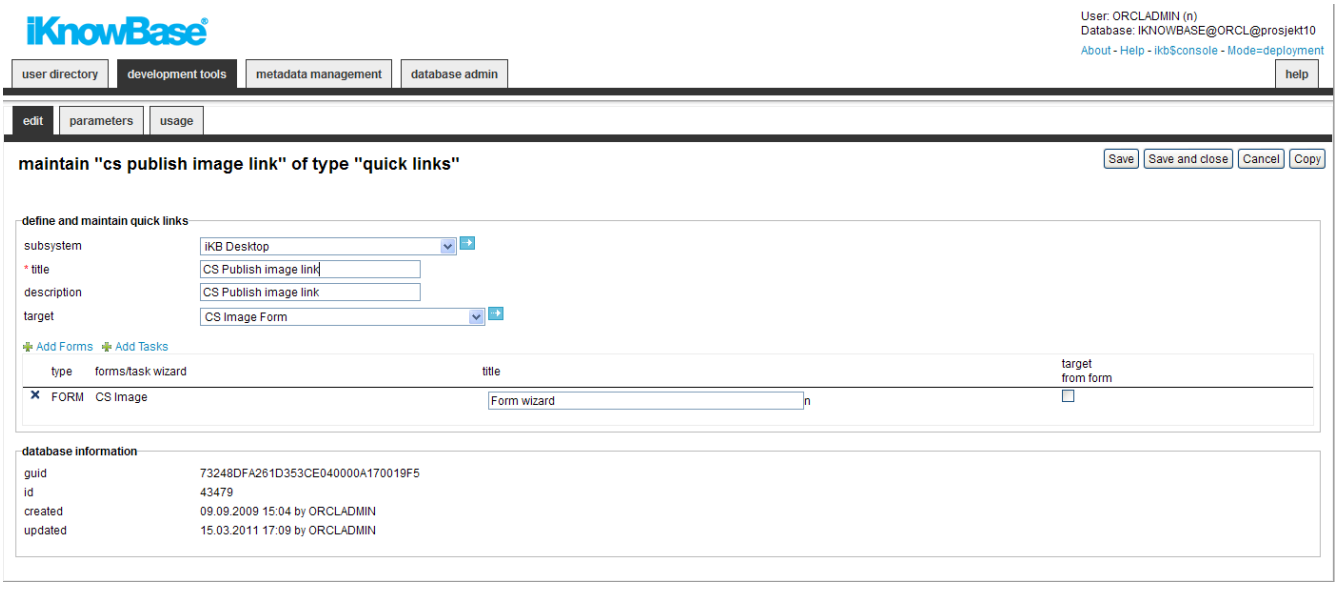
A quick link may point to either one or more forms:

- If the quick link points to a single form, using the quick link opens that form directly.
- If the quick link points to more than one form, using the quick link opens a dialog page and asks the user which form to use.

26.1. Properties

This section describes the properties of a quick link, as shown on the corresponding **Edit** pane tabs.

26.1.1. Edit Tab



Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a title for this quick link.

Property	Description
Description	Type a description for this quick link.
External key	Altenative key to the quick link. The value has to be unique.
Target	Select the target page in which to display the form.
Add form	Click the link to add new forms. You can reorder the list of forms/task wizards by using drag and drop.
Add task	Click the link to add new task wizard
Type	Displays the type; either form or task wizard.
Form/Task wizard	Displays the names of the available forms and task wizards.
Title	Type the title use to select this form. Applicable if the quick link contains multiple forms and task wizards and hence needs a title in the dialog window.
Target from form	Select this check box to override the **Target** property of the quick link with the target specified for the form or task wizard.

26.1.2. Parameters Tab

You can add parameters to the quick link, passing contextual values to the selected form or task wizard and hence the new document that you will create.

You can use three types of parameters with quick links:

- **iKnowBase**: Parameters defined as iKnowBase parameters, both iKnowBase and SQL, and parameters defined for iKnowBase external data sources.
- **Function**: Parameters defined as database functions. A value returned from the given database function is passed on to the form or task wizard.
- **Constant**: Parameters defined with a constant value.

Property	Description
Description	Displays the types of the parameters associated with this quick link. You can use two types of parameters associated with quick links: iKnowBase parameters and functions. See the introduction to this chapter for a description of the parameter types. To add a new parameter, click on the new parameters icon for the appropriate parameter type. To remove a parameter, click on the respective remove icon.
Parameter in form	Select the target parameter you want to assign value to. The list of selectable parameters is the union of all declared url parameters in all selected forms for this quick link.
Value	For iKnowBase parameter: Select the parameter whose value you want to pass on to the form or task wizard. For Function parameter: Select the PL/SQL database function that will generate the parameter value. For Constant parameter: Type the constant value.

Chapter 27. RSS feed

Use the RSS feed component to define RSS-feeds that are available from the iKnowBase application to the outside world.

To configure an RSS feed you must create a search source which defines which documents to include in the feed, and a target to be used to display the entries of the RSS feed.

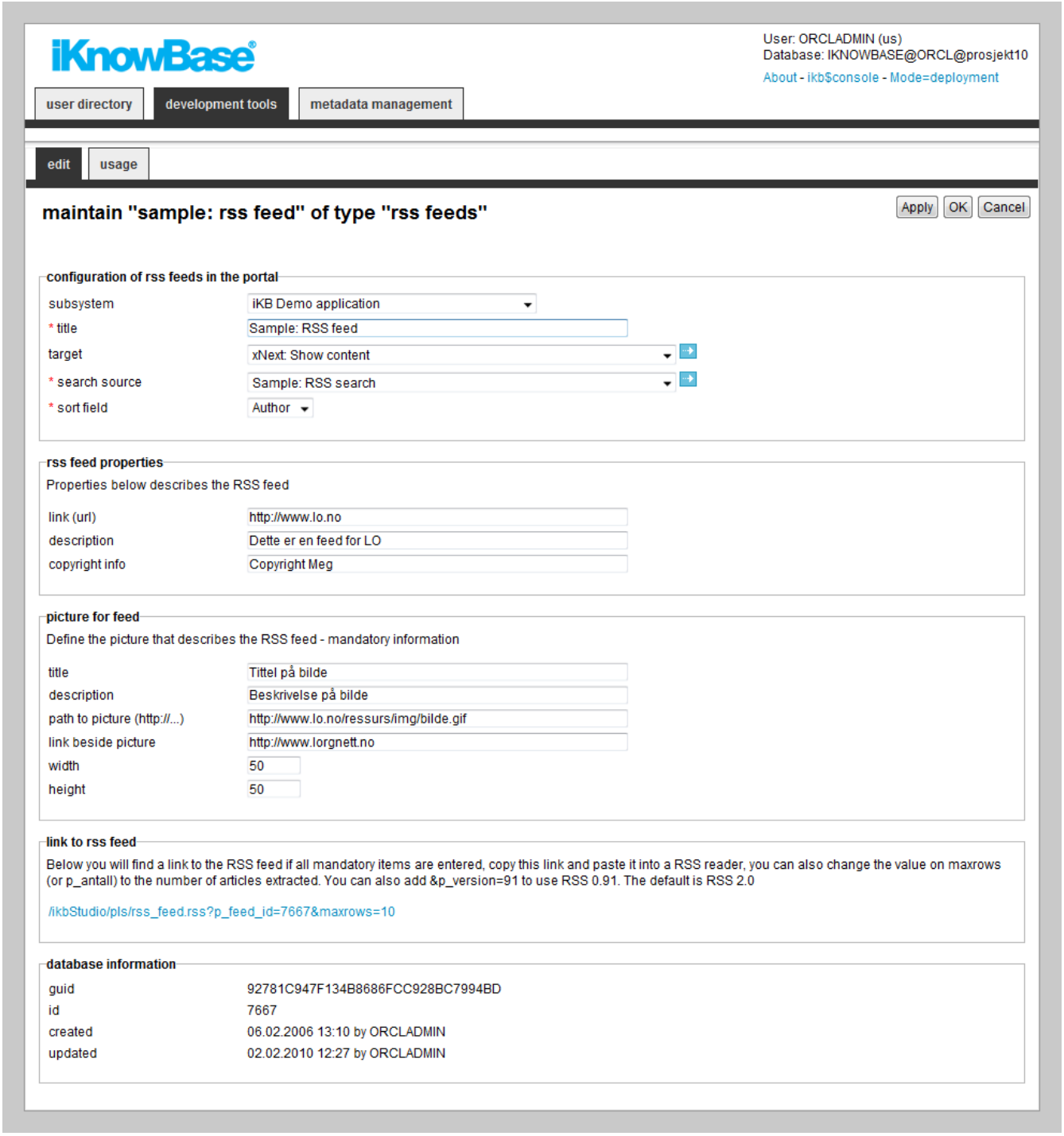
RSS feed supports RSS 2.0 and RSS 0.91. The standard format of the RSS feed is RSS 2.0. By adding the parameter p_version = 91 to the URL to the feed, RSS 0.91 will be generated.

If the RSS feed component is set up correctly, you will see the link to the feed in the link to RSS feed region on the Edit pane. You can test the RSS feed by copy the URL to the feed into a preferred RSS reader.

By default the feed is limited to ten articles. You can change this number by using the parameter maxrows.

27.1. Properties

This section describes the properties of an RSS feed, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type unique title of the feed. This will display as the name of the feedn in an RSS reader.
Target	Select the target to be used as the URL for individual entries in the RSS-feed, and where the user will be directed if he clicks the entries in the feed.
Search source	The search source which extracts the data (documents) that will be shown by the feed.

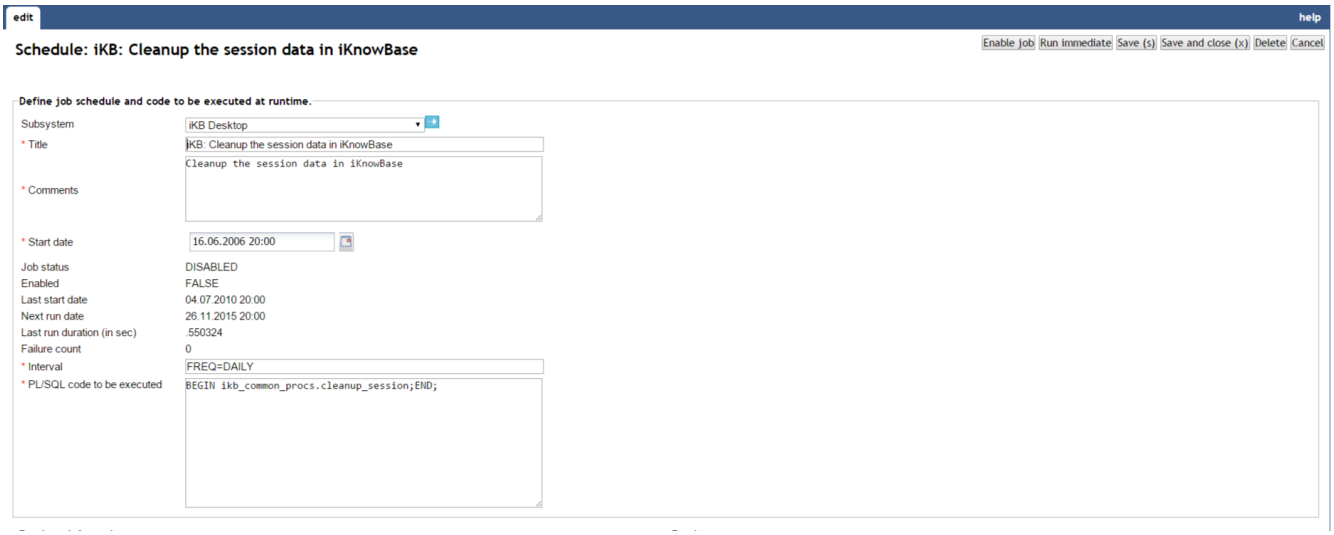
Property	Description
Sort field	Enter the sort order. Determines the order in which documents are listed. Valid values are date (newest first), title (ascending) and author (ascending).
Link	Type an URL which will be added to the RSS-feed output.
Description	Type a description which will be added to the RSS-feed output.
Copyright info	Type the copyright information which will be added to the RSS-feed output.
Title	Type a title for the image section which will be added to the RSS-feed output.
Description	Type a description for image which will be added tot the RSS-feed output.
Path to picture	Type a fully qualified path to an image, including the starting protocol specification (http://...), which will be added to the RSS-feed output.
Link beside picture	Type an URL which will be added as a link in the image section in the RSS-feed output.
Width	Type the width of the image.
Height	Type the height of the image.
Link to RSS feed	Displays the link to the RSS feed, when it is correctly configured.

Chapter 28. Schedule

The Oracle database contains a feature that enables you to schedule PL/SQL jobs (procedures) for execution at given times and at given intervals. While this feature is very powerful, it is also fairly complex to use. Therefore, iKnowBase Development Studio contains a web user interface to configure such jobs.

28.1. Properties

This section describes the properties of a schedule, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a title for the job schedule.
Comments	Type a description for the job schedule.
Start date	Enter the first date and time that the schedule should run. Format: DD.MM.YYYY hh24.mi.
Job status	Displays the current job status. E.g. DISABLED, ENABLED, RUNNING
Enabled	Displays if the job is enabled or disabled.
Last start date	Displays the date and time when the schedule was last run.
Next run date	Displays the next run date and time for the schedule.
Last run duration (in sec)	Displays the number of seconds the batch job used last time it ran.

Property	Description
Failure count	Displays the number of times the batch job failed has failed.

Interval	Type the frequency of the job schedule, using the Oracle Database syntax.
	
	Examples:
	
	`SYSDATE +1`
	`FREQ=DAILY`
	`FREQ=WEEKLY`

PL/SQL code to be executed	Enter PL/SQL-code to execute as per the specified interval.
Action available	Select action • Disable - The job will be disabled • Enable - The job will be enabled • Run immediate - The job will be executed immediate. It will not change the settings of the scheduled job

You can enable or disable for all jobs (in the lists of all jobs).

Chapter 29. Search Sources

A search source is the definition of a set of searchable documents, including both a form for entering the search criteria and a definition of the result output.

Search sources can apply to both regular iKnowBase documents and external data sources.

To accomplish a search feature in your iKnowBase application, perform the following:

1. Create a presentation style to be used for the search result, if you don't already have an appropriate presentation style which can be reused.
2. Create a search source component associated with the previously created presentation style.
3. Use a Search source portlet to display the configured search source.

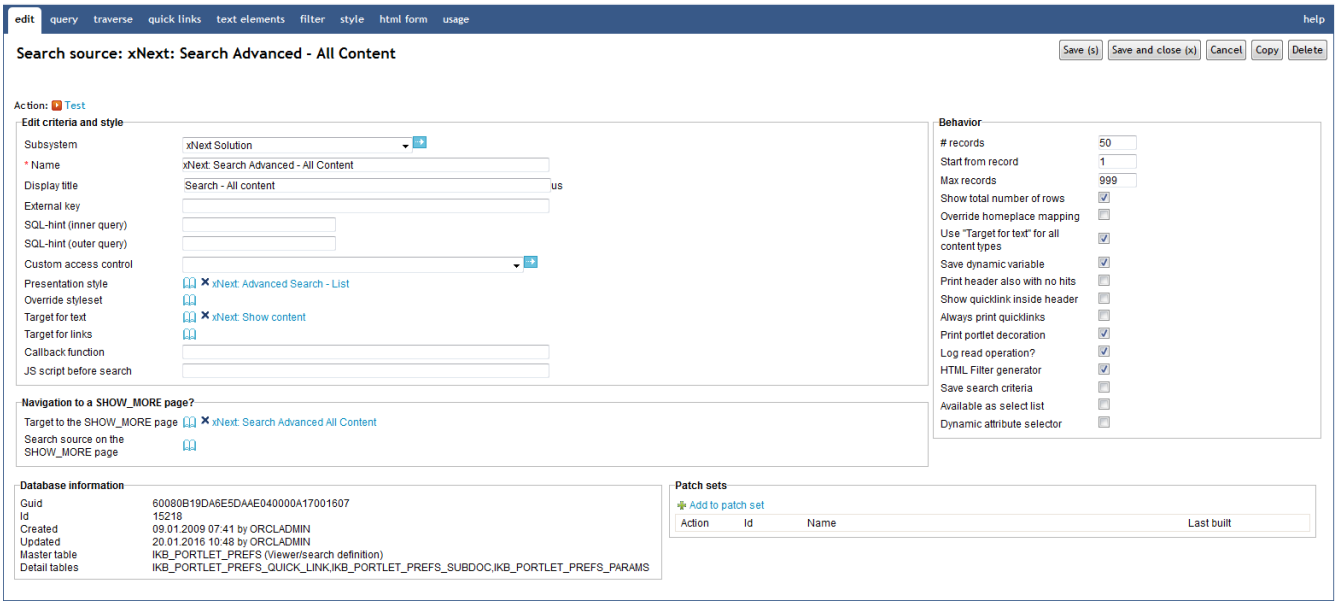
You can use the Build search dialog portlet together with one or more configured search sources. The Build search dialog portlet will display a search dialog to the user where he can perform a free text search using one of the associated search sources.

The Search Source is a specialized form of a Viewer, with the addition of the input search form.

29.1. Properties

This section describes the properties of a search source, as shown on the corresponding Edit pane tabs.

29.1.1. Edit Tab



Property	Description
Subsystem	Select the appropriate subsystem.
Name	Type a name for this viewer.

Property	Description
Display title	Type a title for this viewer. This may be presented to the end-user by a Presentation Style. The title supports multiple languages.
External key	Type the appropriate external key.
SQL Hint	For advanced users only, type the appropriate SQL hint. The syntax is the name of the hint, like FIRST_ROWS. The hint will be inserted into the SQL-query; using the appropriate hint may help speed up query execution.

Custom access control	Type the name of the appropriate database procedure to use a special access control, if you want to extend the default access control.
	
	WARNING You should use this sparingly and carefully. The default security model is being overridden, and errors in this custom code may create SQL-injection vulnerabilities.
	
	The following signature must be used for the database procedure:
	
	`PROCEDURE <package>.<procedure name> ( site_id in number, user_id in number, reference_path in varchar2, result out );`
	
	The returned result must be an SQL fragment which fits into the SQL WHERE clause generated by the Viewer. For example, the function could return
	
	`or oi1.owner_id = 125`
	
	and the query would then be
	
	`... and (oi1.owner_id = <userid> or ((oi1.acl_guid is null or oi1.owner_id = 125 or oi1.acl_guid in (select v_acl.acl_guid from v_acl) ...`

Presentation style	Select the Presentation style you want to use to format the output.

Property	Description
Override styleset	Select the Styleset you want to apply. If set, this will override the styleset defined on the Presentation style.
Target for text	Select the target page to use for link to documents with text content.
Target for links	Select the target page to use for link to documents with file or url content.
Callback function	A function used as callback from Forms when adding new documents or editing existing documents initiated from the viewer. You can use this property to avoid page redirect upon save from form. The parameter passed to the callback function is a json object with the properties **action** and **documentId**. The callback function could for example reload the search source.

JS script before search	Defines a custom javascript function. It will execute before the search is posted to the server and can be used e.g. to validate input criterias. If the function returns false, the search will not be executed.
	
	`...`
	`<script type="text/javascript">`
	`function myValidator()`
	`{`
	`var lval = $("#p_value_122").val();`
	`if (lval == "money")`
	`{`
	`alert("Do not search for money");`
	`return false;`
	`}`
	`return true;`
	`}`
	`</script>`
	`...`

Target to show_more page?	Select the target page to use for the "show more" link. Please note that the target definition should have a parameter named p_search_id as Parameter1.
Search source on the show_more page	To reuse a single target page for multiple "show more" pages, select the search source you want to display on the target page.
# records	Type the number of rows that you want to extract at a time. The default value is 10.

Property	Description
Start from record	Type the row number from which you want to display the result set. The default value is 1.
Max records	Type the maximum number of documents that you want to extract. The default value is 100.
Cache interval (0 is none)	Type the time in minutes for which you want to keep content in the cache.
Show total number of rows	Select this check box to display the total number rows on the status line.
Override homeplace mapping	Select this check box to use the targets defined on this Viewer rather than the target selector mechanism.
Use "Target for text" for all content types	Select this check box to use the target defined in the Target for text property for all links to documents, disregarding the content type.
Save dynamic variable	Select this check box to use a session save on all the dynamic parameters. If these values are not in the URL, this property allows iKnowBase to use the saved values. e.g. sortinfo. If you do not save the session variables, no content appears when you enter the page without the necessary dynamic parameters specified on the portlet.
Print header also with no hits	Select this check box to display the title of the portlet if the search finds no documents.
Show quicklink inside header	Select this check box to display the quick links within the header section of the viewer.
Always print quicklinks	Select this check box to display the quick links even it mandatory attributes are not set.
Print portlet decoration	Select this check box to print the portlet decoration that surrounds the content in a portlet.
Log read operation	Uncheck if you want to avoid logging to the document statistic table. By default it will insert one row everytime a document with HTML-content is displayed.

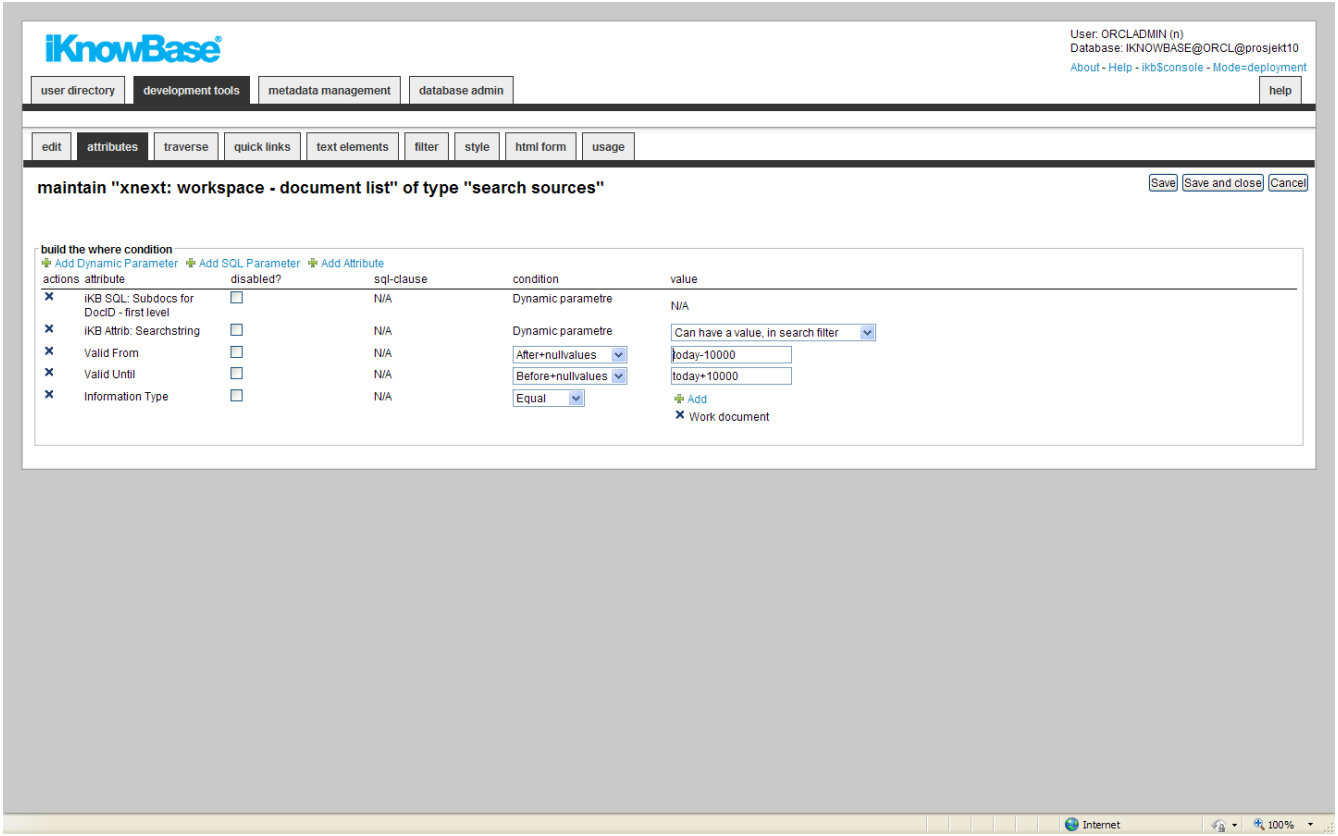
Property	Description
Return full document object?	Check if a document should be return to the client with all ids (guid, external_keys, id and labels). This applies to access control list value, document type, status, user information, and all dimensions/document and value list attributes. These values will be available from e.g freemarker. Be aware of reduced performance by selecting this option (Only use it if you need it).
Create cacheable URLs?	If set, all URLs to files will has a cache instruction set in the URL. e.g. /cache=timestamp
HTML Filter generator	Select this check box to build the search form using the HTML-based generator. You must enter the appropriate HTML code on the HTML form tab. If you don't select this check box, the limited, rule based generator is used.
Save search criteria	Select this check box to save the search statistics of a user. When you select this check box, the search statistics of the user are logged in the LOG_SEARCH_VALUES table.
Available as select list	Select this check box to use the search source as a list for selection of documents or dimension values. This list may be connected to a form as a new selector of values.
Dynamic attribute selector	Select this check box to allow a user to manually add attributes to the search criteria. When this is checked, iKnowBase will display a drop down list of all searchable attributes in the search form; selecting one will add that attribute to the search form.

29.1.2. Attributes Tab

You can choose between four types of parameters:

- **Dynamic parameter**: Parameters defined as iKnowBase parameters.
- **SQL parameter**: Parameters defined as SQL parameters.
- **Attribute**: iKnowBase attributes, used to set constant values in the query.
- **External**: Parameters defined for iKnowBase external data sources. Only available if the data source is an external datasource.

When the parameter is selected, you must save before you can set any values.



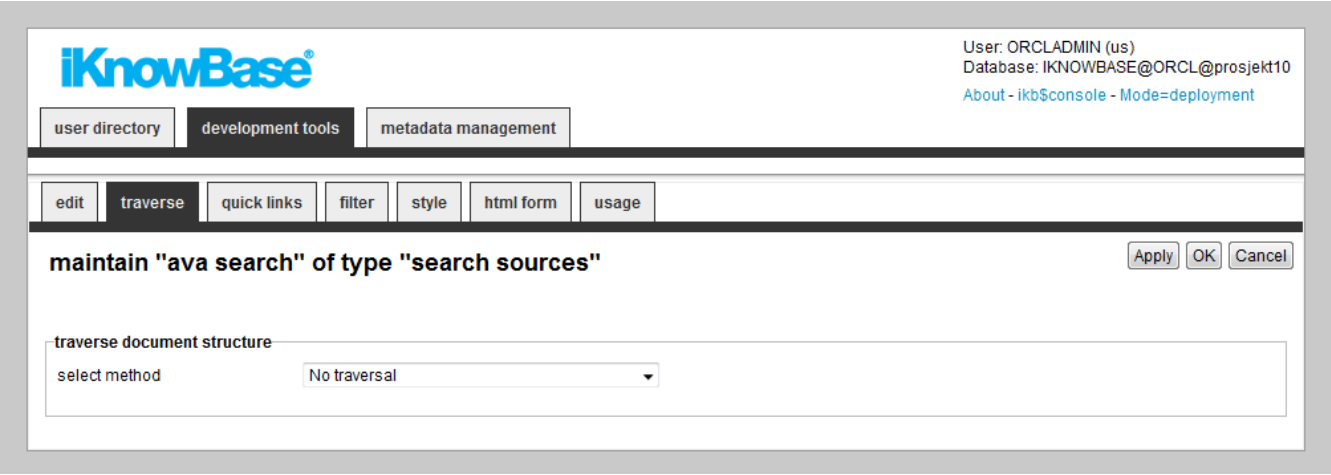
Property	Description
Actions	Delete the parameter by clicking the icon.
Attribute	Displays the names of the selected attributes to use as conditions for the Search source.
Disabled?	You can for debugging reasons disable attributes.
Sql Clause	Used for performance reasons for advanced users. Will generate a SQL with either IN or EXISTS.
Condition	Select the appropriate conditions for the selected attributes. The conditions depend on the type of attribute. **Note**: You cannot select a condition for parameters.
Value	Select or enter the appropriate values for the selected attributes. Available options depends on the attribute/parameter type. Applicable to SQL parameters only when the parameter is defined with an attribute.

29.1.3. Traverse Tab

The properties on the Traverse tab enable you to define a Search source with traverse features, e.g.

possibilities to display subdocuments or versions of the extracted documents. Examples are discussion forums and view all versions of a document.

When running the query will automatically add a condition for selecting subdocuments for the current document.

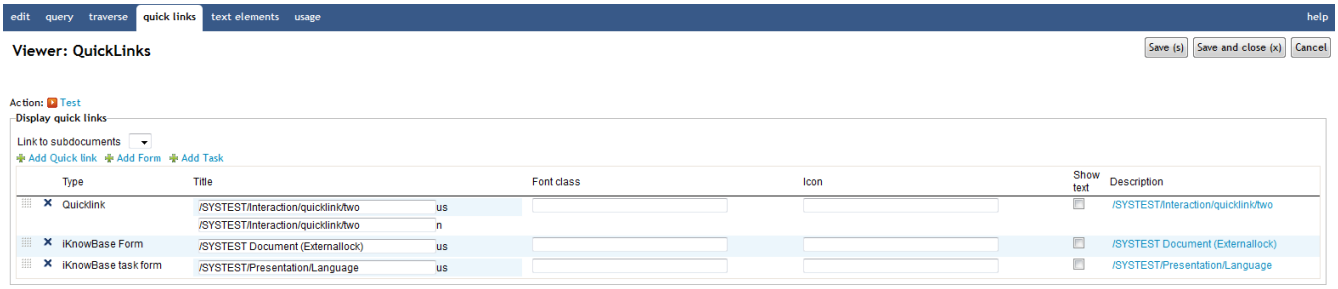


Property	Description
Select method	Choose how you want to traverse the document structure. You can choose between : No traversal: will not retrieve any subdocuments Traverse down by using a connect-by clause: will fetch all subdocuments for every documents retrieved. It will use the same presentation style as defined on the main viewer definition. When selected, you can enter the number of levels you want to traverse. Traverse up by using a connect-by clause: will fetch all documents above for every documents retrieved. It will use the same presentation style as defined on the main viewer definition. Suitable for viewers showing only one document where you want to see the top levels. When selected, you can enter the number of levels you want to traverse. Traverse by using search sources: For each document it will run a new viewer. This is not as efficient (performance) as the above methods, but gives you the flexibility of defining separate conditions and presentation style for each level.
Level	Type the level for the extraction source. Level 1 specifies first level, but you may specify extraction sources that traverse further on level 2 documents, etc.
Select source	Select the appropriate Search source as the base for the extraction of subdocuments. You can vary the style and layout on different levels.
Expand Collapse	To enable the expand/collapse functionality for the subdocuments, click Yes. To display the subdocuments directly, click No.

Property	Description
Icon Expand	Enter the reference to the icon to be used to expand the list of subdocuments. **Note**: You must click Yes in the Expand Collapse list.
Icon Collapse	Enter the reference to the icon to be used to collapse the list of subdocuments. **Note**: You must click Yes in the Expand Collapse list.

29.1.4. Quick links Tab

The properties on the Quick links tab enable you to generate links to create new documents in the Viewer. The link can point to a quick link, iKnowBase Form or Task Wizard. In order to use the Quick link to create a subdocument, you should define the Quick link to take a document ID as a dynamic parameter, which may be used to set the parent document for the document to be created.



Property	Description
Link to subdocuments	Select the appropriate dynamic parameter, must be a document ID, to pass to the Quick link in order to be able to create a subdocument.
Add quicklink	The link opens a window with all available quicklinks. Select one or more.
Add Form	The link opens a window with all available iKnowBase Forms. Select one or more.
Add Task	The link opens a window with all available task wizards. Select one or more.
Title	Type the title that to use for the Quick link. If multiple languages are supported in the solution, each language displays a box, where you can type the title that appears. When you click in the Title box, the language box appears. The language code is placed behind the box.
Font class	Type the font class to use for the Quick link text.
Icon	Type the path of the image to use for the quick link.

Property	Description
Show text	Select this check box to display both text and image.
Sort	Type the sorting IDs to sort the quick links that you select.
Description	Displays the description of each quick link.

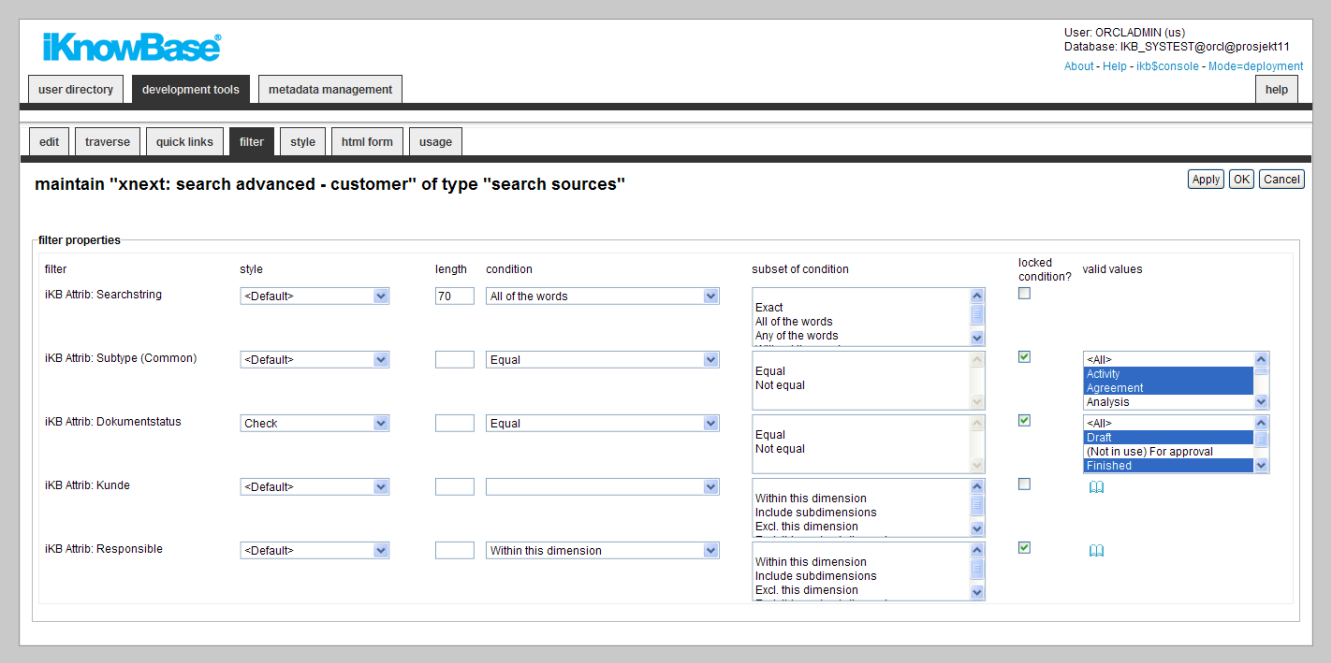
29.1.5. Text elements Tab

The properties on this tab enable you to define texts to be used in the component. The texts are available as FreeMarker model objects from the Template used for the Page. Multiple languages are supported.

Property	Description
Id	Type an identifier for the label.
Text	Type the text labels that you want to use in the page. If multiple languages are supported in the solution, each language displays a box, in which you can type the display form name. When you place the cursor in the Text field, the language box appears. The language code is placed behind the field.

29.1.6. Filter tab

You can use the properties on the Filter tab to define how to present the various dynamic parameters.

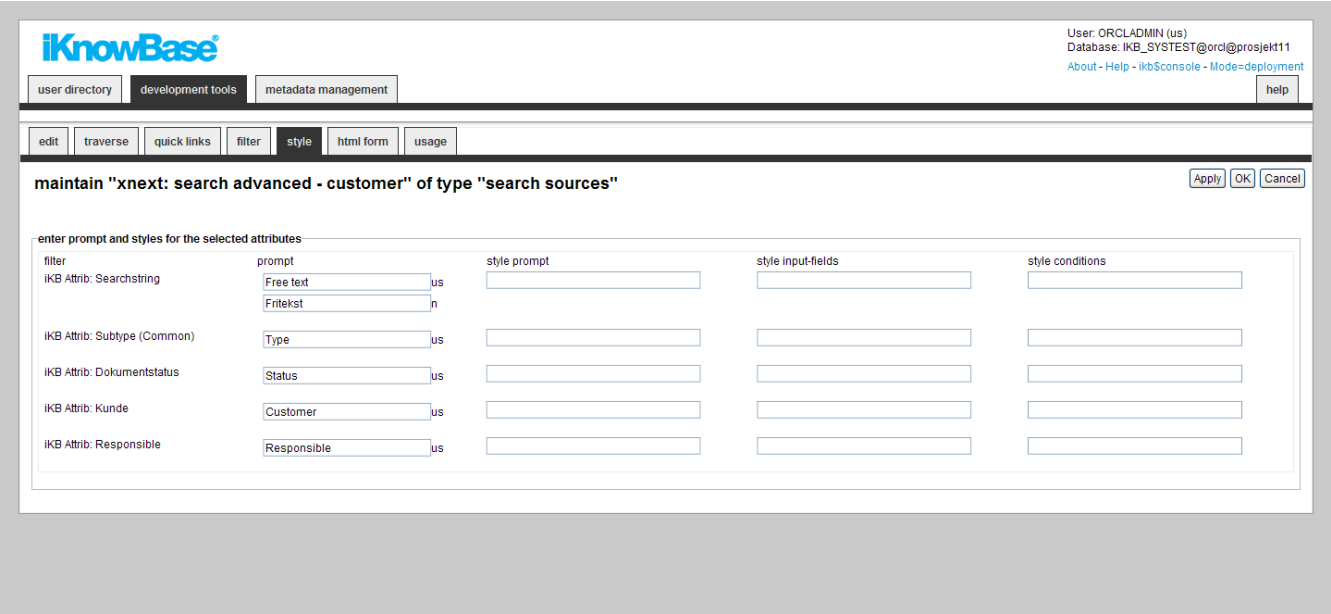


Property	Description
Filter	Displays the selected attributes that makes up the search criteria for the search source.
Style	Select the appropriate styles for the input fields of the search criteria. Available options for lists of values are radio buttons, check boxes, select box, multiselect box, or `<default>`. If you define **Valid values** for a dimension attribute, the input field for this attribute is treated as a list of values.
Length	Type the lengths of the input fields of the search criteria.
Condition	Select the default conditions for the search criteria.
Subset of condition	Select the conditions which will be available for selection in the search form. If none is selected, all will be available.
Locked condition?	Select the check box to restrict the user from selecting a condition for the given search criterion in the search form. In this case the value given in the **Condition** will be used. **NOTE** If you lock the condition, the automatically created HTML code on the HTML form tab will not include the iKnowBase condition-tag. You are able to include it yourself though, and thereby override this property.

Property	Description
Valid values	Select the values which will be available for selection in the search form. Applicable to value list and dimension attributes.

29.1.7. Style tab

The properties on the Style tab enables you to define labels and styles for the attributes in the search form.



Property	Description
Prompt	Type the label you want to use for the dropdown used to manual add attributes to the search criteria. Available when the **Dynamic attribute selector** property is selected. If multiple languages are supported in the solution, each language displays a box, in which you can type the prompt. The language code is placed behind the field.
Style prompt	Enter the style class to use for the label for the dropdown used to manual add attributes to the search criteria. Available when the **Dynamic attribute selector** property is selected.
Style dropdown	Enter the style class to use for the dropdown used to manual add attributes to the search criteria. Available when the **Dynamic attribute selector** property is selected.
Style prompt	Enter the style class to use for the label for the manually added search criterion. Available when the **Dynamic attribute selector** property is selected.

Property	Description
Style input-fields	Enter the style class to use for the value input field for the manually added search criterion. Available when the **Dynamic attribute selector** property is selected.
Style conditions	Enter the style class to use for the condition field for the manually added search criterion. Available when the **Dynamic attribute selector** property is selected. Enter prompt and styles for the selected attributes
Filter	Displays the names of the selected filter attributes.
Prompt	Type the labels for the respective filter attributes. If multiple languages are supported in the solution, each language displays a box, in which you can type the prompt. When you place the cursor in the Prompt field, the language box appears. The language code is placed behind the field.
Style prompt	Enter the style classes to use for the labels of the respective filter attributes.
Style input-fields	Enter the style classes to use for value input fields of the respective filter attributes.
Style conditions	Enter the style classes to use for the condition fields of the respective filter attributes.

29.1.8. HTML Form tab

When using a search source, you typically create a form where the user can enter the desired search criteria.

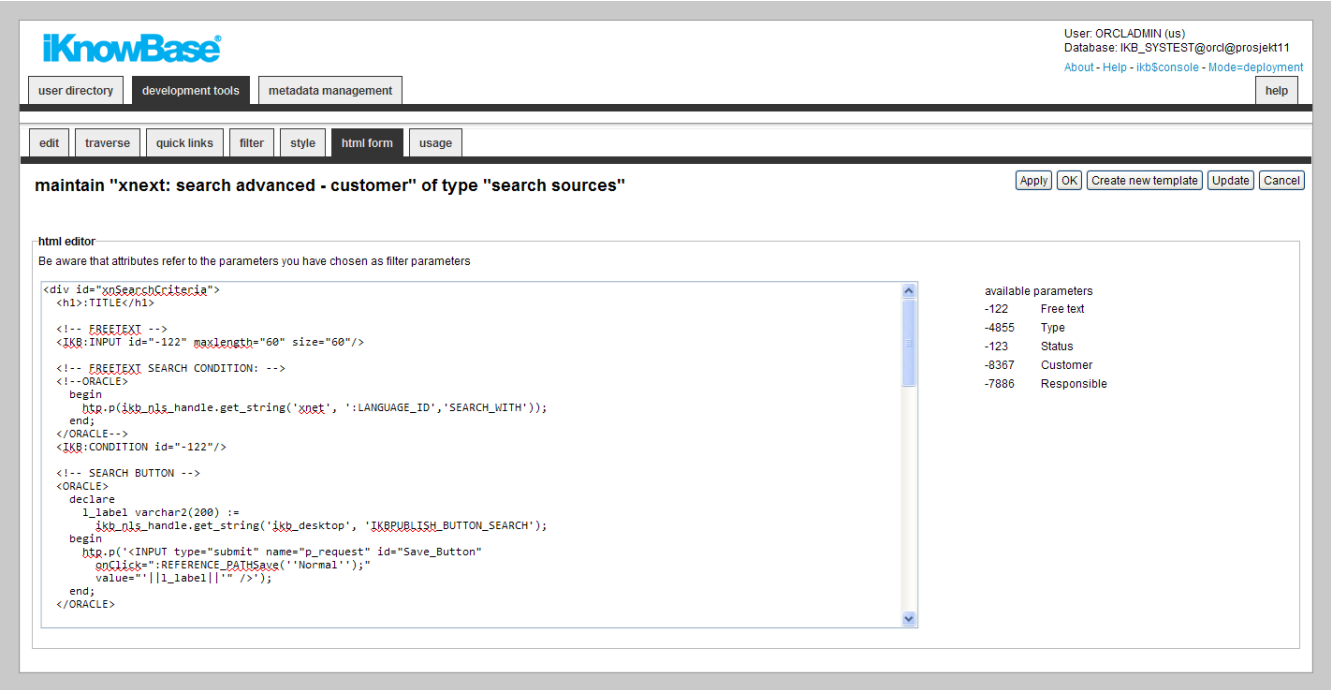
iKnowBase enables you to design and create the search form layout using your own HTML markup, rather than using the automatically generated search form. The notation in the setup is based on HTML with several extensions to generate dynamic fields for iKnowBase, pretty much the same as for regular Forms.

You can write the HTML template code in the HTML form tab.

NOTE	If you update the selected attributes in the search form, you must also update the HTML template to reflect the changes. You can generate a new template or manually update the template, and insert IKB tags for new attributes or delete old tags.

There are two action buttons available:

- **Create new template**: Click this button to generate a default template, with placeholders for the attributes in the search source. You may then change this template as needed. If you do in fact not need to change this template, then a rule-based search form is generally a better choice.
- **Update**: Click this button to update your template with new attributes. iKnowBase will scan the existing template, and find attributes that are missing. Then, it will generate default template code to edit these attributes, and add to the bottom of the template. Move this code around as required.



Property	Description
HTML code	Type the HTML template code. **NOTE** Use the action buttons Create new template or Update to automatically create or update HTML template code.
Available parameters	A list of available parameters and their IDs available for use in the HTML template code.

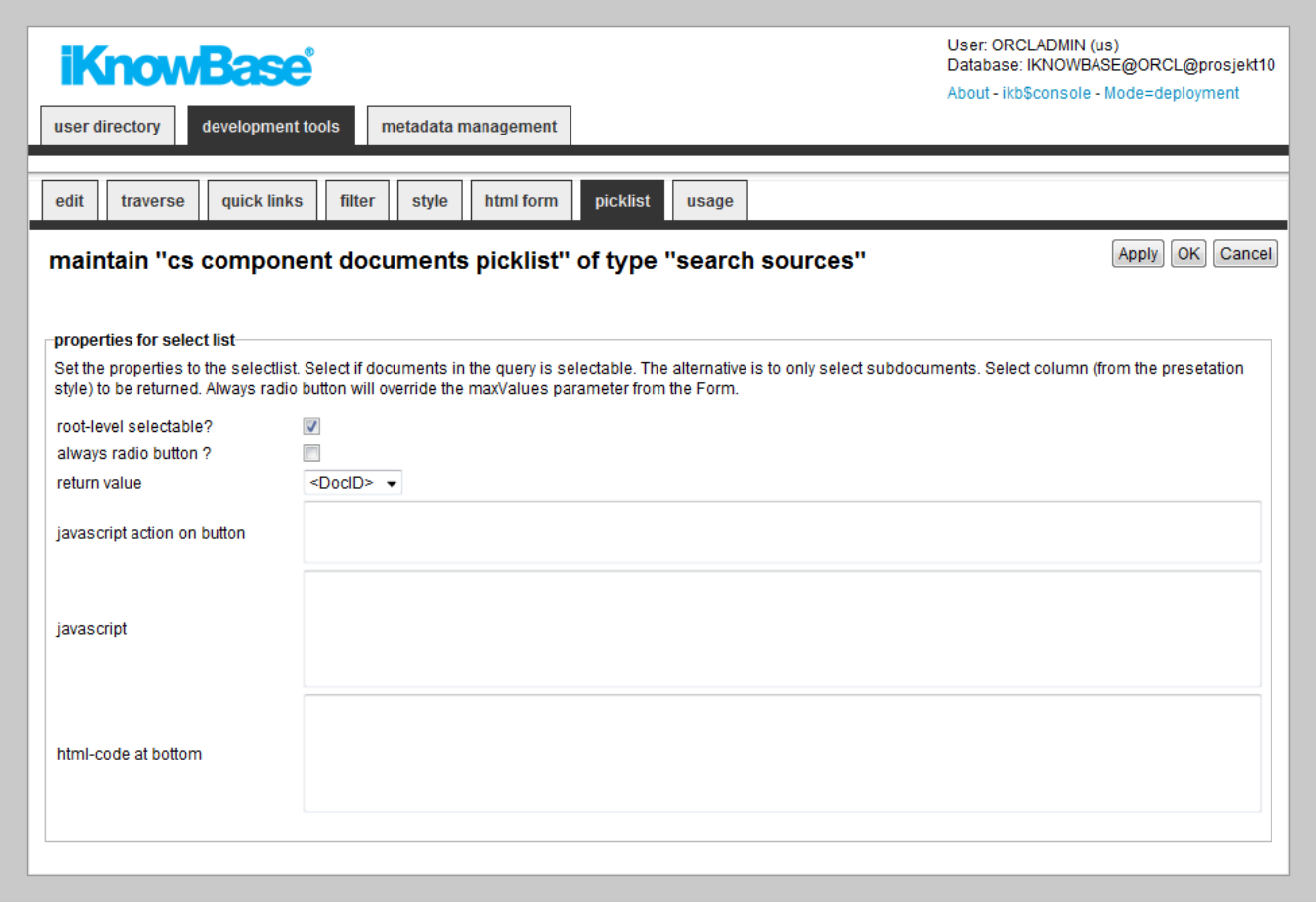
29.1.9. Picklist Tab

If you define the search source to be available as a select list, property **Available as select list** on the Edit tab, you get access to the Picklist Tab.

Pick lists are used to select one or more values, for example document ID or dimension ID, from a list of iKnowBase documents, and then return those values back to a given dialogue, such as a TinyMCE- or other attribute field in a Form.

When the search source is used as a pick list, the extracted documents are displayed together with check boxes or radio buttons, which enables the end user to select one or more documents. The specified values for the selected documents are returned to the calling dialogue. By default, radio

buttons are generated if the calling dialogue only accepts one return value, and check boxes are generated otherwise.



Property	Description
Root-level selectable?	Select this checkbox to make documents at the upper most level selectable. Applicable if you have defined the search source with traverse features, e.g. to extract and display subdocuments on one or more sublevels.
Always radio button?	Select this check box to always display a radio button, even though the calling dialogue accepts more than one return value.
Return value	Select which value to return; typically document ID or dimension ID. Available options are decided by the Presentation style associated with the Search source. The selection must correspond to the value expected from the calling dialogue. If the calling dialogue is a related document or image attribute on a form, a document ID must be returned. If the calling dialogue is a dimension attribute on a form, a dimension ID must be returned.

Property	Description
JavaScript action button	Type the JavaScript code that runs when the end user clicks the radio button in the pick list. Rather than typing your own code, you can use two pre-defined actions: • StartReturnFromPickList (): This can be used where you use the pick list from an attribute field on a Form. It will return the selected value back to the calling dialogue. • ReturnToEditor (): This can be used where you use the pick list from a TinyMCE field on a Form.
JavaScript	Type your own JavaScript code if needed, could for example be run using the button.
HTML-code at bottom	Enter the HTML code to be generated at the end of the page, after the extracted data. Examples can be a button which returns the selected values.

Using the StartReturnFromPickList() function

As mentioned above, you can use the StartReturnFromPickList() function to return from a picklist. This works as follows:

- Make sure to enter the value StartReturnFromPickList() for the javascript action button.
- Next, make sure that the picklist is opened in a new window, and that values are passed for the URL parameters cbFunction and cbClosure.
- When the user selects an item, the predefined function StartReturnFromPickList() is called. This function, in turn, calls the built-in function ReturnFromPickList(), passing the values for cbFunction and cbClosure.
- ReturnFromPickList will fetch the selected item's information (id and label), and call the function named in cbFunction, in the window that originally opened the picklist.

Chapter 30. Solr Configuration

When using the Solr search engine, we need to define what kind of information we should index for each document. This screen allows you to add fine grained definitions for each attribute you want to index and also how it should be represented in Solr.

In Solr we differ between three main types of storage :

- **Store**: The value is stored and can be retrieved by the client.
- **Search**: The value will be searchable.
- **Index**: The value will be indexed in its own index and can be used as a filter (e.g. facet).

These three types can be combinded.

In addition it is also possible for most attributes to index the ident (either the id or the GUID) for the value and the Path for dimensions. The SOLR representations for these fields will be attributeName__ident, attributeName__guid or attributeName__path.

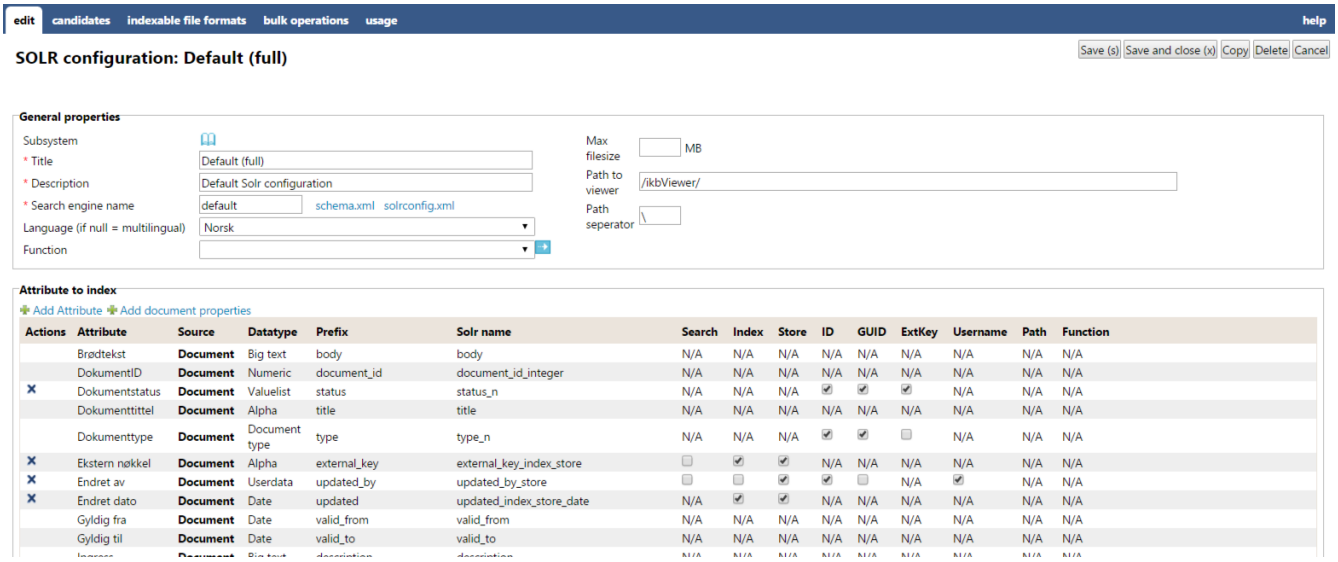
In many implementations the labels are in more than one language and in those cases all labels with NLS support will be populated into separate fields in Solr. By default, Solr is set up to support Norwegian and English. It is also possible to add extra value to the indexer by using custom written PL/SQL functions. They can be triggered document-based or for each attribute.

As a rule, you should have only ONE Solr configuration for each search engine and share it between all Solr events populating data to the index.

30.1. Properties

This section describes the properties of an Solr configuration, as shown on the corresponding Edit pane tab.

30.1.1. Edit tab



Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a name for the Solr Configuraiton.
Description	Type a description for Solr Configuration.
Search Engine	When you index data to more than one solr instance, you need to define seperate names for the destination. These are logical names, but refer to Installation properties where you define index- and search URLs to the instances. If you define a new search name, Installation properties will be populated by dummy data.
Language	Select a language if you have a single language environment and the index should only handle that specific language. Set the value to blank if you want to index the values in all languages defined in iKnowBase.

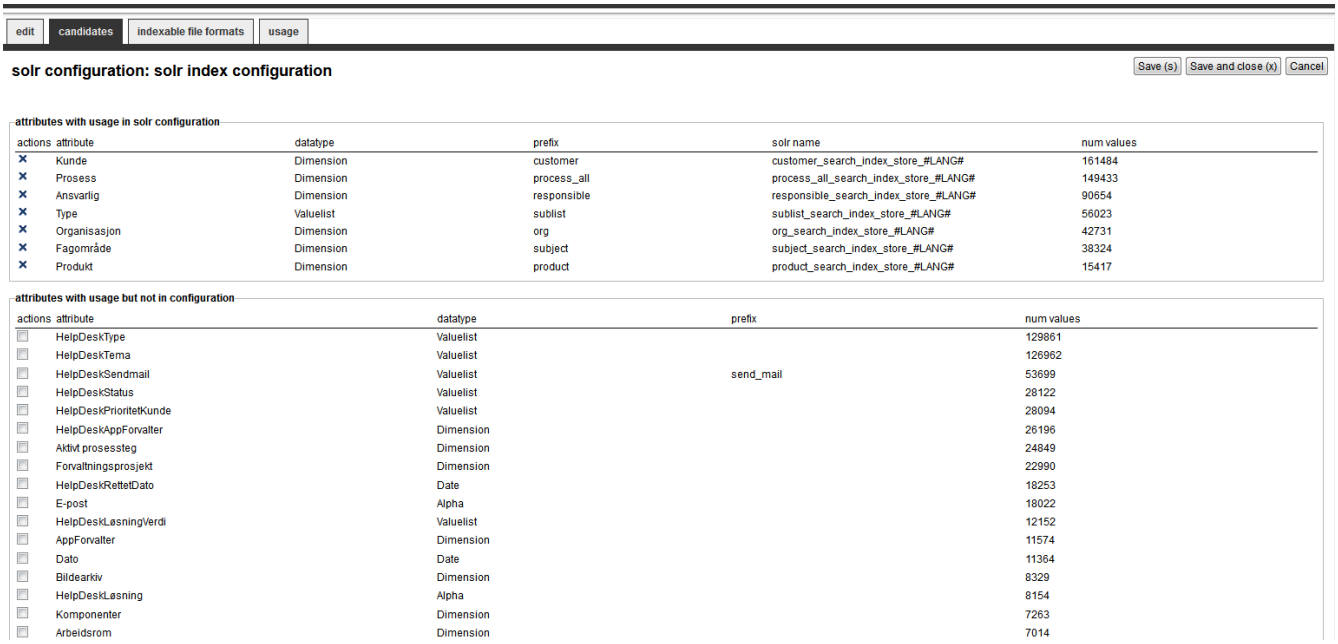
Function	A custom function is used to execute your own built-in function to add / remove content before it is sent to the indexer service. (e.g. You want to create a Solr field for sorting where you select an attribute value if it exists, else you use the document timestamp). The function is executed after the document data is populated. The signature is defined in the Database funtion-section. To add an extra field for indexing, it must be added to the object type ct_solr_rows like this:
	`p_solr_data.EXTEND;`
	`p_solr_data (p_solr_data.COUNT) :=`
	`ot_solr_row (`
	`'<a name>',`
	`'<type>', -- Value can be VALUE_CHAR/DATE/NUMBER/XML/BLOB`
	`<char-value>,`
	`<number-value>,`
	`<date-value>,`
	`<xml-value>,`
	`<blob-value>,`
	`<mimetype>);`

Max filesize	Defines maximum size of a binary file to be indexed. Very large files can be time consuming to index and should be avoided.
Path to viewer	Defines where and how the link should be generated when indexed. Default values is retrieved from domain preferences, but can be overridden here.
Path seperator	Defines the seperator used when building path elements from dimensions.

Property	Description
Attribute to index	You can choose between two types of attributes: • Document properties: Values from the document itself. The required attributes are already selected when you create a new configuation. • Attributes: Regular attributes tagged on the document.
Actions	Delete the parameter by clicking the icon. Mandatory attributes are not possible to delete.
Attribute	Name of the attribute / property.
Source	Document means it's a document property, Attribute means its a regular attribute on the document.
Datatype	Display the datatype.
Prefix	First part of the name used for the attribute in Solr. For attribute values the full name is generated when you select how to store/index/search the value in Solr. Some document properties are locked and will be named by the same value as the prefix.
Solr Name	The full name in Solr for the attribute.
Search	Select (if available) if you want the value to be searchable.
Index	Select (if available) if you want the value to be indexed.
Store	Select (if available) if you want the value to be stored.
ID	Select (if available) if you want to index and store the Ident of the value. The Solr name will be `<prefix>__ident`.
GUID	Select (if available) if you want to index and store the GUID of the value. The Solr name will be `<prefix>__guid`.
ExtKey	Select (if available) if you want to index and store the External key of the value. The Solr name will be `<prefix>__external_key`.
Username	Select (if available) if you want to index and store the Username of the value. The Solr name will be `<prefix>__username`.
Path	Select (if available) if you want to store the path of the value. The Solr name will be `<prefix>__path`.

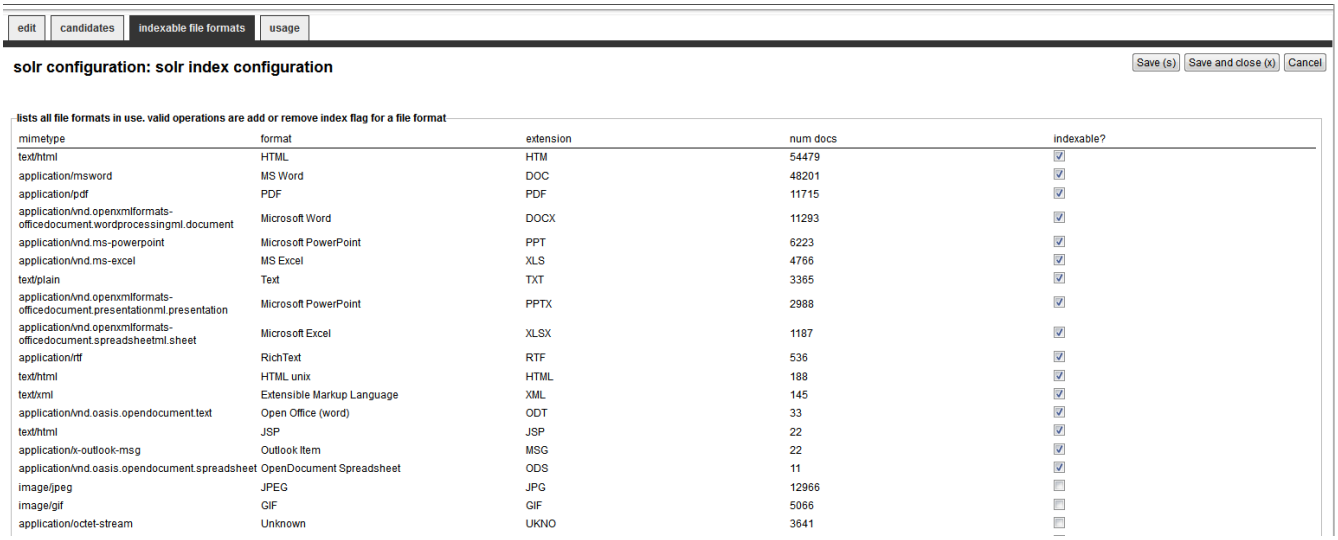
Property	Description
Function	A custom function is used to execute your own built-in function to add / remove content before it is sent to the indexer service. The signature is defined in the Database funtion-section. This function is called if the attribute exists.

30.1.2. Candidates



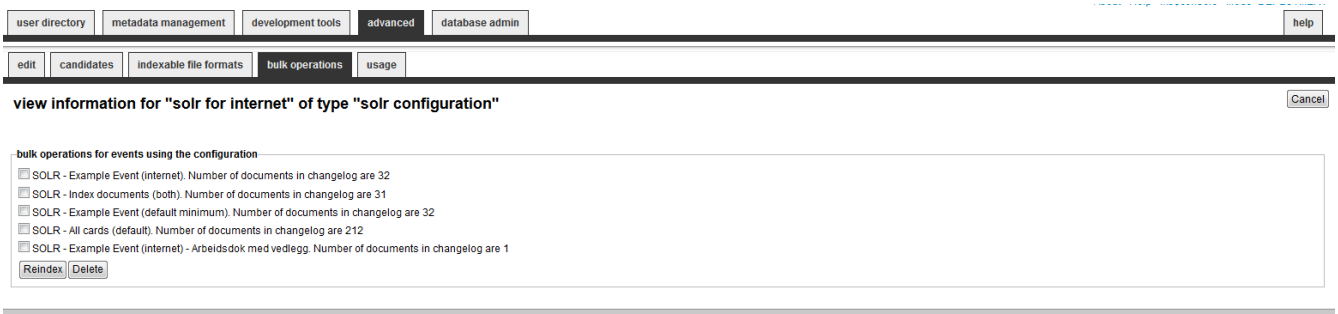
Property	Description
Attributes with usage in Solr Configuration	Displays all selected attributes and how many times they are used by documents. This might indicate if the attribute is a useful indexed attribute. The only available operation you can do is to delete the attribute from the configuration.
Attributes with usage but not in Solr Configuration	Displays all attributes not in the configuration and how many times they are used by documents. This might indicate if the attribute is a useful indexed attribute. The only available operation you can do is to add the attribute to the configuration.

30.1.3. Indexable file formats



Property	Description
File formats supported in Solr Configuration	Displays all used file formats in iKnowBase. You can decide if files with this format should be indexed or not.

30.1.4. Bulk operations



Property	Description
Select events for bulk operation	Displays all events using the current configuration. You can easily reindex all documents for all events using the configuration, or delete all documents from solr by checking the boxes and then press the desired button.
Cleanup misconfigured changelog entries	The SOLR changelog might have entries originally created by a event or a solr configuration. If the event definition / solr configuration is deleted or changed, the changelog can 'come out of sync'. Use cleanup to remove entries without a correct event or solr configuration. The option is only available if such misconfiguration exists.

Chapter 31. Stylesets

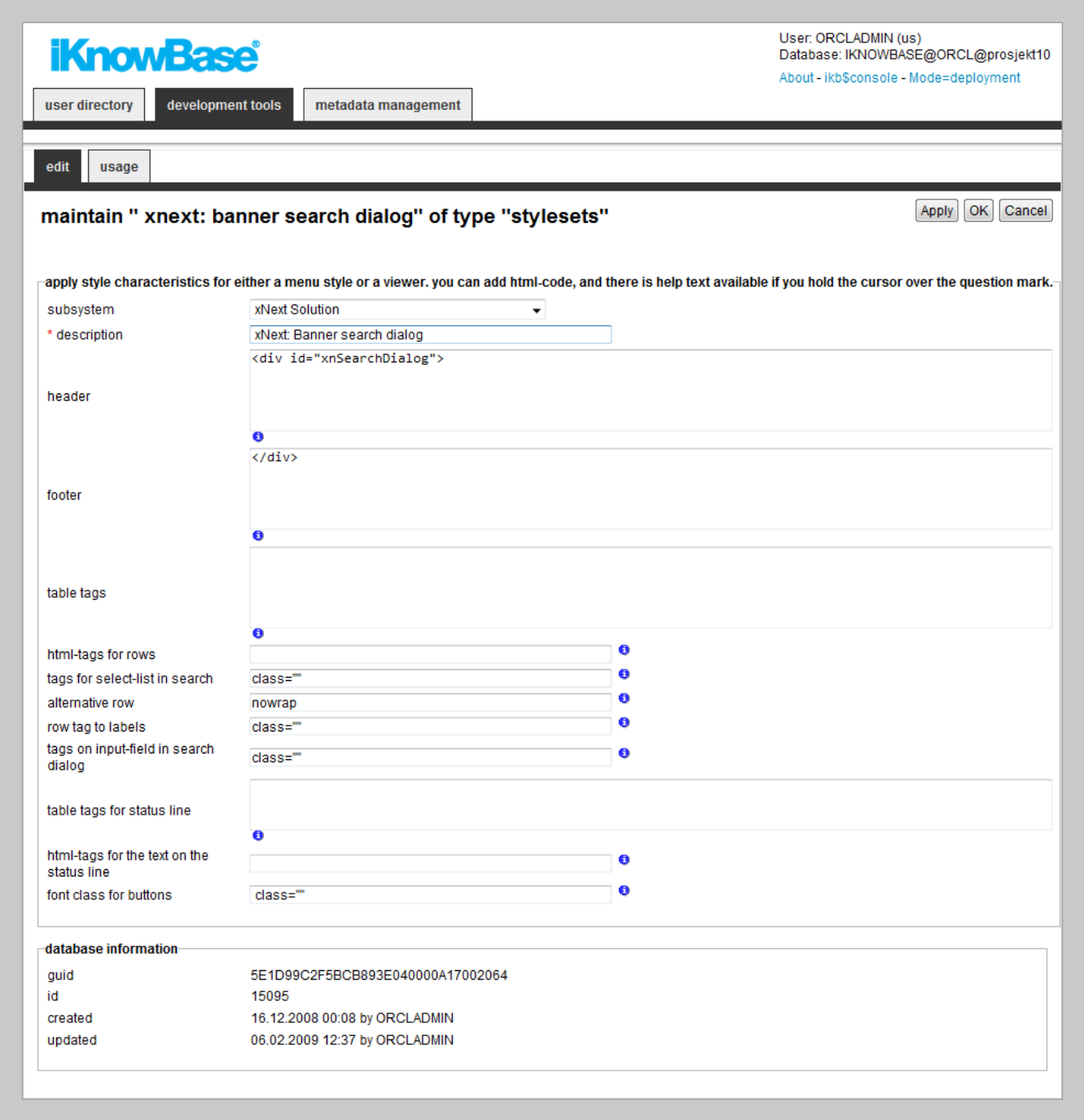
Stylesets are reusable fragments of HTML-markup that can be used to "decorate" certain other components, in order to customize the HTML-markup from them. In general, stylesets are used with components that do not allow template-based output.

There are three different styleset types:

- **Style for iKnowBase**: You can use this type of styleset for Form, Viewer and Presentation style components, as well as Build search dialog portlets.
- **Style for menus**: You can use this type of styleset for the menu portlets Advanced menu and Advanced iKnowBase menu.

31.1. Styleset iKnowBase Properties

This section describes the properties of an iKnowBase style set, as shown on the corresponding Edit pane.



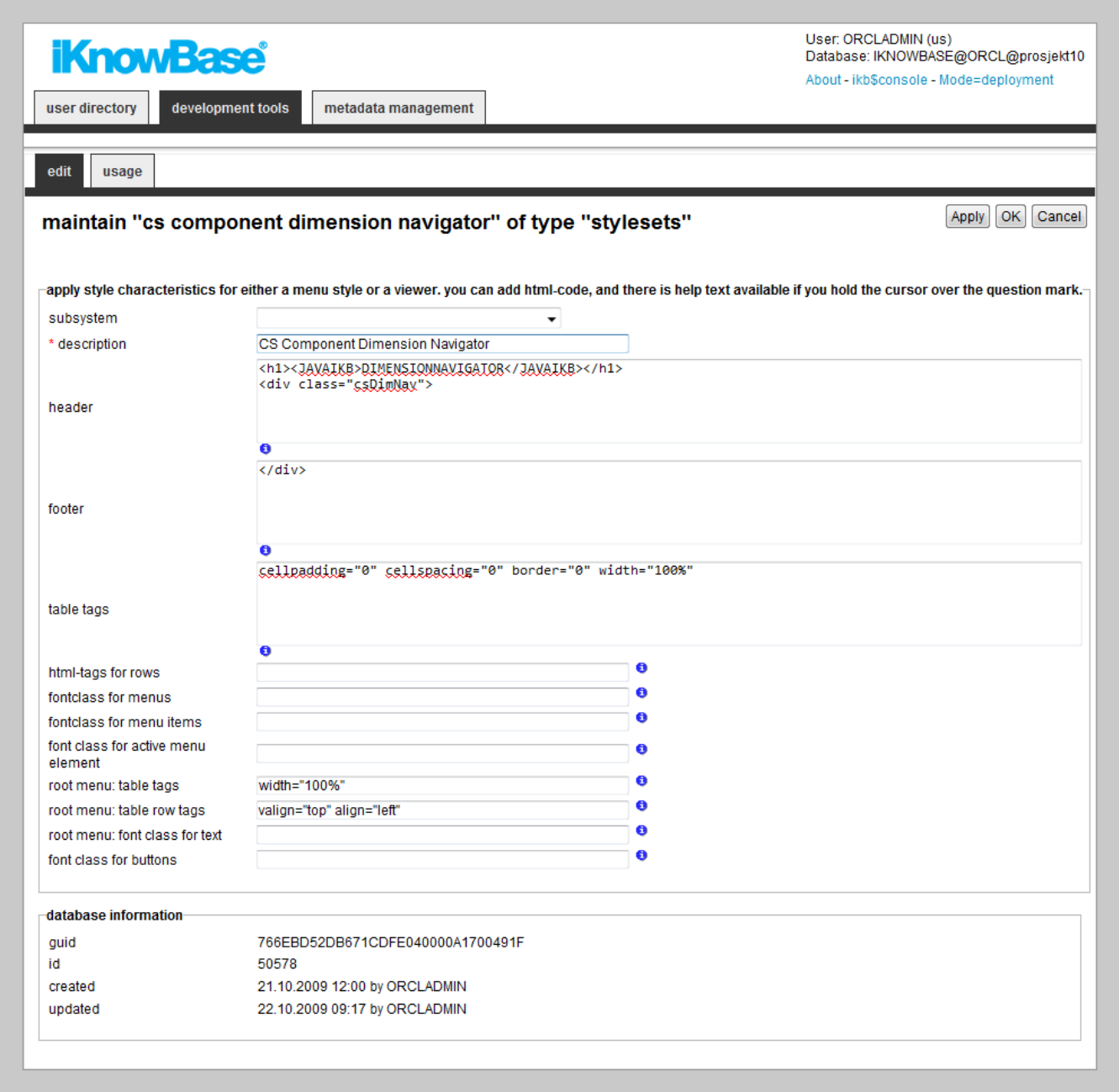
Property	Description
Subsystem	Select the appropriate subsystem.
Description	Type a description for this style set.
Header	Type the HTML header you want to render at the top of the style set, before rendering content. You may use substitution tags to insert context-specific content into the header.

Property	Description
Footer	Type the HTML footer you want to render at the end of the style set, after rendering content. You may use substitution tags to insert context-specific content into the footer.
Table tags	Type the attributes you want rendered for the <TABLE> tag enclosing the content. iKnowBase will render the value inside the tag, like this: `<table HERECOMESTHECONTENT>`
HTML-tags for rows	Type the attributes you want rendered for the <TR> tag enclosing each row of the content. iKnowBase will render the value inside the tag, like this: `<tr HERECOMESTHECONTENT>`
Tags for Select-list in search	Type the attributes you want rendered for the <SELECT> tag that will be rendered when selecting between multiple search sources in a search dialog. iKnowBase will render the value inside the tag, like this: `<select HERECOMESTHECONTENT>` Applicable for Build search dialog portlets.
Alternative row	Type the attributes you want rendered for the <TR> tag for alternate rows (2,4,6, ...). Use this to highlight alternate rows. iKnowBase will render the value inside the tag, like this: `<tr HERECOMESTHECONTENT>`
Row tag to labels	Type the attributes you want rendered for the <TR> tag for heading rows for a tabular list. iKnowBase will render the value inside the tag, like this: `<tr HERECOMESTHECONTENT>`

Property	Description
Tags on input-field in search dialog	Type the attributes you want rendered for the <INPUT> tags that will be rendered for search forms. iKnowBase will render the value inside the tag, like this: `<select HERECOMESTHECONTENT>`
Table tags for status line	Type the attributes you want rendered for the <TABLE> tag enclosing the navigation controls (first/next), if enabled. iKnowBase will render the value inside the tag, like this: `<table HERECOMESTHECONTENT>`
HTML-Tags for the text on the status line	Type the tags you want rendered for the text rendered in the navigation controls (first/next), if enabled. iKnowBase will render the value inside the tag.
Font class for buttons	Type the font class you want rendered for any buttons rendered.

31.2. Styleset Menu Properties

This section describes the properties of an menu style set, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Description	Type a description for this style set.
Header	Type the HTML header you want to render at the top of the style set, before rendering content. You may use substitution tags to insert context-specific content into the header.

Property	Description
Footer	Type the HTML footer you want to render at the end of the styleset, after rendering content. You may use substitution tags to insert context-specific content into the footer.
Table tags	Type the attributes you want rendered for the <TABLE> tag enclosing the content. iKnowBase will render the value inside the tag, like this: `<table HERECOMESTHECONTENT>`
HTML-tags for rows	Type the attributes you want rendered for the <TR> tag enclosing each row of the content. iKnowBase will render the value inside the tag, like this: `<tr HERECOMESTHECONTENT>`
Font class for menus	Type a font class for menu items that have sub menus.
Font class for menu items	Type a font class for menu items that do not have sub menus.
Font class for active menu element	Type a font class for active menu elements.
Root menu: Table tags	Type the appropriate HTML tags. If the root menu appears, these tags are inserted in the <TABLE> tag that encloses the root menu.
Root menu: Table row tags	Type the appropriate HTML tags. These tags are inserted in the <TR> tag that contains the root menu.
Root menu: Font class for text	Type a font class that is for the text of the root menu.
Font class for buttons	Type the font class for any buttons rendered.
Guid	Displays a globally unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.

Property	Description
Id	Displays a unique identifier number for this component. This property appears after you save a component. You cannot update the information of this property.
Created	Displays when the component was created and by whom it was created.
Updated	Displays when the component was last updated and by whom it was updated.

31.3. Substitution Tags

In the HTML fields (header and footer), you can use substitution tags insert context-specific content.

Property	Description
#TITLE# or ${viewer.style.portletTitle}	You can use this tag to display the portlet name inside the header text.
:LANGUAGE_ID or ${viewer.logic.languageId}	If the NLS-supported text is also entered in the HTML code, you can use this tag.
${viewer.param.referencepath}	You can use this tag to display the reference path of the portlet instance in the header text.
#SHOW_MORE# OR ${viewer.navigation.moreLink}	If you want to create a link to a new search source, you can use this tag. You must set up a search source and a target page in the viewer. You must build the a-tag. `<a #SHOW_MORE#>Show more</a>`

You can also use `<ORACLE>` tags to run PL/SQL commands inside the text.

For example:

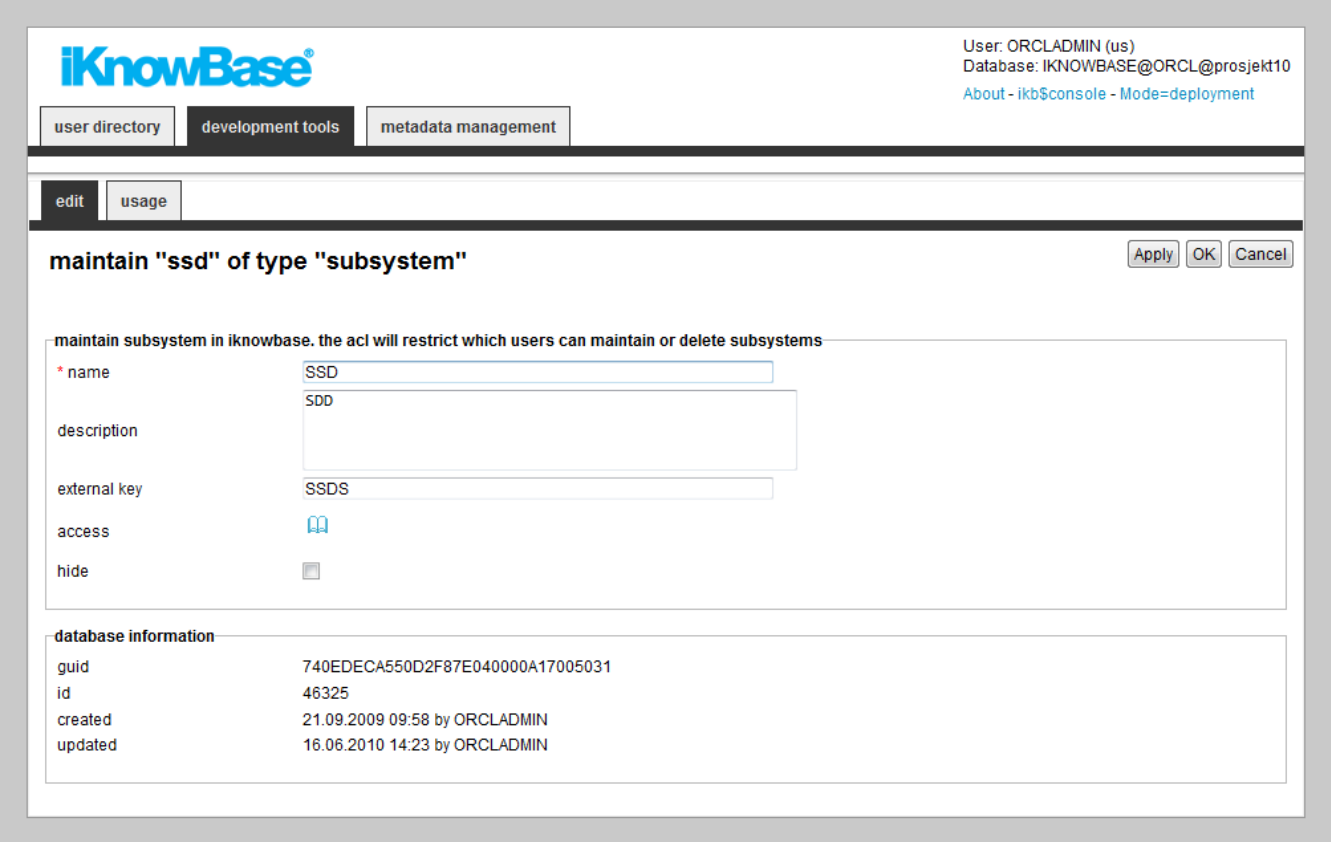
```
<oracle>
BEGIN
Htp.p(Ikb_nls_string.get_string('<objectID>',':LANGAUGE_ID','<StringID>');
END;
<oracle>
```

Chapter 32. Subsystem

Subsystems enable you to divide metadata into different areas to get an overview of where the metadata is used. For example, you can create a Subsystem for testing or a Subsystem for the intranet. When a new metadata is created, such as a Form, you can select the Subsystem that this Form belongs to.

32.1. Properties

This section describes the properties of a subsystem, as shown on the corresponding Edit pane.



Property	Description
Name	Type a name for the subsystem.
Description	Type a description for the subsystem.
External key	Type an external key for the subsystem.
Access	Select the appropriate access control list. This field specifies who can update, delete, or add metadata associated with this subsystem.
Hide	Hides the elements tagged with this subsystem, to avoid accidental editing.

Chapter 33. Targets

A target is a generic concept that is used to specify destinations for links and the content information to be displayed in the destination. Web-based applications use URLs to specify the content information and the location of the information. With iKnowBase, the task of generating context-based URL is abstracted into easy-to-use targets. You can view content information as is or add parameters that enable you to specify or filter the content that you want to display on the destination page.

iKnowBase enables you to create four types of targets:

- **Popup targets**: A popup target opens the given link in a new window. Used where you want to show the link in another window than the base window. For this target type you can define height and width of the new window.
- **Page targets**: A page target opens the given target destination and passes the specified parameters. For this target type you must specify the destination, which could be of type iKnowBase page or URL, and which parameters to pass.
- **Parameter targets**: A parameter target opens the given link and passes the specified parameters. For this target type you must specify which parameters to pass.
- **Template targets**: A template target runs a template, and returns the output to the user. A template target corresponds roughly to a Java servlet or a Groovy Groovlet.

You can use parameters with Page targets and Parameter targets. All parameters are transmitted as URL parameters, and might be used by the portlets and components on the destination page. The following parameter types are available for targets:

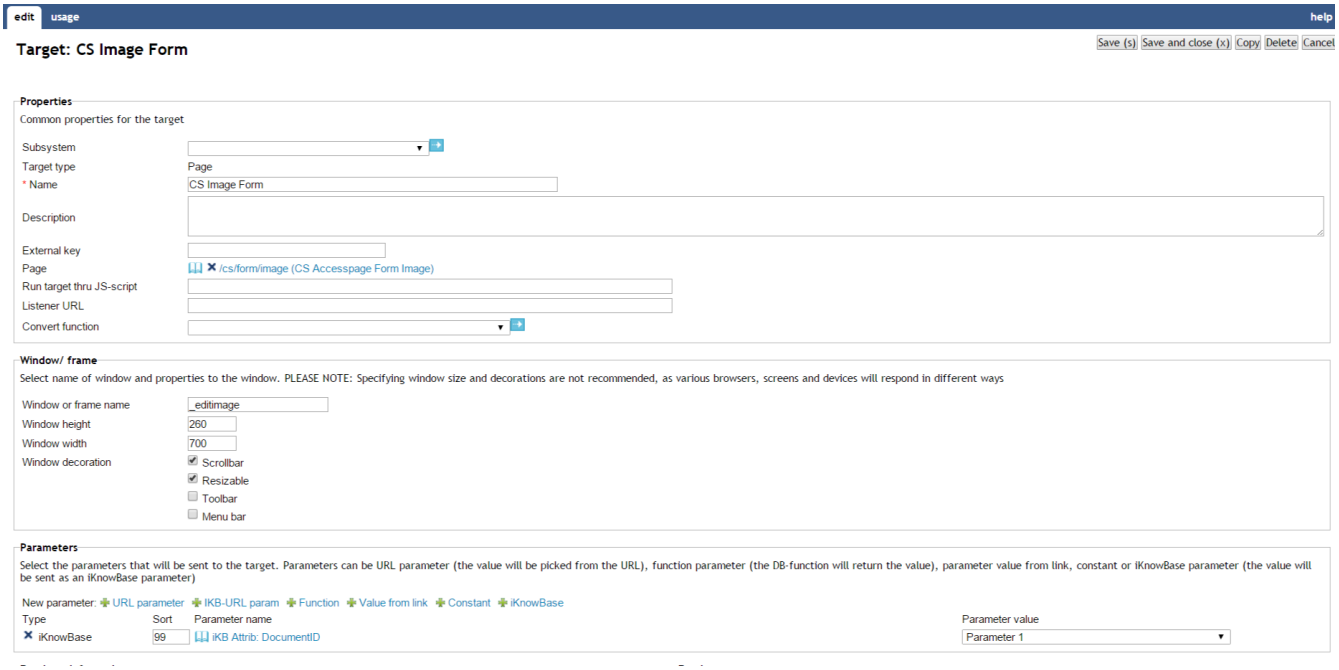
- **URL parameter**: Use this parameter type to transfer a value from a URL parameter on the currently rendered page to a URL parameter on the destination page. For example, if the current page has the URL `http://www.example.com?mainmenu=value`, and you want to pass the `mainmenu=value` parameter to a new page, then you must define a URL parameter with them same name as the name of the parameter in the URL of the current page, e.g. mainmenu.
- **IKB-URL parameter**: Use this parameter type to transfer a value from an iKnowBase Parameter on the currently rendered page to an iKnowBase Parameter on the destination page. This removes the need to understand URL parameter naming.
- **Function**: Use this parameter type to execute a PL/SQL database function, and pass the return value as a parameter to the destination page. For example, if you want to send today's date as a parameter to a page, you must create a Function parameter for the target. Specify a name for the parameter, and choose the database function that generates the proper value. The function will be executed, and the return value of the function will be passed on the URL which will look something like this: `http://www.example.com?<paramName>=01012004`. It is undefined whether the function is executed when you click the page, or when the source page is first rendered.
- **Value from link**: Use this parameter to send a dynamic value from the link to a named parameter. This is typically implemented in the database layer where you build the URL programatically.

- **Constant**: Use this parameter when the value that is being sent is constant.
- **iKnowBase parameter**: Use this parameter to send a dynamic value to an iKnowBase parameter on the target page. This is typically implemented in the database layer where you build the URL programatically.

33.1. Properties

This section describes the properties of a target, as shown on the corresponding Edit pane.

The Parameters region on the Edit pane displays for Page targets and Parameter targets.



Property	Description
Subsystem	Select the appropriate subsystem.
Target type	Displays the target type that you select.
Name	Type a name for this target.
Description	Type a description for this target.
External key	Type the appropriate external key. This key is an alternative key for the target page, and can be used to call a target page without using the target ID.

Property	Description
Select target	Select the appropriate target type and destination. • **iKnowBase Page**: If you want to go to an iKnowBase page, use this target type. Use the drop-down to the right to select the desired portal page. • **Template**: A template target runs a script, and returns the output to the user. A template target corresponds roughly to a Java servlet or a Groovy Groovlet. The template can either be an inline template or a shared template. • **URL**: If you want to go to a hardcoded URL, type the URL here. You can specify the URL in three ways: ◦ Enter an absolute URL, starting with `http://`. The specified URL will be used as is. ◦ Enter a relative URL, starting with `/`, to avoid hardcode of domain. The `/` will be substituted by the current domain. Example: `/ikbViewer` will produce `http://www.example.com/ikbViewer`. ◦ Enter a relative URL, starting with `#`, to call a pl/sql procedure. The notation is `<provider>.procedure` where *procedure* should be replaced by the name of the pl/sql procedure. The `<provider>` will be substituted by the current domain and the appropriate provider. Example: `<provider>.portlet_manage_redirect.redirect` will produce `http://www.example.com/pls/portlet_manage_redirect.redirect` **Note**: This property displays if you select the Page target type.
Run target thru JS-script	You can define a target where the URL built for the target is used as an input to a javascript instead of navigating directly to the URL. The code generated will look like this : `<a href="url" onClick="MyScript.call(this, this.href,'window name', 'window params');"`

Property	Description

Listener Url	Define a listener URL if you want to generate more readable URLs. By default all URLs will be generated where the parameters end up at the end like this: /url?param=value1&param2=value2. A Listener URL can take the parameters and place them with understandable values inside the URLs instead.
	
	You can either use one asterisk (*), which will be a placeholder for one fragment, or two asterisks (**), which means the value can contain slashes (/), for example a dimension path. The fragments and the order between them are defined for each parameter in the target.
	
	Examples:
	
	`/mypage/*/*  Two fragments can be placed in the URL`
	`/mypage/**/*  Two fragments can be placed in the URL, the first can contain "/"`
	
	You may also use URI Templates, which lets you map parts of the URL to named parameters. Note that URI Templates will never be used for URL generation, only for URL parsing. This means that URI Templates are most useful with targets that you activate by URL (for example from a client side script), and not so much when the target is activated automatically (by selection in e.g. a Menu or Dimension viewer).
	
	Examples:
	
	`/mytarget/{from}/{to}  The url /mytarget/OSL/CPH corresponds to /mytarget?from=OSL&to=CPH`

Convert function	When defining a listener URL you need a custom function to build and parse the URL. The function will on BUILD get all parameter values for the target defined as fragments. The custom code must define how the value should appear in the URL. (e.g. a document ID should be presented as `<docID>-<title>`). Parse will do the opposite. The fragment will in example will be `<docID>-<title>` and should return the DocID.
Template set (only for template targets)	Please see the *Template Set* section for more information.
Window or frame name	Type the name of the web browser window or iframe where you want to open the target. Use "_blank" to always get a new window. PLEASE NOTE: Specifying window size and decorations are not recommended, as various browsers, screens and devices will respond in different way. The frame name is rendered into the target-attribute of the HTML `<a>`-tag.

Property	Description
Scrollbar	Select this check box to display a scroll bar for the new window. This field is applicable only to the Popup target type.
Resizable	Select this check box to enable a user to resize the window. This field is applicable only to the Popup target type.
Toolbar	Select this check box to display the Windows Explorer toolbar. This field is applicable only to the Popup target type.
Menu bar	Select this check box to display the Windows Explorer menu bar. This field is applicable only to the Popup target type.
Width	Type the width of the window in pixels. This field is applicable only to the Popup target type.
Height	Type the height of the window in pixels. This field is applicable only to the Popup target type.
Type	Displays a list of parameters associated with this target. To add a new parameter, click on the new parameter icon of the appropriate type. See the introduction to this chapter for a description of the available parameter types. To remove a parameter, click on the respective remove icon.
Sort	Type the appropriate sort key, if you want the parameters in a specific order.
Parameter name	• **URL parameter** / **Function** / **Value from link** / **Constant**: Type a name for this parameter. This will be used as the parameter name on the destination page. • **IKB-URL parameter** / **iKnowBase parameter**: Select the parameter you want to pass to the destination page. The list of selectable parameters is the union of all declared iKnowBase parameters, both iKnowBase and SQL, and parameters defined for iKnowBase external data sources.

Property	Description
Value	• **URL parameter**: Type the appropriate name of the parameter whose value will be retrieved from the current page URL. • **IKB-URL parameter**: Select the parameter whose value you want to extract from the current page URL. • **Function**: Enter the PL/SQL database function that will generate the parameter value. • **Value from link**: Select a parameter number that will be used in a custom function call. • **Constant**: Type a value that is sent to the target page. • **iKnowBase parameter**: Select a parameter number that will be used in a custom function call.
FragmentID	Used where a listener url is defined. The fragmentID correspond to the placement of the asterics (*) in the listener URL. If you have two * in the listener URL you should also have two fragments with id 1 and 2.

Chapter 34. Task Wizard

Use the task wizard to design sequences of input steps to create a single iKnowBase information object (document). Rather than using a single form, this enables more intuitive user interfaces.

The task wizard will act as a supervisor to perform a task. The component will handle the navigation between the different components and storage between each step in the navigation. The Task wizard is document-oriented, e.g. information about the task wizard and the active step within it is saved to one document (information object). This means that each step of the task wizard must have actions that update this document.

To configure a task wizard, you must define the forms to be used in the task wizard. You also need to define a default Target to be used if no target is set on the individual steps of the task wizard, and a Form to be used to edit the information object after the user has finished all the steps in the task wizard.

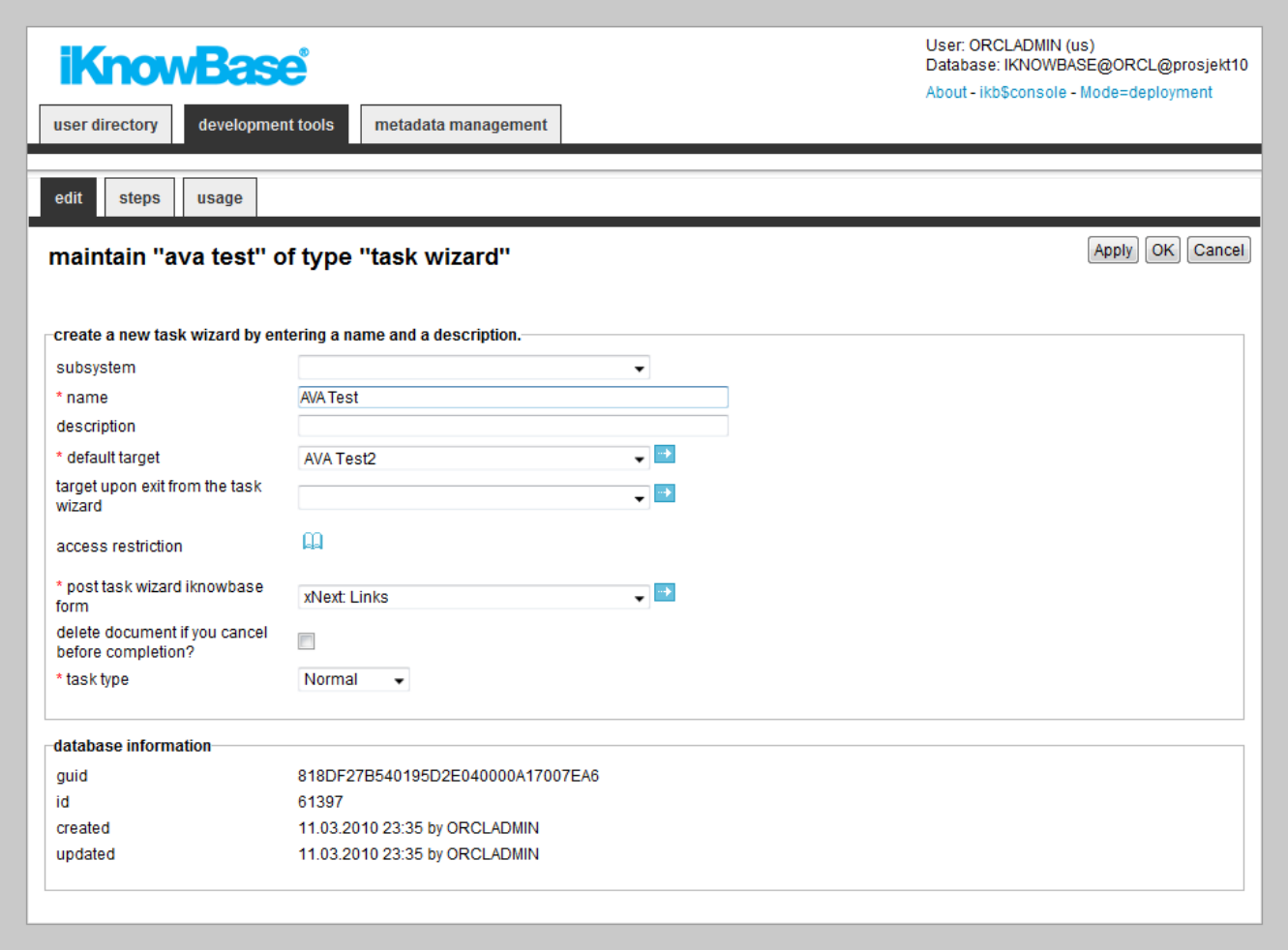
In order to use a task wizard, you must first create a Page with a Process arrow in task wizard portlet, which will display the steps of the task wizard and which step the user is on, and a Form portlet.

NOTE	You may reuse this Page for different task wizards, as both these portlets are dynamic. Then you must create a quick link for the task wizard. Associate this quick link with a component such as a Viewer. Make this component available on a Page using the appropriate portlet such as the Shared content viewer portlet for a Viewer component. Now, the end user may click on the quick link to initiate the task wizard.

34.1. Properties

This section describes the properties of a task wizard, as shown on the corresponding Edit pane tabs.

34.1.1. Edit tab

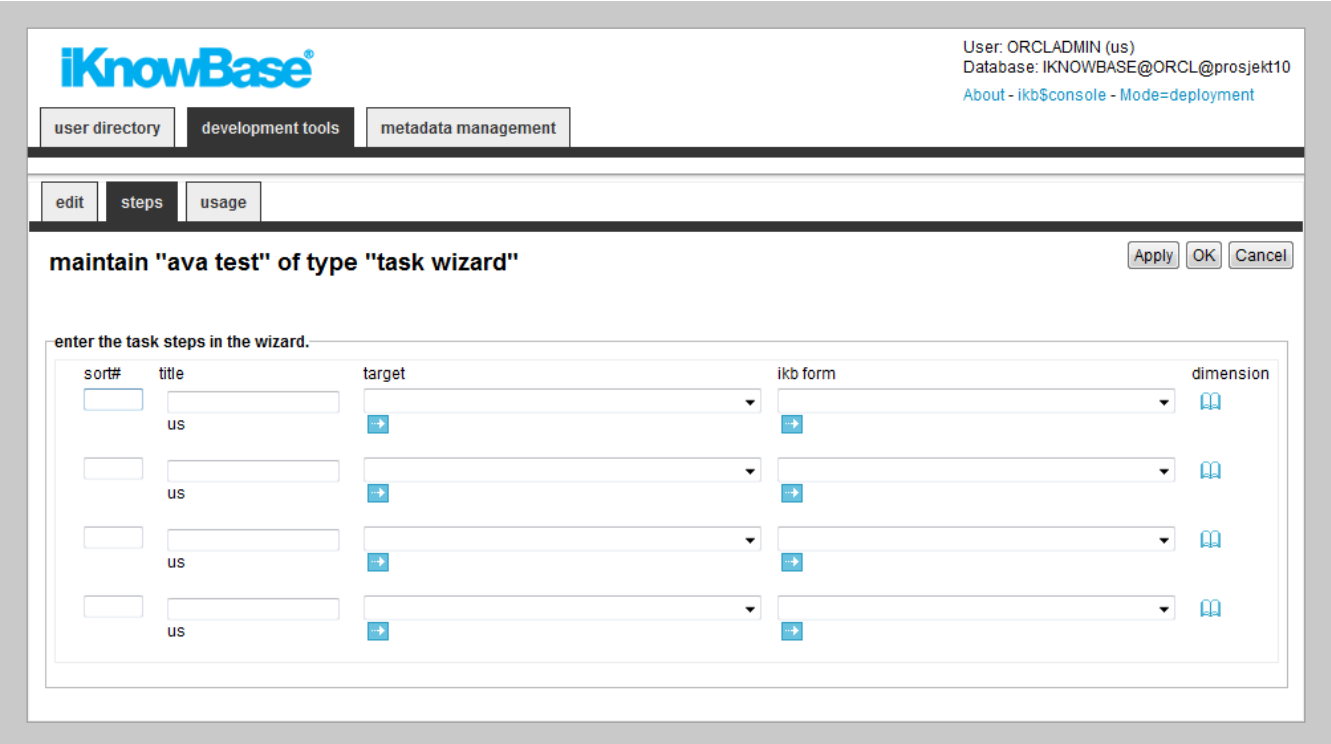


Property	Description
Subsystem	Select the appropriate subsystem.
Name	Type a name for this task wizard.
Description	Type a description for this task wizard.
Default target	Select the default target for this task wizard. If no target is set on the individual steps, this target is used.
Target upon exit from the task wizard	Select the appropriate target to use after the task wizard has been completed.
Access restriction	Select the appropriate access control list. Only members with the create privilege in this access control list can use the task wizard.
Post task wizard iKnowBase Form	Select the Form to use for editing the information object after initial creation from this task wizard.

Property	Description
Delete document if you cancel before completion?	Select this check box to delete the document if the user clicks cancel in the middle of a task flow.
Task type	Select the appropriate task type. The following options are available: • **Normal**: Use this task type if the information object created using this task wizard should be kept in the database after completion of the wizard. • **Temporary**: Use this task type where the task wizard should write to a temporary information object, which is deleted upon completion of the wizard. NOTE: If you select **Temporary** the **Temporary fields** region appears on the **Edit** pane. You can use these properties to specify which fields should be updated in the document that initiated the task wizard (called master). The value is retrieved from the temporary document. By marking the check-your box you will set the field to be updated. In addition, all attributes will be transferred back to the main document.
Use temporary ACL on main document	Select this check box to update the access group on the main document, e.g. the document which initiated the task wizard. Only applicable to **Temporary** task type.
Use temporary STATUS on main document	Select this check box to update the status on the main document, e.g. the document which initiated the task wizard. Only applicable to **Temporary** task type.
Use temporary VALID_FROM on main document	Select this check box to update the valid from date on the main document, e.g. the document which initiated the task wizard. Only applicable to **Temporary** task type.
Use temporary VALID_TO on main document	Select this check box to update the valid to date on the main document, e.g. the document which initiated the task wizard. Only applicable to **Temporary** task type.
Use temporary TITLE on main document	Select this check box to update the title on the main document, e.g. the document which initiated the task wizard. Only applicable to **Temporary** task type.
Use temporary DESCRIPTION on main document	Select this check box to update the description on the main document, e.g. the document which initiated the task wizard. Only applicable to **Temporary** task type.

Property	Description
Use temporary CONTENT on main document	Select this check box to update the content(URL, file, or text) on the main document, e.g. the document which initiated the task wizard. Only applicable to **Temporary** task type.
Use temporary OWNER on main document	Select this check box to update the owner on the main document, e.g. the document which initiated the task wizard. Only applicable to **Temporary** task type.
Use temporary Post task wizard iKnowBase Form on main document on exit	Select this check box to update the form information on the main document, e.g. the document which initiated the task wizard. The identification of the form given in the **Post task wizard iKnowBase Form** property will be saved to the main document. This means that this form will be used for maintenance of the main document. Only applicable to **Temporary** task type.

34.1.2. Steps tab



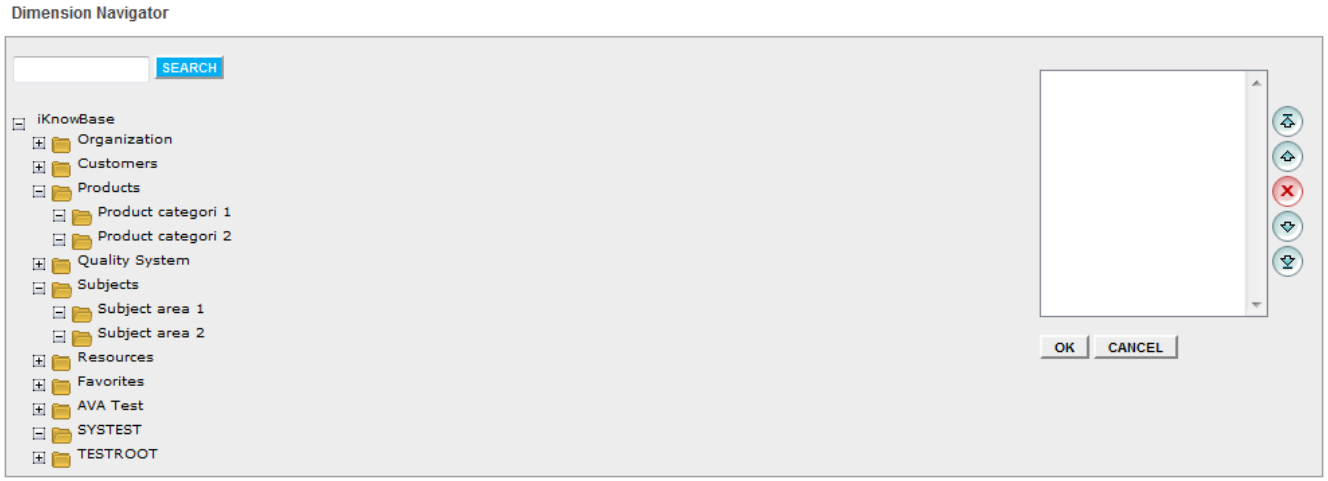
Property	Description
Sort#	Type the appropriate number to sort the steps.

Property	Description
Title	Type a name for the step. This name appears in the process arrow for the task wizard. If multiple languages are supported, each language displays a box, where you can type the title that appears. When you click in the Title box, language box appears. The language code is placed behind the field.
Target	Select the appropriate target for the step.
iKB Form	Select the appropriate form for the step.
Dimension	Select a dimension you want to associate with the step. You can use the associated dimension to display relevant content to the task wizard step, such as guidelines, etc.

34.2. Creating a Task Wizard

Use the basic **create** actions to add a task wizard.

During the creation of a task wizard, you can have iKnowBase automatically generate steps matching a certain dimension structure. To use this feature, click the dimension navigator icon for **Select the steps for the task wizard from dimensions**, and select the appropriate dimensions. After initial save of the task wizard, it will contain one step per selected dimension.



34.3. Testing a Task Wizard

To test your task wizard, either click the **Test** action for the task wizard on the **List** pane, or click the **Test** action link on the **Edit** pane tabs for the task wizard.

NOTE	The **Test** actions become available for a content form after you specify the target **Target on show** for the form.

Chapter 35. Template set

35.1. Concept

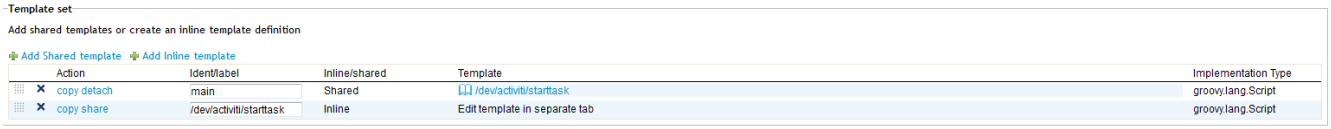
Template are used by a large number of components in iKnowBase. The template set feature allows you to define links to existing templates or/and create new inline templates used by the specific component. This chapter will focus on the user interface where you define such template set. To read more about scripts and templates, see *Using Scripts and templates* in the *iKnowBase API Reference*.

Features of Template set:

- Create inline templates
- Use existing shared templates
- Copy or share inline templates
- Detach a shared templates and make it inline

35.1.1. Properties

This section describes the properties of an template set.



Property	Description
Add Shared template	Choose among shared templates for the specific component type. Only templates with the same template type as the context you are in will be available.
Add Inline template	Create a local, inline template used only by this component.
Action	The following actions are available: • Move up/down: Move a template up or down in the set • Delete: Delete the template from the template set • Copy: Will create a new inline template • Share: Will convert a inline template to a shared template • Detach: Will convert a shared template to an inline template (only if the template is used by one component)
Ident/label	Name of the template in the set. The default template will be the first template in the component.

Property	Description
Inline/shared	Displays if its a shared or inline template.
Template	For shared templates it will let you either go to the selected templated or call a popup to select another one. Inline templates are maintain within the component in a separate tab named after the ident of the template.
Implementation	Displays the implementation type.

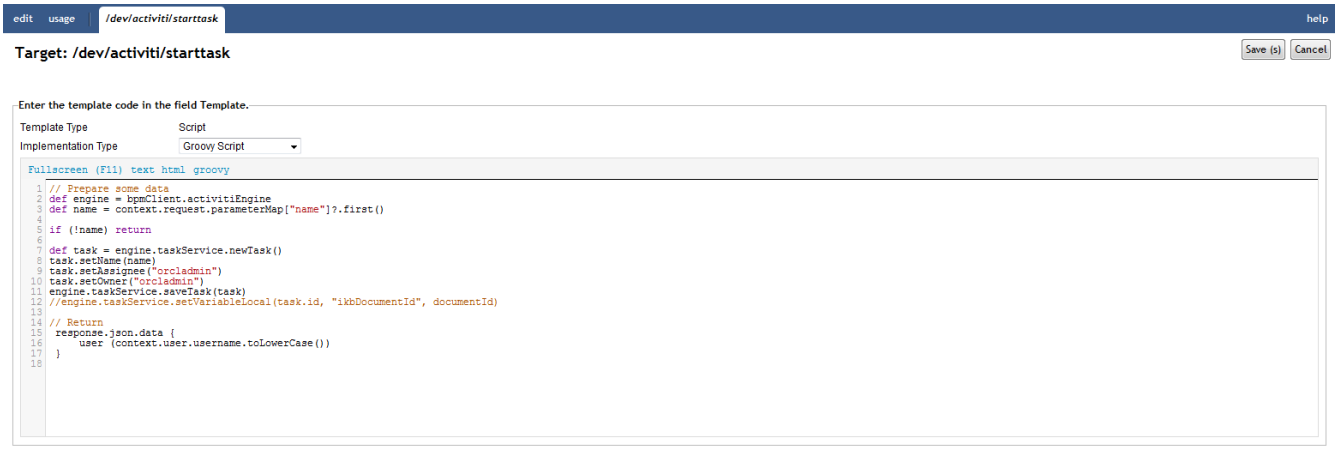
35.1.2. Inline templates

This section describes how to maintain an inline template. Shared templates are described in the *Templates* section.

First, the inline template will be available as a separate tab named like Ident name you gave.

Multiple inline templates will create multiple tabs.

The screen to maintain the inline tab looks like this:



Property	Description
Template type	The value is given by the context. e.g. a inline template for a presentation style will set the template type to Presentation style.

Property	Description
Implementation type	Select the appropriate implemetation type. Choose between the following options: • FreeMarker template • Groovy template • Groovy XMLtemplate • Groovy script • Html Script
Template	Type the template code using the appropriate syntax (FreeMarker, html, javascript or Groovy). Click on the label to enter a full screen editing mode, where you can use CTRL+S to save.

Chapter 36. Templates

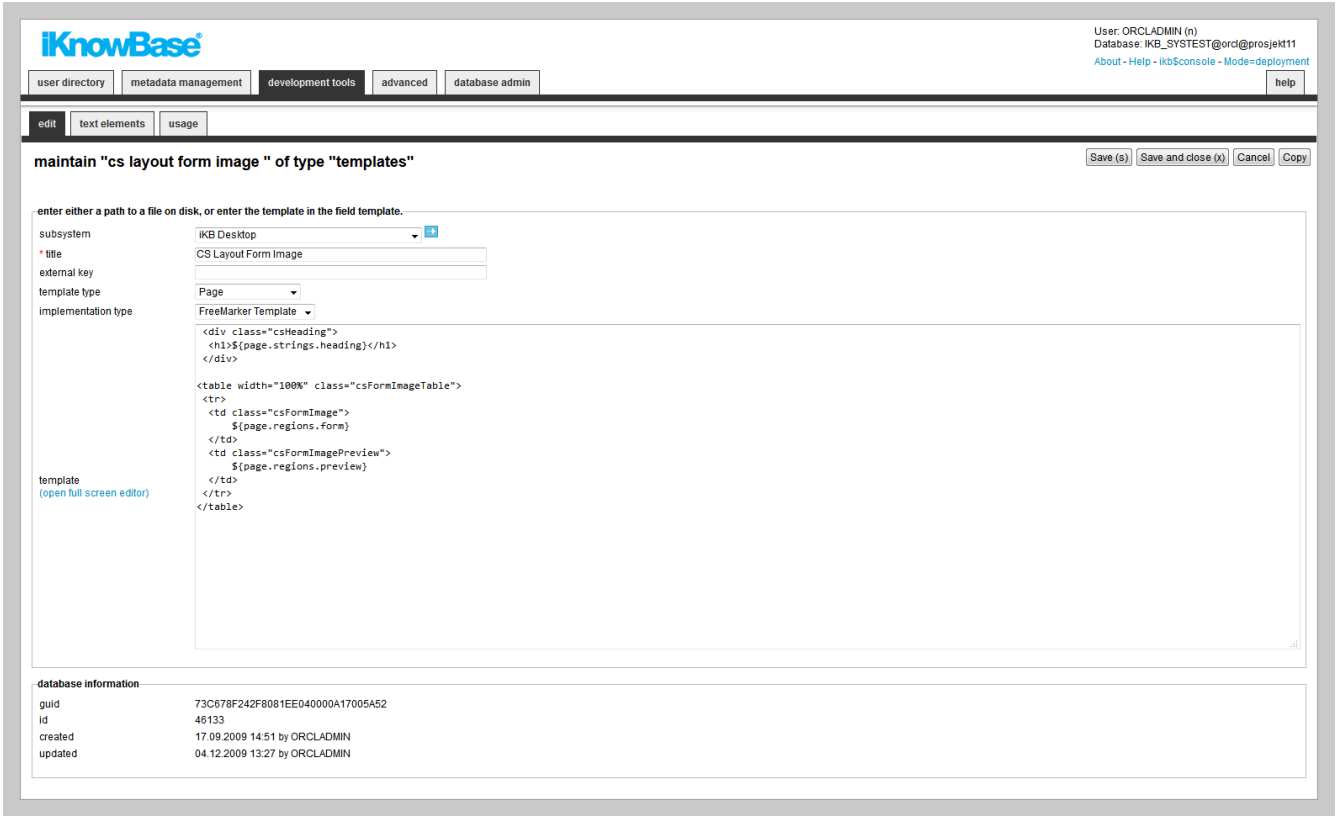
Templates enforce a standard layout across multiple pages and within content regions on pages within your iKnowBase application. With templates, you can ensure that you have a consistent look and feel across the portal. You can create a template once and use it for multiple pages or layout pages. When you modify a template, the pages or the regions based on that template are automatically updated. You can use an existing template for a page or a layout page, or create you own template by writing your own FreeMarker template code.

See Part V for further information about FreeMarker and available FreeMarker model objects.

36.1. Properties

This section describes the properties of a template, as shown on the corresponding Edit pane tabs.

36.1.1. Edit Tab

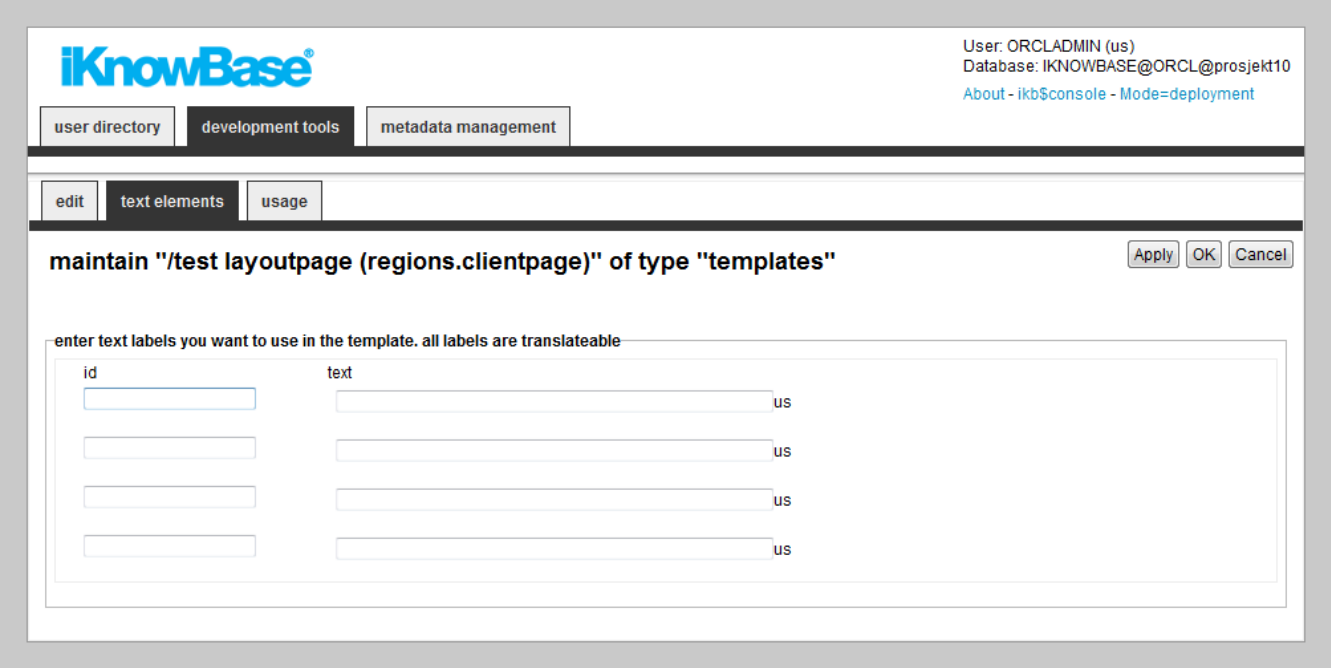


Property	Description
Subsystem	Select the appropriate subsystem.
Title	Type a name for this template. This name is used during the configuration and not available for the end user.

Property	Description
Template Type	Select the appropriate template type. A template type defines where the template can be used. Choose between the following options: • **Page**: Available for pages • **Menu viewer**: Available for menu instances • **Dimension viewer**: Available for dimension viewers • **Script**: Available for script targets and template viewers • **Form**: Available for Activiti forms • **XML viewer**: Available for XML viewers
Implementation type	Select the appropriate implemetation type. Choose between the following options: • **FreeMarker template** • **Groovy template** • **Groovy XMLtemplate** • **Groovy script** • **Html Script**
Template	Type the template code using the appropriate syntax (e.g. FreeMarker or Groovy). Click on the label to enter a full screen editing mode, where you can use CTRL+S to save.

36.1.2. Text Elements Tab

The properties on this tab enable you to define texts to be used in the component. The texts are available as FreeMarker model objects. Multiple languages are supported.



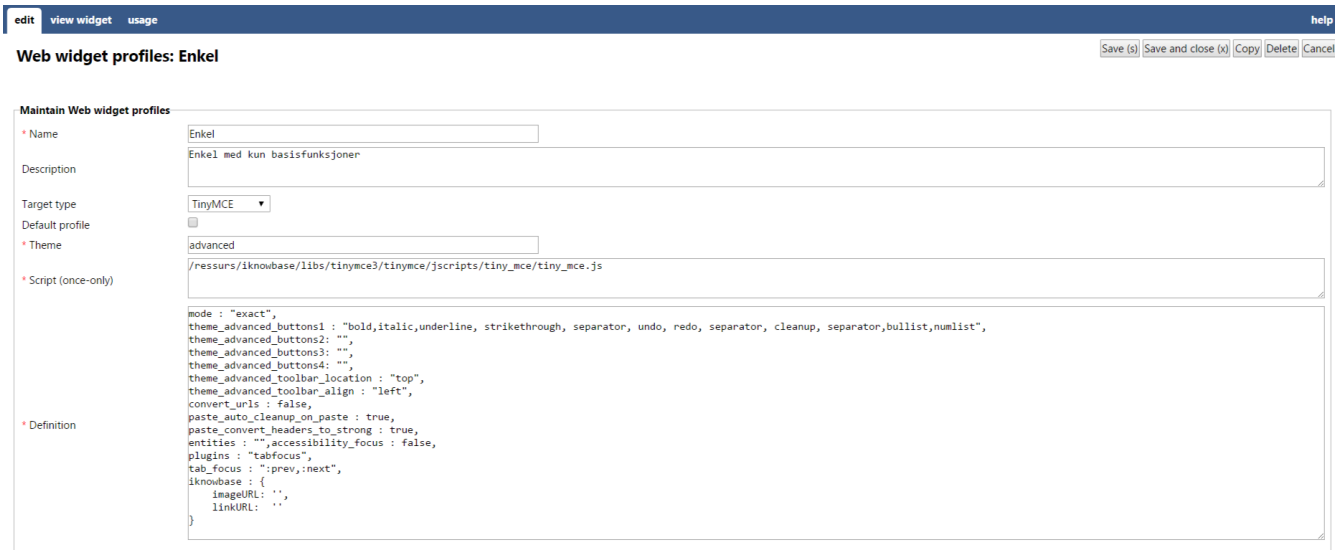
Property	Description
Id	Type an identifier for the text element.
Text	Type the text labels that you want to use in the template. If multiple languages are supported in the solution, clicking the text input item expands hidden input items for all the languages, the language codes are specified behind the input fields.

Chapter 37. Web Widget Profiles

Web Widgets profiles is used to define a access point to a software application, e.g TinyMCE used for rich text editors. Other examples are date widgets. iKnowBase differs between three types of widgets; Tinymce widgets, other text editor widgets and date widgets.

37.1. Properties

This section describes the properties of a Web Widget profile, as shown on the corresponding Edit pane.



Property	Description
Name	Type a name for this Web Widget profile.
Description	Type a description for this Web Widget profile.
Target type	Select between TinyMCE, CLOB Widget and Date Widget
Default profile	Check this check box to have this TinyMCE profile be the default one. Only applicable for Tinymce
Theme	Type the reference to the TinyMCE setup that is based on different themes. For more information on themes, see the TinyMCE documentation. Only applicable for Tinymce.
Script	Enter the name of the script file required to configure this particular profile.
Definition	Enter tags used for building a web widget profile.

37.2. More about TinyMCE

iKnowBase, by default, uses the TinyMCE WYSIWIG html editor to edit HTML-based content. Define different TinyMCE profiles to use different TinyMCE configurations throughout the system.

iKnowBase contains TinyMCE plug-ins to access the iKnowBase document- and image archive. This enables the end user to insert document links and images into the TinyMCE editor from the iKnowBase archives.

When you first install iKnowBase, three TinyMCE profiles will be configured:

- Standard: Showing a selection of buttons on the TinyMCE toolbar.
- Simple: Displays only the basic functions on the TinyMCE toolbar.
- Full: Showing all of the buttons and features on the TinyMCE toolbar, including iKnowBase buttons.

The Simple profile is default on most description fields, and the Full profile is default for text content fields.

You can change the existing TinyMCE profiles or create you own to match your needs. The configured TinyMCE profiles are available when you set a style for a text field in a Form (on the Style tab of the Edit pane).

The TinyMCE documentation is available at: http://tinymce.moxiecode.com/index.php.

The following languages are supported: Norwegian and English. You can define more language profiles; see the TinyMCE documentation for information.

For TinyMCE the following scripts are included in the iKnowBase distribution:

/iknowbase/libs/tinymce3/tinymce/jscripts/tiny_mce/tiny_mce.js

To include iKnowBase buttons in the toolbar, the definition must contain the following:

```
plugins:"iknowbase"
theme_advanced_buttons1_add : "iknowbase.link, iknowbase.image"
iknowbase : {
    imageURL: '',
    linkURL:  ''
}
```

For more information, see the TinyMCE documentation.

37.3. Testing your Web Widget profile

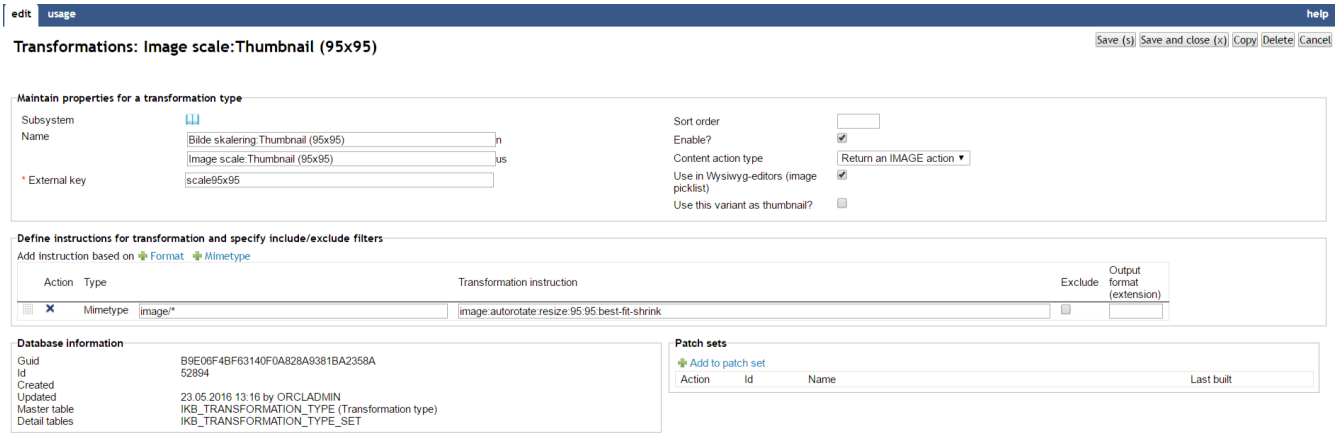
To test your Web Widget profile, click the View Widget on the Edit pane tabs for the profile.

Chapter 38. Transformation

Transformations are used to transform content in iKnowBase. Typical examples are image scaling or transformation to a different content type (e.g. from word to PDF). Transformation are based on instructions to providers supported by iKnowBase. By now we have the following providers: fileconverter (Oracle InsideOut), image (iKnowBase image converter) and ctxdoc (Oracle Text conversion). A transformation definition can have rules and include or exclude certain mimetypes or file formats.

38.1. Properties

This section describes the properties of an image variant, as shown on the corresponding Edit pane.



Property	Description
Subsystem	Select the appropriate subsystem.
Display name	Give the transformation a name to describe the transformation.
External key	External key is a logical name that will be used as an instruction to the transformation service. Its is more readable than the actual instruction and creates more readable links. e.g. /transformation=scale95x95 instead of /transformation=image:resize:200:200:best-fit-shrink. NOTE: be aware if you change the external key, all links using the name like the document body will not be changed.
Sort order	Used to order the variants in image selectors (e.g. the image selector used in editors).
Enable?	Defines if the variant is enabled. No variants will be created (or available from images functions) if the variant is disabled.
Content action type	Used from a content viewer and decides if the returning object should be a link or an image link.

Property	Description
Use in Wysiwyg-editors (image picklist)	Used when you want to insert a image link to a variant from the Wysiwyg-editor.
Use this variant as thumbnail?	Defines if the variant should be used as thumbnail in the image archive. Only one variant can be checked as thumbnail.
Define instructions and include / exclude content types	
Format	Create a rule for a certain file format. It can either be included or excluded. It you include the file format you need to give an instruction.
Mimetype	Create a rule for a certain mimetype. It can either be included or excluded. It you include the mimetype you need to give an instruction. Wildcard are allowed, e.g. image/*.
Transformation instruction	Enter a valid instruction if the rule is an including one. See *Content Transformation Service* in the *Development Guide* for instruction details.
Exclude	Decide if the rule is an exluding one.
Output format (extension)	Enter the extension to the transformed file. If not given, it will use the original extension. e.g when transforming to pdf the extension should also be set to pdf.

Chapter 39. Viewer

A Viewer enables you to present content from iKnowBase. When configuring a viewer, you must specify which content to retrieve (similar to the WHERE clause in SQL). You can use both static and dynamic criteria. You can associate the Viewer with a Presentation style to define how to present the content. If you do not specify a Presentation style, iKnowBase tries to find a Presentation style at run-time based on current domain/document type. If the document type is not associated with any presentation style, the viewer cannot retrieve a document.

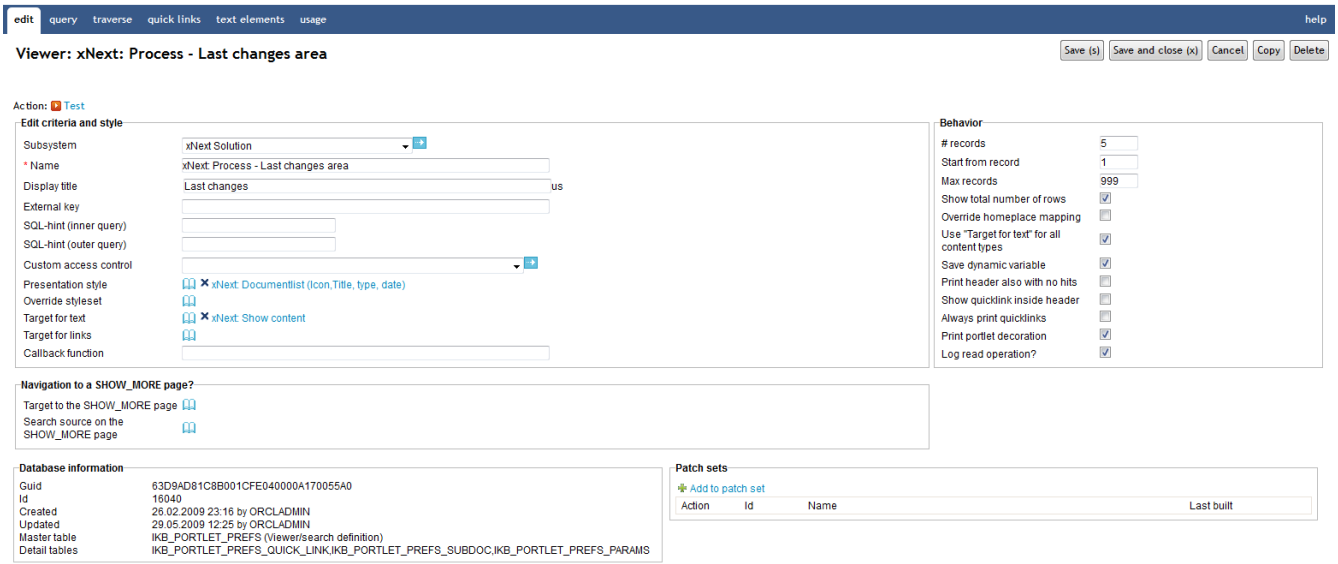
There are two types of viewers.

- **iKnowBase shared viewer**: Most common, used by a content viewer component on a page.
- **SOLR Viewer**: It is used to enhance the result set from SOLR by running a viewer with a presentation style. The presentation style can retrieve everything a shared viewer can, but will only be retrieved for documents in the SOLR result set. This will allow you to run database functions, build links and so on easily. Only appropriate properties are available for this mode.

39.1. Properties

This section describes the properties of a viewer, as shown on the corresponding Edit pane tabs. A SOLR viewer has only a subset of the properties available.

39.1.1. Edit Tab



Property	Description
Subsystem	Select the appropriate subsystem.
Name	Type a name for this viewer.

Property	Description
Display title	Type a title for this viewer. This may be presented to the end-user by a Presentation Style. The title supports multiple languages.
External key	Type the appropriate external key. For SOLR viewers external key is a mandatory field, otherwise its optional.
SQL-hint (inner query)	For advanced users only, type the appropriate SQL hint for the inner query (where-condition part). The hint will be inserted into the SQL-query; using the appropriate hint may help speed up query execution.
SQL-hint (outer query)	For advanced users only, type the appropriate SQL hint for the outer part of the query (select-part). The hint will be inserted into the SQL-query; using the appropriate hint may help speed up query execution.

Property	Description

Custom access control	Type the name of the appropriate database procedure to use a special access control, if you want to extend the default access control. Note: You should use this carefully, as controlled security model may be set aside.
	
	The following signature must be used for the database procedure:
	
	`PROCEDURE <package>.<procedure name> (`
	`  site_id in number,`
	`  user_id in number,`
	`  reference_path in varchar2,`
	`  result out`
	`);`
	
	The returned result must be an SQL fragment which fits into the SQL WHERE clause generated by the Viewer. For example, the function could return
	
	`or oi1.owner_id = 125`
	
	and the query would then be
	
	`...`
	`and (oi1.owner_id = <userid>`
	`or ((oi1.acl_guid is null`
	`or oi1.owner_id = 125`
	`or oi1.acl_guid in (select v_acl.acl_guid from v_acl)`
	`...`

Presentation style	Select the Presentation style you want to use to format the output.
Override styleset	Select the Styleset you want to apply. If set, this will override the styleset defined on the Presentation style to be used.
Target for text	Select the target page to use for link to documents with text content.
Target for links	Select the target page to use for link to documents with file or URL content.
Callback function	A function used as callback from Forms when adding new documents or editing existing documents initiated from the viewer. You can use this property to avoid page redirect upon save from form. The parameter passed to the callback function is a json object with the properties **action** and **documentId**. The callback function could for example reload the viewer.

Property	Description
Target to show_more page?	Select the target page to use for the "show more" link. Please note that the target definition should have a parameter named p_search_id as Parameter1.
Search source on the show_mode page	To reuse a single target page for multiple "show more" pages, select the search source you want to display on the target page.
# records	Type the number of rows that you want to extract at a time. The default value is 10.
Start from record	Type the row number from which you want to display the result set. The default value is 1.
Max records	Type the maximum number of documents that you want to extract. The default value is 100.
Cache interval (0 is none)	Type the time in minutes for which you want to keep content in the cache.
Show total number of rows	Select this check box to display the total number rows on the status line.
Override homeplace mapping	Select this check box to use the targets defined on this Viewer rather than the target selector mechanism.
Use "Target for text" for all content types	Select this check box to use the target defined in the Target for text property for all links to documents, disregarding the content type.
Save dynamic variable	Select this check box to use a session save on all the dynamic parameters. If these values are not in the URL, this property allows iKnowBase to save the last values. If you do not save the session variables, no content appears when you enter the page without the necessary dynamic parameters specified on the portlet.
Print header also with no hits	Select this check box to display the title of the portlet if the search finds no documents.
Show quicklink inside header	Select this check box to display the quick links within the header section of the viewer.
Always print quicklinks	Select this check box to display the quick links even it mandatory attributes are not set.

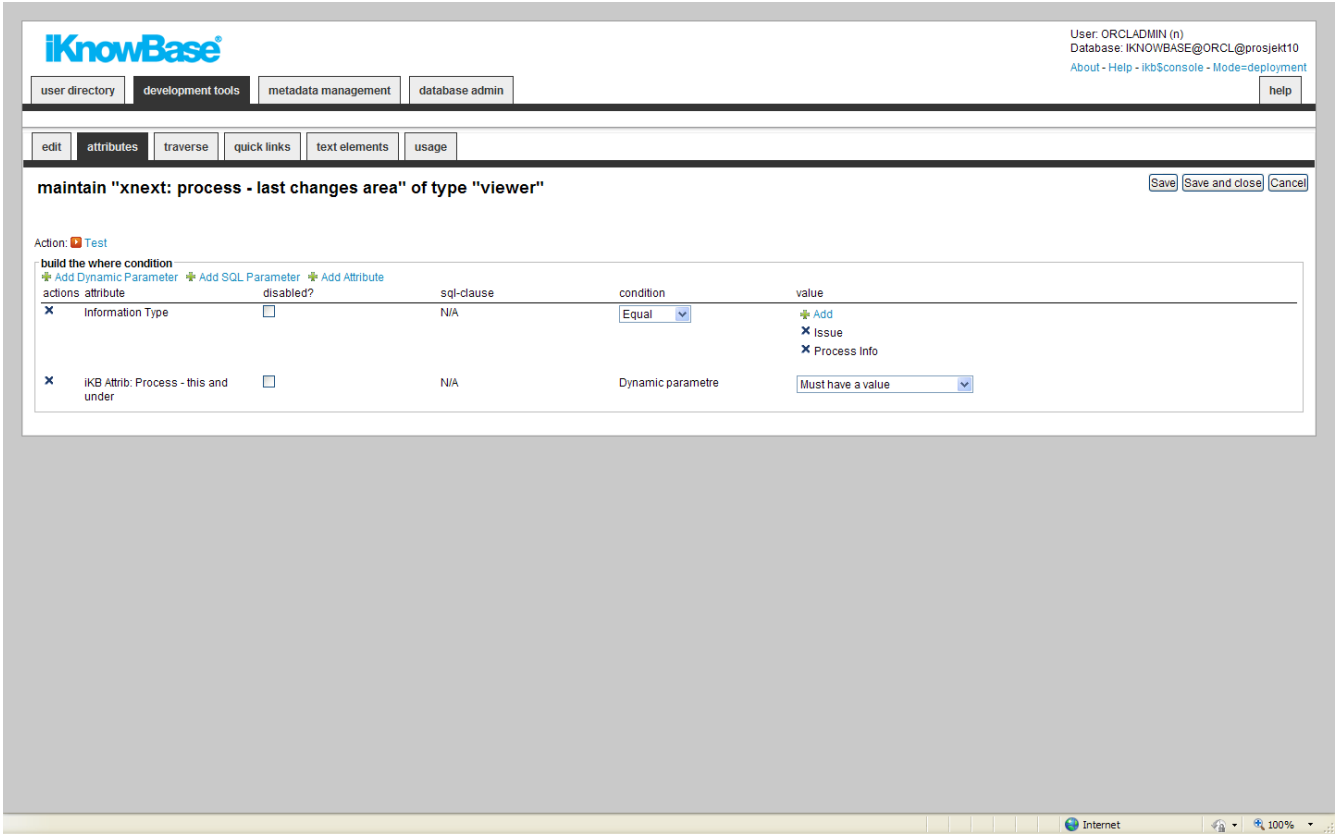
Property	Description
Print portlet decoration	Select this check box to print the portlet decoration that surrounds the content in a portlet.
Log read operation	Uncheck if you want to avoid logging to the document statistic table. By default it will insert one row everytime a document with HTML-content is displayed.
Return full document object?	Check if a document should be return to the client with all ids (guid, external_keys, id and labels). This applies to access control list value, document type, status, user information, and all dimensions/document and value list attributes. These values will be available from e.g freemarker. Be aware of reduced performance by selecting this option (Only use it if you need it).

39.1.2. Attributes Tab (only available for iKnowBase shared Viewer)

You can choose between four types of parameters:

- **Dynamic parameter**: Parameters defined as iKnowBase parameters.
- **SQL parameter**: Parameters defined as SQL parameters.
- **Attribute**: iKnowBase attributes, used to set constant values in the query.
- **External**: Parameters defined for iKnowBase external data sources. Only available if the data source is an external datasource.

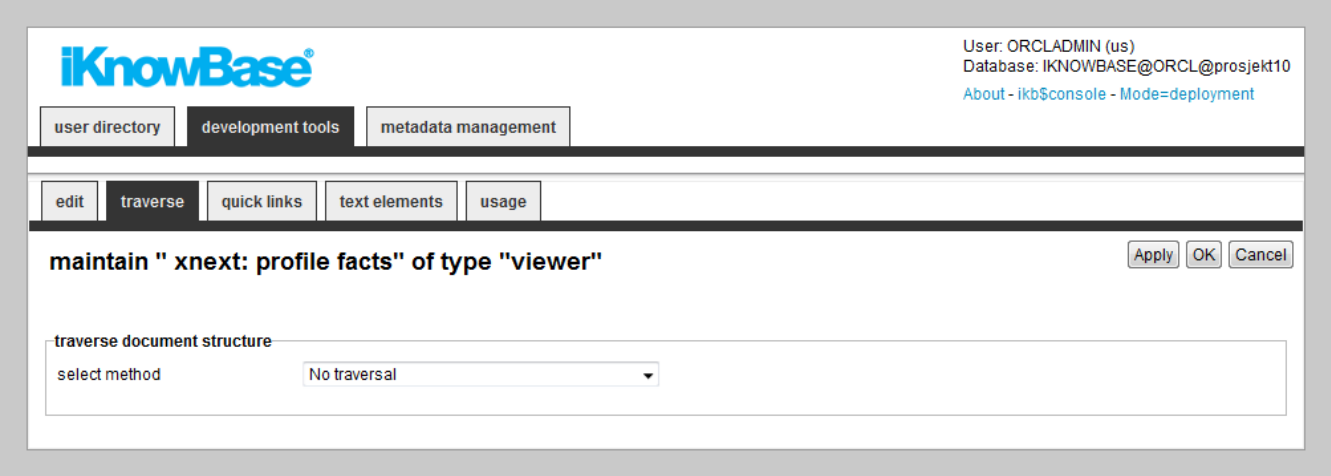
When the parameter is selected, you must save before you can set any values.



Property	Description
Actions	Delete the parameter by clicking the icon.
Attribute	Displays the names of the selected attributes to use as conditions for the Search source.
Disabled?	You can for debugging reasons disable attributes.
Sql Clause	Used for performance reasons for advanced users. Will generate a SQL with either IN or EXISTS.
Condition	Select the appropriate conditions for the selected attributes. The conditions depend on the type of attribute. If the conditions *exists* or *not exists* are available you don't need to add any values. **Note**: You cannot select a condition for parameters.
Value	Select or enter the appropriate values for the selected attributes. Available options depends on the attribute/parameter type. Date attributes allow use of NOW (with timestamp) and TODAY (truncated value) Applicable to SQL parameters only when the parameter is defined with an attribute.

39.1.3. Traverse Tab (only available for iKnowBase shared Viewer)

The properties on the Traverse tab enables you to define a Viewer with traverse features, e.g. possibilities to display subdocuments or versions of the extracted documents. Examples are discussion forums and view all versions of a document.

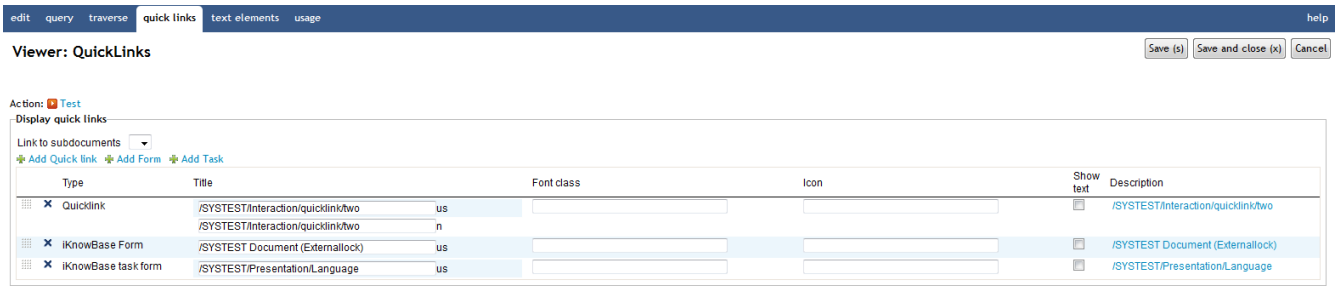


Property	Description
Select method	Choose how you want to traverse the document structure. You can choose between : • No traversal: will not retrieve any subdocuments Traverse down by using a connect-by clause: will fetch all subdocuments for every documents retrieved. It will use the same presentation style as defined on the main viewer definition. When selected, you can enter the number of levels you want to traverse. • Traverse up by using a connect-by clause: will fetch all documents above for every documents retrieved. It will use the same presentation style as defined on the main viewer definition. Suitable for viewers showing only one document where you want to see the top levels. When selected, you can enter the number of levels you want to traverse. • Traverse by using search sources: For each document it will run a new viewer. This is not as efficient (performance) as the above methods, but gives you the flexibility of defining separate conditions and presentation style for each level.
Level	Type the level for the extraction source. Level 1 specifies first level, but you may specify extraction sources that traverse further on level 2 documents, etc.
Select source	Select the appropriate Search source as the base for the extraction of subdocuments. You can vary the style and layout on different levels.
Expand Collapse	To enable the expand/collapse functionality for the subdocuments, click Yes. To display the subdocuments directly, click No.

Property	Description
Icon Expand	Enter the reference to the icon to be used to expand the list of subdocuments. Note: You must click Yes in the Expand Collapse list.
Icon Collapse	Enter the reference to the icon to be used to collapse the list of subdocuments. Note: You must click Yes in the Expand Collapse list.

39.1.4. Quick Links Tab (only available for iKnowBase shared Viewer)

The properties on the Quick links tab enable you to generate links to create new documents in the Viewer. The link can point to a quick link, iKnowBase Form or Task Wizard. In order to use the Quick link to create a subdocument, you should define the Quick link to take a document ID as a dynamic parameter, which may be used to set the parent document for the document to be created.

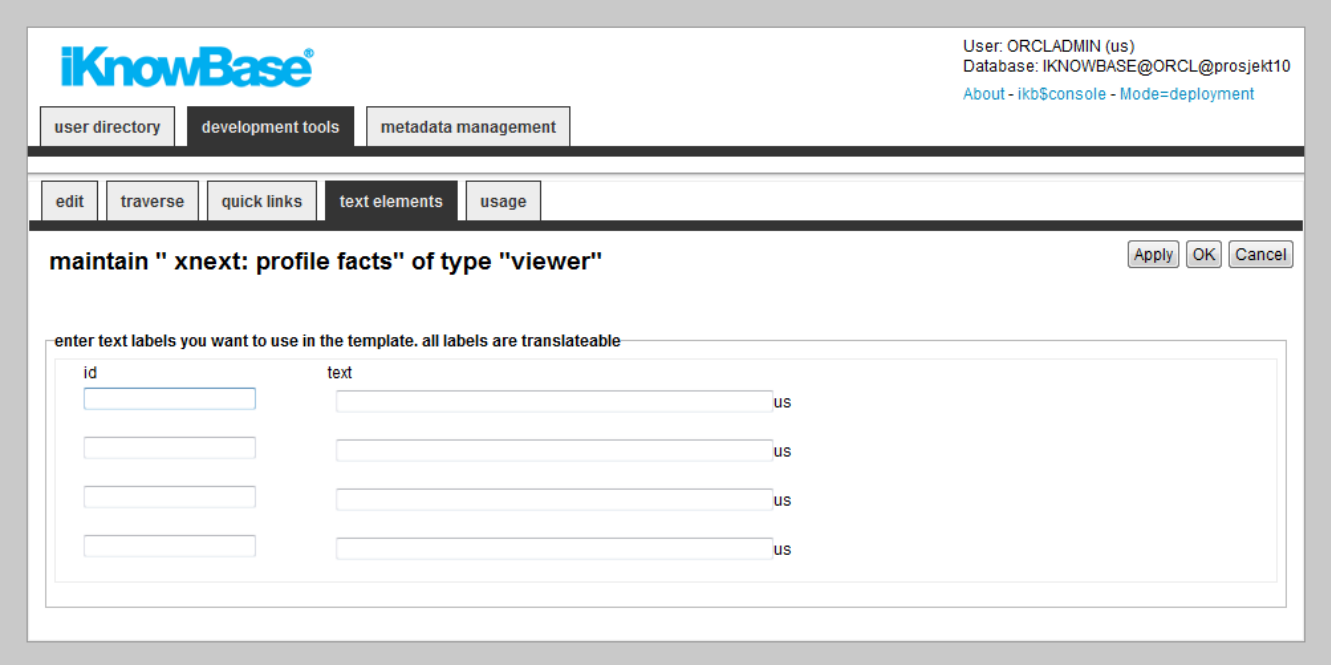


Property	Description
Link to subdocuments	Select the appropriate dynamic parameter, must be a document ID, to pass to the Quick link in order to be able to create a subdocument.
Add quicklink	The link opens a window with all available quicklinks. Select one or more.
Add Form	The link opens a window with all available iKnowBase Forms. Select one or more.
Add Task	The link opens a window with all available task wizards. Select one or more.
Title	Type the title that to use for the Quick link. If multiple languages are supported in the solution, each language displays a box, where you can type the title that appears. When you click in the Title box, the language box appears. The language code is placed behind the box.
Font class	Type the font class to use for the Quick link text.
Icon	Type the path of the image to use for the quick link.
Show text	Select this check box to display both text and image.

Property	Description
Sort	Type the sorting IDs to sort the quick links that you select.
Description	Displays the description of each quick link.

39.1.5. Text Elements Tab

The properties on the Text elements tab enable you to define texts to use in the component. The texts are available as FreeMarker model objects in template-based Presentation styles. Multiple languages are supported.



Property	Description
Id	Type an identifier for the viewer.
Text	Type the text labels that you want to use in a template. If multiple languages are supported in the solution, each language displays a box, where you can type the name of the form that appears. When you click in the Text box, the language box appears. The language code is placed behind the box.