Search and Filter

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1 Introduction

1.1 Purpose of the Document

Xpert.NET is a very dynamic help desk solution that can be configured in nearly every direction. Daily routine and our experience have shown that, while most administrators familiarize themselves with the most important modules and configurations after some time, many questions remain unanswered and much potential unused, due to a lack of knowledge.

This document is supposed to help you with reaching your target faster using various search and filter methods. For this purpose, it will describe their configuration and use as well as their integration into the entire *Xpert.NET* system step by step.

1.2 Addressees of the Document

This document mainly addresses administrators and end users of *Xpert.NET*.

1.3 Remarks on the Content of this Document

In this document, all kinds of functions for searching and filtering will be named and described. The functional range can, however, fluctuate due to the configuration, licensing, and versioning. If you miss certain functions listed in this document in your *Xpert.NET* installation, please contact our support directly.

1.4 Document Overview

In Chapter 2, the two most important methods for finding various objects in *Xpert.NET*, the search via the direct access and the extended search, will be illustrated. In the subsequent Chapter 3, the search and filter options in the various *Xpert.NET* modules will be detailed.

2 Direct Access and Extended Search

The direct access as well as the extended search can be accessed from every location in *Xpert.NET*. While you can access the extended search via the top menu, the direct access is located in the bottom left corner of your *Xpert.NET* interface.

2.1 Direct Access

You can find the direct access in the menu bar on the left on every page of *Xpert.NET*. Via this function, you can open various objects directly without having to switch to the respective module first. Simultaneously, a search can be started via various aliases previously set.

2.1.1 Access to Objects via ID

Via this direct access, tickets, tasks, KB articles, CIs, and expenses can be opened by using the ID of the respective object. For this purpose you have to enter the respective object's ID in the same way it is displayed in the interface.

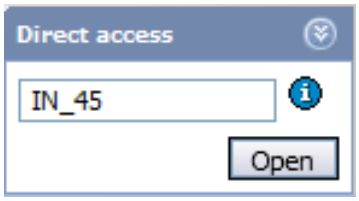

Figure 2.1: Opening an object using direct access

For example, entering *IN_45* opens the ticket *IN_45* after you click on Open or use the Enter key on your keyboard. Leading zeros in the numbers can be left out as the direct access recognizes leading zeros in the IDs on its own. Thus, the ticket number could be *IN_00045* as well. Entering *IN_45* would be a sufficient ticket number for opening the ticket.

In the following table you can see how the various objects can be accessed with their ID:

Object	**Description**
Tickets	Tickets can be generally accessed via the character strings determined by the numerical range for tickets. Example: *IR_02328*
Tasks	Every task begins with the character string *TSK_*. Example: *TSK_1438*
CIs	A configuration item can be accessed via the direct access by entering its Visible ID.Warning: Since Version 3.7 of *Xpert.NET* on, you have the option to assign a unique Visible ID for CI; this is, however, optional. Otherwise, if there are multiple CIs with the same Visible ID, the CI created first in the system will be opened

KB articles	Every KB article begins with the character string *KB_*. If there are several revisions of a KB article, these revisions can be opened by adding .rxx to the ID. Example for an article without revision: *KB_0546*. Example for an article with revision: *KB_0546.r05* (fifth revision of this article)
Expenses	Expenses are number continuously. There is no prefix character string

2.1.2 Searching via the Direct Access

A simple search can be performed via the direct access as well. Currently it is only possible to search for complete contents, i.e. you cannot search for parts of field content.

A further option is the search via previously set aliases.

In order to perform such a search all of the fields to be searched in a ticket schema have to be assigned with an alias. For example, every ticket field in any schema containing email contact information could be assigned with the alias email.

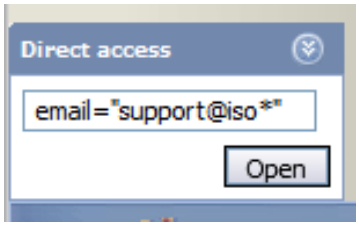

Figure 2.2: Searching with aliases in direct access

Please note

Aliases can be defined arbitrarily for fields in the ticket schemas and thus may differ from system to system. We recommend to ask your administrators for the currently used aliases.

Subsequently, a search like

```
email=lastname.firstname@enterprise.com
```

can be entered into the direct access field. In the results dialogue all of the tickets with the specified email in a field assigned with the alias email will be displayed. If only a part of the content is to be searched, a placeholder can be used at the end of the search string in the form of

```
email="lastname.firstname@enter*"
```

In this case all of the tickets with an email address ending with enterprise.com in a field assigned with the alias *email* beginning with name.firstname@ent will be displayed in the results dialogue. If no placeholder is used, the quotation marks can be left out. The search content can include spaces as well.

Moreover, the operator =! (does not equal) can be used, as well as the operator = (equals). Thus, using the expression

```
email=!lastname.firstname@enterprise.com
```

all tickets that do not include this email address would be listed.

You can use logical operators like AND or OR for narrowing down the search results as well. If both of the logical operators are used in an expression, they will be processed as follows:

```
<AND condition> AND <OR condition>
```

This is important as an alias can be assigned several times to different ticket fields of different ticket schemas. If the expression

```
Country=CH AND Department=MRI
```

is used and if both aliases are used in two ticket schemas, the expression will internally be interpreted as:

```
(TicketSchema1.Country=CH OR TicketSchema2.Country=CH) AND
(TicketSchema1.Department=MRI OR TicketSchema2.Department=MRI)
```

If a date value is to be searched, it has to be entered in the UTC and ISO format:

```
Completed=2009-09-07T22:00:00
```

Moreover, aliases for fields containing only Boolean values, like check boxes, can be defined as well. In order to search for them, true can be used for True/Yes and false for False/No respectively:

```
Checkbox1=true
```

Please note

No brackets are allowed when entering a search into the direct access.

2.2 Extended Search

The general starting point for finding various objects is the extended search. Using extended search knowledge base articles, configuration items (CIs), expenses, tasks, and tickets can be found.

You can find the extended search in the top menu under Tools -> Extended Search.

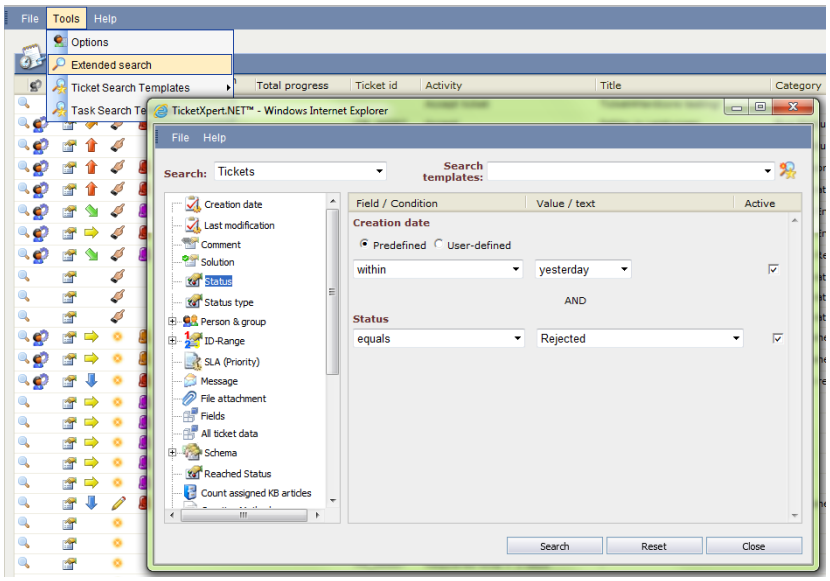

Figure 2.3: You can find the extended search in the menu *Tools*

A new window will open, in which the search parameters can be combined.

The elements to be searched can be configured via the drop-down-list top left. If there are search templates available for these elements, they can be selected in the drop-down-menu on the right next to it. If a search is needed repeatedly, it can also be saved vie the *Save template* button, which will be faded in as soon as a search has been compiled. Saved search templates can be customized afterwards as well. Select a search template and the individual parameters will then be displayed in the search dialogue and can be adjusted there.

The various search parameters can be selected in the tree view on the left. Search parameters that can be sub-divided, like Ticket ID Range, can be expanded and then will display several sub-parameters (in this example the various numerical ranges for tickets). If one of them is selected with a click, it will automatically be transferred into the array on the right and can be configured more closely there.

Already configured search parameters will also be displayed in form of a table there. Under **Field/Requirement**, the parameter name will be displayed. Simultaneously, you can select the relation of the parameter's value to the search result there.

The parameter's value can be entered under **Value/Text**. This can be accomplished via drop-down menus, normal text entries, or the like. In general, all available expressions of the *Expression Reference* are supported as soon as it is possible to write text in a text box.

Please note

It is necessary to check whether an expression that is used for searching returns usable results. By way of example, it is not useful to use the expressions
{$ TaskLifeCycle.DataId $}
for searching in ticket file attachments as this would not return a reasonable result.

The **Active** column is used to exclude or include search parameters from the search. If multiple search parameters are selected, they are linked via an AND relation by default.

If an OR relation is to be used, simply click on the logical operator and it will change automatically. Via the green plus icon, further fields can be added to a search parameter. These will be linked via an OR relation. Via the recycle bin icon, they can be deleted again.

It is possible to change the succession of already configured search parameters as well. For this purpose, the left frame of any parameter is to be clicked. By holding the left mouse button, any search parameter can be dragged up or down in the list.

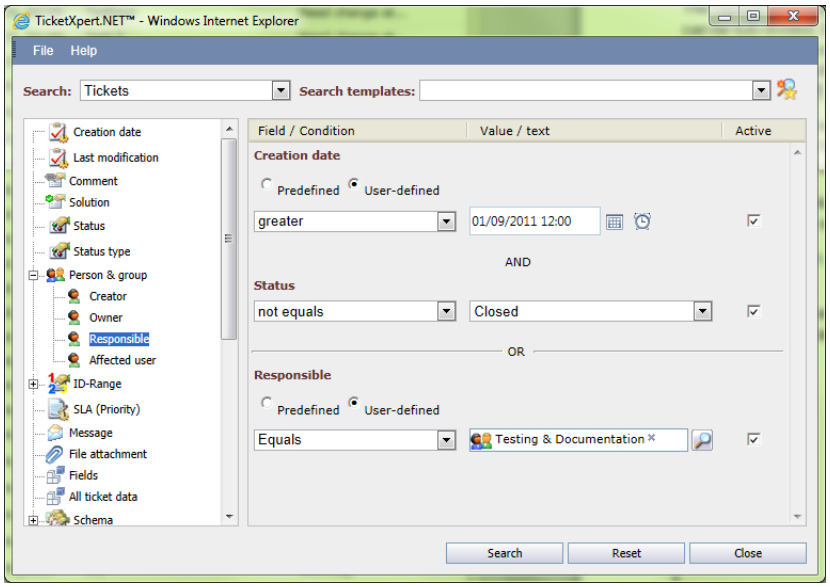

Figure 2.4: The extended search feature

When all search parameters have been entered, the search can be started with a click on the *Search* button.

If another search is to be conducted with new search parameters, the *Reset* button can be used. All of the already created search parameters, however, will be deleted by this.

The *Close* button closes the entire window without conducting a search.

The individual search parameters will be explained in the following.

Please note

Search keys that check for the number of linked entities, do not check the authorization level of the current user on these entties, but only whether internally or externally linked entities are visible for the user executing the search. For this reason, it is possible that, when searching for tickets that are linked to at least 3 expenses, also tickets are displayed the current user is allowed to only see one or two expenses of.

Starts with: Searches the fields for the entered text. If a field's content begins with this particular value, the condition is fulfilled and the object will be displayed.

Doesn't start with: Searches the fields for the entered text. If a field's content does not begin with this particular value, the condition is fulfilled and the object will be displayed.

Including: Searches the fields for the entered text. If a field's content contains this particular value, the condition is fulfilled and the object will be displayed.

Excluding: Searches the fields for the entered text. If a field's content does not contain this particular value, the condition is fulfilled and the object will be displayed.

Contains data: Searches the fields for contained data. If a field contains data, the condition is fulfilled and the object will be displayed.

Contains no data: Searches the fields for contained data. If a field does not contain data, the condition is fulfilled and the object will be displayed.

Creation date: Searches the fields for the entered date value. If a field contains this date, the condition is fulfilled and the object will be displayed.

Equals: Searches the fields for the entered values. If a field contains exactly this value, the condition is fulfilled and the object will be displayed.

Not equals: Searches the fields for the entered value. If a field does not contain this value, the condition is fulfilled and the object will be displayed.

Greater: Searches the fields for the entered value. If a field contains a value greater than the entered one, the condition is fulfilled and the object will be displayed.

Greater or equal: Searches the fields for the entered value. If a field contains a value greater than or equal to the entered one, the condition is fulfilled and the object will be displayed.

Smaller: Searches the fields for the entered value. If a field contains a value smaller than the entered one, the condition is fulfilled and the object will be displayed.

Smaller or equal: Searches the fields for the entered value. If a field contains a value smaller than or equal to the entered one, the condition is fulfilled and the object will be displayed.

2.2.1 Searching for Tickets

The following search parameters are available for the type Ticket:

Time: Searching for tickets that meet time requirements:

- **Creation date**: Searching for tickets that have been created at a certain date. The condition to be selected can vary from *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal* or *Not Equal* as a condition here. In the Value field, a date and a time have to be entered.
- **Last modification**: This is the time the ticket has been modified last, either by a user or by the system. The condition has the same options as Creation date. In the Value field, a date and a time have to be entered.

It is also possible to choose predefined time values. For this purpose, it is necessary to switch from *User-defined* to *Predefined*. Afterwards, the conditions *Within* and *Older* as well as usual values like *today*, *yesterday*, *last quarter* or *last 60 days* can be selected.

Status: Searching for tickets according to their status by considering the following criteria:

- **Current status**: The current status of the ticket is defined as a search criterion. The available conditions are *Equals* and *Not equals*.
- **Reached status**: The conditions available are Reached and Not reached. Depending on the existing statuses, various value selections can be made.
- **Status type**: Tickets will be searched for by means of a status belonging to a certain status type. The conditions available here are *Equals* and *Not Equals*. Select one of the preset status types as a value.

Fields: Searching for data according to the specific ticket fields mentioned below:

- **All ticket data**: All data available for tickets, like comments and solutions, are searched. The condition that can be selected is *Including*.
- **Comment**: Ticket comments are searched according to a certain value. The available conditions are *Including* and *Excluding*.
- **Fields**: All ticket fields are searched. The condition that can be selected is *Including*.
- **File attachment**: File attachments that are attached to tickets are searched. The condition that can be selected is *Including*.
- **Message**: Messages that are attached to tickets are searched according to the values mentioned in this field. The available conditions are *Including* and *Excluding*.
- **Solution**: The ticket solution is searched according to any value. The available conditions are *Including* and *Excluding*. Any value can be entered in the text field.
- **Title**: The ticket field that has been marked as the title field in every ticket schema is searched according to the values entered. Available conditions are *Including*, *Excluding*, *Equals*, *Not equals*, *Starts with* and *Doesn't start with*.

Person & group: Searching for tickets that are in a certain constellation to a user or a group. If you click on *Person & group* instead of one of the sub-options, all of these user types will be searched. The conditions available are *Equals* and *Not Equals* in each case. The respective person can either be entered manually or be searched via a user browser (magnifying glass icon).

Alternatively, the defined filtering option *Equals* or *Not Equals* and *Logged in user* can be used. The following five options can be found in the tree under Person & group:

- **Creator**: The creator of the ticket is searched.
- **Owner**: The current owner of the ticket is searched. Additionally, searching for owners can be constrained to Is user/group/team/process role resp. Is not user/-group/team/process role.
- **Responsible**: Users or groups set as responsible for a ticket are searched
- **Ticket follower**: Searching for users that are set as ticket followers.
- **Editor**: Searching for tickets in which a certain user made modifications and, thus, affected a history entry in a ticket. The preset search allows for searching for tickets with the currently logged-in user (*Equal/Not equals*) as editor; the user-defined

search allows for searching for an arbitrary user as editor who is visible to the user (*Equal/Not equals*).

- **Affected user**: Searching for users that are set as affected users.

It is also possible to search for the logged-in user by selecting *Person & Group* or any of the user types in the tree view. By clicking *Predefined* it is possible to search for the active user. The search condition can be either *Equals* or *Not equals*.

Number range: Tickets are searched according to their number range. The sidebar shows all ticket number ranges that are available on your system. The available search conditions are *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equals*, *Not Equals*. Please enter only numbers in the value field.

SLM: Existing tickets are searched for the selected contracts, services and priorities.

- **Contract**: Tickets are searched for the selected contract.
- **Service**: Tickets are searched for the selected service.
- **Priority**: Tickets are searched for the selected priority.

The available operators are *Equals* and *Not Equals*.

Schema: Select individual ticket fields from schemas, in order to search them specifically. The available conditions are *Equals* and *Not Equals*. It is furthermore possible to search the fields for Boolean values. For this purpose, there are two additional search parameters: *Contains data* and *Contains no data*. If text fields of a ticket schema are searched, the following search options are available: *Including*, *Excluding*, *Starts with*, *Doesn't start with*.

Alternatively, all tickets of a schema can be searched by clicking on the *Schema* node. Subsequently, all existing ticket schemas can be selected in the search field.

Count of: This search option allows for searching for the number of the following objects:

- **Assigned KB articles**: Tickets are searched according to the number of linked KB articles. Please enter only numbers in the Value field.
- **Comments**: Tickets are filtered for the number of created comments. The available search conditions are *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equals*, *Not Equals*. Please enter only numbers in the Value field.
- **Expenses**: Tickets are filtered for the number of linked expenses. The available search conditions are *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equals*, *Not Equals*. Please enter only numbers in the Value field.
- **Mails**: Tickets are filtered according to the number of linked emails. The available search conditions are *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equals*, *Not Equals*. Please enter only numbers in the Value field.
- **Successors**: Tickets are filtered according to the number of successor tickets. The available search conditions are *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equals*, *Not Equals*. Please enter only numbers in the Value field.

Creation: This search option allows for searching tickets according to specific creation characteristics:

- **Converted from ticket schema**: Searching for a ticket that has been created with a certain ticket schema. The available search conditions are *Equals* or *Not Equals*. Every ticket schema is available to be set as the search value.
- **Converted tickets**: If you want to display all tickets converted from one ticket schema into another, select this option. The available search conditions are *Converted* or *Not converted* can be selected.
- **Creation method**: Tickets will be filtered for their creation method. Select *Equal* or *Not equal* as a condition. The following options can be selected as a value:
  - **Automated filtering rules**: Select this creation method, if you want to search for a ticket created via automatic rules.
  - **Container**: If you want to search for a ticket container, select this method.
  - **Mail2Ticket**: If the ticket searched for has been created from an email via the Mail2Ticket interface, select this method.
  - **Ticket Wizard**: Select this method, if you want to search for a ticket created in the usual way, via a Ticket Wizard (this applies to tickets created from the Service Portfolio as well).
- **Directly solved**: Tickets are filtered for the property of being Directly Solved or Not directly solved. The respective property is set as the search condition.
- **Has parent**: Tickets are filtered for the property of being created from a ticket. The available search conditions are *Has parent* and *Has no parent*. The respective property is set as the search condition.
- **From Mail2Ticket account**: This option allows for searching for tickets that have been created through a specific Mail2Ticket account. Available conditions are *Equals* and *Not equals*.

Service Portfolio: This search option allows for searching tickets according to the following criteria of the Service Portfolio:

- **Service**: Tickets will be searched for the service they have been created with. Select *Equal* or *Not equal* as a condition. As a value, all of the available services can be used.
- **Service Catalog**: Tickets will be searched for the service catalog they have been created with. Select *Equal* or *Not equal* as a condition. As a value, all of the available service catalogs can be used.
- **Service Transaction**: Tickets will be searched for the service transaction they have been created with. Select *Equal* or *Not equal* as a condition. As a value, all of the available service transactions can be used.

2.2.2 Searching for Tasks

The following search parameters are available for the type Task:

Creation date: Creation date of the task. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition here. As a value, a date and a time have to be entered here.

Start date: Enter a date here and the tasks will be scanned for your start date. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition.

End date: Enter a date here and the tasks will be scanned for your end date. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition.

It is possible to select predefined intervals for the above search parameters. For this purpose, it is necessary to switch from *User-defined* to *Predefined*. Afterwards, the conditions *Within* and *Older* as well as usual values like *today*, *yesterday* or *last quarter* and *last 60 days* can be selected.

Comment: The task's comments will be scanned here. As a condition, *Including* or *Excluding* can be selected.

Status: Via this search field, tasks having reached the specified status will be searched. The conditions available here are *Equal* and *Not Equal*.

Status type: Select one of the preset status types as a value. The conditions available here are *Equal* and *Not Equal*.

Schema: Tasks of the selected schema will be searched. The conditions available here are *Equal* and *Not Equal*.

Executor: Tasks are searched for the named executor. The search conditions available are *Equals* and *Not equals*.

Executor group: Tasks are searched for the named executor group. The search conditions available are *Equals* and *Not equals*. A group can be selected as value.

Fields: Individual fields will be scanned for the value. As a condition, *Including* or *Excluding* can be selected.

Attachments count: Tasks are searched for the number of contained file attachments. The search conditions available are *greater*, *greater or equal*, *smaller*, *smaller or equal*, *equals* or *not equals*. Please enter only numbers in the value field.

Comments count: Tasks are searched for the number of comments created. The search conditions available are *greater*, *greater or equal*, *smaller*, *smaller or equal*, *equals* or *not equals*. Please enter only numbers in the value field.

Linked expenses count: Tasks are searched for the expenses linked to a task (created in a task). The search conditions available are *greater*, *greater or equal*, *smaller*, *smaller or equal*, *equals* or *not equals*. Please enter only numbers in the value field.

Subtasks count: Tasks are searched for condition if subtasks were created. for tasks are searched for the expenses linked to a task (created in a task). The search conditions available are greater, greater or equal, smaller, smaller or equal, equals or not equals. Please enter only numbers in the value field. Subtasks can only be first generation tasks. If a task has been created from a subtask, it is not a subtask.

Linked tickets count: Tasks are searched for the number of tickets they are linked with (tickets created in a task). The search conditions available are *greater*, *greater or equal*, *smaller*, *smaller or equal*, *equals*, or *not equals*. Please enter only numbers in the value field.

Has subtasks: Tasks are searched for the expenses linked to a task (created in a task). The search conditions available are *Has subtask* and *Has no subtask*.

Ola timespan: Tasks are searched for the Ola timespan that can be defined in every task schema. The search conditions available are *greater*, *greater or equal*, *smaller*, *smaller or equal*, *equals* or *not equals*. The format for the time span is minutes.

2.2.3 Searching for Configuration Items (CIs)

It is possible to search for configuration items (CIs) using the following search parameters:

Visible ID: The visible IDs of the CIs will be scanned for the value here. Valid conditions are *Including* and *Excluding*. As a value, a part or the entire content of the Visible ID can be entered. It is furthermore possible to use placeholders (see 3.3.2).

Created on: CIs will be searched via their creation date. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. As a value, a date and a time have to be entered here.

It is also possible to choose predefined time values for the above search parameter. For this purpose, it is necessary to switch from *User-defined* to *Predefined*. Afterwards, the conditions *Within* and *Older as* well as usual values like *today*, *yesterday* or *last quarter* or *last 60 days* can be selected.

State: Via this search field, CIs having reached the specified status will be detected. The conditions available here are *Equal* and *Not Equal*.

Person & Group: Users in a certain connection to a ticket will be searched. If you click on *Person & group* instead of one of the sub-options, all of these user types will be searched. The conditions available here are *Equal* and *Not Equal* in each case. The respective person can either be entered manually or searched via a user browser (magnifying glass icon). The following four options can be found in the tree under Person & group:

- **Creator**: The CI's creator will be searched. The user can be entered here or searched via the user browser (magnifying glass icon).
- **Owner**: The current owner of the CI will be searched. The user or group can be entered here or searched via the user browser (magnifying glass icon).
- **Affected User**: Users set as the affected user of a CI will be searched for here.

Furthermore can be searched for the currently logged-in user by clicking *Person & Group* in the tree or by selecting one of the user types. By clicking *Predefined* you can search for the currently active user. The search conditions available are *Equals* and *Not equals*.

Zone: CIs of a specified zone will be searched here. Available as conditions are: *Equal*, *Not Equal*, *Equal or below*, and *Not equal or below*.

All fields: All of the CIs' fields will be scanned here. Available conditions are *Including* and *Excluding*. As a value, an arbitrary search text can be entered.

Schemas: Individual fields of CIs of a specified schema will be scanned. Depending on which field has been selected, various different values and conditions can be defined. If a specific schema is used instead of the search parameter Schemas, it is possible to search for CIs that have been created by using a specific schema and that contain certain fields and field contents. It is furthermore possible to search the fields for Boolean values. For this purpose, there are two additional search parameters: *Contains data* and *Contains no data*.

Type: CIs will be searched for their type. Select one of the configured types as a value. As a condition, *Equal* and *Not Equal* can be selected.

2.2.4 Searching for Expenses

The following search parameters can be used in the search for expenses:

Execution date: Expenses will be searched for their execution date. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. As a value, a date and a time have to be entered here.

It is also possible to choose predefined time values for the above search parameter. For this purpose, it is necessary to switch from *User-defined* to *Predefined*. Afterwards, the conditions *Within* and *Older as* well as usual values like *today*, *yesterday* or *last quarter* or *last 60 days* can be selected.

Expense ID: Expenses will be searched for their ID (Expense#). The expense's ID is comparable to the ID range of a ticket, only without a prefix character string. *Including* and *Excluding* can be set as a condition. Only numbers can be entered as a value!

Project: Expenses will be searched for their corresponding project. Select *Equal* or *Not equal* as a condition. As a value, the project searched for can be selected from a drop-down-list.

Cost center: Expenses will be searched for their corresponding cost center.

- **Field name**: If the cost center contains additional fields, expenses connected to the respective cost center can be searched. Enter the desired field name.
- **Title**: Searching for expenses connected to a cost center with the entered name. As a value, the searched cost center can be selected from the drop-down list.

Select respectively *Equals* or *Not equals* as a condition.

Expense type: Expenses will be searched for their corresponding expense type. Select *Equal* or *Not equal* as a condition. As a value, the expense type searched for can be selected from a drop-down-list.

Reference: If an expense created from a task or ticket and thus linked to it is to be searched, the ID of this ticket or task can be entered here. *Equal* and *Not equal* are available as a condition here.

User: Expenses will be searched for their corresponding user (creator). *Equal* and *Not equal* are available as a condition here. As a value, a user can be selected in a user browser.

It is also possible to search for the currently logged-in user by clicking *Person & Group* in the tree or by selecting one of the user types. By clicking *Predefined* you can search for the currently active user. The search conditions available are *Equals* and *Not equals*.

Ticket schema: Expenses are often created via a certain ticket schema. Select *Equal* or *Not equal* as a condition. As a value, one of the available ticket and process schemas can be selected.

Allocation type: Expenses will be searched for their corresponding allocation type. Select *Equal* or *Not equal* as a condition. As a value, the allocation type searched for can be selected from a drop-down-list.

Title: The expenses' title will be searched. Enter *Including* or *Excluding* as a condition and the character string contained in the title as a value.

Total: With this, the total of the underlying formula of the respective expense type and the allocation type of the expense can be searched. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. Only numbers can be entered as a value!

Total internal: With this, the total of the underlying formula of the respective expense type and the allocation type of the expense can be searched. Because the internal and external totals can differ, this search parameter is available as well. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. Only numbers can be entered as a value!

2.2.5 Searching for Knowledge Base Articles

The following search parameters can be used in the search for knowledge base articles:

Created: Knowledge base articles will be searched for their creation date. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. As a value, a date and a time have to be entered here.

Revised: Knowledge base articles will be searched for the date of their revision. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. As a value, a date and a time have to be entered here.

It is also possible to choose predefined time values for the above search parameters. For this purpose, it is necessary to switch from *User-defined* to *Predefined*. Afterwards, the conditions *Within* and *Older as* well as usual values like *today*, *yesterday* or *last quarter* or *last 60 days* can be selected.

Status: Knowledge base articles will be searched for their current status. Select *Equal* or *Not equal* as a condition. As a value, every available status for KB articles can be used here.

Person & Group: Users in a certain connection to a ticket will be searched. If you click on *Person & group* instead of one of the sub-options, all of these user types will be searched. The conditions available here are *Equal* and *Not Equal* in each case. The respective person can either be entered manually or searched via a user browser (magnifying glass icon). The following four options can be found in the tree:

- **Creator**: The creator of the respective knowledge base article will be searched. The user can be entered here or searched via the user browser (magnifying glass icon). Additionally, the search option *Is member of group* is available.
- **Modifier**: A KB article modified by the respective user or group last will be searched. The user or group can be entered here or searched via the user browser (magnifying glass icon).
- **Knowledge owner**: KB articles with a certain user or group defined as the knowledge owner will be searched. The user or group can be entered here or searched via the user browser (magnifying glass icon).

- **Revisor**: A KB article revised by the respective user or group last will be searched. The user or group can be entered here or searched via the user browser (magnifying glass icon).

You can also search for the currently logged-in user by clicking Person & Group in the tree or by selecting one of the user types. By clicking *Predefined* you can search for the currently active user. The search conditions available are *Equals* and *Not equals*.

Title: The title or parts of the title of a KB article will be searched. Valid conditions are *Including* or *Excluding*. As a value, a part or the entire content of the title can be entered.

Description: Parts a KB article's description will be searched. Valid conditions are *Including* or *Excluding*. As a value, a part or the entire content of the description can be entered.

Keywords: With this, the key words of a KB article will be searched. Valid conditions are *Including* or *Excluding*. As a value, a key word or parts of it can be entered.

Content: Parts a KB article's content will be searched. Valid conditions are *Including* or *Excluding*. As a value, a part of the content can be entered.

Identity: The identity (ID#) of a KB article will be searched here. Valid conditions are *Including* or *Excluding*. As a value, a part of or the entire ID of a KB article can be entered (e.g. KB_0414).

Categories: With this option, you can search for articles sorted into certain categories. Select *Equal* or *Not equal* as a condition. As a value, every available knowledge base category can be selected.

Internal: An article can be marked as internal. You can search for these articles specifically via this option. As a condition, *True* or *False* can be selected. No further value can be added.

Linked ticket ID: KB articles linked to a certain ticket will be searched here. As a condition, *Including* or *Excluding* can be used. A ticket ID can be entered as a value.

Number of ratings: Articles will be searched here via their number of ratings. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. Only numbers can be entered as a value!

Rating: Article can be searched via their rating here. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. Only numbers between 0 and 5 can be entered as a value!

Number of visits: Articles with a certain number of visitors will be listed here. You can select *Greater*, *Greater or Equal*, *Smaller*, *Smaller or Equal*, *Equal*, or *Not Equal* as a condition. Only numbers can be entered as a value!

Attachments: File attachments attached to the articles will be searched here. You can search in all Microsoft Office documents as well as Zip, Text, and PDF files. Valid conditions are *Including* or *Excluding*.

2.3 Ticket Search Templates

All the search templates you have already compiled and saved can be accessed via the top menu. For this purpose, simply click on *Tools*. Depending on the elements to be searched, the templates will be available in various subfolders.

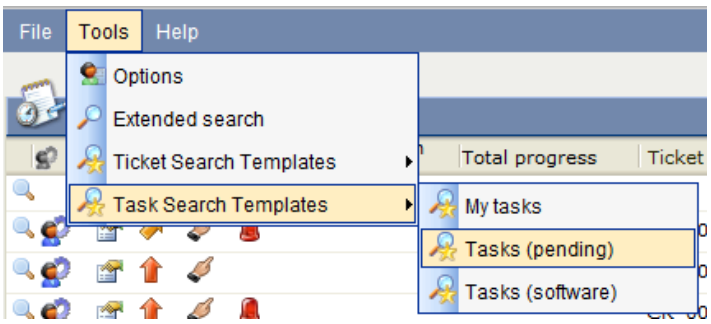

Figure 2.5: Saved task search templates

3 Searching in the Various Stages of Xpert.NET

Apart from the direct access and the extended search, which are available everywhere in *Xpert.NET*, there are specialized options for accessing the individual objects as well.

3.1 Searching and Filtering in the Ticket Overview

The extended filter is located on the right next to the short filter in the ticket list. On the far right, the options for the filter favorites can be found. Here, new favorites can be created or already generated favorites selected.

3.1.1 The group filter folder

By means of the group filter above the ticket list, it is possible to display tickets by users or user groups. By clicking on the magnifying icon or directly into the filter (All Tickets), the existing groups and users will be displayed in a tree view. Those groups will be displayed which the user is member in (*Tickets*, *My Tickets*, *Tickets of my group* as well as their subgroups and, additionally, the *followed tickets*).

Under *My tickets*, the ticket view can be constrained either to followed tickets (within a ticket, the ticket follower role has been assigned to the current user, for example by means of the ticket action *Follow ticket*) or to edited tickets. This only allows for displaying tickets the currently logged-in user made modifications in und thus, a history entry has been created on his behalf.

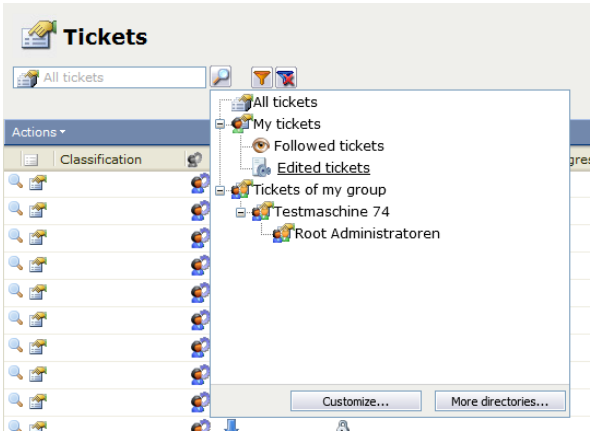

Figure 3.1:

By clicking on a group or a user, in the ticket list will be displayed only tickets created by the group or user. If the requested group is not available in the view, the button *Further directories* allows for searching for it. By clicking the button *Edit*, the tree view can be edited.

3.1.2 The Extended Filter

Via the extended filter, tickets can be filtered according to various criteria.

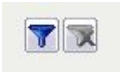

Figure 3.2: No filter is active

If a filter has already been activated, this will be indicated by the changed icons of the extended filter:

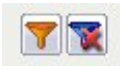

Figure 3.3: Active filter

Via a click on the blue (orange) filter icon, a new window will open, in which the filter criteria can be selected.

The following tabs are available here:

Status: Select the status of the ticket to be searched. The statuses available on a system depend on the respective system because of being created by the system administrator. If tickets with several different statuses are to be searched, multiple statuses can be selected from the available ones as well. They will then be displayed in the right array, under Selected statuses.

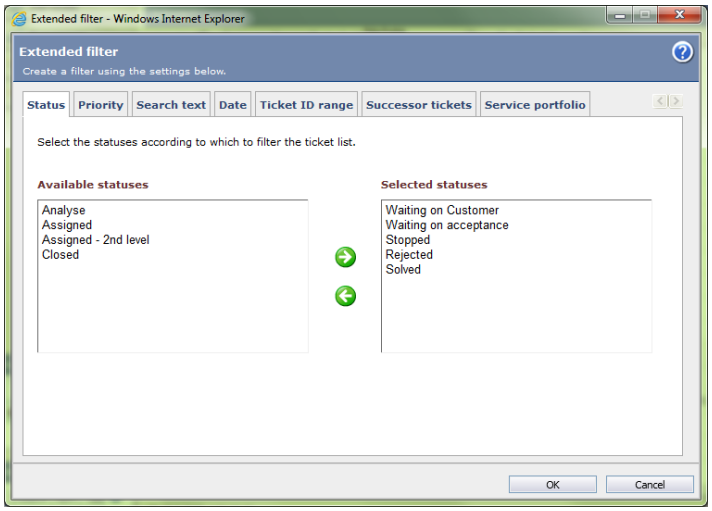

Figure 3.4: Further limitations in the extended filter

Priority: Use the Priority tab, if you want to search for tickets with various priorities. The priorities depend on the system as well, due to having been created by the responsible system administrator. If you want to look for tickets with no specific priority, select *(No priority)*. Multiple selections can be set for priorities as well.

Search key: If you are searching for a certain key word in a ticket, use this tab. All data fields that can be displayed on the Fields tab in the ticket view can be searched for the

respective key word using a full text search. Other fields and arrays, as well as comments, will not be incorporated into the search.

If fields are only to be searched for a certain key word, you also have the option of filtering via individual ticket fields.

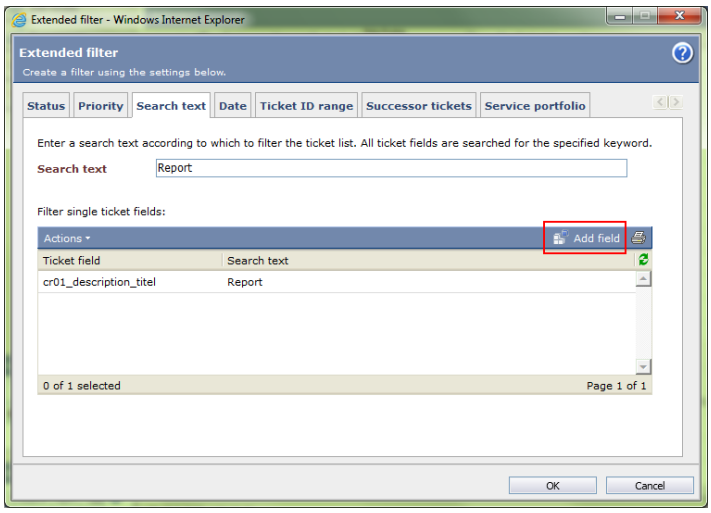

Figure 3.5: Filtering for ticket field values

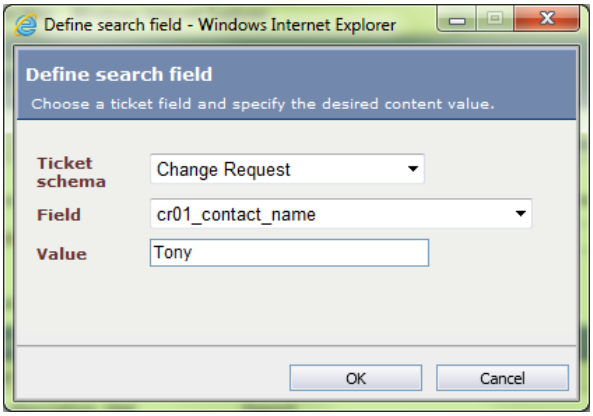

Figure 3.6: Inserting the desired ticket schema and field

Click on the button *Add field*. Subsequently, a new window will open, in which you can select the ticket schema, field, and value. If a field's value is not determined by the ticket schema, a search key can be entered here.

Date: Select the date range of the ticket creation here. The following three options are available:

- Predefined: Certain predefined time periods have already been added, e.g. Last Week or Current quarter.
- User-defined: The time frame can be specified manually here.
- Later than: Here, you can select a date, past which the ticket to be searched has been created.

Ticket ID range: Here, you can search for tickets in a certain ID range. Either you can search for tickets of an entire ID range, (e.g. CR_00001 or PR_00001) or you can limit the search by narrowing down the ID range (e.g. SR_00001 from 50 to 230).

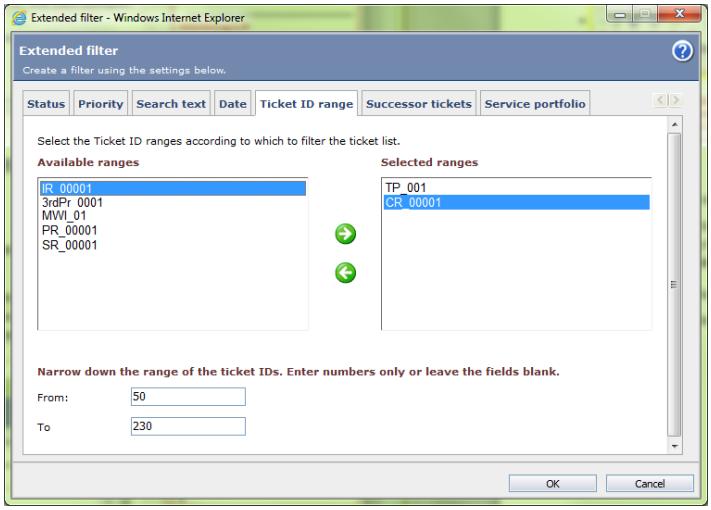

Figure 3.7: Searching for tickets with the help of a number range

Successor tickets: This filter option is very suitable for the combination with other search options. Define here, whether parent tickets and/or successor tickets are to be displayed.

Service Portfolio: Here, tickets can be displayed according to service catalogues, services, and service transactions.

In order to get more precise results, you can combine the respective search options of the extended filter's various tabs.

3.1.3 Filter Favorites

If certain filters are needed more than once, the filter favorites are a simple option for saving them and accessing them again later on.

The buttons for saving filter favorites and for deleting the current favorites (individual filters) are located right next to the drop-down list.

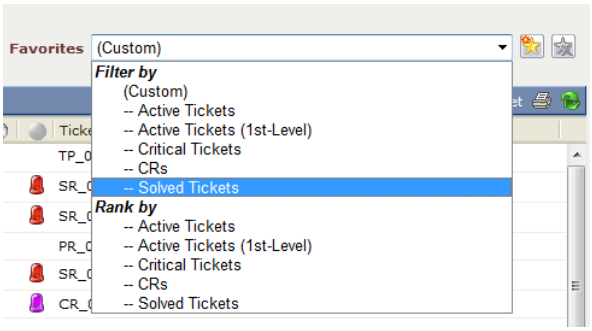

Figure 3.8: Filter favorites

If you are satisfied with the current filter, simply click on the favorite icon *Save filter* in favorites. If the filter favorite is to be used again later on, select it from the drop-down-list and it will be applied automatically.

If some of the filters are not needed any more, they can be easily deleted by selecting them from the drop-down-menu and clicking on the *Delete favorite* button next.

If a filter favorite cannot be deleted, this is due to the option of creating favorites globally for all users of the system by the administrator.

3.1.4 The Ticket Ranking

Via the ticket ranking, you can weight certain tickets differently. For example, if you have multiple tickets with the same priority, you can assign your own prioritization for you or another group via the ranking, without having to interfere with the actual prioritization of the ticket.

Please note

For the ticket ranking to be available, it has to be configured for the respective ticket scheme (ticket action *Mark ticket for ranking*) and the logged on has to be authorized for this. A predefined filter favorite (Settings -> Ticket Management -> Ticket Filter Management) is required for the ranking as well.

There are two options for marking a ticket for ranking: directly via the ticket list in the Actions menu, or via the Actions menu in the ticket.

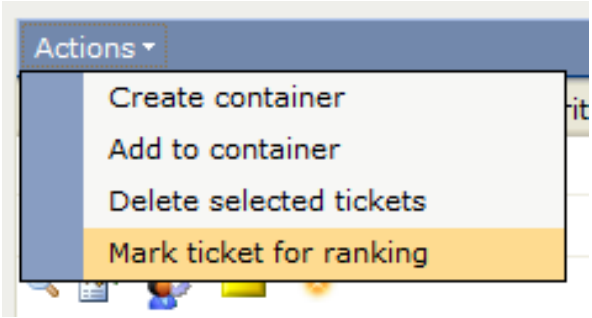

Figure 3.9: Marking a ticket for ranking in the Actions menu

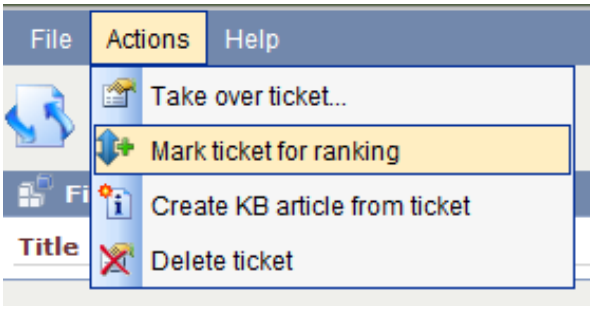

Figure 3.10: Marking a ticket for ranking in the ticket dialog

After all of the designated tickets have been marked for ranking, the ranking itself can be started. Click on the Favorites drop-down-menu above the ticket list on the right.

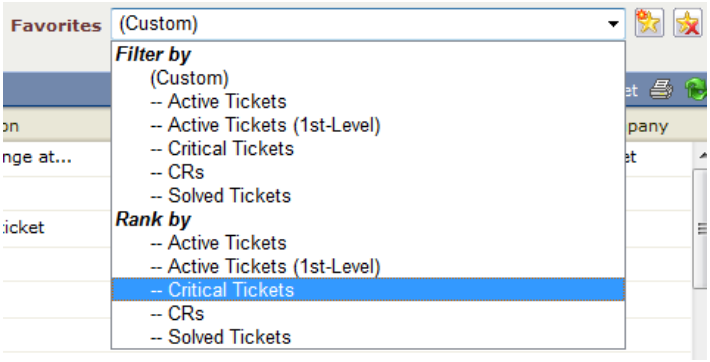

Figure 3.11: Using ranking

Select your favorite filter under *Rank by* instead of under *Filter by*. Subsequently, the filter will only be used on the tickets marked for ranking. You can now see the menu for ticket ranking on the right. You have the option to increase or decrease the rank of a ticket via the buttons here, or you can enter a ticket rank directly via Move to. For every one of these actions, the designated ticket has to be selected. Via the button *Remove*, the action Mark ticket for ranking can be undone and the ticket will not be displayed in the list anymore.

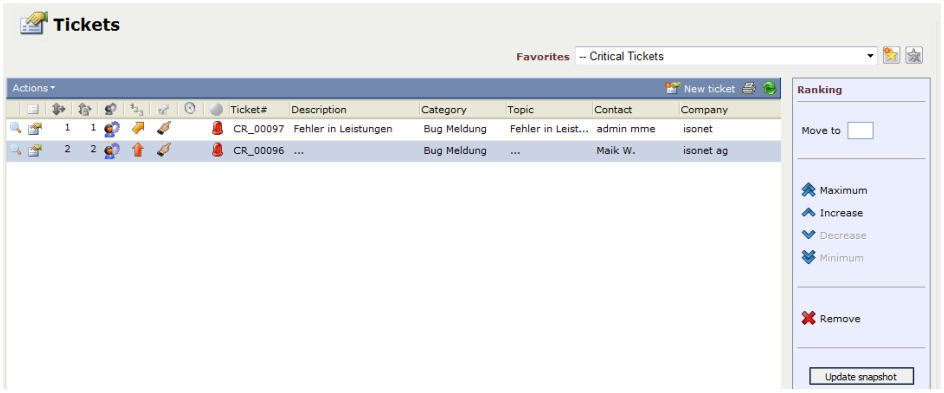

Figure 3.12: Ticket ranking

If you have assigned the designated ranks to the tickets, click on *Update snapshot*. Only then, the current ranking will be displayed to the other users in this way.

3.2 Searching in the Expense Overview

Above the expense overview, you will find a filter, which can be used to narrow down the expenses displayed.

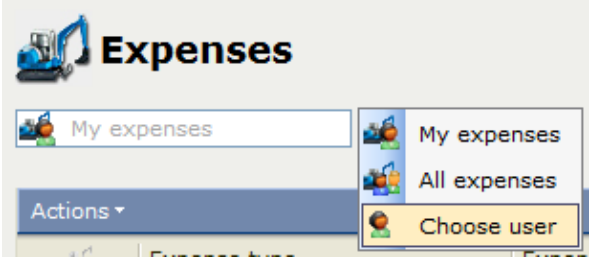

Figure 3.13: Expense filter

My expenses: Displays all the expenses the logged on user has executed or, in which he has been added as a user.

All expenses: Displays all expenses of the types the logged on user has at least the right View on. This depends on the expense settings in the User Management.

Choose user: Allows for the selection of a user via a user browser in order to display expenses. The display of the expenses and expense types depends on the assigned authorizations here as well.

Next to the button with the magnifying glass, you can find two further filter buttons. The first one is used for setting a filter and the second one is used to reset an already used filter. If you click on the button with the blue funnel, the dialogue for the extended filter will open:

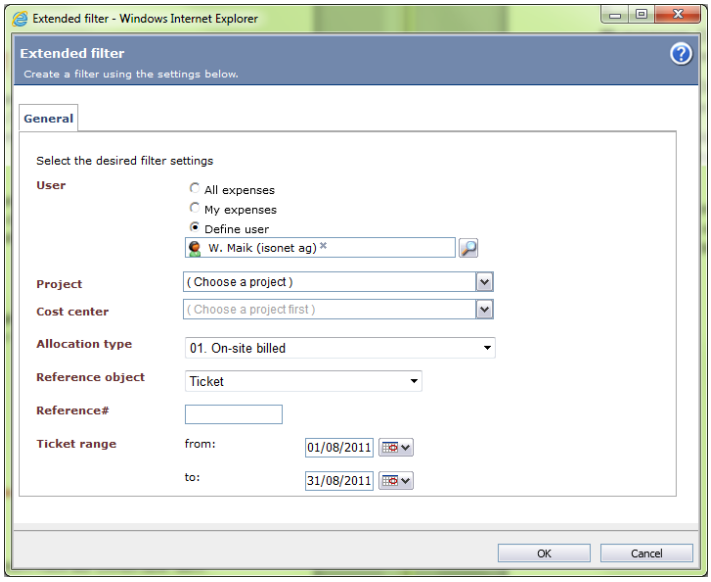

Figure 3.14: The extended filter dialogue for expenses

In this filter dialogue, you have the option to compile an extended filter out of various components. The available options in the dialogue are illustrated in the following table.

Option	Description
User	Allows for the selection of one of the three standard filters

Project	Select an individual project here
Cost center	Select a cost center here
Allocation type	Select the designated allocation type
Reference object	Because expenses can be created from tickets and tasks, you can make a distinction between those two types of objects here
Reference#	Here, the number of a designated reference ticket can be specified
Ticket range	Allows for the filtering in a specific period

In this dialog, not all the fields have to be filled in with a value. Only the relevant fields for the designated filtering have to be set. Thus, you have the option to show all expenses, which have been booked on a specific project (only the option Project has been set), or to filter the cost center additionally to the project, for example.

3.3 Search in the CMDB

You can use the filters in order to find CIs with a particular content quickly.

Please note

The filters are only available in the grid view.

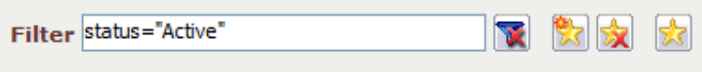

Figure 3.15: CMDB search

Replace *{search string}* by the respective value you want to filter for and press the Enter key or click on the Activate filter icon. In order to delete an existing filter, click on the *Deactivate filter* icon replacing the *Activate filter* icon as soon as the filter will be active.

Warning

CIs may also contain the special characters `">"`, `"<"` and `"="`.

3.3.1 Filter Input Options

Search for a supplier, user or affected user:

user={search string}

Hint

You have to enter the search string in quotation marks (“Search string”) when it contains space characters. You can only search for users via their login names.

Search for the owner:

`owner={search string}`

Search for a supplier:

`supplier={search string}`

Search for the affected user:

`affected={search string}`

Search for a certain schema:

`scheme={search string}`

Search for a status:

`status={search string}`

Search for a certain ID:

`Id={search string}`

Search all fields:

```
{search string}
```

Search all fields containing mathematic characters "<", ">" and "=":

```
allfields={search string with special characters}
```

> **Hint**
>
> Use the asterisk (*) in order to search for strings within the fields. The asterisk has to be placed at the end of the search string.

Search for a particular field:

```
{field name}={search string}
```

Search for the date of creation (newer than):

```
created<{date}
```

> **Hint**
>
> You have to enter the date in the format YYYY-MM-DD.

Search for the date of creation (older than):

```
created>{date}
```

3.3.2 Using Placeholders for Searching

It is possible to use placeholders when searching in the CMDB:

* The asterisk serves as a placeholder for several characters.

schema={*text}

? The question mark serves as a placeholder for one character.

schema={??archtext}

[ ] Enter a number of characters in square brackets that can appear in a certain place.

schema={[s-z][a-e]archtext}

[^] The circumflex accent negates the placeholder. The contained characters are excluded from searching.

schema={[^a-r][cde]archtext}

> **Hint**
>
> The following characters need to be surrounded by brackets for a valid search request: [(Opening square brackets: [[]), * (Asterisk : [*]) and ? (Question mark: [?])

3.3.3 Relations

In order to get more precise results, you can use multiple conditions together as well. Use the keywords AND and OR for this.

The OR relation means that only one of those conditions has to be fulfilled (a or b). The AND relation requires all of the conditions to be met (a and b).

AND relation

```
{Condition1} AND {Condition2}
```

OR relation

```
{Condition1} OR {Condtion2}
```

3.3.4 Examples

Only display CIs assigned to the schema HARDWARE:

```
scheme=HARDWARE
```

Only display CIs assigned to the schema COMPUTER TECHNOLOGY:

```
scheme="COMPUTER TECHNOLOGY"
```

Only display CIs with the supplier isonetadmin:

```
supplier=isonetadmin
```

Only display CIs assigned to the schema HARDWARE with isonetadmin as their supplier:

```
scheme=HARDWARE AND supplier=isonetadmin
```

Search for CIs containing ISO in one of their fields:

```
hostname=ISO*
```

Search for CIs containing the mathematical character = in a field:

```
allfields="ISO=net"
```

3.4 Searching in the Knowledge Base

There are several searching options for finding articles quickly: Using filters, categories, and the full text search or the display of articles according to status.

3.4.1 Filter

Via the option *Search* above the article list on the right, you can narrow down the article range using three predefined filters. Search can also be combined with the *categories*, the *status*, and the *search* simultaneously.

Figure 3.16: The predefined filters

3.4.2 Categories

In the field on the left, you can find the *Category* tab. When one of these categories is selected, only articles in the respective category and its subcategories will be displayed.

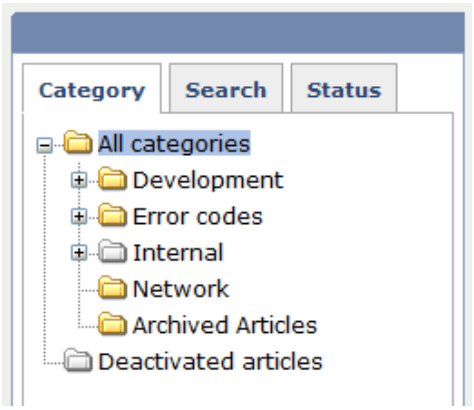

Figure 3.17: Knowledge base categories

Depending on the configuration of the article, it can be displayed in several categories.

3.4.3 Search

The search enables you to enter miscellaneous words or word parts and to search for them. In doing so, you can extend or narrow down the search by using certain options, like *Mode*, via which you can select whether all of the entered words or only one of them has to be found in the article.

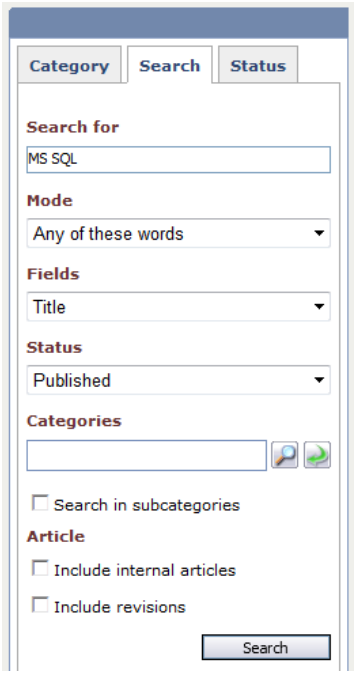

Figure 3.18: Knowledge base search

With the option *Fields*, you can select, in which field the entered word is to appear. Under *Status*, the status of the articles to be searched for can be specified, and under *Categories*, the categories to be searched can be selected. Furthermore, there is a check box for the search in subcategories, one for a search including internal articles, and another one for the search in revisions of the original article.

3.4.4 Status

Using the search via the *Status* tab, all articles will be displayed according to their status (e.g. Draft, Archived, etc.), irrespective of the category they belong to. Articles belonging to a category not unlocked for the current user's group will not be displayed.

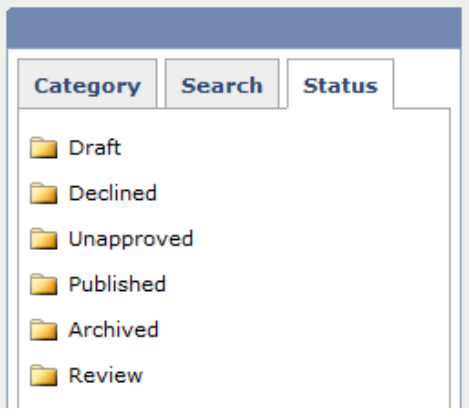

Figure 3.19: Knowledge base statuses

3.5 Searching the Service Portfolio

By using the top filter you can search for different kinds of objects in the Service Portfolio. To use the filter, click in the text line and search for a text component or for a status. If you would like to show only active objects, enter the following text in the text box:

```
StatusType="In operation"
```

If you would like to search for contained text, enter the following text:

```
Text="web site"
```

If an invalid expression is entered, the text box is colored red. Searching can then only be continued if a valid expression is entered.

Warning

Exclamation marks can be omitted as they only have to be used in search conditions consisting of a word group.

After entering the search expression, click the blue *filter* button and the search is being started immediately. To gain further information about this filter control you can click on the help button that is displayed as soon as you click in the text field for the first time.

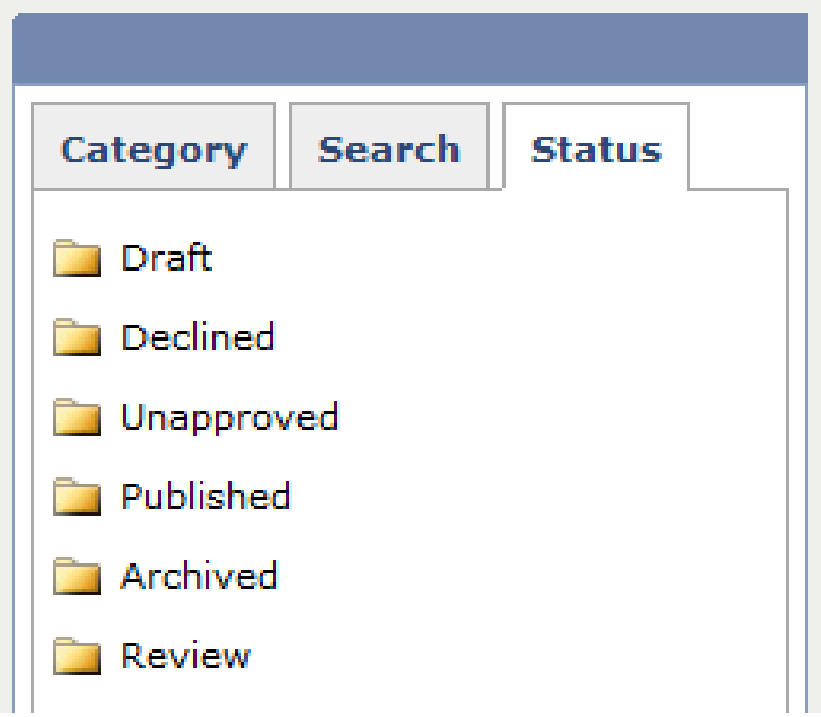

Figure 3.20: Displaying the help button after clicking in the filter text field

4 Statistics and Change Management

4.1 Statistics

Created by	Maik Wisatzke
Creation date	08.09.2011
Doc-ID	DOC-080512-010
Version	2015-1
Status	Approved
Replaces version	3.8-4
Release date	12.06.2015
Valid from	Immediately
Valid until	Cancellation
Document name	Search and Filter 2015-1_EN

4.2 Change Control

Version	Date	Executed by	Comments
3.0	08.09.2011	Maik Wisatzke	Created
3.1	01.12.2011	Maik Wisatzke	Added Seach for Service Portfolio, added 6 new search parameters for tickets and 8 new parameters for tasks, linguistic review
3.2	01.06.2012	Maik Wisatzke/Steffi Kurnot	Added follower to the extended search
3.3	08.08.2012	Maik Wisatzke/Steffi Kurnot	Added further search options for tickets, KB articles, tasks and CIs
3.8-1	14.02.2013	Maik Wisatzke	Corrections, general search parameters added
3.8-2	07.05.2013	Maik Wisatzke	Search in the direct access corrected, Special Characters added to Search in the CMDB
3.8-3	21.11.2013	Maik Wisatzke	Search in the direct access corrected, new design
3.8-4	23.01.2014	Maik Wisatzke	New design adapted, new figures
2015-1	12.06.2015	Alexander Schmidt	Updates for 2015

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