jACOB QBE Expression Description

Version 1.0

QBE Expression Description

Since QBE (Query By Example) feature allows to use any input field as search criteria, the search result set can be filtered efficiently. Nevertheless, strings entered as search criterias for text, numerical and datetime data fields are treated as QBE expressions in case they contain QBE modifiers and/or QBE keywords. These modifiers and keywords will be described in the following to enable advanced users to perform more powerful and target-oriented (e.g. for reports) search queries.

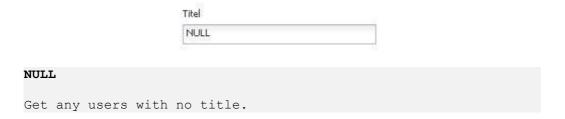
Common modifiers

Common modifiers can be used to build QBE expressions for text, numerical and datetime fields. There it makes sense QBE modifiers could be combined.

NULL

The keyword NULL (or null) is used to identify empty data fields.

Examples:



Logical NOT

A logical not is represented by a ! character.

Examples:



Logical OR

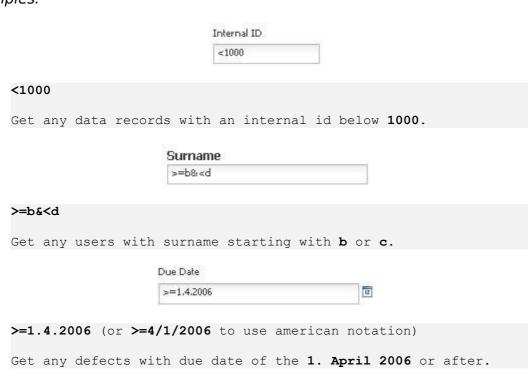
A logical or is represented by a | character.

Examples:

,			
	First	Name	
	John	[Liz	
John Liz			
Get any users with first name containing John or Liz.			
		Defect No. 1 2 712	
		1.73	
1 2 712			
Get the defects with number 1 or 2 or 7 to 12.			
Logical AND A logical and is represented by a & character.			
Examples:			
	Surname		
	John	8:(Johnsen	
John &	!Johnsen		

Get any users with surname containing John but not Johnsen.

Greater than, greater or equal than, less than, less or equal than *Examples*:



Text modifiers

Text modifiers can be used to build QBE expressions for text fields only. There it makes sense text modifiers could be combined with other QBE modifiers.

Exact match

A leading = character is used to query for text fields which exactly match a given string.

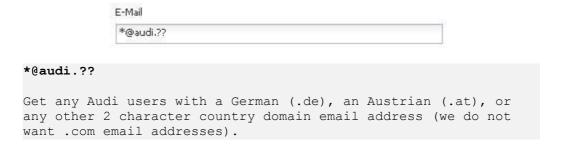
Examples:



Wildcards

The character ? is used as a placeholder for a single character, there as the character * is used as a placeholder for any character sequence (or no character).

Examples:



Alignment

A leading ^ character is used to left align a text sequence, there as a trailing \$ character is used to right align a text sequence.

Examples:



Escaping character sequences

Since the characters |, &, ! and so on are interpreted as QBE modifiers, they can not be used within normal text sequences. Therefore these text sequences have to be escaped. This is done by means of bracketing a text sequence with two "characters. The "character itself is escaped by two "characters within an escaped character sequence, e.g. "I said ""No"" to him".

Examples:



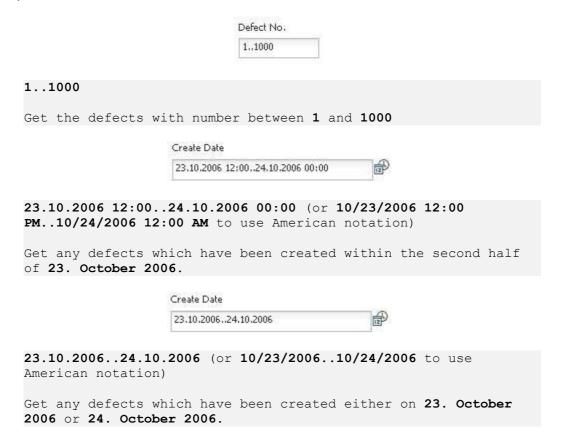
Range modifiers

Range modifiers can be used to build QBE expressions for numerical and datetime fields only. There it makes sense range modifiers could be combined with other QBE modifiers.

Range

A range is indicated by two . (dot) characters.

Examples:



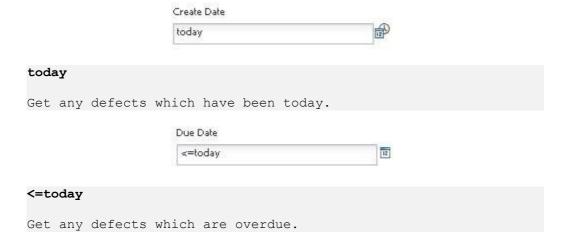
Datetime keywords

Datetime keywords can be used to build QBE expressions for date, time and timestamp fields only. Datetime keywords could be combined with datetime modifiers (as described below) and, if it makes sense, with other QBE modifiers as well.

TODAY

The keyword TODAY (or today) is used to represent the current day.

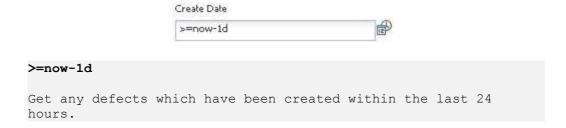
Examples:



NOW

The keyword NOW (or now) is used to represent the current timestamp, i.e. the current day and current time.

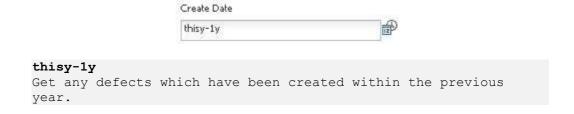
Examples:



THISY

The keyword THISY (or thisy) is used to represent the current year, i.e. the range of this years 1. January to this years 31. Dezember.

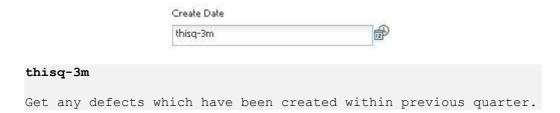
Examples:



THISQ

The keyword THISQ (or thisq) is used to represent the current quarter, e.g. if today is the 4. May, THISQ represents the range of this years 1. April to this years 30. June.

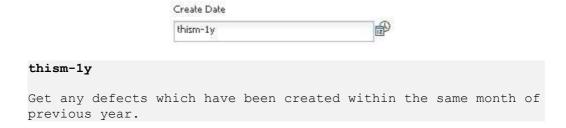
Examples:



THISM

The keyword THISM (or thism) is used to represent the current month, e.g. if today is the 4. May, THISM represents the range of this years 1. May to this years 31. May.

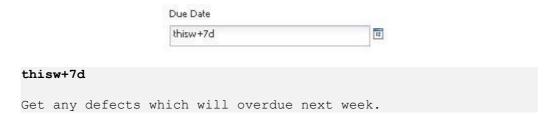
Examples:



THISW

The keyword THISW (or thisw) is used to represent the current week, i.e. the range of Monday (or Sunday depending on the locale setting) of this week to Sunday (or Saturday) of this week.

Examples:



YTD

The keyword YTD (or ytd) is used to represent the current year to date range, e.g. if today is the 4. May, YTD represents the range of this years 1. January to this years 4. May.

OTD

The keyword QTD (or qtd) is used to represent the current quarter to date range, e.g. if today is the 4. May, QTD represents the range of this years 1. April to this years 4. May.

MTD

The keyword MTD (or mtd) is used to represent the current month to date range, e.g. if today is the 4. May, MTD represents the range of this years 1. Mai to this years 4. May.

WTD

The keyword WTD (or wtd) is used to represent the current week to date range, e.g. if today is Friday, WTD represents the range of this weeks Monday (or Sunday depending on the locale setting) to this weeks Friday.

WEEK[n]

The keyword WEEK (or week) combined with an unsigned decimal number (e.g. WEEK12) is used to represent the designated calendar week of the current year.

Datetime modifiers

Datetime modifiers can be combined with datetime keywords to build QBE expressions as follows:

keyword[+-][n]modifier

There [n] is an unsigned decimal number and modifier one of the following:

Modifier	Description
y or Y	years
m or M	months
d or D	days
h or H	hours
min or MIN	minutes
sec or SEC	seconds

Examples see above.