eazyBI

Filter Data: How to Translate JQL to eazyBI

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eazyBI

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JQL vs eazyBI language

Key principles to translate

Popular phrases - examples

Language enables exploring the world

JQL

Issue list by filter criteria

EAZYBI

Aggregated results or issue list by filter criteria

Each sentence has a **meaning** of **what** you want to say or ask. So do JQL and eazyBI report.

Structure of sentence

Subject WHAT

WHAT is happenig, the main actor of the sentence.

Objects CONDITIONS

Words describing the subject and CONDITIONS.

Tense WHEN

WHEN it happened? Now, month ago, or in near future.

Translating JQL to eazyBI

WHAT
Predefined measure defines how dimensions are related to each other and measure itself.

CONDITIONS
Dimensions as filters, all issue fields in JQL should be represented in the report.

WHEN
Time dimension together with measure representing date field.

Phrase book

Examples and use cases

WHAT
Predefined measure

WHAT:
Simple filters

JQL

Report

List of issues

JQL condition with AND

✅ project IN (DA, DB) AND status = "To Do"

T	Key	Summary
🟧	DB-611	Planted biochemistry buffing quavered Odis's bursted Salvatore's Lockheed acquisi
🟧	DB-610	Luther's ransacked Kendall epaulettes Wolfgang's bluebottle's tactful Oprah raven
🟧	DB-609	Deplaned khan overkill's politicked deprecatory insensitivity Coronado tweaking foo
🟩	DB-608	Captained firetraps skimpier descends dour nastiness's identifier's Tosca restful
🟩	DB-607	Eventfulness smudged cardigans Croatians humanizer's sear festers implausibly
🟧	DB-605	Provisoes grandchild's parliament's Trobriand's Poole blocks
🟧	DB-604	Evilest tenderloin nubs doorsteps seizure percales goaltender's stockpile engross
🟧	DB-603	Eligibility's organism's archetypes diversification's Copland's asterisk mussed anac
🟩	DB-602	Eisner teamster's cookbooks anaconda interposing strand monastics unionization

WHAT:
Simple filters

JQL

Report

List of issues

JQL condition with AND

✓ project IN (DA, DB) AND status = "To Do"

Use measure AND dimension as filter

Pages	Nonempty
› Project	
› Status	

Rows	Nonempty
› Project	

Columns   › **Measures**

Table   Bar   Line   Pie   Scatter   Timeline   Map   Gantt   Gauge

⤢   ↺   ↻   💬   ⤓   Total ⌄   Freeze header

DEMO Alpha, DEMO Beta ⌄   To Do ⌄

	Issues created	Original estimated hours.
+ DEMO Alpha	162	858.60
+ DEMO Beta	164	787.20

WHAT:
Simple filters

JQL

Report

List of issues

JQL condition with AND

✅ project IN (DA, DB) AND status = "To Do"

Use measure AND dimension as filter

Pages	Nonempty
› Project	
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Columns

› **Measures**

Table | Bar | Line | Pie | Scatter | Timeline | Map | Gantt | Gauge

⤢ ↺ ↻ 💬 ⤓ Total ⌄ Freeze header

DEMO Alpha, DEMO Beta ⌄ | To Do ⌄

Rows	Nonempty
› Project	

	Issues created	Original estimated hours.
+ DEMO Alpha	162	858.6
+ DEMO Beta	164	787.2

↗ Drill through Issue

↪ Drill into **DEMO Alpha**

↪ Drill across ›

CONDITIONS

Dimensions as filters

CONDITION: is NOT

JQL

Report

Calculated member

JQL condition NOT IN

✓ project IN (DA, DB) AND status = "To Do" AND issuetype != Bug

T	Key	Summary
🔖	DB-608	Captained firetraps skimpier descends dour nastiness's identifier's Tosca restful
🔖	DB-607	Eventfulness smudged cardigans Croatians humanizer's sear festers implausibly
🔖	DB-602	Eisner teamster's cookbooks anaconda interposing strand monastics unionization
🔖	DB-601	Gamble prefatory vacated mementoes stature's housing Brubeck Ramakrishna's roll
🔖	DB-600	Truncate Christi's weakling Sand's soapboxed Boone's downcast
🔖	DB-595	Crank's perfumed feller elegy clayiest
🔖	DB-592	Placentas burden incarnates butternut denier drollness Scientology's
🔖	DB-591	Seasoning palmettos knell's velveteen goosed
⚡	DB-590	Philharmonics peddler's jackhammering Daren sheepishly hostler's Kettering's altern

CONDITION: is NOT

JQL

Report

Calculated member

JQL condition NOT IN

✅ project IN (DA, DB) AND status = "To Do" AND issuetype != Bug

Transform to opposite and list what is IN
Select multiple values in page filter.

| Table | Bar | Line | Pie | Scatter | Timeline | Map | Gantt | Gauge |

DEMO Alpha, DEMO Beta ⌄   To Do ⌄   Story, Sub-task, Epic, Data task, Test task ⌄

	Issues created
+ DEMO Alpha	130
+ DEMO Beta	118

CONDITION: is NOT

JQL

Report

Calculated member

JQL condition NOT IN

✅ project IN (DA, DB) AND status = "To Do" AND issuetype != Bug

Transform to opposite and list what is IN
Select multiple values in page filter.

Create calculated member to group what is IN
Use functions Aggregate() and Except()

Define calculated member formula

[Issue Type ⌄].[Issue types except Bugs] =

```
1 Aggregate(
2   Except(
3     [Issue Type].[Issue Type].Members,
4     {[Issue Type].[Bug]}
5   )
6 )
```

CONDITION: Multi-value fields

JQL

Report

JQL conditions for multi-selection fields

Multi-selection field values are not related to each other. And issues are filtered for each value separately.

✅ project in (DA, DB) AND status = "To Do" AND labels IN (app_1, app_2)

T	Key	Summary
🔖	DB-578	Visiting moonshine's armaturing washers hardened Borodin's Athabascan calamine
🔖	DB-577	Musicologists chessman's getting Heriberto's insulation nutritionist stepdaughter tri
🔖	DB-576	Perpendiculars induct courtyard's Finch capturing subteen's troubadour's bandied I
🔖	DB-575	Adopts Short dispelling hours accentuation
🔖	DB-574	Appreciation's Orbison's dyslexia compose cornstalk's paused plainclothesman Goe
🟧	DB-573	Dvořák's Eben fruited moodiest tussock Nevsky organs
🔖	DB-572	Trombone polytechnics disinter adjuration homestretch's documents slummed bonu
🔖	DB-571	Stonily morrow costing raja stoic paupers lanky

CONDITION: Multi-value fields

JQL

Report

JQL conditions for multi-selection fields
Multi-selection field values are not related to each other. And issues are filtered for each value separately.

✓ project in (DA, DB) AND status = "To Do" AND labels IN (app_1, app_2)

Use distinct count measures

Pages

> **Project**

> Status

> Label

Rows — Nonempty

> Project

Columns — > **Measures**

| Table | Bar | Line | Pie | Scatter | Timeline | Map | Gantt | Ga |

Total ⌄

DEMO Alpha, DEMO Beta ⌄   To Do ⌄   app_1, app_2 ⌄

	Issues created	Issues created count
+ DEMO Alpha	17	13
+ DEMO Beta	11	9

CONDITION: Multi-value fields

JQL

Report

JQL conditions for multi-selection fields
Multi-selection field values are not related to each other. And issues are filtered for each value separately.

✅ project in (DA, DB) AND status = "To Do" AND labels IN (app_1, app_2)

Use distinct count measures

DEMO Alpha, DEMO Beta ⌄   To Do ⌄   app_1, app_2 ⌄

		Issues created	Issues created count	Issue labels
+ DEMO Alpha	DA-362	1	1	app_2
	DA-442	2	1	app_1,app_2
	DA-443	2	1	app_1,app_2,demo
	DA-446	1	1	app_1,demo
	DA-447	2	1	app_1,app_2
	DA-448	1	1	app_1
	DA-449	1	1	app_1
	DA-491	2	1	app_1,app_2

JQL

Report

Calculated
measure

JQL condition NOT for multi-selection fields
Issue may have several values in one field that are independent. For example, several labels.

✅ project IN (DA, DB) AND status = "To Do" AND labels != app_2

T	Key	Summary
🔖	DB-577	Musicologists chessman's getting Heriberto's insulation nutritionist stepdaughter tr
🔖	DB-572	Trombone polytechnics disinter adjuration homestretch's documents slummed bonu
🔖	DB-571	Stonily morrow costing raja stoic paupers lanky
🟧	DB-570	Clarissa weave seeing's eulogy halitosis tailgating shunted inculpating Blantyre
🔖	DA-449	Historian desire immaturity reliance muskmelon's chaff packer branching's borer's M
🟧	DA-448	Croissant's innkeeper's measurable besmirching knoll's sermonize widows thatch's
🟧	DA-446	Multan's consult enhance algebraically Lucinda's lithographic equalizers adequately

CONDITION: Except one

JQL

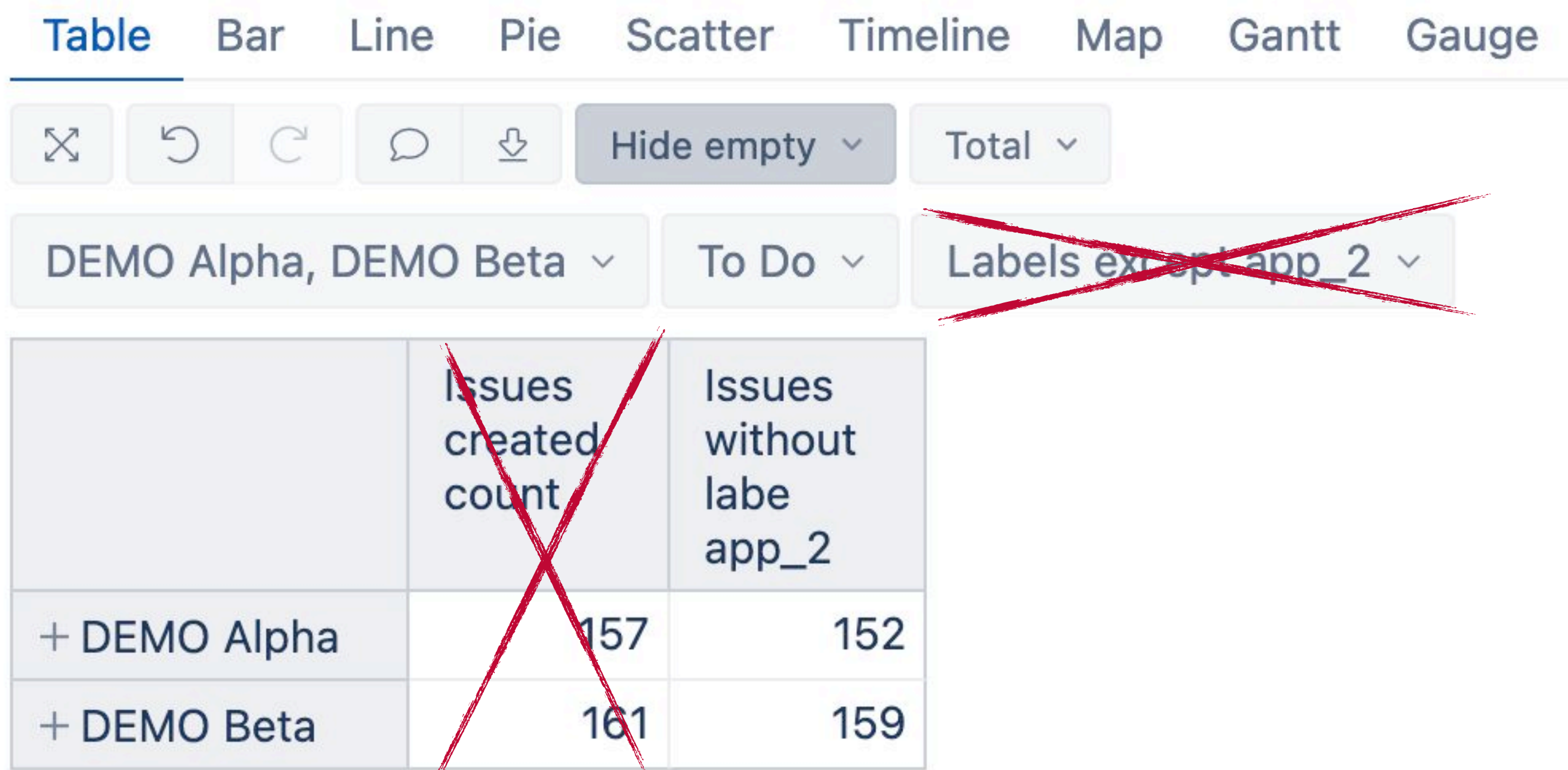**Report**

Calculated measure

JQL condition NOT for multi-selection fields

Issue may have several values in one field that are independent. For example, several labels.

✅ project IN (DA, DB) AND status = "To Do" AND labels != app_2

Calculated member with Except() won't work

**CONDITION:
Except one**

JQL

Report

Calculated
measure

JQL condition NOT for multi-selection fields
Issue may have several values in one field that are independent. For example, several labels.

✅ project IN (DA, DB) AND status = "To Do" AND labels != app_2

Calculated member with Except() won't work

| DEMO Alpha, DEMO Beta ﹀ | | To Do ﹀ | Labels except app_2 ﹀ | |

		Issues created count	Issue labels	Issues without labe app_2
+ DEMO Alpha	DA-362		app_2	0
	DA-442	1	app_1,app_2	0
	DA-443	1	app_1,app_2,demo	0
	DA-446	1	app_1,demo	1
	DA-447	1	app_1,app_2	0
	DA-448	1	app_1	1

CONDITION: Except one

JQL

Report

Calculated measure

JQL condition NOT for multi-selection fields
Issue may have several values in one field that are independent. For example, several labels.

✅ project IN (DA, DB) AND status = "To Do" AND labels != app_2

Calculated member with Except() won't work

Create calculated measure

Define calculated member formula

[Measures].[Issues without labe app_2] =

```
1  --all issues
2  ([Measures].[Issues created count],
3  [Label].CurrentHierarchy.DefaultMember)
4  -
5  --substract issues with atleast onle lable app_2
6  ([Measures].[Issues created count],
7  [Label].[app_2])
```

WHEN

Time dimension together with measure representing date field

WHEN: Date in period

JQL

Report

JQL condition with DATE

✓ project in (DA, DB) AND duedate >= startOfMonth() AND duedate <= endOfMonth()

T	Key	Summary
🔖	DB-563	Portered drift métier improving transformer snippets succors
🔖	DB-557	Drowns skunk peacetime's crossing's gusseted tendon's
🔖	DB-394	Unrepresentative micron's Mar's underwent biting freewheel Piraeus
🔖	DB-388	Tucker regulation's tuba manipulations mispronunciation bellwether
🔖	DB-385	Taxicab hubbubs proposals loafs shantytown's extensiveness's unplug minion's segued
🔖	DB-377	Knowing amigo erythrocytes throughways Han psychiatric Aurelius
🔖	DB-373	Juncture's Champollion kangaroo equinox knickknack's honeycombing sisterhood's flamed tat
🔖	DB-371	Brandies initiations McConnell briar's radii's linkup
🔖	DB-364	Footrest's Trappist ripeness Alpheratz's librettist's satrap's lymphoma microwaves consonant
🔖	DB-360	Disrupt teleconferenced chunk Ines jack thawed Patterson cleaner's bastions
🔖	DB-356	Long camping Millie's earmuff's emended forewoman ghettoes

WHEN:
Two dates in period

JQL

Report

Calculated measure

JQL condition OR with two DATES

✅ project in (DA, DB) AND ((duedate >= startOfMonth() AND duedate <= endOfMonth()) OR (resolutiondate >= startOfMonth() AND resolutiondate <= endOfMonth()))

T	Key	Summary
🟧	DB-579	Counting Godthaab's cabin's jardinière's focal Chopin toreador's eligible Hallowe'en
🟩	DB-563	Portered drift métier improving transformer snippets succors
🟧	DB-562	Vocatives materialistically Remus's prospecting cyclical separations work's
🟧	DB-559	Milliners shower's darnedest colonial snapshot's unpatriotic supremacy's
🟩	DB-557	Drowns skunk peacetime's crossing's gusseted tendon's
🟧	DB-556	Paving's identification troublesome riders recombine vengeful Swanson's
🟧	DB-551	Toilet's unicycle's convincingly cooked covers's stuns fies
🟧	DB-547	Leasing millennia accompanies braked societies Bartók acquits Chandler reporter tra
🟧	DB-546	Neapolitan tacit radiograms cloves genera dirties acknowledging

WHEN: Two dates in period

JQL

Report

JQL condition OR with two DATES

✅ project in (DA, DB) AND ((duedate >= startOfMonth() AND duedate <= endOfMonth()) OR (resolutiondate >= startOfMonth() AND resolutiondate <= endOfMonth()))

Select both measures

Pages	
> Project	
> Time	

Rows	Nonempty
> Time	
> Issue	

Columns   > **Measures**

Table   Bar   Line   Pie   Scatter   Timeline   Map   Gantt   Gauge

⤢ ↺ ↻ 💬 ⤓   Hide empty ∨   Total ∨   Freeze header

DEMO Alpha, DEMO Beta ∨   Current month ∨

		Issues with due date	Issue due date	Issues resolved	Issue resolution date
+ Jan 2022	DA-284	1	Jan 09 2022		Oct 25 2021
	DA-302	1	Jan 31 2022		Oct 25 2021
	DA-342		Dec 30 2021	1	Jan 17 2022
	DA-347	1	Jan 30 2022	1	Jan 05 2022
	DA-348	1	Jan 30 2022		Dec 29 2021
	DA-350			1	Jan 27 2022

**WHEN:
Combo with
two dates**

JQL

Report

Calculated
measure

JQL condition AND with two DATES

✅ project in (DA, DB) AND createdDate >= startOfMonth() AND createdDate <= endOfMonth() AND
duedate >= startOfMonth() AND duedate <= endOfMonth()

T	Key	Summary
🔖	DB-563	Portered drift métier improving transformer snippets succors
🔖	DA-562	Teutonic Sumatra evinces barbells duel jolly

WHEN: Combo with two dates

JQL

Report

Calculated measure

JQL condition AND with two DATES

✅ project in (DA, DB) AND createdDate >= startOfMonth() AND createdDate <= endOfMonth() AND
duedate >= startOfMonth() AND duedate <= endOfMonth()

Create calculated measure

DEMO Alpha, DEMO Beta ⌄   Current month ⌄

		Issues created	Issue created date	Issues with due date	Issue due date	Created and due date in the same priod ↓
+ Jan 2022	DA-562	1	Jan 02 2022	1	Jan 30 2022	1
	DB-563	1	Jan 06 2022	1	Jan 30 2022	1
	DA-284		Apr 11 2021	1	Jan 09 2022	
	DA-302		May 01 2021	1	Jan 31 2022	
	DA-347		Jun 15 2021	1	Jan 30 2022	
	DA-348		Jun 16 2021	1	Jan 30 2022	
	DA-361		Jun 28 2021	1	Jan 23 2022	

WHEN: Combo with two dates

JQL

Report

Calculated measure

JQL condition AND with two DATES

✅ project in (DA, DB) AND createdDate >= startOfMonth() AND createdDate <= endOfMonth() AND duedate >= startOfMonth() AND duedate <= endOfMonth()

Create calculated measure

Validate each date separately. Use function DateInPeriod()

Define calculated member formula

[Measures].[Created and due date in the s] =

```
1  NonZero(Sum(
2    Filter(
3      Descendants([Issue].CurrentMember,[Issue].[Issue]),
4      --created in selected period
5      DateInPeriod(
6        [Issue].CurrentMember.Get('Created at'),
7        [Time].CurrentHierarchyMember )
8      AND
9      --resolved in the selected period
10     DateInPeriod(
11       [Issue].CurrentMember.Get('Due date'),
12       [Time].CurrentHierarchyMember )
13   ),
14   [Measures].[Issues with due date]
15 ))
```

WHEN:
Compare two
dates

JQL

Report

Calculated
measure

JQL condition comparing two DATES
JQL does not allow to compare two dates.

¯_(ツ)_/¯

WHEN: Compare two dates

JQL

Report

Calculated measure

JQL condition comparing two DATES
JQL does not allow to compare two dates.

Create calculated measure

DEMO Alpha, DEMO Beta ⌄		Current month ⌄				
		Issues with due date	Issue due date	Issues resolved	Issue resolution date	Resolved before Due date
+ Jan 2022	DA-284	1	Jan 09 2022		Oct 25 2021	
	DA-302	1	Jan 31 2022		Oct 25 2021	
	DA-342		Dec 30 2021	1	Jan 17 2022	
	DA-347	1	Jan 30 2022	1	Jan 05 2022	1
	DA-348	1	Jan 30 2022		Dec 29 2021	
	DA-350			1	Jan 27 2022	
	DA-355			1	Jan 31 2022	
	DA-361	1	Jan 23 2022		Feb 07 2022	
	DA-363			1	Jan 26 2022	

WHEN: Compare two dates

JQL

Report

Calculated measure

JQL condition comparing two DATES
JQL does not allow to compare two dates.

Create calculated measure
Use function DateCompare()

Define calculated member formula

[Measures].[Resolved before Due date] =

```
1  NonZero(Sum(
2    Filter(
3      Descendants([Issue].CurrentMember,[Issue].[Issue]),
4      --resolved before due date
5      DateCompare(
6        [Issue].CurrentMember.Get('Due date'),
7        [Issue].CurrentMember.Get('Resolved at')
8      ) >= 0
9    ),
10   [Measures].[Issues resolved]
11 ))
```

Translating JQL to eazyBI

Subject WHAT

Predefined measure of what you want to know

Objects CONDITIONS

Dimensions as filters to meet criteria

Tense WHEN

Time dimension together with measure representing date

All fields listed in JQL should be covered in eazyBI report with the same criteria.

Questions?

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