

Prevent issue creation if another issue with same field value already exists

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Features used to implement the example

- [Validation based on JQL query](#)
- [Boolean validator with math, date-time or text-string terms](#)

Example: Prevent issue creation if another issue with same field value already exists

We want to **prevent issue creation** when there is already **another issue** in the **project** with the **same value** in a certain field. That field works as a kind of alternative issue key in the project. You can easily extend this example to much more complex cases, like preventing coincidence of values in more than one field at the same time, or in more than one project, all projects in a category, or in all the projects in Jira.

Let's suppose that we have a Text custom field called **Invoice**, and we want to avoid this field's value to be repeated among issues of **same issue type** in **same project**, i.e., we don't want to have two issues with **same issue type**, in **same project** and **same value in field Invoice**.

We are going to introduce a validator [Validation based on JQL query](#) in transition "**Create Issue**" with the following configuration:

JQL Query:

1

project = "{00018}" AND issuetype = "{00014}" AND Invoice = "{10200}"

WARNING: Values entered in transitions' screen will not be reflected in JQL query output.

Field code injector:

Summary - [Text] - %00000

- Field codes with format %**{nnnn}** may be inserted in the JQL Query, and will be replaced with field values at runtime. Most times it's a good idea to write field codes between double quotes (e.g. "{00001}"), since field values may contain blank spaces that will produce JQL parsing errors at runtime.

- **Cascading Select fields** and **Multi-level Cascading Select fields** specific levels can be referenced with %**{nnnn.0}** for parent level, %**{nnnn.1}** for child level, etc.

Check Syntax

Condition:

☐ Current issue belongs to output of the query
☐ Current issue doesn't belong to output of the query
☒ Number of issues returned by the JQL query satisfies a boolean expression, with "Ephemeral number 1" (code {00058}) storing the number of returned issues

Boolean expression:

1

{00058} = 0

Syntax Specification

Logical connectives: and, or and not. Alternatively you can also use &, | and !.

Comparison operators: =, !=, >, >=, < and <=. Operators in, not in, any in, none in, ~ and != can be used with strings, multi-valued fields and lists.

Logical literals: true and false. Literal null is used with = and != to check whether a field is initialized, e.g. {00012} != null checks whether Due Date is initialized.

Check Syntax

String Field Code Injector:

Summary - [Text] - %00000

Numeric/Date Field Code Injector:

Original estimate (minutes) - [Number] - {00068}

Skip validation when:

Inhibit the validator under selected circumstances.

☐ Transition is triggered by a bulk operation.
☐ Transition is triggered by a JIRA Workflow Toolbox post-function.
☐ Current issue is being created by cloning. Only makes sense in Create Issue transition.

Message to show when validation fails:

Duplicated value in field 'Invoice' for the project and issue type.

Field code injector:

Summary - [Text] - %00000

Field codes with format %**{nnnn}** can be inserted in the failure message and its translations, and they will be replaced with actual field values at runtime.

Hide translations for installed languages

Language	Validation Failure Message Translations
alemán (Alemania)	
coreano (Corea del Sur)	
español (España)	Valor del campo 'Invoice' duplicado para el proyecto y tipo de incidencia.
francés (Francia)	
inglés (Estados Unidos)	
inglés (UK)	
japonés (Japón)	
portugués (Brasil)	
ruso (Rusia)	

Run as:

Select the user that will be used to execute this feature. JIRA will apply restrictions according to the permissions, project roles and groups of the selected user.

Current user

User defined by a field.

Input a specific user.

JQL Query: project = "{00018}" AND issuetype = "{00014}" AND Invoice = "{10200}"

Note that:

- `%{00018}` is the field code for **Project key**
- `%{00014}` is the field code for **Issue key**
- `%{10200}` is the field code for custom field **Invoice**. This field code depends on each particular Jira instance

Once configured, transition “**Create Issue**” will look like this:

Create

▶ TO DO

This is the **initial** transition in the workflow.

Screen: None - initial transition does not have a view.

Validators 2

Post Functions 3

The transition requires the following criteria to be valid

Add validator

Only users with **Create Issues** permission can execute this transition.

Only if the **number of issues returned by** the following JQL query `project = "%{Project key}" AND issuetype = "%{Issue type}" AND Invoice = "%{Invoice}"` (stored in "*Ephemeral number 1*") satisfies the following boolean expression `{Ephemeral number 1} = 0`.

Message to show when validation fails: "**Duplicated value in custom field 'Invoice' for the project and issue type.**", providing translations for the following languages: **español (España)**.

This feature will be run as user in field **Current user**.

Alternative implementation

There is an alternative implementation based on validator [Boolean condition and validator with math, date-time or text-string terms](#). The following configuration should be used:

Boolean expression to be evaluated:

[Line 1 / Col 126]

Syntax Specification and Examples?

1

count(issuesFromJQL("project = ' " + %{00018} + "' AND issuetype = ' " + %{00014} + "' AND Invoice = ' " + %{10200} + "'")) = 0

Logical connectives: and, or and not. Alternatively you can also use &, | and !.

Comparison operators: =, !=, >, >=, < and <=. Operators ~, !~, in, not in, any in and none in can be used with strings, multi-valued fields and lists.

Logical literals: true and false. Literal null is used with = and != to check whether a field is initialized, e.g. {00012} != null checks whether Due Date is initialized.

Check Syntax

NUMERICAL AND DATE-TIME TERMS

Numeric and Date-Time field values: insert field codes with format {nnnnn}.

Original estimate (minutes) - [Number] - {00068}

Insert Numeric Value

Valid date-time literal formats: yyyy/MM/dd [hh:mm] or yyyy-MM-dd [hh:mm]. Time literals use format: hh:mm.

There is a set of mathematical functions and time macros and functions available to be used in your expression.

TEXT-STRING TERMS

Text-String field values: insert field codes with format %{nnnnn} or %{nnnnn.i} for referencing levels in cascading select fields (i = 0 for base level).

Summary - [Text] - %{00000}

Insert String Value

String literals: written in double quotes, e.g., "This is a string literal."

String concatenation: use operator '+' to concatenate string values, e.g., "The summary of issue with key " + %{00015} + " is \" + %{00000} + "\".

Escape character: character \ is used with characters ", \, 'n', 'r', 't', 'f and 'b' to invoke an alternative interpretation.

There is a set of string functions available to be used in your expression.

Skip validation when:

Inhibit the validator under selected circumstances.

☐ Transition is triggered by a bulk operation.

☐ Transition is triggered by a JIRA Workflow Toolbox post-function.

☐ Current issue is being created by cloning. Only makes sense in Create Issue transition.

Message to show when validation fails:

Duplicated value in field 'Invoice' for the project and issue type.

Field code injector:

Summary - [Text] - %{00000}

Field codes with format %{nnnnn} can be inserted in the failure message and its translations, and they will be replaced with actual field values at runtime.

Hide translations for installed languages

Language	Validation Failure Message Translations
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inglés (Estados Unidos)	
inglés (UK)	
japonés (Japón)	
portugués (Brasil)	
ruso (Rusia)	

Boolean expression is: count(issuesFromJQL("project = ' " + %{00018} + "' AND issuetype = ' " + %{00014} + "' AND Invoice = ' " + %{10200} + "'")) = 0

Note that:

- `%{00018}` is the field code for **Project key**
- `%{00014}` is the field code for **Issue key**
- `%{10200}` is the field code for custom field **Invoice**. This field code depends on each particular Jira instance

Once configured, transition “**Create Issue**” will look like this:

Create

→

TO DO

This is the **initial** transition in the workflow.

Screen: None - initial transition does not have a view.

Validators 2

Post Functions 3

The transition requires the following criteria to be valid

Add validator

Only users with **Create Issues** permission can execute this transition.

Only if the following boolean expression is true: `count(issuesFromJQL("project = '" + %{Project key} + "' AND issuetype = '" + %{Issue type} + "' AND Invoice = '" + %{Invoice} + "'")) = 0`

Message to show when validation fails: **"Duplicated value in field 'Invoice' for the project and issue type."**, providing translations for the following languages: **español (España)**.

Other examples of that function

Condition and validation based on JQL query

Page: Make linked issues, sub-tasks and JQL selected issues progress through its workflows

Page: Prevent issue creation if another issue with same field value already exists

Boolean condition and validator with math, date-time or text-string terms

Page: Block a transition until all sub-tasks have certain fields populated

Page: Block an epic's transition depending on linked issues status and due date

Page: Block or hide a transition for an issue depending on its issue links

Page: Block or unblock a transition after an issue rested a specific time in a status

Page: Block transition until all sub-tasks are in a specific status category

Page: Close parent issue when all sub-tasks are closed

Page: Enforce a field (Select List) to be set when another field (Radio Button) has a certain value (works with any kind of field type)

Page: Ensure that all issues linked with a certain issue link type have "Due Date" field set

Page: If field A is populated then, field B must also be populated

Page: Limit issue creation per role and issue type

Page: Limit the number of hours a user can log per day

Page: Limit valid dates for work logs

Related Usage Examples

- Validate compatible values selection among dependent custom fields
 - example
 - validator
 - custom-field
- Validate a custom field "Story Points" has been given a value in Fibonacci sequence
 - example
 - validator
 - custom-field
- Validate that multi-user picker custom field A does not contain any user in multi-user picker custom field B
 - example
 - validator
 - custom-field
- Validation on the value of a Cascading Select field
 - example
 - validator
 - custom-field
- Make different fields mandatory depending on the value of a Select List custom field
 - example
 - validator
 - custom-field
- Make a custom field mandatory when priority is "Critical" or "Blocker" and issue type is "Incident"
 - example
 - validator

Page: Make "Time Spent" field required when there is no time logged in the issue

Page: Make a custom field mandatory when priority is "Critical" or "Blocker" and issue type is "Incident"

Page: Make attachment mandatory depending on the value of certain custom field

Page: Make different fields mandatory depending on the value of a Select List custom field

Page: Make linked issues, sub-tasks and JQL selected issues progress through its workflows

Page: Make parent issue progress through its workflow

Page: Prevent issue creation if another issue with same field value already exists

Page: Reject duplicated file names in attachments

Page: Require at least one sub-task in status "Resolved" or "Closed" when "Testing required" is selected in Check-Box custom field

Page: Require issue link when resolving as duplicate

Page: Restrict parent issue from closing if it has sub-tasks that were created during a given parent issue status

Page: Restrict sub-task type creation depending on parent issue status

Page: Restrict sub-task type creation depending on parent issue type

Page: Set a condition in a global transition which only applies in a certain status

Page: Validate a custom field "Story Points" has been given a value in Fibonacci sequence

Page: Validate compatible values selection among dependent custom fields

Page: Validate only issue links created in transition screen

Page: Validate that multi-user picker custom field A does not contain any user in multi-user picker custom field B

Page: Validation and condition based on time expressions

Page: Validation based on the value of a date type project property

Page: Validation on issue attachments

Page: Validation on MIME types of issue attachments

Page: Validation on sibling sub-tasks depending on issue type and status

Page: Validation on the value of a Cascading Select field

- custom-field
- Enforce a field (Select List) to be set when another field (Radio Button) has a certain value (works with any kind of field type)
 - example
 - validator
 - custom-field
- Make attachment mandatory depending on the value of certain custom field
 - example
 - validator
 - custom-field
- Create a dynamic set of sub-tasks based on checkbox selection with unique summaries
 - example
 - post-function
 - custom-field
 - sub-task
- Total of all story points in an epic
 - example
 - custom-field
 - calculated-field
- Show timeliness of an issue based on two date pickers
 - example
 - custom-field
 - calculated-field
- Add and remove a single or a set of items from multi valued fields
 - example
 - post-function
 - custom-field
 - issue-links
 - sub-task
- Highest value of a custom field among linked issues
 - example
 - custom-field
 - calculated-field
- Google Maps location from address
 - example
 - calculated-field
 - custom-field
- Make certain custom field required in resolve screen only if the resolution was set to "Fixed"
 - example
 - validator
 - custom-field