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

On this page

Features used to implement the example

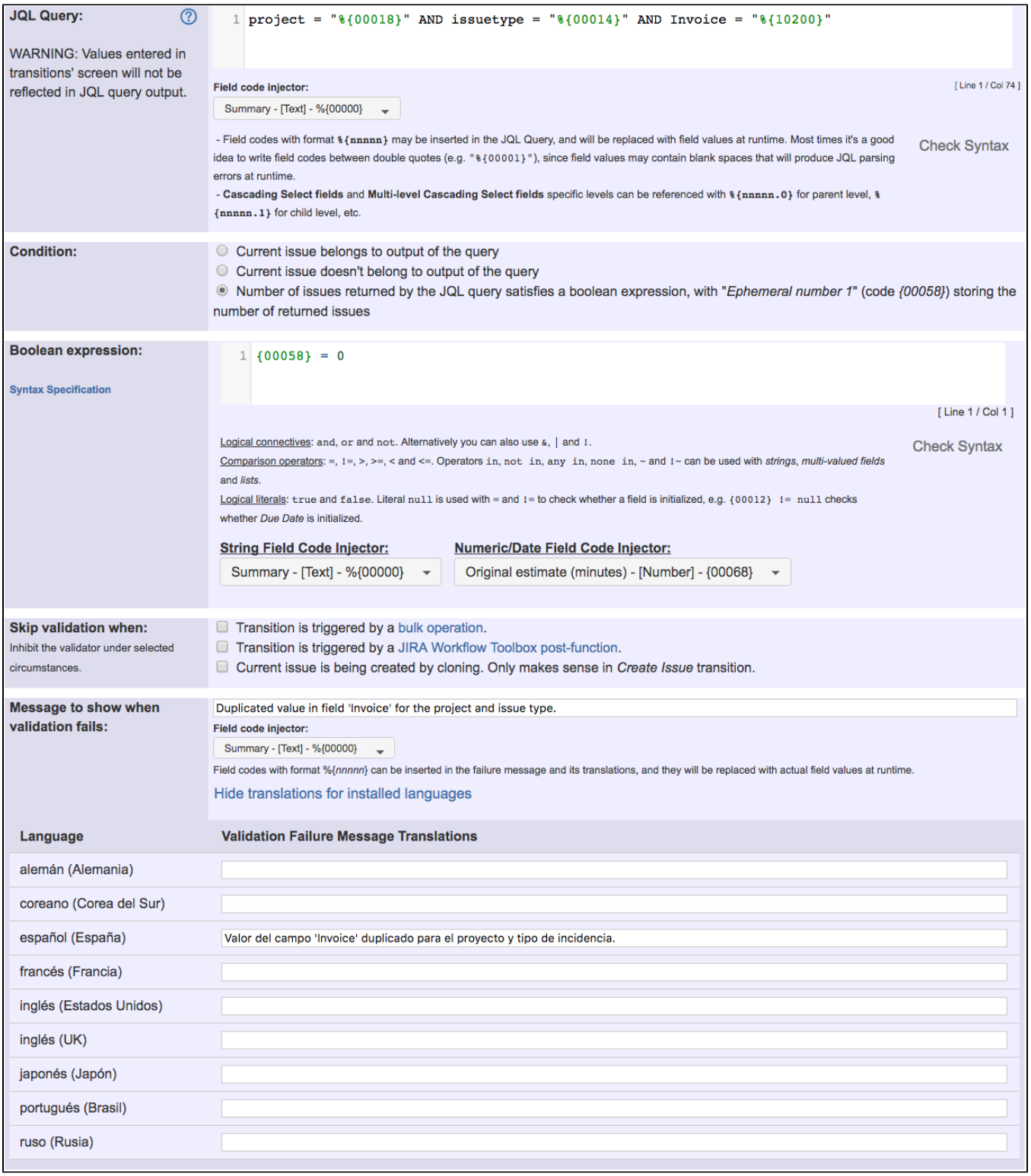
- **Validation based on JQL query**
- **Boolean validator with math, date-time or text-string terms**

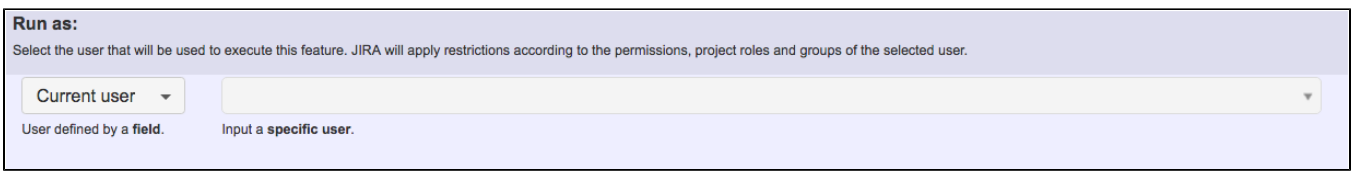
Example: Prevent issue creation if another issue with same field value already exists

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:



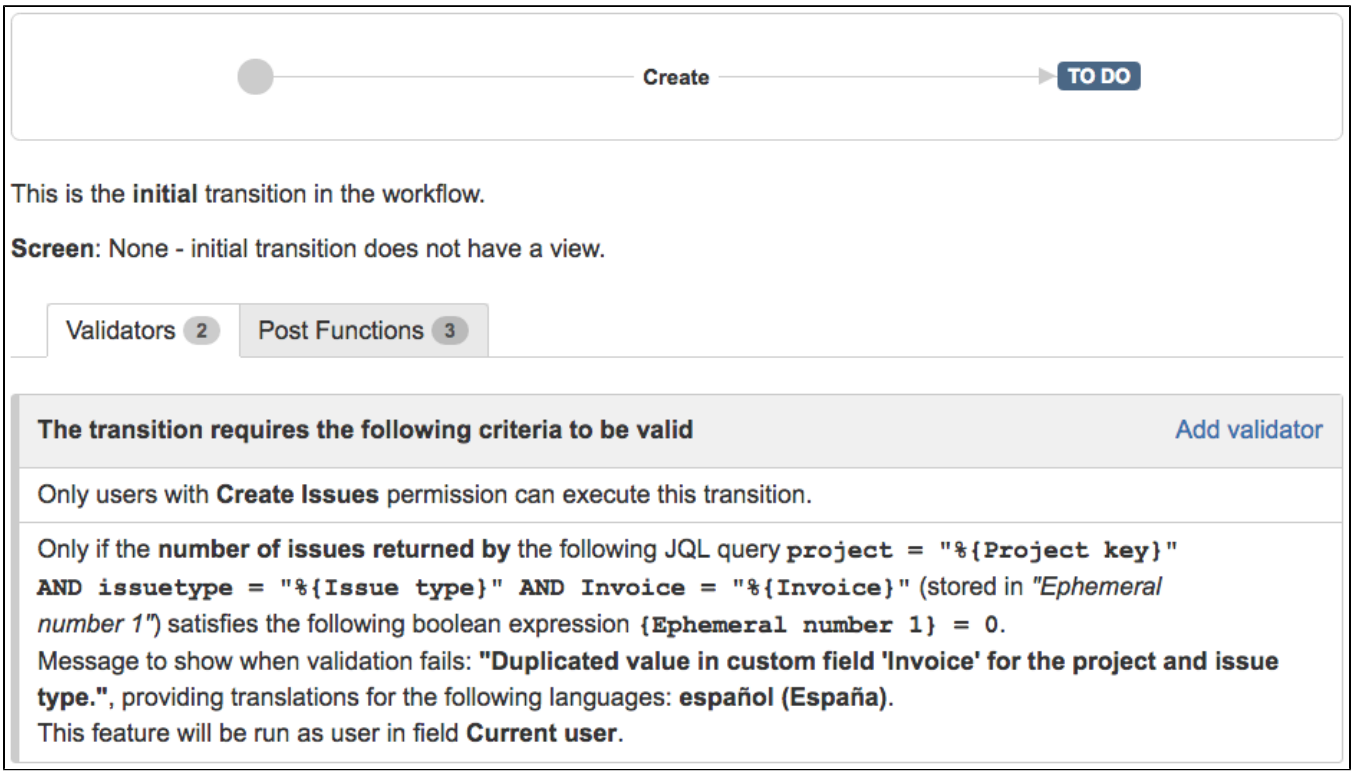


JQL Query: **`project = "%{00018}" AND issuetype = "%{00014}" AND Invoice = "%{10200}"`**

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:



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
```

Check Syntax

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.

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
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)	

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

Note that:

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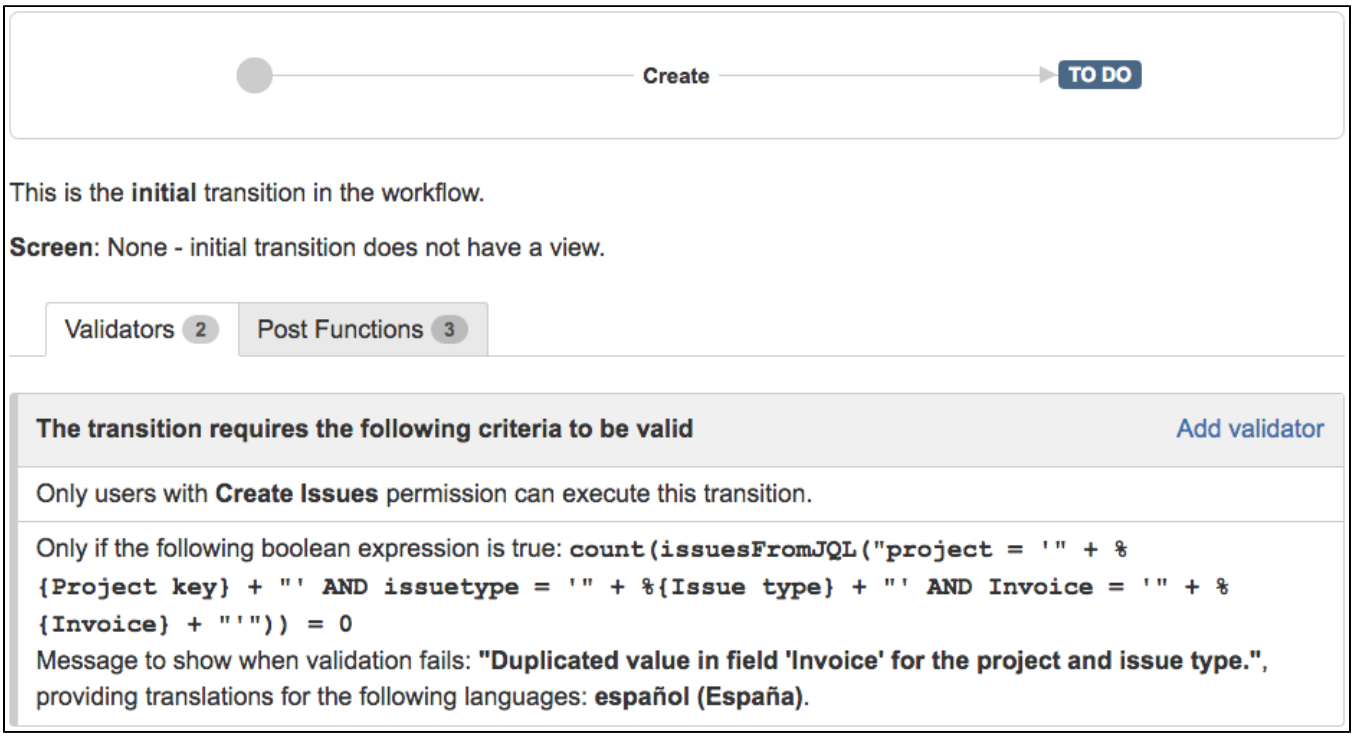
- **%{00014}** is the field code for **Issue key**
- **%{10200}** is the field code for custom field **Invoice**. This field code depends on each particular Jira instance

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



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

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

Page: Block a transition until all sub-tasks have certains 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

- 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
- Validate compatible values selection among dependent custom fields
  - example
  - validator
  - custom-field
- Make a custom field mandatory when priority is "Critical" or "Blocker" and issue type is "Incident"
  - 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

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
- Make attachment mandatory depending on the value of certain custom field
    - example
    - validator
    - 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
- 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