

Using project properties to calculate custom sequence numbers

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Features used to implement the example

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Example: Using project properties to calculate custom sequence numbers

In this example, a custom identifier "**Approval Code**" is added to issues by using a project property and different custom fields.

The code that will be created is a combination of a specific number (sequence number), the fiscal year (custom field) and abbreviation of a department and will look like this:

```
003/2018-2019/DEV
```








Configuration items needed are:

- Project property "**sequenceNumber**"
- Custom Text Field "**Department**"
- Custom Text Field "**Fiscal Year**"
- Custom Text Field "**Approval Code**"

Setting the project property

Setting a project property can be done via the project settings [Details](#).

Details

Name*	<input type="text" value="Development"/>	
Key*	<input type="text" value="DEV"/>	
URL	<input type="text"/>	
Project type*	<div> Software</div>	
Project category	<div>None</div>	
Avatar*	<div> select image</div>	
Description	<div><div><div>{sequenceNumber=0}</div><div> </div></div></div>	
<div><div>Save details</div><div>Cancel</div></div>		

A valid expression is: `{sequenceNumber=0}`

Adding multiple post functions

When executing the transition, the current value of "**sequenceNumber**" is stored in an ephemeral field with the [Read a project property](#) post function.

Project key: Leave this field empty for reading a property in current project.	<input type="text"/> Field code injector: <div>Start typing to get the list of available fields</div> <small>Field codes with format %{nnnn} will be replaced with their corresponding value at runtime.</small>
Name of project property: <small>Project Properties are stored in project description with the following format: {property_name=property_value} e.g. {MaxNumberBugs=5}</small>	<input type="text" value="sequenceNumber"/> Field code injector: <div>Start typing to get the list of available fields</div> <small>Field codes with format %{nnnn} will be replaced with their corresponding value at runtime.</small>
Target field to store project property value:	<div>Ephemeral number 1 - (Number) - [00058]</div>
Additional options:	<input type="checkbox"/> Update issue immediately after field writing. A specific entry will be created in issue history for this field writing.

Name of project property is: **sequenceNumber**

Ephemeral fields are temporary fields that can be used within a transition, e.g. to cache temporary values. They're cleared when the transition is completed, unless a [Inhibit ephemeral fields auto-clearance](#) post function is added to the transition.

Incrementing the "**sequenceNumber**" by one is done with a [Mathematical and date-time expression calculator](#) post function.

Target field: <div>Ephemeral number 1 - (Number) - [00058]</div> <small>Field to be written with the result of evaluation of the formula.</small> <input type="checkbox"/> Don't overwrite target field if it's already set.
Formula: <div>[Line 1 / Col 1] Syntax Specification Check Syntax</div> <div>1 {00058} + 1</div>

Formula is: **{00058} + 1**

Note that:

- {00058}** is the field code for Ephemeral Number 1

Formatting the "**sequenceNumber**" is done with a [Set a field as a function of other fields](#) post function: This ensures that the sequence number is always a 3 digit number, e.g. "3" is formatted to "003" and "10" to "010".

Field to be checked for matching with type 1 setting rules:
Ephemeral number 1 - (Number) - [00058]

This field is only used by rules where conditional part is a regular expression written in brackets: `'(regular_expression)'value`

Target field to be set:
Ephemeral string 1 - (Text) - [00061]

Field to be set by first matched setting rule. Type of the field is shown in square brackets. Check [documentation on Virtual Fields](#) to get information about suitable values for setting selected target field.

☐ Don't overwrite target field if it's already set.

Setting rules:
There are two types of setting rules, and both types can be combined in the same post-function.
Rule formats:
- type 1: `'(regular_expression)'value`
- type 2: `'[boolean_expression]'value`
Write only one rule per line.

1 `[length(%{00058}) = 1]000{00058}`
2 `[length(%{00058}) = 2]000{00058}`
3 `[true]%{00058}`

☐ Evaluate all the setting rules, not stopping at first match. Only for multi-valued and ephemeral target fields.

[Line 1 / Col 1]
Check Syntax

Start typing to get the list of available fields
Insert Numeric Value

Start typing to get the list of available fields
Insert String Value

Setting rules are:

```
[length(%{00058}) = 1]000{00058}
[length(%{00058}) = 2]000{00058}
[true]%{00058}
```

Note that:

- `%{00058}` is the field code for Ephemeral number 1

Finally, the "Approval Code" is composed with an [Update issue fields](#) post function.

Target fields and Source values:
Select the target fields that will be set and the source values for each of them.

Target field:
Start typing to get the list of available fields
Add

Add a field to be set in selected issues.

Target Field	Type of Value	Source Value	Don't Overwrite	Actions
Approval Code	Parsed text (advanced mode)	<code>%{Ephemeral string 1} + "/" + %{Fiscal Year} + "/" + toUpperCase(substring(%{Department}, 0, 3))</code>	<input type="checkbox"/>	Edit Remove

Target Issues:
Select the issue(s) to be updated.

Issue Selection Mode:

☒ Current Issue
☐ Parent Issue
☐ Linked Epic
☐ Linked Issues
☐ Subtasks
☐ Sibling Subtasks
☐ Issues under Epic
☐ Sibling Issues under Epic
☐ JQL Query
☐ Issue List

Issue executing this post-function..

Additional options:

☐ Enable email notifications on issues to be written, according to applicable notification scheme.
☐ Update issue immediately after field writing. A specific entry will be created in issue history for each field writing.

Text to be parsed (in advanced mode) is: `%{00061} + "/" + %{10420} + "/" + toUpperCase(substring(%{10421}, 0, 3))`

Note that:

- `%{00061}` is the field code for Ephemeral string 1
- `%{10420}` is the field code for custom text field "Fiscal Year" (this field code might differ on your instance)
- `%{10421}` is the field code for custom text field "Department" (this field code might differ on your instance)

In order to keep the "sequenceNumber" in sync, a final [Set or create project property](#) post function is added.

Property Name: <small>Project Properties are stored in project description with the following format: {property_name=property_value} e.g. {MaxNumberBugs=5}</small>	<input type="text" value="sequenceNumber"/> Field code injector: <input type="text" value="Start typing to get the list of available fields"/> <small>Field codes with format %{nnnnn} will be replaced with their corresponding value at runtime.</small>
Value to be written:	<input type="text" value="%{00058}"/> Field code injector: <input type="text" value="Start typing to get the list of available fields"/> <small>Field codes with format %{nnnnn} will be replaced with their corresponding value at runtime.</small>
Behavior if Project Property doesn't exist:	<input checked="" type="radio"/> Create the property and assign the value <input type="radio"/> Do nothing

Once configured, the transition will look like this:

<div>IN PROGRESS</div> <div>Approve</div> <div>APPROVED</div>			
Screen: Approval Screen			
Triggers 0	Conditions 0	Validators 0	Post Functions 10
The following will be processed after the transition occurs			Add post function
1. Project property sequenceNumber of current project will be stored in field Ephemeral number 1 . <small>by JWT</small>			
2. Field Ephemeral number 1 will be assigned with the calculation result of the formula: {Ephemeral number 1} + 1 This feature will be run as user in field Current user . <small>by JWT</small>			
3. The field Ephemeral string 1 will be set according to the evaluation of Ephemeral number 1 against the following set of rules: [length(%{Ephemeral number 1}) = 1]00%{Ephemeral number 1} [length(%{Ephemeral number 1}) = 2]0%{Ephemeral number 1} [true]%{Ephemeral number 1} This feature will be run as user in field Current user . <small>by JWT</small>			
4. Update issue fields			
<u>Target issues:</u>			
Current Issue			
<u>Target fields and Source values:</u>			
Target Field	Type of Value	Source Value	Don't Overwrite
Approval Code	Parsed text (advanced mode)	%{Ephemeral string 1} + "/" + %{Fiscal Year} + "/" + toUpperCase(substring(%{Department}, 0, 3))	
This feature will be run as user in field Current user . <small>by JWT</small>			
5. Project property in sequenceNumber will written with the value stored in %{Ephemeral number 1}. If property doesn't exists the property will be created in project description. <small>by JWT</small>			
6. Set issue status to the linked status of the destination workflow step.			
7. Add a comment to an issue if one is entered during a transition.			
8. Update change history for an issue and store the issue in the database.			
9. Re-index an issue to keep indexes in sync with the database.			
10. Fire a Generic Event event that can be processed by the listeners.			



When executing this transition, the custom fields "**Fiscal Year**" and "**Department**" **must not be empty!** Ensuring this can be done by using a validator.

Other examples of that function

Page: [Assign new issues to a different project role depending on field value in current issue](#)

Page: [Using project properties to calculate custom sequence numbers](#)

Related Usage Examples

- [Using project properties to calculate custom sequence numbers](#)
 - [example](#)
 - [post-function](#)
 - [calculated-field](#)
 - [project-properties](#)
- [Setting the priority depending on the multiplication of custom fields](#)
 - [example](#)
 - [calculated-field](#)
 - [post-function](#)
- [Number of open subtasks](#)
 - [example](#)
 - [calculated-field](#)
- [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](#)
- [Highest value of a custom field among linked issues](#)
 - [example](#)
 - [custom-field](#)
 - [calculated-field](#)
- [Predicted due date of an epic](#)
 - [example](#)
 - [calculated-field](#)
- [Number of issues in same version](#)
 - [example](#)
 - [calculated-field](#)
- [Number of linked bugs \(with hyperlink\)](#)
 - [example](#)
 - [calculated-field](#)
- [Google Maps location from address](#)
 - [example](#)
 - [calculated-field](#)
 - [custom-field](#)
- [Total remaining estimate in an epic](#)
 - [example](#)
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- [Creating a Jira Service Desk internal comment](#)
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- [Limit the number of hours a user can log per day](#)
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- [Set a date based on current date](#)
 - [example](#)
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- [Parse Email addresses to watchers list](#)
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