Set a custom field "Urgency" depending on a combined value of issue's priority and "Impact" custom field

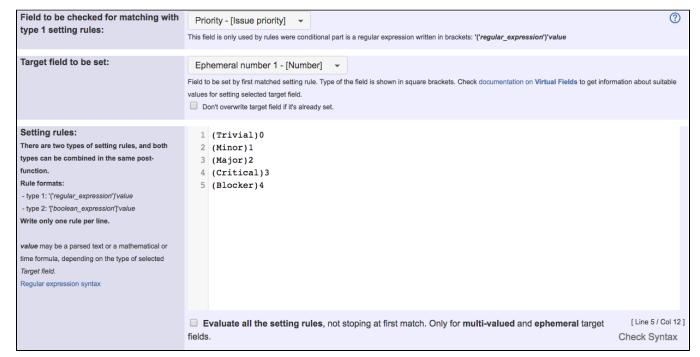## Features used to implement the example

- **Set a field as a function of other fields**
- **Mathematical and date-time expression calculator**

Example: Set a custom field "Urgency" depending on a combined value of issue's priority and "Impact" custom field

Let's suppose we want to set a custom field called "**Urgency**" depending on issue "**Priority**" and the value of another custom field called "**Impact**". We associate a numerical value to issue "**Priority**" and to custom field "**Impact**". These two values may be applied to a mathematical function to calculate another numerical value that will represent the "**Urgency**" of the issue. In our case we simply have summed both values, but we could have used a much more complex formula. Once we get the result of the sum, we revert the process, associating each possible result of the sum to an options in custom field "**Urgency**".

1. Use post-function **Set a field as a function of other fields** to set on virtual fields "**Ephemeral number 1**" and "**Ephemeral number 2**" with a numeric value associated to issue "**Priority**" and the value of custom field "**Impact**".
2. Use post-function **Mathematical and date-time expression calculator** to calculate the sum of "**Ephemeral number 1**" and "**Ephemeral number 2**" and store the result on "**Ephemeral number 1**".
3. Use post-function **Set a field as a function of other fields** to set custom field "**Urgency**" from the value of "**Ephemeral number 1**".

Using post-function **Set a field as a function of other fields** we associate a numerical value to each possible value of issue "**Priority**", and this value is stored in auxiliary field "**Ephemeral number 1**".

Field to be checked for matching with type 1 setting rules:	Priority - [Issue priority] ▾
	This field is only used by rules were conditional part is a regular expression written in brackets: '**('*regular_expression*')'value**
Target field to be set:	Ephemeral number 1 - [Number] ▾
	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.** **value** may be a parsed text or a mathematical or time formula, depending on the type of selected Target field. Regular expression syntax	``` 1 (Trivial)0 2 (Minor)1 3 (Major)2 4 (Critical)3 5 (Blocker)4 ```
	☐ **Evaluate all the setting rules**, not stoping at first match. Only for **multi-valued** and **ephemeral** target fields. [Line 5 / Col 12] Check Syntax

Using post-function " **Set a field as a function of other fields**" we associate a numerical value to each possible value of custom field "**Impact**", and this value is stored in auxiliary field "**Ephemeral number 2**".
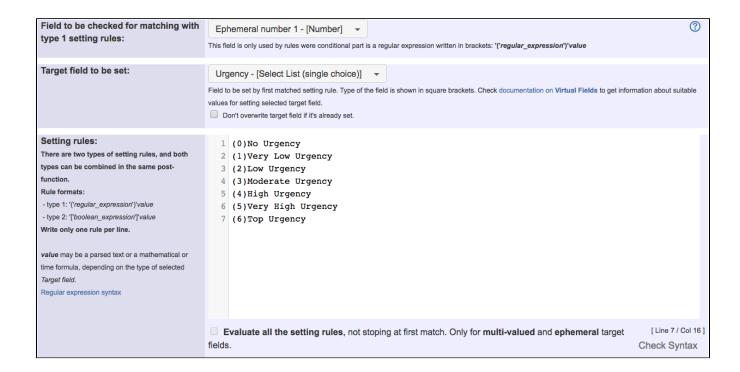

Using post-function " **Mathematical and date-time expression calculator**" we store in "**Ephemeral number 1**" the result of summing "**Ephemeral number 1**" and "**Ephemeral number 2**".
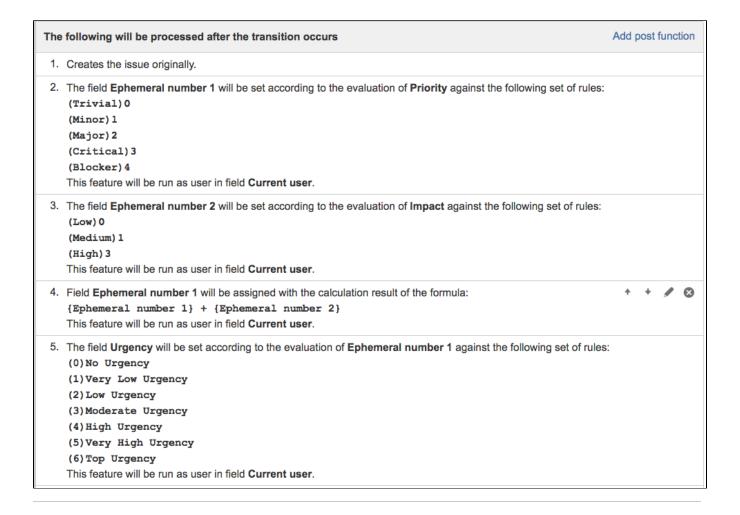

Note that:

- **{00058}** is code for numeric value of "**Ephemeral number 1**"
- **{00059}** is code for numeric value of "**Ephemeral number 2**"

Using post-function **Set a field as a function of other fields** custom field "**Urgency**" is set depending on the result of the former sum, which is stored in "**Ephemeral number 1**".

Field to be checked for matching with type 1 setting rules:	Ephemeral number 1 - [Number] ▾	?

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

Target field to be set:	Urgency - [Select List (single choice)] ▾

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.

value may be a parsed text or a mathematical or time formula, depending on the type of selected *Target field*.

Regular expression syntax

```
1  (0)No Urgency
2  (1)Very Low Urgency
3  (2)Low Urgency
4  (3)Moderate Urgency
5  (4)High Urgency
6  (5)Very High Urgency
7  (6)Top Urgency
```

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

[Line 7 / Col 16]

Check Syntax

Once configured "**Create Issue**" transition looks like this:

The following will be processed after the transition occurs   Add post function

1. Creates the issue originally.

2. The field **Ephemeral number 1** will be set according to the evaluation of **Priority** against the following set of rules:
    ```
    (Trivial)0
    (Minor)1
    (Major)2
    (Critical)3
    (Blocker)4
    ```
    This feature will be run as user in field **Current user**.

3. The field **Ephemeral number 2** will be set according to the evaluation of **Impact** against the following set of rules:
    ```
    (Low)0
    (Medium)1
    (High)3
    ```
    This feature will be run as user in field **Current user**.

4. Field **Ephemeral number 1** will be assigned with the calculation result of the formula:
    ```
    {Ephemeral number 1} + {Ephemeral number 2}
    ```
    This feature will be run as user in field **Current user**.

5. The field **Urgency** will be set according to the evaluation of **Ephemeral number 1** against the following set of rules:
    ```
    (0)No Urgency
    (1)Very Low Urgency
    (2)Low Urgency
    (3)Moderate Urgency
    (4)High Urgency
    (5)Very High Urgency
    (6)Top Urgency
    ```
    This feature will be run as user in field **Current user**.

Other examples of that function

Set a field as a function of other fields

Page: Add watcher depending on security level
Page: Add watchers based on issue type
Page: Add watchers depending on the value of a custom field
Page: Assign issue based on the value of a Cascading Select custom field
Page: Assign issue to a specific user based on a specific custom field value
Page: Assign issue to current user if assignee is empty
Page: Assign issue to current user if the user is not member of a certain project role
Page: Change assignee based on a custom field
Page: Change parent's status depending on sub-task's summary
Page: Changing issue priority depending on issue description
Page: Compose dynamic text by inserting field values in a text template
Page: Copy "Due date" into a date type custom field in a linked issue if it's greater than current issue's "Due date"
Page: Limit the number of hours a user can log per day
Page: Make parent issue progress through its workflow
Page: Rise priority if due date is less than 3 weeks away
Page: Set "Due date" depending on the value of other fields, in case it's uninitialized
Page: Set "Due date" to a specific day of next week no matter of date of creation this week
Page: Set "Due date" to current date at issue creation if not initialized
Page: Set a custom field "Urgency" depending on a combined value of issue's priority and "Impact" custom field
Page: Set a date based on current date
Page: Set a field based on reporter's email
Page: Set a watcher at ticket creation depending on custom field's value
Page: Set assignee depending on issue type
Page: Set security level based on groups and project roles the reporter or creator are in
Page: Set security level depending on reporter or creator
Page: Set the assignee based on a condition
Page: Set the value of a field of type "User Picker" depending on other field's value
Page: Set watchers depending on the value of a custom field
Page: Setting a custom field (User Picker) based on the value of another custom field (Text Field)
Page: Setting a field's default value depending on another field
Page: Setting the priority depending on the multiplication of custom fields
Page: Transition an issue automatically depending on the value of a field
Page: Unassign an issue when assigned to project leader
Page: Update checkboxes custom field if a file has been attached during a transition
Page: Using project properties to calculate custom sequence numbers

Mathematical and date-time expression calculator

Page: Automatic work log with start and stop work transitions
Page: Automatically log work time when the user uses a "Stop Progress" transition
Page: Calculate the time elapsed between 2 transition executions
Page: Getting the number of selected values in a custom field of type Multi Select
Page: Implement a form with a series of questions and calculate a numeric value based on the answers
Page: Increment a field or set to 1 if it's not set
Page: Set "Date-Time Picker" custom field with current date-time
Page: Set "Due date" 6 natural days (or work days) earlier than a "Date Picker" custom field
Page: Set "Due date" to a specific day of next week no matter of date of creation this week
Page: Set "Due date" with certain time offset from current date
Page: Set "Total time spent" to "Current date and time - date and time of last update"
Page: Set a custom field "Urgency" depending on a combined value of issue's priority and "Impact" custom field
Page: Sum "Time Spent" in all sub-tasks of issues linked with issue link types "LinkA", "LinkB", "LinkC"
Page: Triage Jira Service Desk email requests (Move issues)

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

Page: