

# Seeds

## On this page

[Seed issues](#) | [Seed texts](#) | [Seed numbers](#)

Probably most of the time, doing things with the help of JWT for Jira Cloud is related to a **single object** - the **issue** currently being **transitioned**, e.g. by adding a comment, updating a field, etc.

Referring to the **current issue's information** can be done by using a simple field code like `%{issue.description}`.

However, since you can also use more complex functions in JWT that work with **multiple objects**, this simple notation is not sufficient for those use cases. To name a few examples

- Creating sub-tasks based on the (dynamic) **selection** of components set in the current issue
- Create a task for **each issue** returned by a JQL query (dynamic)
- Create a set of **three** (static) **stories** in an Epic with distinct pieces of information

Whenever JWT for Jira Cloud has to handle (or **iterates** over) multiple elements of [Lists](#) (or sources), those elements are referred to as **seeds**. Depending on the type of list, those are referred to as

- **Seed issues** - for elements of **issue lists**
- **Seed texts** - for elements of **text lists** (e.g. custom field options, components etc.)
- **Seed numbers** - for the numbers from one to a given **number**



## Seed issues

**Issue lists** can be specified by **issue list expressions** like `linkedIssues()`.

When dealing with issue lists, the notation for accessing values of each element is `%{seed.issue.someField}`, e.g. `%{seed.issue.summary}`

## Workflow functions

You might face seed issues when trying to create multiple issues with the [Create issue](#) post function by setting the "Mode" parameter:

Number of issues to be created	Description
Multiple issues based on an issue list	An issue is created for every issue returned by the issue list expression.

**Example:** You want to create multiple issue based on a parser function that returns three issues, e.g. `linkedIssues()`:

- DEMO-1 Issue A
- DEMO-2 Issue B
- DEMO-3 Issue C

Creating issues based on this result, the post function will run **three** times, where the following values will be returned throughout those three runs.

Run	<code>%{<b>seed.issue.key</b>}</code>	<code>%{<b>seed.issue.summary</b>}</code>
1	DEMO-1	Issue A

2	DEMO-2	Issue B
3	DEMO-3	Issue C

In general, using the seed notation, the **nth run** returns the field values of the **nth issue** from this list.



## Seed texts

**Text lists** can either be

- **static**, e.g. ["firstElement", "secondElement", "thirdElement"], or
- **composed dynamically** by using the `toStringList()` expression parser functions, e.g. `toStringList(%{issue.components})` or `toStringList(%{issue.cf12345})` (where the custom field with the ID 123456 is a multi option custom field) or
- **calculated** by using one of the functions that return a text list like `findPattern()`, e.g. `%{findPattern(%{issue.versions}, "Release")}`

When dealing with text lists, the notation for each element `%{seed.text}`.

## Workflow functions

### Create issue post function

Number of issues to be created	Description
Multiple issues based on a text list	An issue is created for each element of a text list.

Given the example of a static list above, **the post function will run three times** and the following values will be returned throughout those three runs

Run	<code>%{seed.text}</code>
1	firstElement
2	secondElement
3	thirdElement

Given a dynamic example, having selected the components Frontend and Backend on an issue with `%{toStringList(%{issue.components})}`, the post function will run two times returning the following values for each run

Run	<code>%{seed.text}</code>
1	Frontend
2	Backend

After adding a third component Interface, the post function will run three times returning the following values for each run

Run	<code>%{seed.text}</code>
1	Frontend
2	Backend
3	Interface

According to this scenario, composing a summary with an expression like

Summary of `%{seed.text}` Issue

will result in **three** issues, named

- **Summary of Frontend Issue**

- **Summary of Backend Issue**
- **Summary of Interface Issue**

### Examples

- [Create a sub-task for each component](#)

1  
2  
3

Seed numbers

Numbers can either be

- **static**, e.g. 3, or
- **composed dynamically** by using the `toNumber()` expression parser function or
- **calculated** by using one of the functions that return a number like `length()`, e.g. `%{length(%{issue.versions})}`

When dealing with number lists, the notation for each element is `{seed.number}`.

### Workflow functions

- [Create issue post function](#)

Number of issues to be created	Description
Multiple issues based on a number	The number of issues provided by the numeric value is created.

Given a static example with the numeric value of 3 in order to create three issues, the following values will be returned for each run

Run	{seed.number}
1	1
2	2
3	3

According to this scenario, composing a summary with an expression like

```
Summary of Issue # {seed.number}
```

will result in three issues, named

- **Summary of Issue # 1**
- **Summary of Issue # 2**
- **Summary of Issue # 3**

If you still have questions, feel free to refer to our [support](#) team.