

# JWT Release Notes 2.1.22

[2014-10-06] Released [Jira Workflow Toolbox 2.1.22](#)

## New features

- New function **toStringList**(*multivalued\_field*) returns the list of selected values as a **string list** type.
- New comparison operators **any in** and **none in**. These operators work with **multi-valued fields**, **number list**, **string list** and **issue list** types.
- New functions **max**(*number list*) and **min**(*number list*) return the maximum and minimum values in a number list respectively.
- New infix operators **UNION**, **INTERSECT**, **APPEND** and **EXCEPT** are now available. These operators work exactly as currently existing homonymous functions, and work also on **number list**, **string list** and **issue list** types. Using these operators instead of function alternative, makes expressions shorter and more readable.
- New virtual field **"Date and time of latest status change"**.
- **String List** and **Number List** can now be written as literals. Examples: ["red", "blue", "white"] and [1, 2, 3]. It makes possible expressions like: %*{00012}* in ["Blocker", "Critical"], where %*{00012}* is field code for field *Priority*.
- New function **toString**(*number*, *number\_of\_decimals*). This function returns number in string format rounding the fractional part to show a limited number of decimal digits.
- New functions **transitivelyLinkedIssues**(*issue\_link\_types*), **transitivelyLinkedIssues**(*issue\_link\_types*, *issue\_keys*) and **transitivelyLinkedIssues**(*issue\_link\_types*, *issue\_list*): returns **directly** linked issues and also **transitively** linked issues.
- New function **availableItems**(*selectable field*) returns a **string list** with the possible values for the field. This function works on the following types of fields: **versions**, **components**, **tags**, **select**, **multi-select**, **attachments**, **multi-user**, **multi-group**, **security level** and **issues**.
- Support for custom fields **"Transition Count Field"** introduced in last version of [Jira Misc Custom Fields](#).

## Improvements

- Function **toString()** now works with **boolean** type.
- Operators **~**, **!~**, **in** and **not in** now work with (**number**, **number list**) and (**string**, **string list**) type arguments.
- All features using a JQL query among its configuration parameter now automatically add double quotes to all field codes injected in the JQL query, (i.e., transform %*{nnnnn}* into "%*{nnnnn}*"). This avoids errors at execution time when values stored in those fields contain spaces.

## Fixed bugs

- Function **toString()** wasn't working with **number list**, **string list** and **issue list** types.
- Fixed minor bug in parser, related to the mechanism for avoiding evaluation of non-necessary terms, once final result has been determined by partial evaluation of the expression.
- Field **"Previous status"** now returns previous status different from current one, i.e., transitions to same status are filtered.
- [#73](#) and [#74](#): Major bug introduced in version 2.1.21 in **"User in field Reporter isn't in project role"**.