

JWT expression parser functions

Jira Workflow Toolbox for Jira Cloud uses a powerful expression parser for interpreting **logical**, **mathematical**, **date-time** and **text** functions.

The following is a list of the available expression parser functions:

- Dates and times
- Numbers
- Texts
- Lists
- Converting data types
- Users



All available parser functions

Function name	Short description	Output
abs(number)	Returns the absolute value of the input number.	NUMBER
addDays()	Adds or subtracts days to or from any given date .	NUMBER
append()	Combines the elements of two lists .	NUMBER LIST TEXT LIST ISSUE LIST
avg()	Calculates the average values of a given number list.	NUMBER
ceil(number)	Returns the smallest mathematical integer that is greater than or equal to the input number.	NUMBER
count()	Returns the number of elements in a text, number or issue list.	NUMBER
datePart()	Returns the date part of any given date.	NUMBER
dateTimeToString()	Returns the timestamp of any given date in text form .	TEXT
dateToString()	Converts any given date to a text .	TEXT
dayOfMonth()	Returns the day of the month of any given timestamp .	NUMBER
dayOfWeek()	Returns the day of the week of any given timestamp.	NUMBER
distinct()	Removes all duplicates from a number, text, or issue list.	NUMBER LIST TEXT LIST ISSUE LIST
epic()	Returns all epics linked to specified issues.	ISSUE LIST
except()	Removes certain elements from a list.	NUMBER LIST TEXT LIST ISSUE LIST

fieldValue()	Returns a number or text list with field values .	NUMBER LIST TEXT LIST
filterByCardinality()	Filters a given number, text, or issue list by the number of occurrence of elements .	NUMBER LIST TEXT LIST ISSUE LIST
filterByIssueType()	Filters a given issue list by issue type .	ISSUE LIST
filterByProject()	Filters a given issue list by project .	ISSUE LIST
filterByResolution()	Filters a given issue list by resolution .	ISSUE LIST
filterByStatus()	Filters a given issue list by issue status .	ISSUE LIST
filterByValue()	Filters a number or text list using a given comparison .	NUMBER LIST TEXT LIST
findPattern()	Returns all substrings matching a given regular expression .	TEXT LIST
findPatternIgnoreCase()	Returns all substrings matching a given regular expression, ignoring the case .	TEXT LIST
findReplaceAll()	Replaces all occurrences of a given text with the given replacement.	TEXT
findReplaceAllIgnoreCase()	Replaces all occurrences of a given text with a given replacement, ignoring the case .	TEXT
findReplaceFirst()	Replaces the first occurrence of a given text with the given replacement.	TEXT
findReplaceFirstIgnoreCase()	Replaces the first occurrence of a given text with the given replacement, ignoring the case .	TEXT
first()	Returns the first element of a number, text, or issue list .	NUMBER TEXT ISSUE LIST
floor()	Returns the greatest mathematical integer that is less than or equal to the input number.	NUMBER
getFromJSON()	Returns the result of a given JMESPath which is applied to a JSON	TEXT
getMatchingValue()	Returns a custom reference value for a given or text or number .	NUMBER TEXT
hour()	Returns the hour part of any given timestamp .	NUMBER
intersect()	Returns common elements of two lists.	NUMBER LIST TEXT LIST ISSUE LIST
issueKeysToIssueList()	Converts a text containing issue keys to an issue list .	ISSUE LIST
issuesFromJQL()	Returns a list of issues returned by a specified JQL query .	ISSUE LIST
issuesUnderEpic()	Returns all issues linked to a given epic	ISSUE LIST
issueType()	Returns the name of the issue type with a given ID .	TEXT
jiraExpression()	Returns the result of a Jira expression .	TEXT

last()	Returns the last element of a number , text , or issue list .	NUMBER TEXT ISSUE LIST
length()	Returns the length any given text.	NUMBER
linkedIssues()	Returns a list of issues linked .	ISSUE LIST
matches()	Checks, if the given text matches the given regular expression .	BOOLEAN
max()	Returns the highest value in a number list.	NUMBER
max(numbers)	Returns the larger of two numeric values.	NUMBER
min()	Returns the smallest value in a number list.	NUMBER
min(numbers)	Returns the smaller of two numeric values.	NUMBER
minute()	Returns the minutes part of a given timestamp.	NUMBER
modulus(numbers)	Returns the remainder after division of the dividend by the divisor.	NUMBER
month()	Returns the month part of a given timestamp.	NUMBER
nthElement()	Returns the nth element of a number, text or issue list.	NUMBER TEXT ISSUE LIST
project()	Returns the key of the project with a given ID .	TEXT
projectId()	Returns the ID of the project with a given key or name .	NUMBER
random()	Returns a number between 0 and 1.0 .	NUMBER
replaceAll()	Replaces all substrings matching a regular expression with a given replacement .	TEXT
replaceFirst()	Replaces the first substring matching a given regular expression with a given replacement.	TEXT
resolution()	Returns the name of the resolution with a given ID .	TEXT
round(number)	Returns the closest integer to the input number.	NUMBER
second()	Returns the second part of a given timestamp .	NUMBER
siblingIssuesUnderEpic()	Returns all issues linked to a given epic	ISSUE LIST
sort()	Sorts a given list in a specific order.	NUMBER LIST TEXT LIST ISSUE LIST
status()	Returns a status name .	TEXT
stringToDate()	Converts a text into a date .	NUMBER
sublist()	Returns a defined extract of a given list .	NUMBER LIST TEXT LIST ISSUE LIST

substring()	Returns a specific part of a text.	TEXT
subtasks()	Returns the list of sub-tasks of the specified issue(s) .	ISSUE LIST
sum()	Sums up all values in a given number list.	NUMBER
timePart()	Returns the time part of any given date.	NUMBER
toLogicalValue()	Converts a text and lists to a logical value .	BOOLEAN
toLowerCase()	Converts a given text with all its characters to lower case .	TEXT
toNumber()	Converts a text to a number .	NUMBER
toNumberList()	Converts text to a number list .	NUMBER LIST
toString()	Converts numbers and lists to plain text .	TEXT
toStringList()	Converts text to a text list .	TEXT LIST
toUpperCase()	Converts a given text with all characters to upper case .	TEXT
trim()	Removes leading and trailing blanks (white spaces and tabs) from a text.	TEXT
union()	Returns distinct elements of two lists.	NUMBER LIST TEXT LIST ISSUE LIST
userId()	Returns the Atlassian account Id of given user(s).	TEXT TEXT LIST
displayName()	Returns the display name of a given user.	TEXT TEXT LIST
year()	Returns the year part of a timestamp.	NUMBER