

# timeDifference()

This function **subtracts two timestamps** using a [JWT calendar](#). The time time difference will be returned in **milliseconds**.

### Syntax

timeDifference(firstDate, dateToSubtract, calendarName, timeZone) #Output: Number

## Examples

**Assumption:** A custom JWT calendar called "my\_calendar" has been defined as follows:

```
MON - THU {  
  08:00 - 15:00,  
  16:00 - 19:30;  
}  
  
FRI {  
  08:00 - 15:00;  
}
```

Parser expression	Description
<code>timeDifference({system.currentDateTime}, {issue.created}, "my-calendar", LOCAL)</code>	This example calculates the <b>elapsed time</b> from <b>issue creation</b> to the <b>current date and time</b> using the calendar <b>my-calendar</b> .  The result will return <b>milliseconds</b> .
<code>timeDifference({system.currentDateTime}, {issue.created}, "my-calendar", LOCAL) / {HOUR}</code>	This example calculates the <b>elapsed time</b> from <b>issue creation</b> to the <b>current date and time</b> using the calendar <b>my-calendar</b> .  The result will return <b>hours</b> .

## Additional information

### Parameters used in this function

Parameter	Input (data type)	Description
firstDate	<input type="text" value="NUMBER"/>	The parameter must be valid <b>timestamp</b> . Usually this value is retrieved from a <a href="#">field</a> (e.g. due date, created date).
dateToSubtract	<input type="text" value="NUMBER"/>	The parameter must be valid <b>timestamp</b> . Usually this value is retrieved from a <a href="#">field</a> (e.g. due date, created date).
calendarName	<input type="text" value="TEXT"/>	The <b>name</b> of the used <a href="#">JWT calendar</a> .
timeZone	<input type="text" value="TIMEZONE"/>	The <b>time zone</b> used for the conversion.

## Output

The function returns a  .

**Variant of the function** where you can define an additional [JWT calendar specification](#).

### Syntax

```
timeDifference(firstDate, dateToSubtract, calendarName, additionalSpecifier, timeZone) #Output: Number
```

## Examples

Parser expression	Description
<pre>timeDifference({system.currentDateTime}, {issue.created}, "my-calendar", "2020/05/20 {:}", LOCAL)</pre>	<p>This example calculates the <b>elapsed time</b> from <b>issue creation</b> to the <b>current date and time</b> using the calendar <b>my-calendar</b> and additionally <b>ignoring the 20th of May, 2020</b>.</p> <p>The result will return <b>milliseconds</b>.</p>
<pre>timeDifference({system.currentDateTime}, {issue.created}, "my-calendar", "2020/05/20 {:}", LOCAL) / {HOUR}</pre>	<p>This example calculates the <b>elapsed time</b> from <b>issue creation</b> to the <b>current date and time</b> using the calendar <b>my-calendar</b> and additionally <b>ignoring the 20th of May, 2020</b>.</p> <p>The result will return <b>hours</b>.</p>

## Additional information

### Parameters used in this function



Parameter	Input (data type)	Description
firstDate	<input type="text" value="NUMBER"/>	The parameter must be valid <b>timestamp</b> . Usually this value is retrieved from a <a href="#">field</a> (e.g. due date, created date).
dateToSubtract	<input type="text" value="NUMBER"/>	The parameter must be valid <b>timestamp</b> . Usually this value is retrieved from a <a href="#">field</a> (e.g. due date, created date).
calendarName	<input type="text" value="TEXT"/>	The <b>name</b> of the used <a href="#">JWT calendar</a> .
additionalSpecifier	<input type="text" value="TEXT"/>	A text containing an additional <a href="#">JWT calendar specification</a> .
timeZone	<input type="text" value="TIMEZONE"/>	The <b>time zone</b> used for the calculation.

## Output

The function returns a



## Use cases and examples

Use case	JWT feature	Workflow function	Field type	Automated action	Parser functions
Difference between two dates in business days			Text		<code>formatWorkDuration()</code> <code>timeDifference()</code>
Automatically log work spent in a specific status		Log work			<code>timeDifference()</code>