

Time Formula Functions

Like other formula functions, the **timeDiff** and **timeOffset** functions use date-related data to perform a calculation or task. These functions do **not** require multiple values and therefore do not require **Relationship** or **Reference** variable types or data from more than one field or formula.

timeDiff

This function returns the difference between two dates using two **Date & Time** variables or a **Date & Time** variable and the **today** function. By default, this function returns the difference between the dates in seconds, however, you can specify that the results are returned in days or hours.

Using the dates May 15, 2018 (variable A) and May 14, 2018 (variable B) as examples, this function could return the following:

UNIT OF TIME	FORMULA	RESULT
Seconds (default)	timeDiff(A,B)	86400
Hours	timeDiff(A,B,"hours")	24
Days	timeDiff(A,B,"days")	1
Today's date (May 15, 2018), days	timeDiff(today(),B,"days")	1

timeOffset

This function offsets (adds or subtracts) seconds, days, or months from a **Date & Time** field variable.

Before using this function, note that:

- This function returns results in Unix (epoch) timestamp format (e.g. May 2018 is returned as 1525132800). **This output is not converted by Resolver Core and must be done manually.** To convert your timestamp into standard time or vice versa, see the [Convert Unix Time](#) website. To calculate the difference between two dates by seconds, days, or months, see the [Unix Time Converter](#).
- Depending on how you intend to use the **timeOffset** function in a formula, it's possible to display the results in a standard date format by inserting the Unix timestamps into the **Max Value** field, then creating a label for the timestamp's date equivalent (see screenshot below for an example). Contact [Resolver Support](#) for additional information.

DISPLAY

Format

Range as

Color	Label	Max Value		
	May 15, 2018	1526342400	✓	
	May 15, 2019	1557878400	✓	

Configuring a formula's display settings to display Unix timestamps as a standard date format.

Using May 15, 2018 (variable A) as an example, this function could return the following:

UNIT OF TIME	FORMULA	RESULT
Seconds	<code>timeOffset(A,86400,"seconds")</code>	1526495700 (May 16, 2018)
Days	<code>timeOffset(A,2,"days")</code>	1526582100 (May 17, 2018)
Months	<code>timeOffset(A,1,"months")</code>	1529087700 (June 15, 2018)
Days (subtracted)	<code>timeOffset(A,-3,"days")</code>	1526150100 (May 12, 2018)