

# Time Formula Functions

Last Modified on 04/05/2024 3:56 pm EDT

## Overview

The **timeDiff** and **timeOffset** functions use date-related data to perform a calculation or task. These functions do **not** require multiple values and do not require relationships, reference variable types, or data from more than one field or formula.



**Warning:**

*Formulas do not calculate automatically on their own. A formula will re-calculate whenever a variable referenced by the formula changes in value.*

## timeDiff

The **timeDiff** function returns differences between two dates using **Date & Time** variables or a **Date & Time** variable and the **today** function in seconds, days, or hours.

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

Unit of Time	Formula	Results
Seconds (default)	timeDiff(A,B)	86400
Hours	timeDiff(A,B,"hours")	24
Days*	timeDiff(A,B,"days")	1
Today's Date	timeDiff(today(),B,"days")	1

\* The Days formula can only be used as a workflow condition, not with forms, as the formula does not auto-update.

## timeOffset

The **timeOffset** function offsets (adds or subtracts) seconds, days, or months from a **Date & Time** field variable. The function returns results in Unix (epoch) timestamp format (e.g., May 2018 = 1525132800). For further information, see the [Converting Unix Timestamp Format to Standard Date Format](#) section or Contact [Resolver Support](#) for additional information.

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

Unit of Time	Formula	Results
Seconds	timeOffset(A,86400,"seconds")	1526495700 (May 16, 2018)
Days*	timeOffset(A,2,"days")	1526582100 (May 17, 2018)
Months	timeOffset(A,1,"months")	1529087700 (June 15, 2018)
Days* (Subtracted)	timeOffset(A,-3,"days")	1526150100 (May 12, 2018)

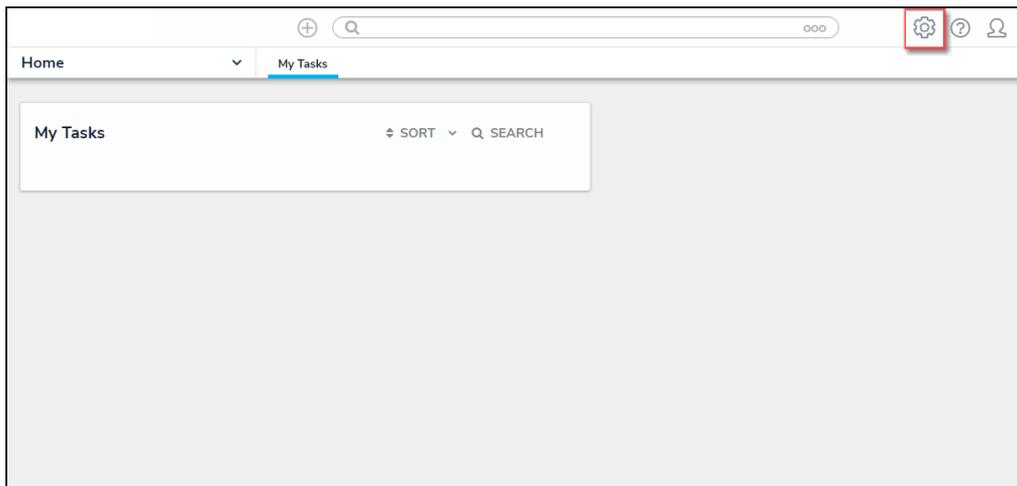
\* The Days formula can only be used as a workflow condition, not with forms, as the formula does not auto-update.

Formulas can display dates using date formats. Existing formulas will need to be updated to date to display dates using date formats instead of Unix code.

## Converting Unix Timestamp Format to Standard Date Format

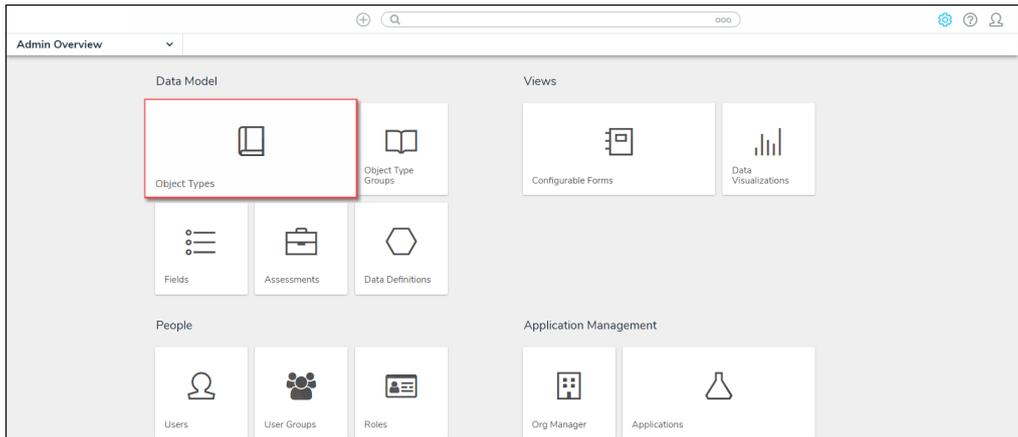
You can convert and display the **timeOffset** value from Unix Timestamp format to standard date format.

1. From any of the main **Resolver** screens, click the **System** icon in the top right-hand corner of the screen.



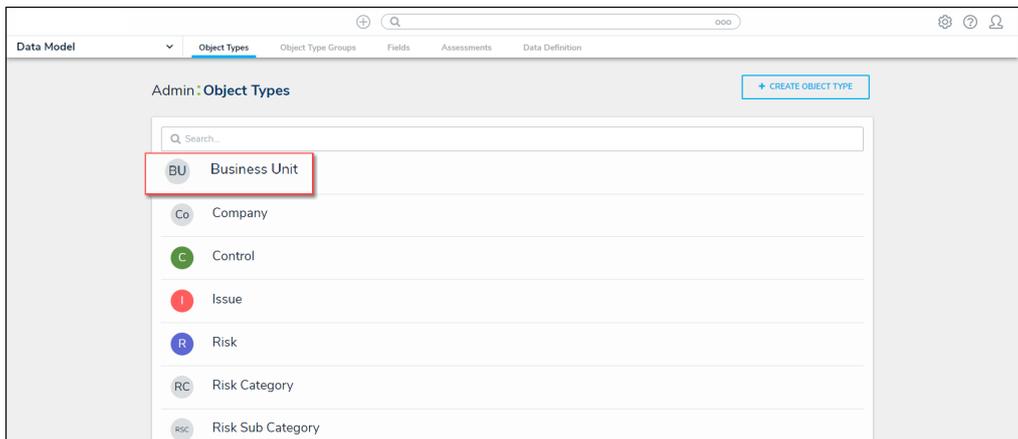
*System Icon Location*

2. From the **Administration Overview** screen, select the **Object Types** tile from the **Data Model** section.



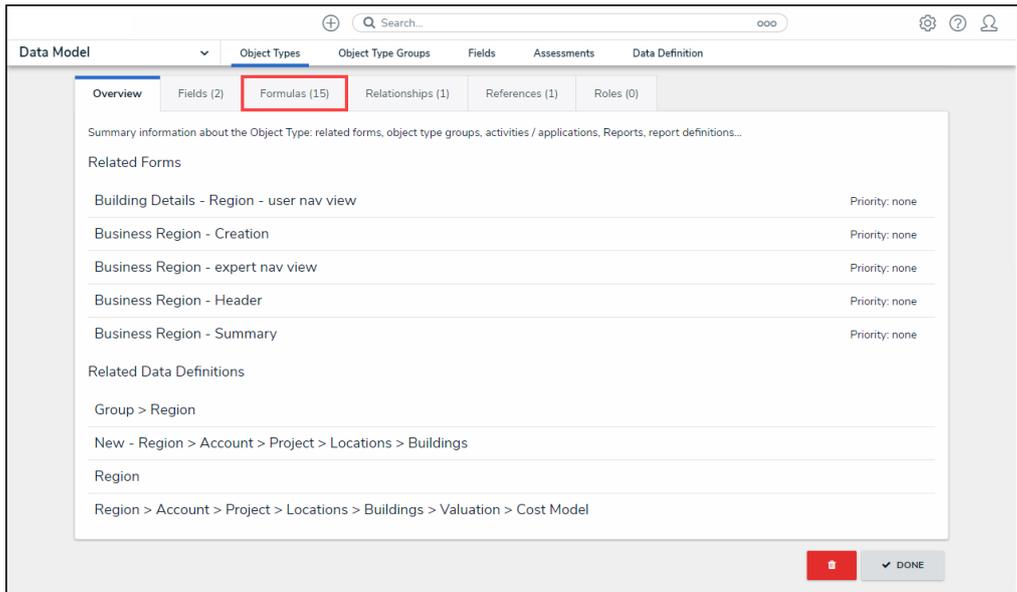
*Administration Overview*

3. From the **Object Types** screen, search for an existing **Object Type**.
4. Click on an **Object Type** name to open the **Edit Object Type** screen.



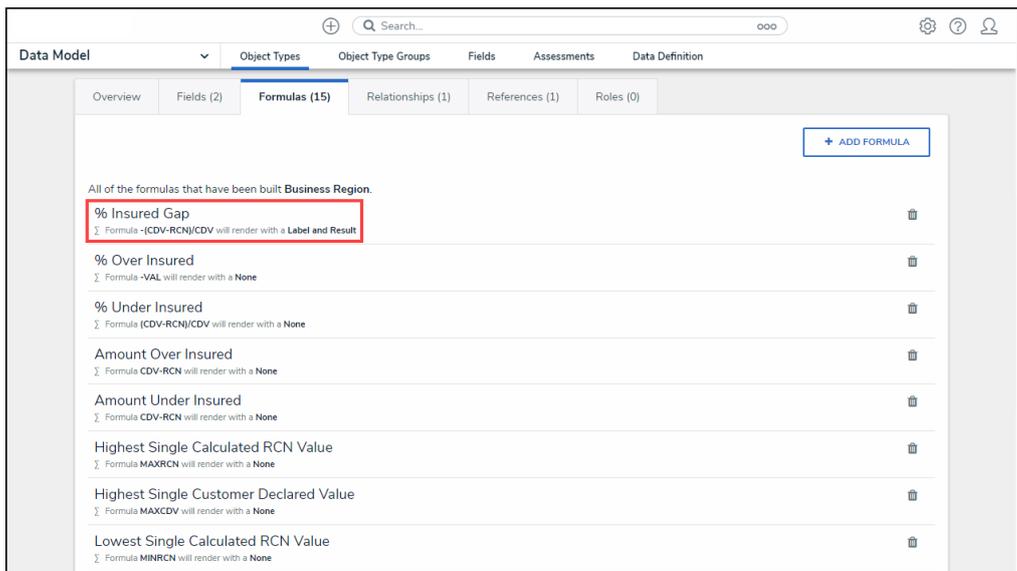
*Click on an Object Type Name*

5. Scroll to the bottom of the screen and select the **Formulas** tab.



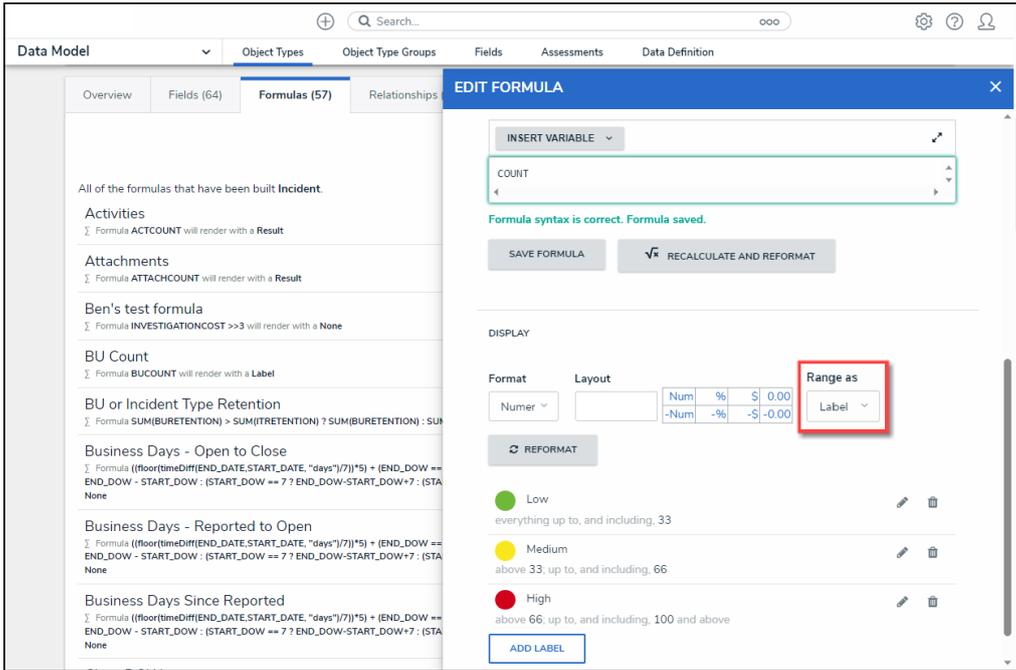
*Formulas Tab*

6. Click on a **Formula** name.



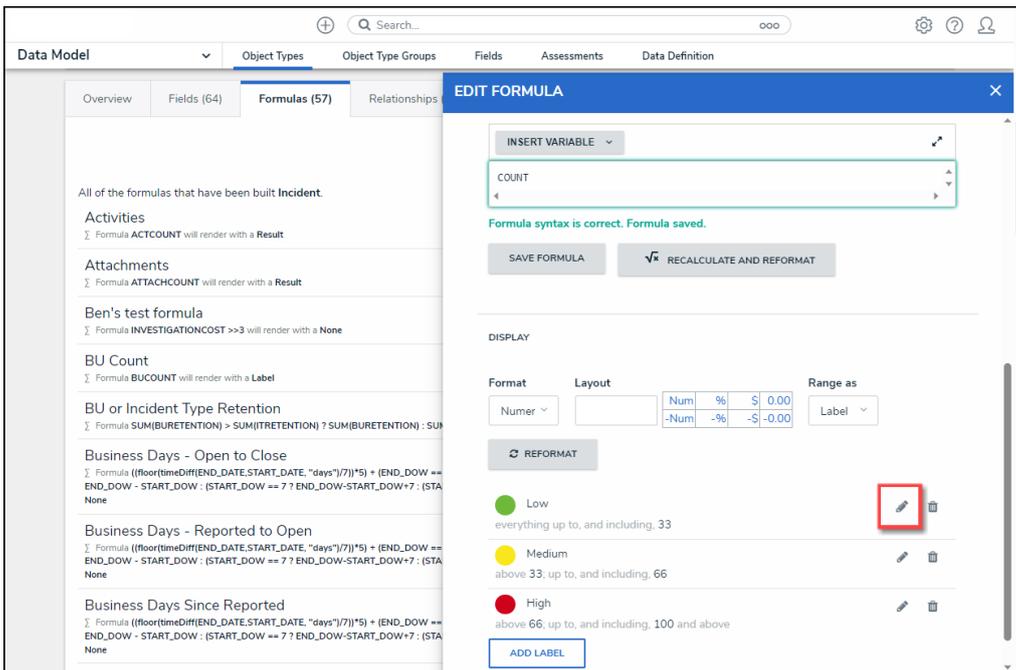
*Formula Name Link*

7. From the **Edit Formula** screen, scroll to the **Display** section and select **Label** from the **Range as** drop-down list.



*Select Label from the Range As Field*

8. Click on the **Edit** icon next to the first entry.

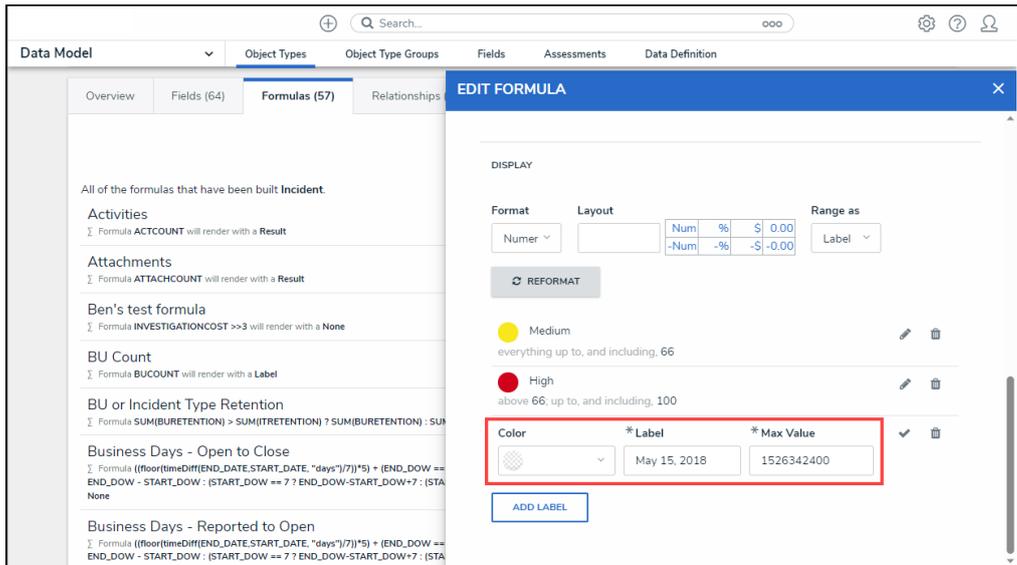


*Click on the Edit Icon*

9. Delete the code from the **Color** drop-down field.

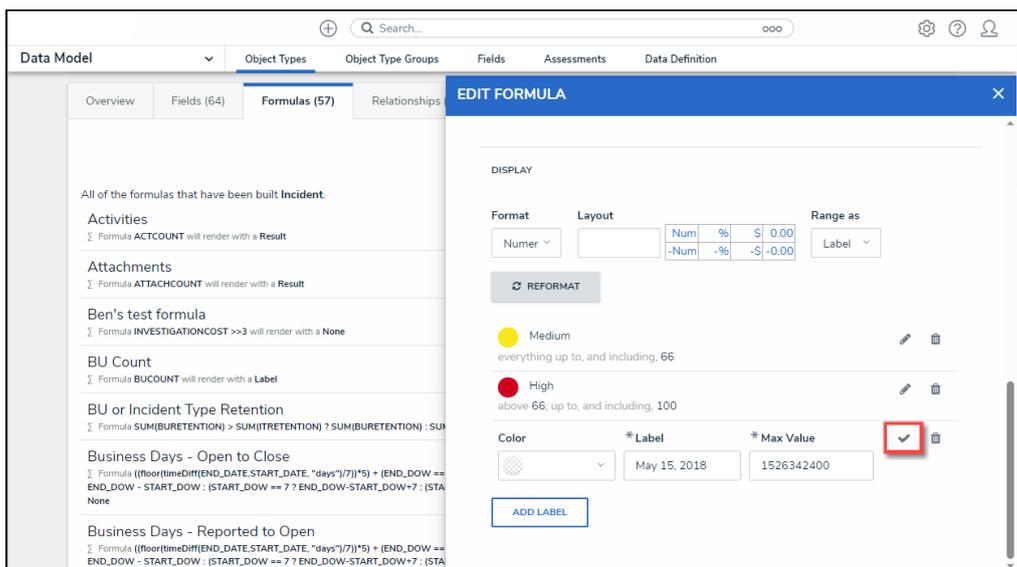
10. Enter the date using the **Standard Date** format in the **Label** field.

11. Enter the date using **Unix Timestamp** format in the **Max Value** field. A **Unix Timestamp** records the date in seconds.



*Filled Out Display Fields*

12. Click on the **Checkmark** icon to save the formula's display settings.



*Checkmark Icon*