

## The example given by Sierra Chart says,

### Locking the State of a One Time Condition

You may have a condition which occurs once and you want to continue to return a TRUE value in your System/Alert formula even if that condition no longer is present.

This can be accomplished by checking the return value from a formula within that same formula. Here is an example: `=OR(E3=10,K3>0)`. This formula is located in cell K3. We check to see if a cell **E3** equals 10 and if it does at least once, we will continue to return TRUE.

This formula uses a reference back to itself. This is properly supported with New Spreadsheets.

The method by which you can reset the locked state is by using this formula: `=AND(OR(E3=10,K3>0),H3=FALSE)` which references a cell (H3) which can be manually set to TRUE (1) or FALSE (0) . To perform a reset set H3 to TRUE, and then back to FALSE.

There are three cell references in the Sierra Chart example above. I have transposed those cells as follows;

Sierra Chart K3 = My spreadsheet's T3

Sierra Chart H3 = My spreadsheet's U3

Sierra Chart E3 = My spreadsheet's V3

There are two formulas in the Sierra Chart Example which I transposed to the columns I am using in my spreadsheet;

#### Formula #1

Sierra's version      `=OR(E3=10,K3>0)`

My version      `=OR(V3=10,T3>0)`

#### Formula #2

Sierra version      `=AND(OR(E3=10,K3>0),H3=FALSE)`

My version      `=AND(OR(V3=1,T3>0),U3=FALSE)`

There is one change that I made in my formula before I put it into my spreadsheet. Instead of using the number “10”, I am using the number “1”. Therefore, the actual formulas in my spreadsheet are as follows:

#### Formula #1

Sierra's version      `=OR(E3=10,K3>0)`

My version      `=OR(V3=1,T3>0)`

#### Formula #2

Sierra version      `=AND(OR(E3=10,K3>0),H3=FALSE)`

My version      `=AND(OR(V3=1,T3>0),U3=FALSE)`

In cell V3 I have entered “=1”. The column U in my spreadsheet continuously turns from 1 to 0 to 1 to 0, over and over.