

Conditionally Hyperlink In-place Cells by Content Type

This document shows how to apply a formula to a cell such that if the content of the cell is numeric, a hyperlink to a cell in another worksheet within the same workbook is created.

Level: Assumes basic familiarity with Microsoft Excel 2019.

Page | 1

Steps

- [0](#) Understand problem scenario and the desired output
- [1](#) Prepare workbook data and structure
- [2](#) Manual copy with data entry column method
- [3](#) Macro to conditionally hyperlink in-place a single cell
- [4](#) Macro to conditionally hyperlink in-place a selected range of cells

0 Understand the task and the required outcome

The Breviary workbook comprises two worksheets: Psalms and LOH. Column C of the LOH sheet contains numbers that refer to content in the Psalms sheet. Clicking on one of hyperlinks in LOH brings the user to the related cell in the Psalms worksheet.

The task is to make data entry to LOH easier so that when a number is entered in column C, it can be formatted quickly to link to the correct content in the Psalms sheet, as is already done for the Nov 1 Wed entries.

A little [sleuthing](#) on the internet will reveal that this is not an uncommon task.

1 Prepare workbook data and structure

In the Psalms sheet, name cells containing numbers only (numeric cells) in column B. To view the naming convention used, select cell B5 of the Psalms sheet (Psalms!B5) and inspect the name box (it says Psalm8).

Meaningful cell names lend a semantic layer to cells, and make using them in formulas and understanding the formulas later (self documentation) cognitively easier.

Select LOH!C24 and link it to Psalm 24 (Insert tab >> Link >> Place in This document >> Psalm24). Clicking on the link should select the cell named Psalm24 (Psalms!B13).

Make a copy of the LOH worksheet (Right click on the LOH worksheet tab >> Move or Copy >> To book: Breviary.xlsx, Before sheet: Move to end, Create a copy).

Rename the new sheet LOH-temp (Double click on the LOH (2) worksheet tab, type LOH-temp).

The LOH-temp sheet will be used to explore solutions and can be deleted or hidden, at the end.

2 Manual copy with data entry column method

A [hyperlink](#) to a location within a document requires the pathname to the Psalms worksheet in the correct format. The following steps are done to the LOH-temp worksheet.

In F2 type =CELL("filename", Psalms!B3), in F3 type =SUBSTITUTE(\$F\$2, "[", ""), and in F4 type =CONCAT("[file:///", \$F\$3, "!Psalm"). Name cell F4 LinkPrefix.

Page | 2

In F5 type =HYPERLINK(LinkPrefix & \$C5, \$C5), style cell as hyperlink (Home tab >> Cell style >> Hyperlink), and test the new link. Copy F5 to F7, F8 and F9; test the links.

A next logical step is to modify the F5 formula and copy it to cells down column F so that the hyperlinks are created automatically when numeric data are entered in column C.

In F11, type =IF(ISNUMBER(\$C11), HYPERLINK(LinkPrefix & \$C11, \$C11), \$C11) and style cell as hyperlink. Copy (using Autofill) the F11 cell down to F22. The results are not as expected; hyperlinks are created for all cells. This is [a known issue](#).

Creating a new column that 'merges' the columns C and F does not produce the desired results either. In H11, type =IF(ISNUMBER(\$C11), \$F11, \$C11). Copy down the H11 formula to H22. The hyperlinks are lost in column H.

The best solution suggested so far requires an additional column (preferably next to column C) for data entry, and manual application of the F5 formula to the horizontally adjacent cell in column C.

For example, enter 40 and 42 in cells D26 and D28 respectively, and type =HYPERLINK(LinkPrefix & \$D26, \$D26) in C26. Copy C26 to C28. Test the new links.

3 Macro to hyperlink in-place a single cell

Configure macro settings for workbook
(File >> Options >> TrustCentre(Settings) >> MacroSettings >> Disable all macros with notifications).

Add Developer tab (Right click ribbon >> Customize the Ribbon).

Create a new macro (Developer tab >> Macros) specific to Breviary.xlsm; name it LinkToPsalm.

Add the following code for this macro (Developer tab >> View Code >> Module1)

Save file as a macro-enabled workbook (Breviary.xlsm).

Assign the macro a shortcut key (Developer tab >> Macros >> Options), for example Ctrl-Shift-H.

```

Sub LinkToPsalm()
' Shortcut key: Ctrl-Shift-H

Dim v As String
v = ActiveCell.Value
If IsNumeric(v) Then
    ActiveCell.Hyperlinks.Add Anchor:=ActiveCell, _
    Address:=ActiveWorkbook.Name, SubAddress:="Psalm" & v, _
    TextToDisplay:=v
Else
' MsgBox "Hyperlinks restricted to psalm (numeric) cells only."
End If
End Sub
|

```

Test the macro. Still in LOH-temp, select C30 and do a Ctrl-Shift-H. Test the new hyperlink.

Uncomment the else portion of the if statement, select C31 and do a Ctrl-Shift-H. A message box should appear. Note that macro actions cannot be undone automatically (with the built-in undo function).

The work procedure suggested by this solution is to enter data in column LOH!C, and apply the macro to applicable cells with the shortcut key. Test the macro on the LOH worksheet.

4 Macro to conditionally hyperlink in-place a selected range of cells

The previous macro solution is unsatisfactory from an efficiency stand point; it works on a single cell only.

In LOH-temp sheet, select C32 to C42 and apply the LinkToPsalm macro (Ctrl-Shift-H). The only numeric cell that gets a hyperlink is C32.

Create a new macro (Developer tab >> Macros) specific to Breviary.xlsm; name it RangeLinkToPsalm.

Add the following code for this macro (Developer tab >> View Code).

```

Sub RangeLinkToPsalm()
' Shortcut key: Ctrl-Shift-R

For Each cell In Selection
    cell.Activate
    LinkToPsalm
Next cell
End Sub
|

```

Test the macro. In LOH-temp sheet, select C33 to C42 and apply the RangeLinkToPsalm macro (Ctrl-Shift-R). This time, hyperlinks are created for all and only the numeric cells within the selected range.

Optional: Add the RangeLinkToPsalm macro to the Quick Access Toolbar (Customize Quick Access Toolbar >> Choose commands from Macros >> Macros). This icon will appear for all workbooks, but will not be functional since the macro is configured only for the Breviary workbook.

The work procedure suggested by this solution is to enter data in column LOH!C, select the newly updated range of cells and apply the macro. Test this work procedure on the LOH worksheet.