

Creating and Using Range Names in Excel

This article covers the following:

- [What are Cell Range Names?](#)
- [Range Name Scope](#)
- [Defining Range Names](#)
- [Using Range Names](#)
- [Managing Range Names](#)

Cell Range Names

Cell ranges can be given names. This makes a workbook easier to interpret, it reduces the risk of a range being wrongly defined and it speeds up worksheet creation.

Moving to a named range is also a useful way of navigating around a large worksheet (see [below](#) for how to do this).

At any point where Excel requires a range to be defined, provided the range name has already been setup, a range name can be used instead (see [below](#) for how to do this).

E.g. in a lookup function:

The screenshot shows the Excel ribbon with the 'Clipboard', 'Font', and 'Alignment' tabs. The formula bar contains the formula: `=VLOOKUP(F2,'discount table 2.xlsx'!discounttab,2)`. Below the formula bar, a table is displayed with columns A through H. The table has a header row with columns A, B, C, D, E, F, G, and H. The data rows are as follows:

Company	Q1	Q2	Q3	Q4	YTD Sales	Current Discount
Advanced PC Products	20000	23200	26912		70112	0.07
...	21000	24360	28257.6		73617.6	0.07
...	24000	27840	32294.4		84134.4	0.09
...	27000	31320	36331.2		94651.2	0.11
...	30000	40600	47096		122696	
...	33000	49960	53824		156844	

Where "discounttab" is a named range containing the lookup table.

This can be situated on another sheet, on the same sheet or even in another file.

Range Name Scope

All names have a scope, either to a specific worksheet (also called the local worksheet level) or to the entire workbook (also called the global workbook level).

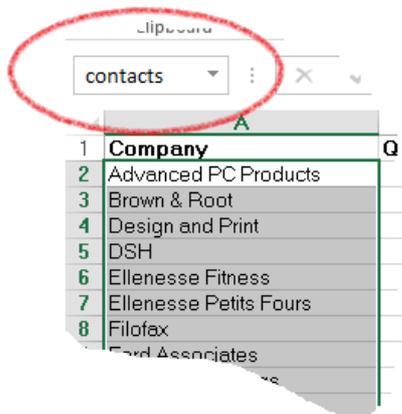
The scope of a name is the location within which the name is recognized without qualification (ie specifying the sheet name as well as the range name).

- For example, if a name is defined and its scope is Sheet1, that name is recognized only in Sheet1 but not in other sheets without specifying the sheet name as well as the range name.
- To use a name with its scope set to the local worksheet in another worksheet, qualify it by preceding it with the worksheet name. For example, Sheet1!Sales refers to the range Sales on Sheet1.
- If name is defined and its scope is the workbook, that name is recognized for all worksheets in that workbook, but not for any other workbook.
- A name must always be unique within its scope. However the same name can be used in different scopes, in the same workbook.
- Once set, a range name scope cannot be changed. You will have to [delete](#) and the re-create the range name.
- Be careful when you are copying or moving worksheets – this can affect the scope of existing names or the scope of names on the copied sheet, especially if there are duplicate names.

Defining Range Names

Range Names can be defined quickly and easily using the range name box in the formula bar.

- Select the required range
- Click the Name Box
- Enter a valid name
- Press **[RETURN]**



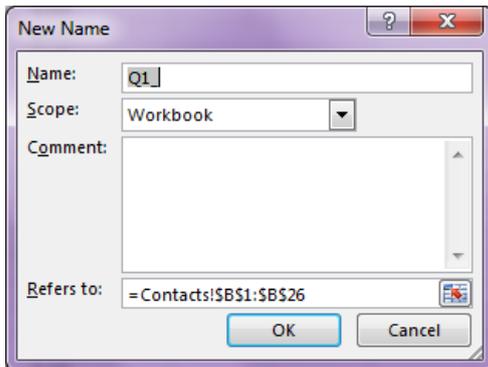
Range Name Rules

- They can be up to 255 characters long
- Cannot contain spaces or punctuation (other than the _ underscore)
- Range names must be unique within their scope. This includes other range names but also names that would be used by Excel such as column labels.
E.g. You can't call a range "Q1", because this is the same as a cell address – column Q, row 1 - you would have to call it "Q1_".

Alternatively, define a range name using the New Name dialogue box:

Use this method if you want to specify a scope for the range name.

- Select the required range to name
- Choose  Define Name  from the **Defined Names** group on the **Formulas** Ribbon.

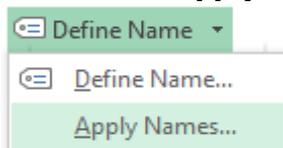


- Enter a name up to 255 characters long in the **Name** text box
- Select a **Scope** for the name
- Optionally, add a **Comment**
- Choose **OK**

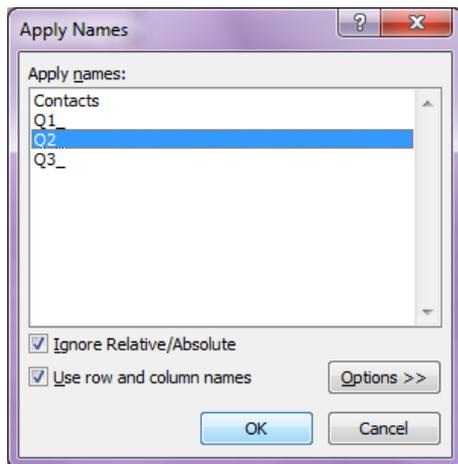
Apply Range Names

If a range name is created after formula has been written, the range will need to be applied before any existing formula will pick it up.

- Choose the  Define Name  drop down list from the **Defined Names** group on the **Formulas** Ribbon
- Then choose **Apply Names** from the drop down list



- ➔ Select the names you wish to apply from the dialogue box and click OK



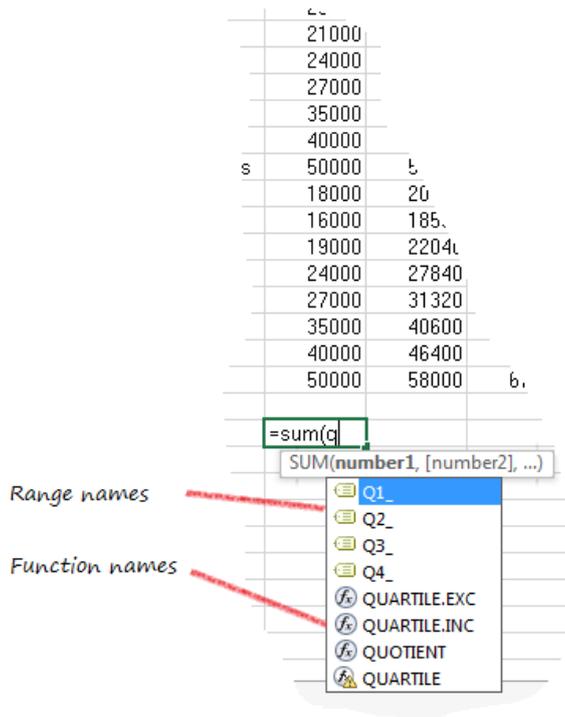
Any formulae that refer to ranges that have the same reference as the applied name(s) will update to display the range name in the formula.

Using a Range Name

Range names can be used when writing a formula or function.

Method 1 – Write the Range Name in the formula

- ➔ Instead of selecting a range of cells when writing the formula or function, simply type the range name
- ➔ As you start to type the range name, an autocomplete list will appear and you can then choose the required name from the list by double-clicking on it

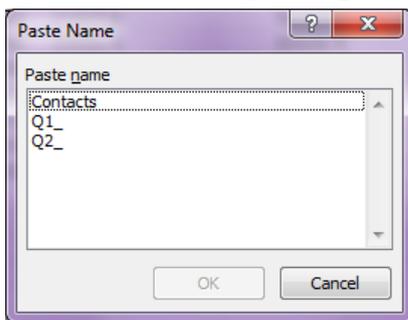


Note: the autocomplete list will contain functions and range names

Method 2 – Select the range name from a list

If you don't know the range name, you can easily choose it from a list when writing a formula or function.

- ➔ Instead of selecting a range of cells when writing the formula or function, press **[F3]**



- ➔ The **Paste Name** dialogue box is displayed
- ➔ Choose the required Range Name from the list
- ➔ Click **OK** (or double-click the required Range Name when choosing it)

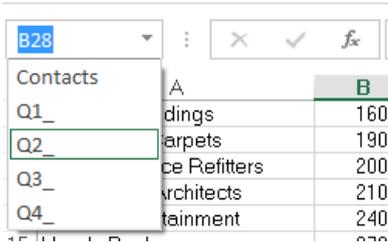
Instead of using **[F3]**, you can select a list of names from the  Use in Formula button in the *Defined Names* group on the *Formulas* tab

Using Range Names to navigate the worksheet

You can also use Range Names to navigate your worksheet. As with many things in Excel. There is more than one way to do this.

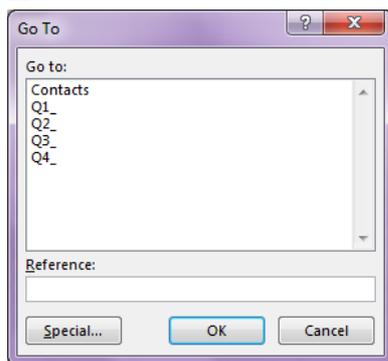
To go to a named range

- ➔ Click the Name Box and choose a name from the list



OR

- ➔ Press **[CTRL]+[G]** or **[F5]**
- ➔ Select a range name from the **Go to** text box or type a range name or cell reference in the **Reference** text box



- ➔ Click **OK**

Managing Range Names

The Name Manager can be used to create, delete or edit range names and to view filtered lists of range names.

To use the Name Manager

- ➔ Choose  from the **Defined Names** group on the **Formulas** Ribbon

