FastExcel Manager Pro V5

User Guide



Table of Contents

FastExcel Manager Pro V5 **1**

USER GUIDE 1

FastExcel Manager Pro: Workbook Management Tools **11**

Installing FastExcel Manager Pro for Windows **12**

Automatic Installer (requires Admin level privileges) 12

Manual Installer (does NOT require Administrator privileges) 12

FastExcel Manager Pro V5 Commands **16**

Formula Explorer Pro 6.1 Overview **17**

The Formula Explorer Pro 6.1 Ribbon **18**

Formula Explorer Pro 6 Button 18

Let/Lambda Wizard Button 18

Formula Indenter and Un-Indenter Buttons 18

Name Manager Pro Button 18

Explore Formulas **19**

The Formula Explorer Form 19

Component Coloring 20

#Expand? And #Calc! 20

Formula Explorer Pro 6 Command Buttons 21

More … Button 21

Show Icons in the component boxes 22

Spilled cells from Dynamic Array Formulas 23

Lambda Helper Functions 24

Single Iteration Mode 24

Formula Source/Destination: Worksheet or Name Manager 25

Formulas that are Text 27

Getting more Information with Tooltips 27

Filtering Array Results 28
Launching Formula Explorer Pro 6 from Name Manager Pro 29
Step-by-Step Debug **30**
Debugging Array Results 30
Change/Save **31**
Actions .. button in Change/Save mode 32
Change Let/Lambda Variable Names 33
Make Reference Abs/Rel (F4) 34
Insert Reference 34
Insert Defined Name 34
Modify Function 35
Insert Formula from Cell 35
Save As 36
Precedents **37**
Precedent Drill-Down 38
Mixing Precedents and Dependents 38
Precedents of Dynamic Array Spilled Cells 38
Dependents **39**
Mixing Dependents and Precedents Mode 40
Resizing and Moving Formula Explorer Pro 6 **41**
Using the Mouse and the Arrow keys 41
Formula Explorer Pro 6 Shortcut and Function keys **42**
Shortcut keys when a worksheet has the Focus: 42
Shortcut keys when Formula Explorer Pro 6 has the Focus 42
Click 42
Function Keys and Ctrl key combinations 42
Navigating the Treeview with the Arrow keys 42
Expanding/Contracting the Treeview 42

Accelerator Keys using Alt 42

Show Hints when Formula Explorer Pro 6 starts 43

Formula Explorer Pro 6 Settings 44

OK 44

Show Hints 44

Reset Form 44

Reset All to Defaults 44

Help 44

Cancel 44

General Settings 45

Formula Explorer Pro 6 Hotkey 45

Smart Indent 45

Initial Indent Style 45

Indent Styles 45

Auto DPI Resize 46

Font Size 46

Show Formulas in Local Language 46

Formula Components Settings 47

Initial Expansion Level 47

Max Offsheet Dependencies 47

Show Icons for Components Box 47

Show Icons for Source/Result Box 47

Auto Expand Selected Nodes 48

Only Show Function Names 48

Show Range and Array Dimensions 48

Show Component Numbers 48

ToolTip Settings 48

Show Short Function Description 48

Show Function Types 48

Show ToolTips as additional Nodes 48

Show Function Syntax 48

Results Box Settings 49

Max Number of Rows & Columns to Evaluate, Color or Select 49

Only do 1 Iteration for Dynamic Helper Functions 49

Show the Results Box 49

Max Evaluated Rows/Cols to show in Results Box 49

Number of Decimal Places to Show in Results Box 50

Evaluation Results Filter Default 50

Coloring Settings 51

Color Right-Hand Nodes: Source References Green and Reduced References Orange 51

Color Nodes that resolve to an error Red 51

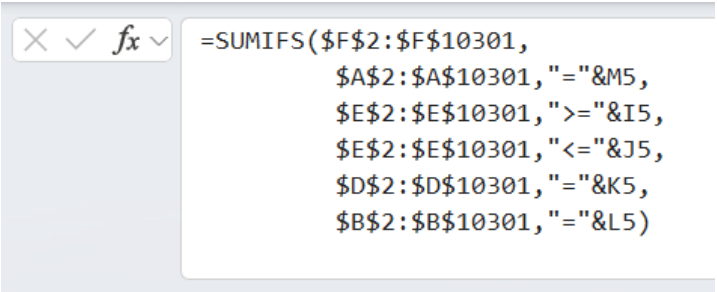
LET/LAMBDA Wizard **52**

Automatic Selection 52

Manual Step-by-Step Selection 53

Variable Names 54

Formula Indenter **55**



55

Formula UnIndenter **55**

Name Manager Professional **56**

Name Manager Credits 56
Working with Name Manager 56
Name Manager is Modeless 57
Name Manager is Resizable 57
Name Manager Splitter Bars 57
The Names Listbox 58
Sorting the Names Listbox 58
Dividing the Space between Name and Refersto 58
Selecting one or more Names 58
Refers-to edit box 59
Refers-to Splitter Bar 59
Name Manager Filters 60
Name Scope filter 60
And/Or option buttons 60
Invert Filters 60
NameType(s) filter 61
Filter names containing Checkbox 61
Search Editbox 61
Unused names checkbox 61
Name Manager Action Buttons 62
Hide, Unhide Buttons 62
Add Button 62
Delete Button 62
List Button 62
Pickup Button 62
Localize Button 63
Globalize Button 63

Evaluate Button 64
Explore Name Button 65
Highlight Button 66
Clear Button 66
Is Used ? Button 66
Refresh Button 66
GoTo button 66
GoBack button 67
Renaming a Name 67
UnName 67
About Button 67
Dynamic Range Wizard Button 68
Find and Replace button 68
Find what: 68
Replace With: 68
Find & Replace Scope 68
Find Next Button 68
Close Button 68
Replace Button 68
Replace All Button 68
Name Map Button 69
Name Manager Help Button 69

Import Export Names to External .TXT files **70**

Format of Names in the .txt files 70
Exporting Names 71
Importing Names 72

Name Manager Settings **74**

Confirm Changes 75

Show Excel System Names....75
Show Refersto....75
Icons....75
R1C1 Notation....76
Choose Language....76
Choose Font Size....76
Name Manager Hotkey....76
Name Manager and the VBE (Windows Only)....77
Corrupt names....77
Problems discovered during the development of this utility....78
Non US List separators....78
Unusual Characters in Names....78
Duplicate Global Local Names....79
Names with refers-to starting with =!....79
Dynamic Range Wizard 80
Creating Dynamic Range Names....80
Starting the Dynamic Range Wizard....80
Dynamic Range Wizard Step 1....80
Dynamic Range Wizard Step 2....81
Step 2A: Choose Dynamic Expansion Method....81
Step2B: Select the Anchor Cell....81
Dynamic Range Wizard Step 3....82
Last non-empty row.....82
Last contiguous (non-empty) row....83
Last row in the used range....83
Count of non-empty cells in the anchor column....83
Select the cell that will contain the number of rows....83

Step3A: Choose columns for finding the last row 83
Use only the Anchor Column to find the last row. 83
Use all the dynamic range columns to find the last row. 83
Confirm the Anchor Cell and fixed columns 84
Dynamic Range Wizard Step 4 85
Choosing the expansion method for the last column. 85
Last non-empty column. 85
Last contiguous (non-empty) column. 85
Last column in the used range. 86
Count of non-empty cells in the anchor row. 86
Select the cell that will contain the number of columns. 86
Step4A: Choose rows for finding the last column 87
Use only the Anchor Row to find the last column. 87
Use all the dynamic range rows to find the last column. 87
Confirm the Anchor Cell and fixed rows 87
Dynamic Range Wizard Step 5 88
Clean Workbook 89
Clean Used Ranges 90
Clean Workbook Options 92
Sheet Manager 96
Sheets Box 96
Sheet Manager Action Buttons 97
Choose Sheet Filters 101
Show Codenames 102
Check Active Workbook 103
Check DA: Compatibility of Office 365 Dynamic Array Formulas 104
Backward Compatibility Problem Areas 104

Unexpected @ in a formula producing =_xlfn.SINGLE()....104

Formula containing a Spill Reference producing _xlfn_ANCHORARRAY()
....104

Unwanted Array Formulas (CSE) in previous versions 104

Using CheckDA 106

Restate Selected Formulas 106

Undo Restate 106

Show Office 365 DA Syntax....106

Where Used Map Styles and Names 107

Go To Cells using Style, Format 110

Active cell is within a Style or Number Format Map 110

Active Cell is within a Name Map 110

Active Cell is in an ordinary Worksheet....110

Memory and Versions 111

Manager Pro V5 Help 112

V5 License Management....113

Activate/Deactivate License – 113

Deactivate an existing License:....114

Activate a new license 114

Buy a license 115

Manage and Release License Activations on other computers....115

FastExcel Manager Pro: Workbook Management Tools

- Supports Windows Office 365 Excel
- Formula Explorer Pro 6.1:
  View, Debug and Edit complex formulas from cells, Names, Conditional Formats and Data Validation using a variety of visualization and debug methods.
- Name Manager Pro:
  Name Manager Pro greatly simplifies management and maintenance of Excel Defined Names.
- Sheet Manager:
  Sheet Manager provides an easy way of managing a large number of sheets in a workbook.
- Clean Workbook:
  Clean workbook gives you a comprehensive set of tools for eliminating wasted space and maintaining your workbooks.
- Check Workbook:
  Produces a report with workbook statistics showing suggested cleaning actions.
- Check DA:
  Checks formulas in Dynamic array Excel 365 for compatibility with previous Excel versions.
- Where Used Map Styles & Names:
  Produces maps of Styles, Named Lambdas, Defined Names used on each worksheet.
- Memory Used:
  Shows virtual memory used and available, and Windows and Excel versions and builds.

Installing FastExcel Manager Pro for Windows

FastExcel V5 Manager Pro for Windows requires:

- One of Excel Excel 2019 or Office 365 Excel
- Either 32 or 64 bit Excel
- A Microsoft supported version of either 32 or 64 bit Windows
- .NET Version 4 or later

Two install methods are available:

- Automatic Installer: requires Administrative level privileges.
- Manual Installer: requires more manual steps than the automatic controller, but does NOT require Administrative level privileges.

Automatic Installer (requires Admin level privileges)

Download the Automatic Install Beta zip file from the Decision Models website

http://www.DecisionModels.com/Downloads/InstallV5Manager.zip

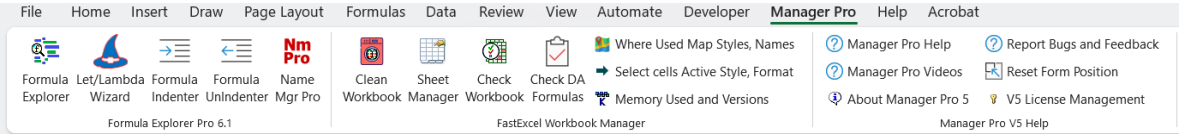
Automatic Installation requires administrative privileges.

1. **Unblock the downloaded Zip file.**
2. **Extract the installer .exe file from the downloaded zip**

3. Double-click the extracted installer .exe file and follow the instructions to create a FastExcel V5 folder containing subfolders for each FastExcel V5 product. The default directory is called FastExcel V5 and is located in your Program Files (x86) directory.

Help files (.CHM) and a PDF version of the User guide will also be installed in these folders.

After successful installation FastExcel V5 will automatically be started when you start Excel, and you will find FastExcel V5 tabs for each installed product on the main ribbon.



If the ribbon does not show any FastExcel V5 tabs, or the installation was done for you by another user with administrative privileges, you may have to use the Manual Install instructions below:

Manual Installer (does NOT require Administrator privileges)

Download the manual install zip file from the Decision Models website.

http://www.DecisionModels.com/Downloads/fxlManagerProWin.zip

1. **Unblock the downloaded ZIP file**
2. **Create the FastExcelV5 folder**

Extract the FastExcelV5 folder from the downloaded zip file to your chosen location

The FastExcelV5 folder contains up to 3 sub-folders, depending on which Manual Installer you chose:

- FastExcel V5 Profiler
- FastExcel V5 Manager Pro
- FastExcel V5 SpeedTools

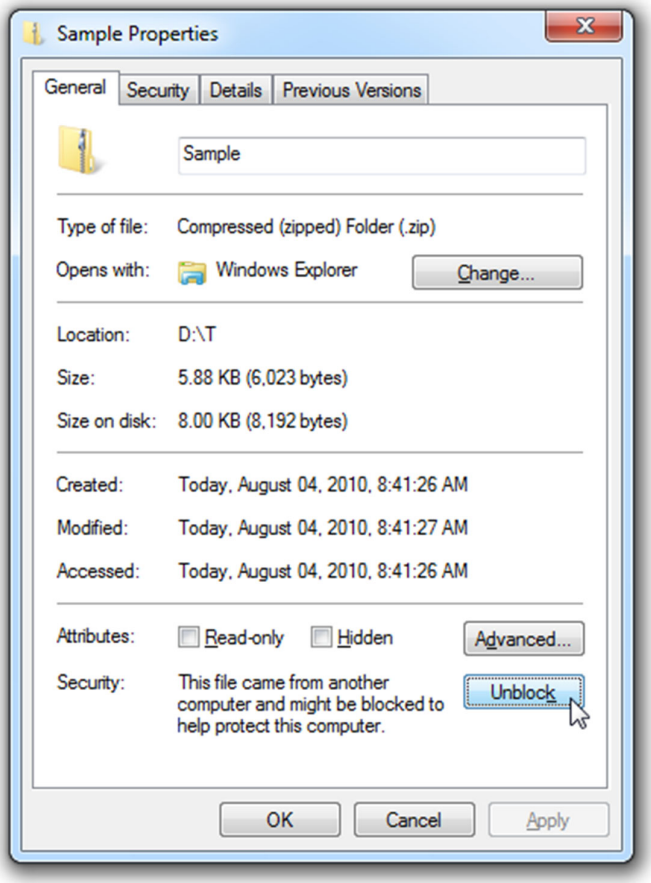
Each of these sub-folders contains an .XLAM file you need to load into Excel using Excel's Addin Manager.

2. Unblock all the XLAM, XLL and DLL files

Windows often blocks downloaded files.

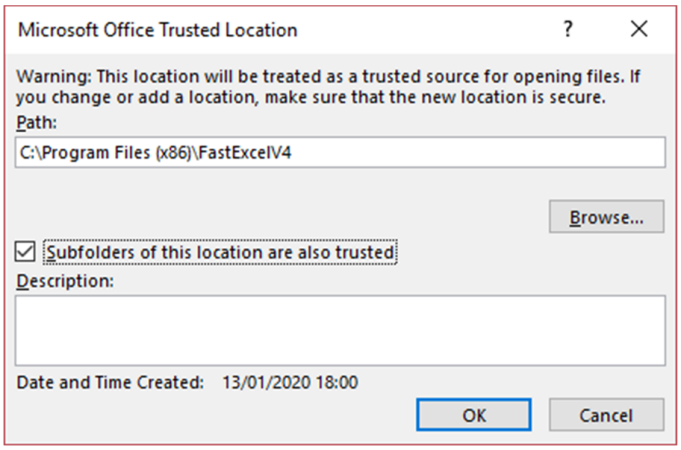
To unblock a file:

- The files you may need to unblock are:
  - FastExcelV5/FastExcel V5 Manager Pro/FxlMgrPro.xlam
  - FastExcelV5/FastExcel V5 Manager/QlmCLRHost_x64.dll
  - FastExcelV5/FastExcel V5 Manager/QlmCLRHost_x86.dll
  - FastExcelV5/FastExcel V5 Manager/QlmLicenseLib.dll
- Browse to each file, Select and Right-click it then select Properties
- Click the Unblock button



3. Make the FastExcelV5 folder a Trusted Location

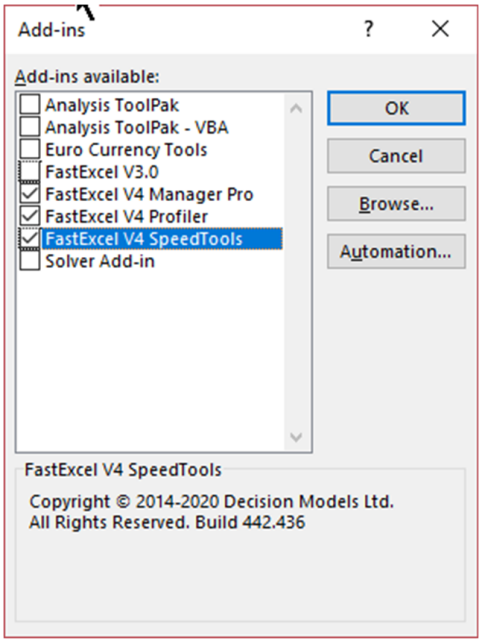
Start Excel and use File->Options->Trust Center->Trust Center Settings->Trusted Locations->Add new location->Browse to your FastExcelV5 folder->Check Subfolders of this Location are also trusted->OK



4. Use Excel's Addin Manager to install each FastExcel V5 addin

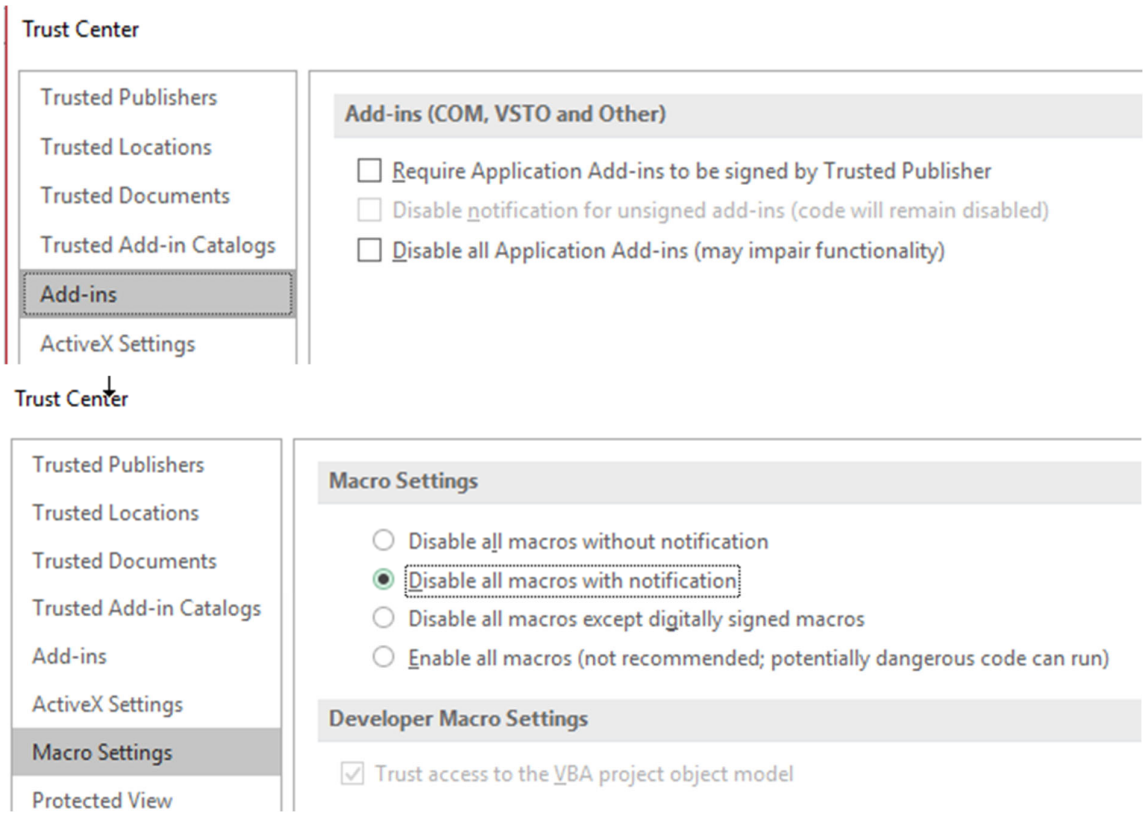
For Excel 2007 Click Office Button->Excel Options->Addins->Excel Addins->Go…
For Excel 2010, 2013, 2016, 2019 and Excel 365 Click File->Excel Options->Addins->Manage Excel Addins->Go…

- Press Browse and locate the FastExcelV5 folder.
- In the FastExcel V5 Manager Pro sub-folder select the **fxlManagerProWin.xlam** file
- If asked "Do you want to copy this Addin to the Addins folder?" reply NO.
- The Excel Addins form should now show the FastExcel V5 addins with a checkmark.
- Click OK to finish.

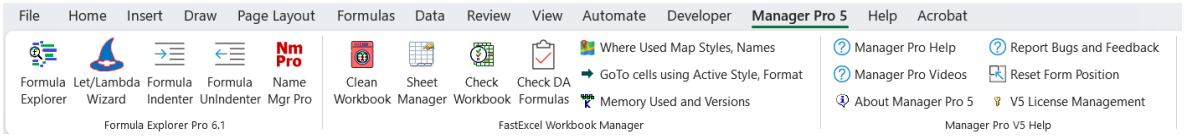


5. Recommended Trust Center Settings

The recommended settings for addins and macros are:



FastExcel Manager Pro V5 Commands



FastExcel Manager for Windows includes Name Manager Pro, Formula Explorer Pro 6.1, Sheet Manager, Clean Workbook, Check DA Formulas, Where Used mapping for Styles and Names, GoTo Style, Name & Format, Reset FastExcel Forms, Check Workbook and Memory Used commands.

FastExcel Manager Pro V5 includes Help, About and License management commands.

Formula Explorer Pro 6.1 Overview

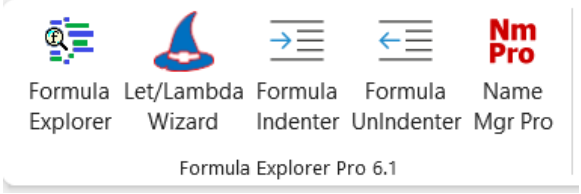
Formula Explorer Pro 6 is a code-signed Excel XLAM addin, created by Excel MVP Charles Williams, for exploring, understanding, and debugging Excel formulas, defined names and Lambda functions. It is the follow-on, updated version of Lambda Explorer and Formula Explorer, and includes Name Manager Pro.

- Explore, Debug, Change/Save, View Precedents and Dependents.
    - **See the evaluated results for the components of the formula**.
    - Drill-down forwards and backwards to precedent and dependent formulas
    - Dynamically expand and contract Named Lambdas and Named Formulas..
    - Debug Recursive Named Lambdas
    - **LET and LAMBDA Wizard to create and modify formulas.**
    - Clickable Indented formula View.
    - Tree View of each component of the formula.
    - Scroll and Filter component results in the resizable Results Box.
    - Explore formulas from Name Manager as well as worksheet cells.
- Supports the latest Excel Functions (PIVOTBY, TRIMRANGE, REGEX …)
- Step-by-Step Formula debug.
    - Step forward and backwards.
    - See and explore intermediate array results.
- Change the formula and review it without changing the workbook formula.
- Save the formula either in a worksheet cell or as a Named Lambda/Formula
- Indent Cell Formulas and Name manager formulas
- **Import and export LAMBDAs from/to external .txt files.**
- Filter and Edit Range Names, Named Formulas, Named Lambdas and Table Names.
- Supports Formulas in 21 languages.
- Modeless resizable forms allow easy selection of worksheet formulas.
- Extensive settings to control text size and options.

Formula Explorer Pro 6.1 can be downloaded from:

https://www.decisionmodels.com/FormulaExplorer6_Install.htm

The Formula Explorer Pro 6.1 Ribbon



Formula Explorer Pro 6 Button

Clicking this button or using **Control-Shift-M** will launch Formula Explorer Pro 6 for the formula in the active cell.

Let/Lambda Wizard Button

Launch the Let/Lambda Wizard to create Lambda and Let formulas from your existing formulas.

Formula Indenter and Un-Indenter Buttons

Auto-Indent your formulas.

Name Manager Pro Button

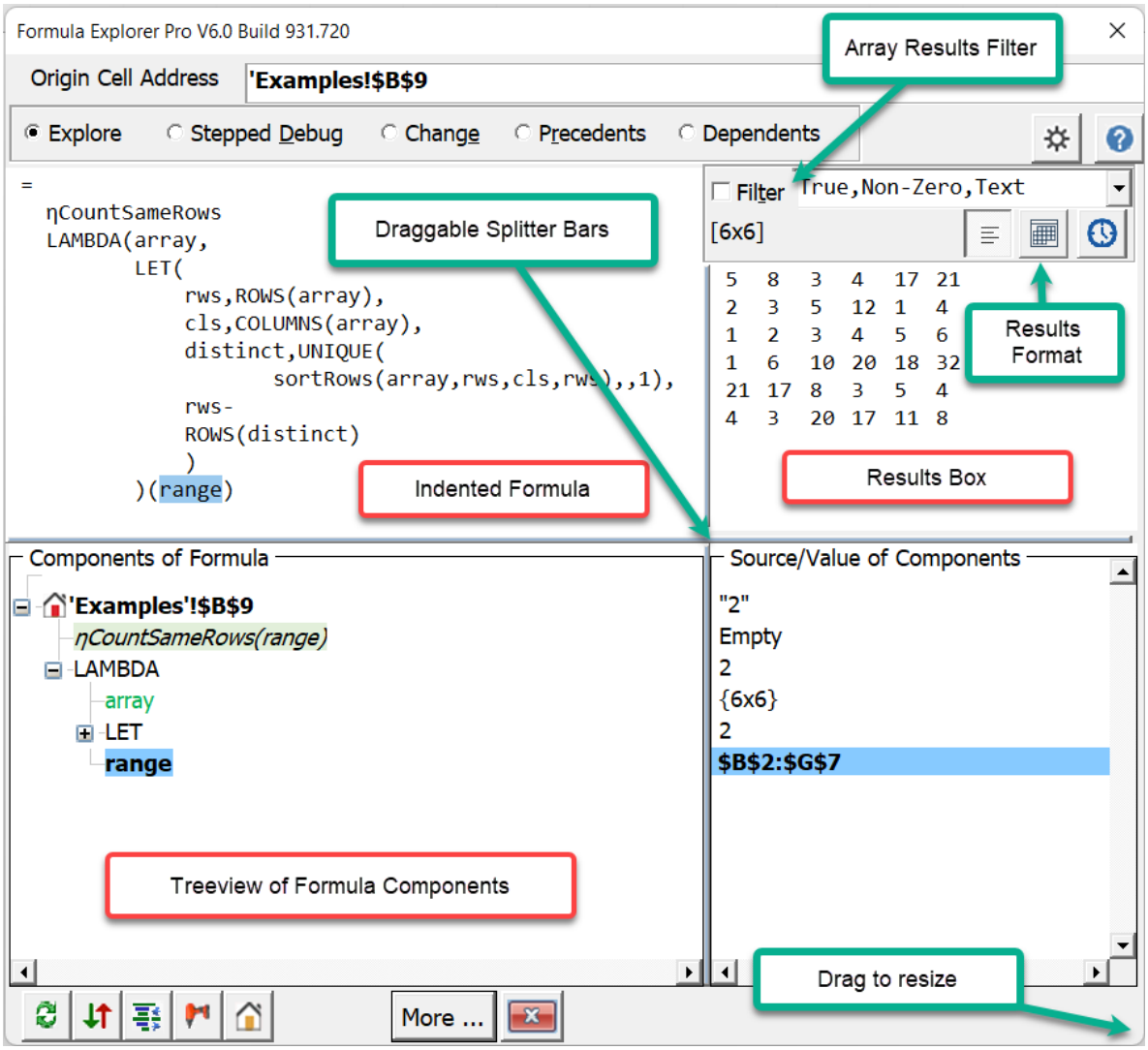
Clicking this button or using **Control-Shift-N** will launch Name Manager Pro for the active workbook.

Explore Formulas

The default mode for Formula Explorer Pro is Explore

The Formula Explorer Form

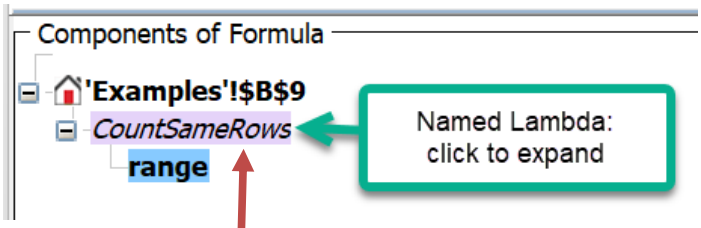
The explorer form is **modeless** and **resizable**. Because the form is **modeless** you can interact with the workbook in all the usual ways with the mouse and keyboard whilst keeping the form visible and switch the focus between the worksheet and the form by clicking with the mouse.



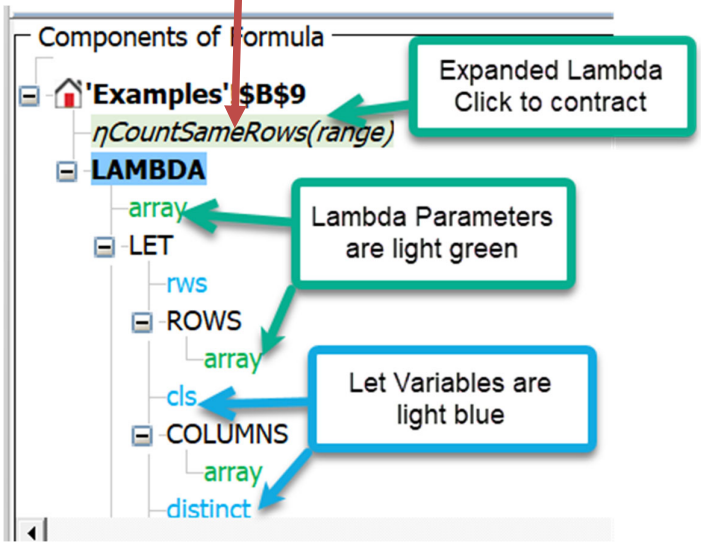
Drag a **splitter bar** to change the amount of space used by the 4 display boxes within the overall form, or drag the **resize button** to change the size of the form.

Clicking in any of the Indented Formula box, the Components Treeview box or the Source/Value box will automatically select the equivalent components in the other boxes.

Component Coloring



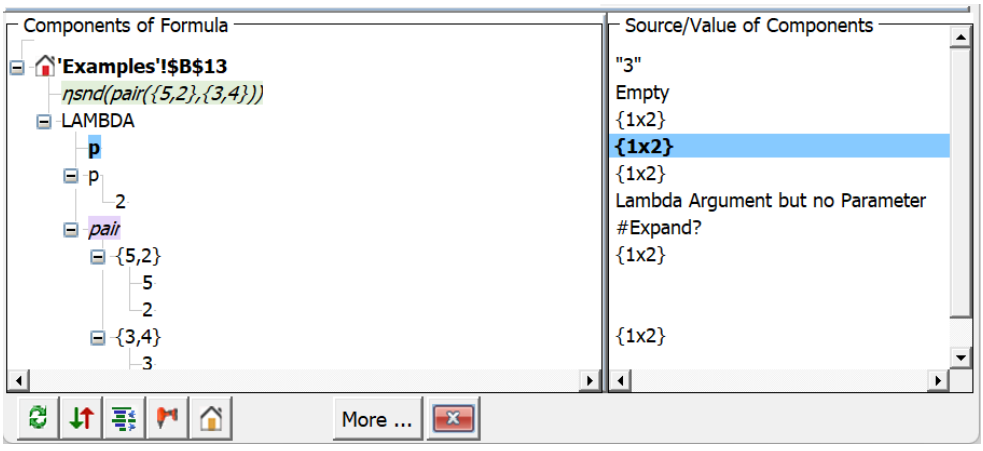
Unexpanded Named Lambdas are shown in ***Italics*** with a **light purple** background.
Clicking on a Named Lambda expands it and shows the name in ***italics*** with a **light green** background



To distinguish between Let Variables and Lambda Parameters, the Lambda Parameters are shown in light green wherever they are used in the formula components and Let Variables are shown in light blue.

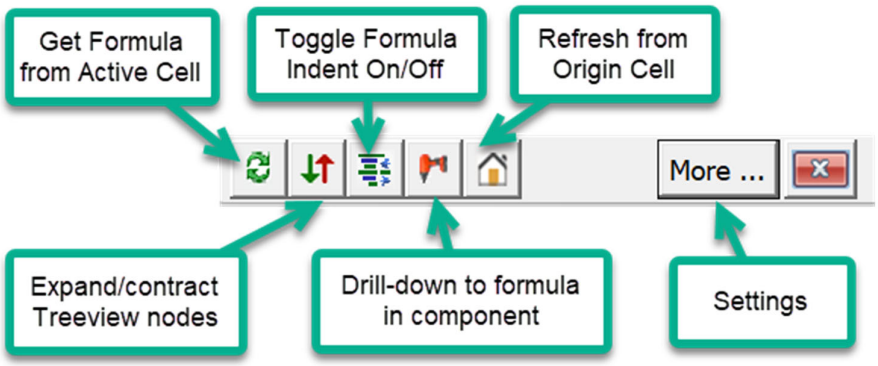
#Expand? And #Calc!

When Lambdas are nested, they may show a #Expand? Or #Calc! error if they are interdependent.
In the example above the *Pair* named lambda requires an argument telling it which pair to return, but the argument comes from the *Snd* named lambda. To see the intermediate results from these named lambdas they both need to be expanded.



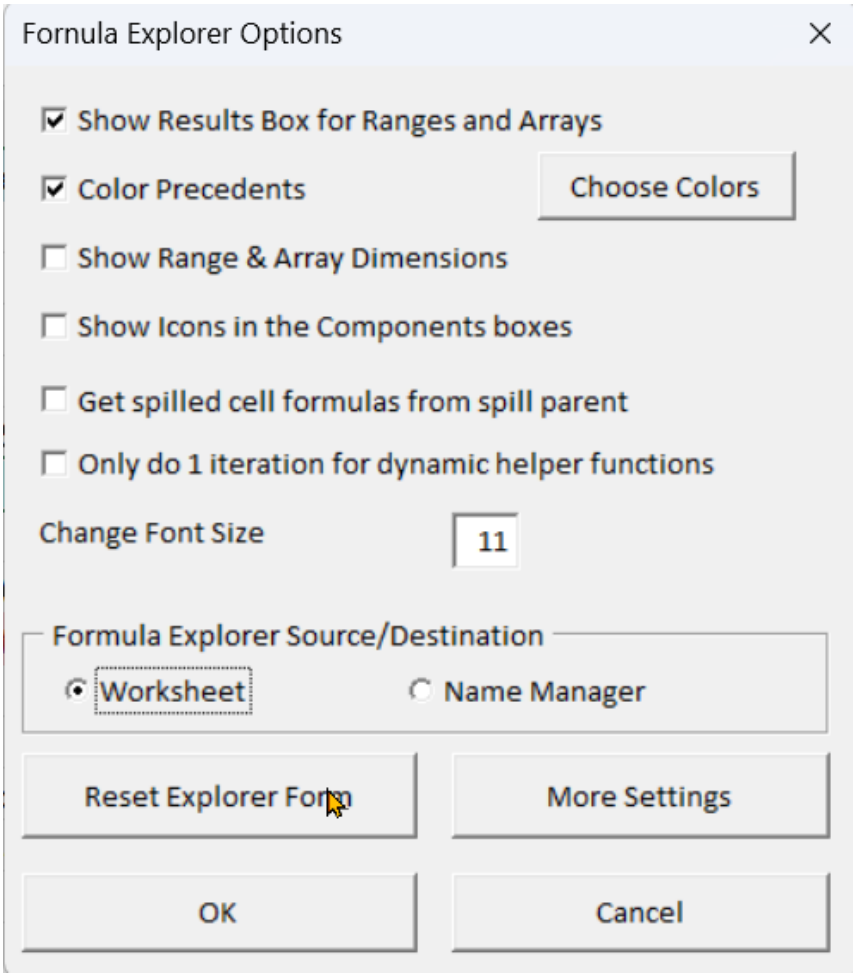
Formula Explorer Pro 6 Command Buttons

The command buttons give easy access to common tasks. Formula Explorer Pro 6 also has many keyboard shortcuts.

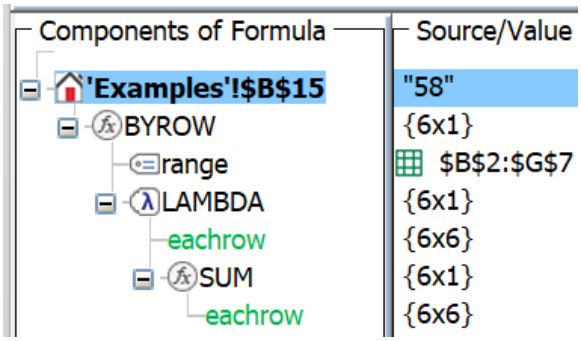


More ... Button

The More button gives quick access to the most frequently used settings.



Show Icons in the component boxes



The available Icons are:

Lambda Function

The Home Cell

Range reference: Sheet1'!$A$1

Reference is an empty Cell

External reference: 'D:\Users\Charles Williams\Documents\[Book5.xlsx]Sheet1'!$A$1

Structured reference: Table2[[#All],[married jointly]]

3-Dimensional reference: Sheet1:Tax!B10:C16

Individual Sheet reference from a 3-D Reference: Tax!B10:C16

Named Range or Dynamic Named Range reference

Named Formula (not returning reference): for example PISquared =PI()^2

Named Variable within a LET function: for example X in LET(X,45,X+$A$1)

Source reference, for example the source cell of a VLOOKUP result

Reference result from Implicit Intersection with a row or column:

Reference result from Implicit Intersection when there is no intersecting row or column

Reference result from Explicit Intersection of 2 references: K19:K30 H24:M24

Reference result from intersection with used range.

Function Component that does not directly return a reference: SUM …

Function returning a reference: OFFSET, INDIRECT, INDEX, XLOOKUP …

Component that does not return a reference: A5*B5

Component returning a reference: INDEX($F$4:$F$7,2,1):INDEX($H$4:$H$7,4,1)

Criteria Component in a SUMIFS, COUNTIFS, …IFS function: Table2[married jointly],">" & D5

A constant, for example 4.5, “FastExcel”, True, #N/A

An array of constants, for example {1,2,3;4,5,6}

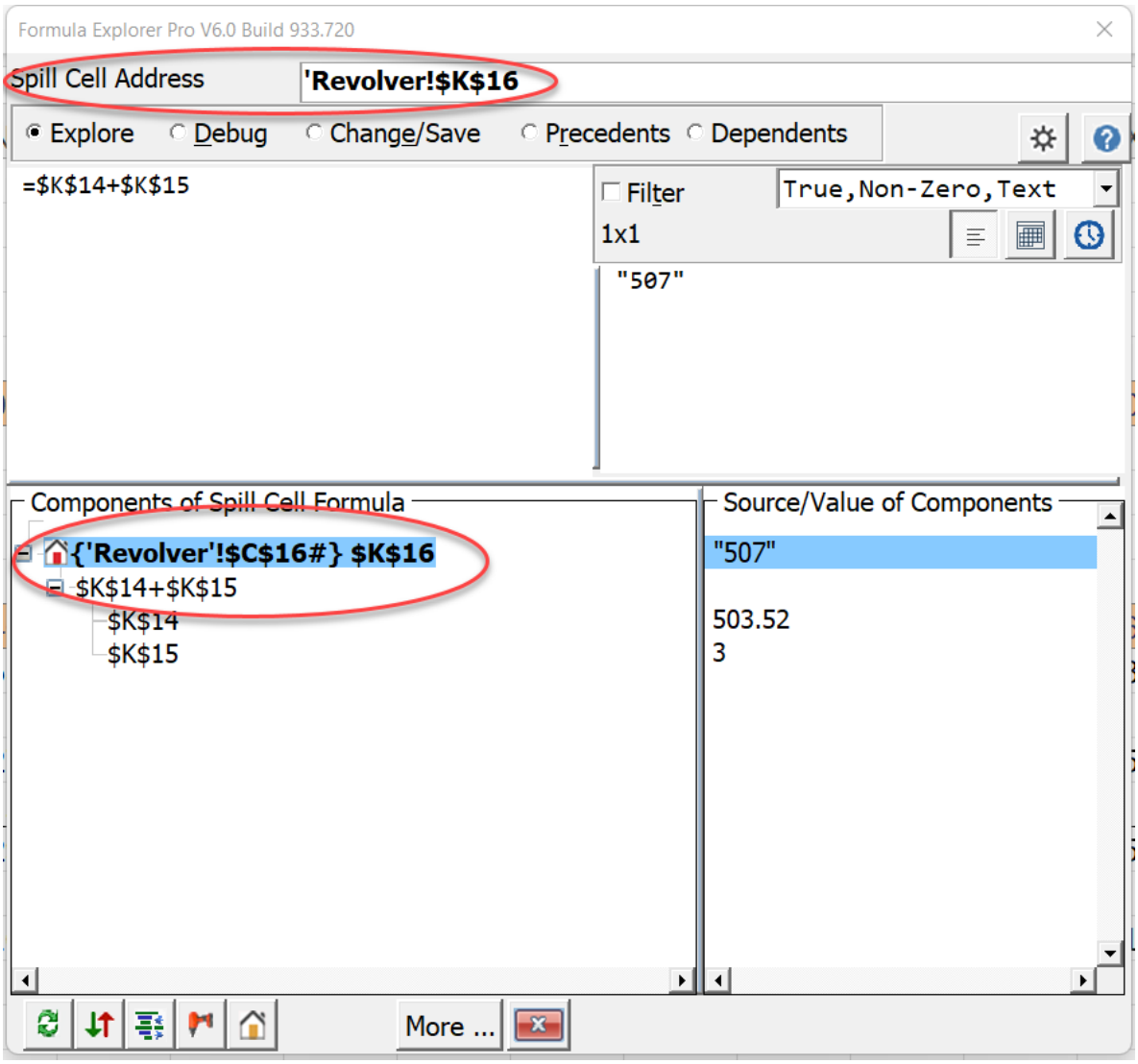
A Tooltip shown as a Component node in the TreeView

The Root Cell for a Dynamic Array

A Rich Data cell

Spilled cells from Dynamic Array Formulas

When Formula Explorer is called from a spill cell that does not actually contain a formula it will dynamically construct an equivalent formula for the cell from the parent spill-cell dynamic array formula. This generated equivalent formula can be debugged and have its precedents and dependents shown.



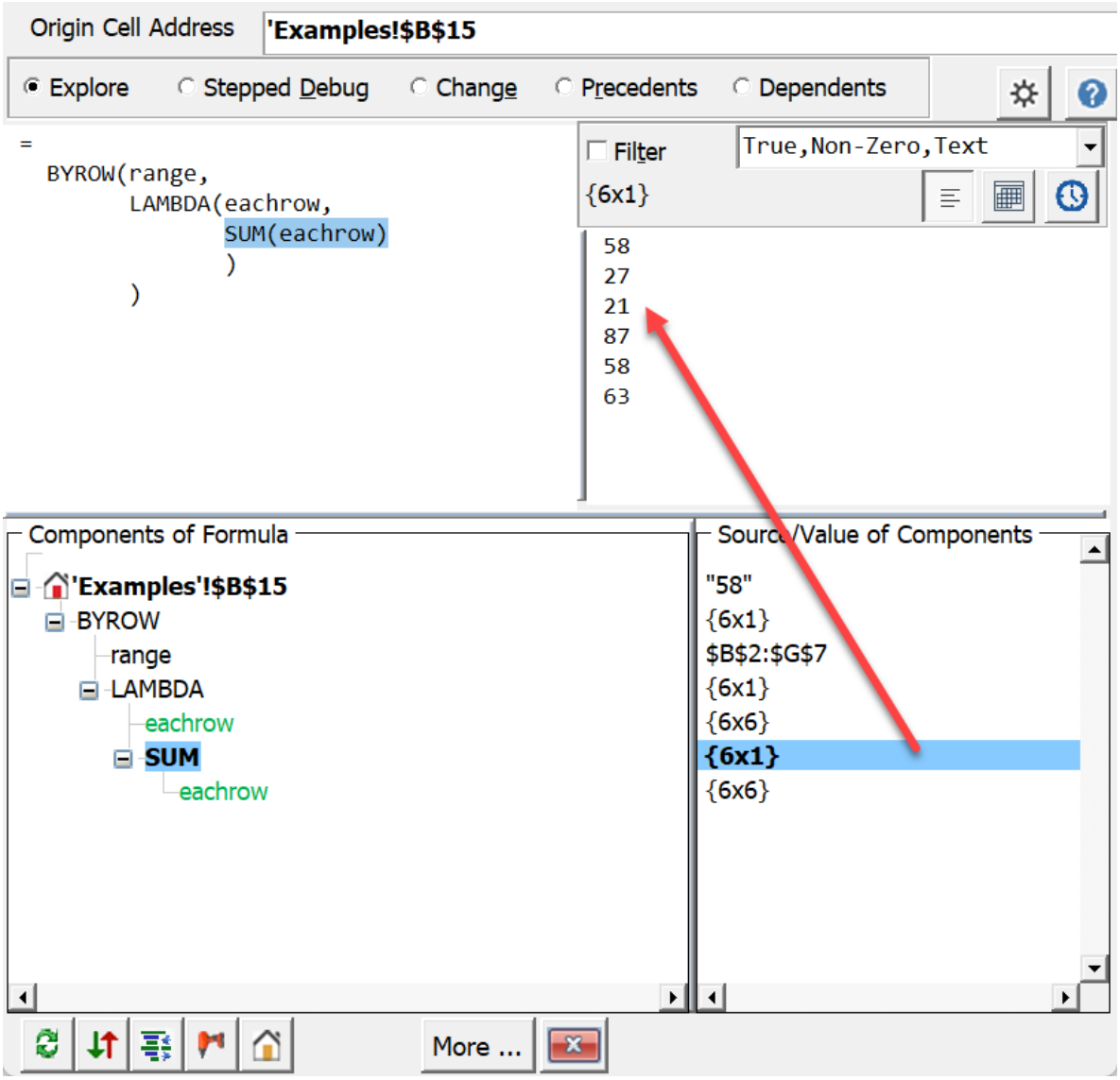
For spilled cells the address of the parent spill cell is shown enclosed in {}, followed by the address of the current spill cell.

Get spilled formulas from Spill Parent switches of the generation of these equivalent formulas.

Lambda Helper Functions

The Excel Lambda helper functions all require a Lambda function with no arguments as their calculation Component. This Lambda calculation Component is repeatedly calculated by Excel using items from the other arguments of the Lambda Helper.

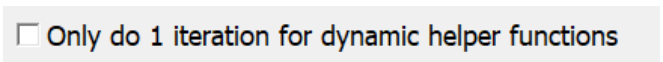
For example, with BYROW the Lambda calculator processes each row a single row at a time.BYROW first passes the Lambda calculator Component B2:G2 as eachrow , SUMs B2:G2 and then is passed row 3, then row 4 …



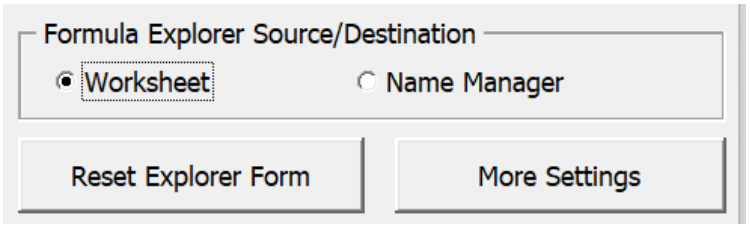
For each of the components of the Lambda Helper Formula Explorer iterates each row and shows the final result of the iterations.

Single Iteration Mode

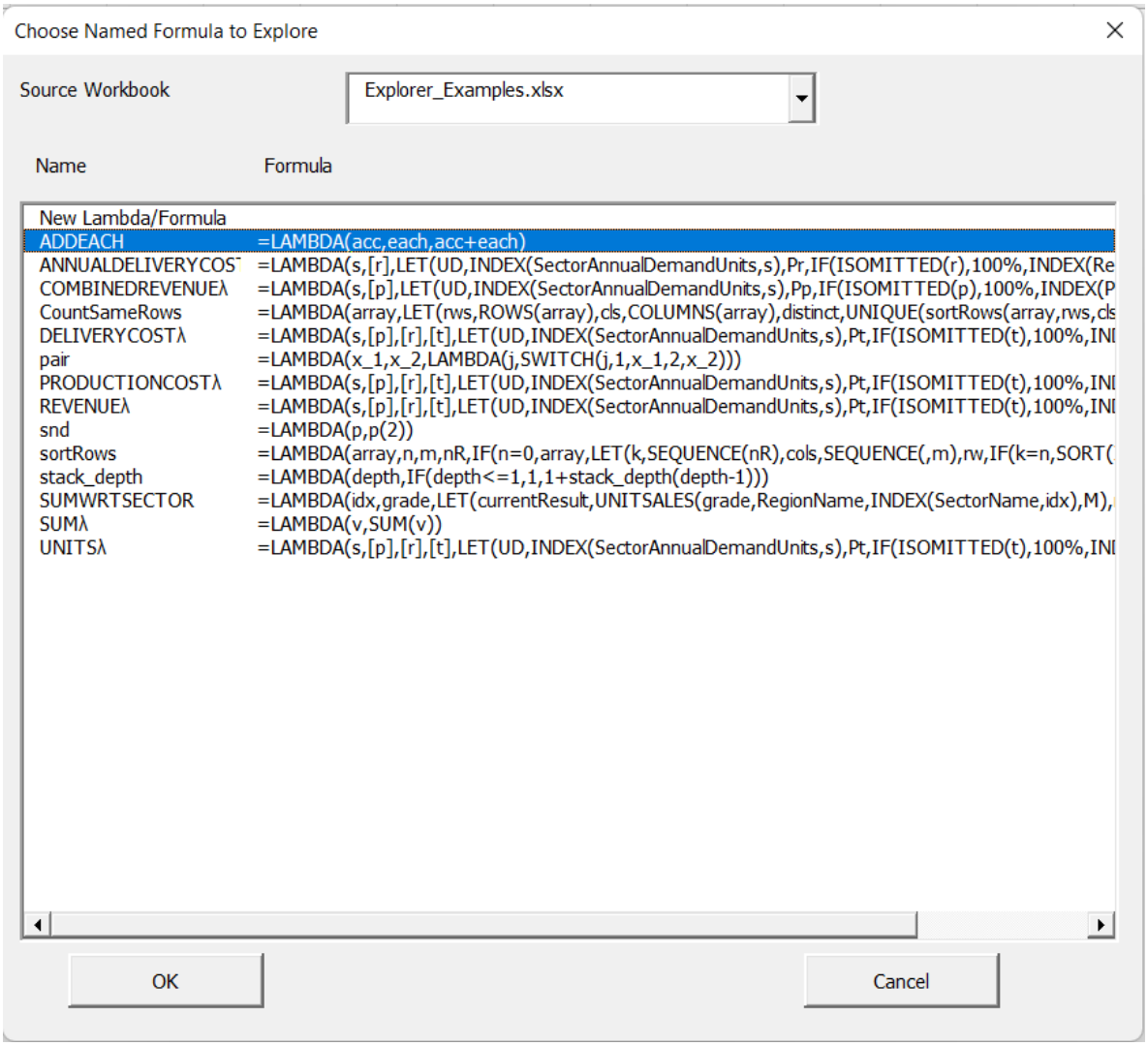
You can change Formula Explorer to single iteration mode with an option in **More …**



Formula Source/Destination: Worksheet or Name Manager

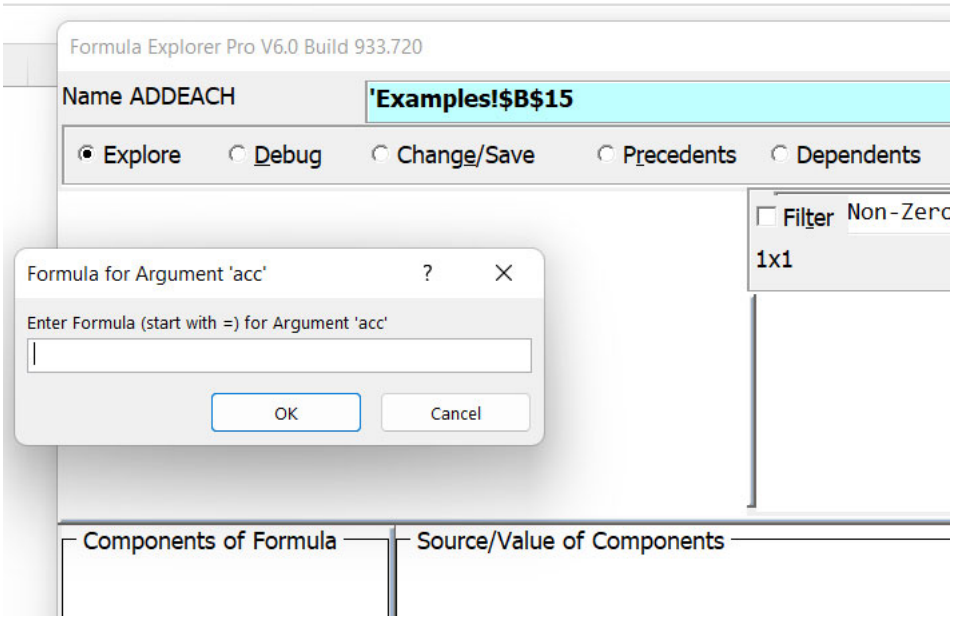


The default action is to get the formula from the currently active cell.
But you can get a Named Lambda/Formula from Name manager using this option.

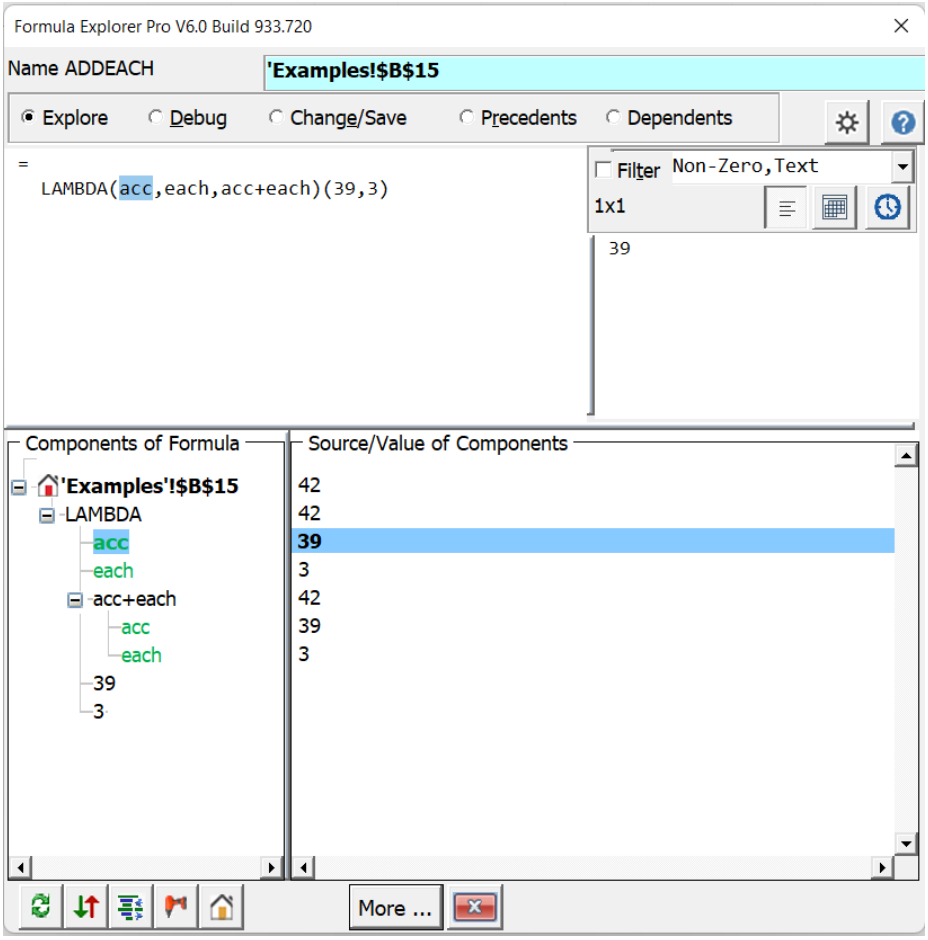


If you select New Lambda/formula you get am empty Explorer form: use Change/Save to create the formula in the formula box and save it.

When you select a Named Lambda formula Explorer will prompt you for the arguments to the Lambda and then load the Named Lambda into Explorer.



The top left of Explorer shows the selected Name and the home cell has a blue blackground.39



Formulas that are Text

Formula Explorer will pick up formulas that are text from cells in a worksheet.

You can also copy paste the text of a formula into the Indented formula box.

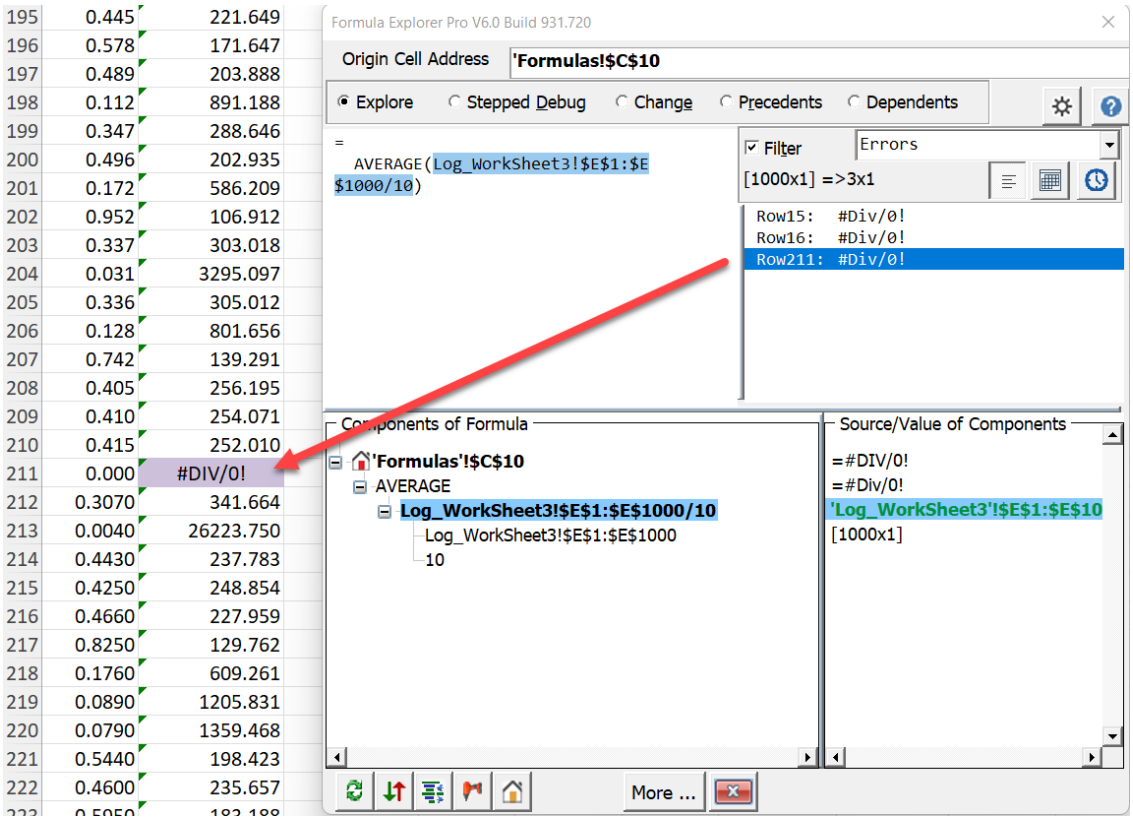
Getting more Information with Tooltips

When you hover over an item an explanatory tooltip will appear.

Or you can change a Formula Explorer Pro 6 setting so that all the tooltips appear as additional Component Nodes.

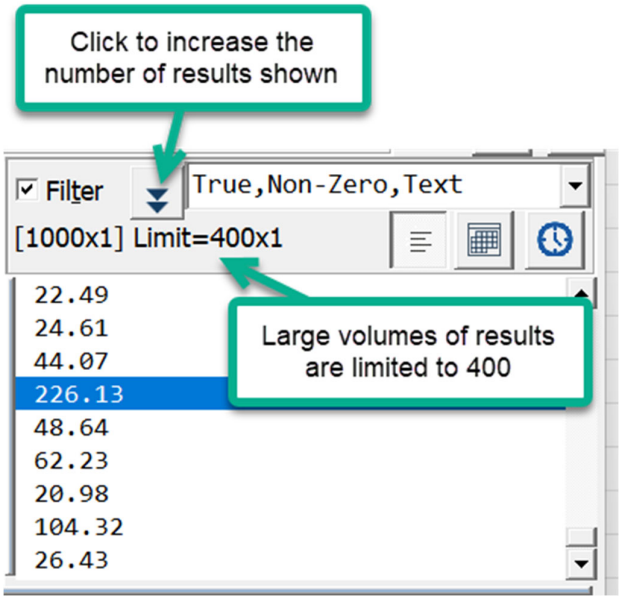
Filtering Array Results

When the component part of a formula returns an array, the array is shown in the results box.



This average formula returns #Div/0!. Selecting the range and choosing the Filter by Errors option shows 3 cells that contain errors. Clicking one of the filtered results in the Results Box scrolls to the cell containing the error.

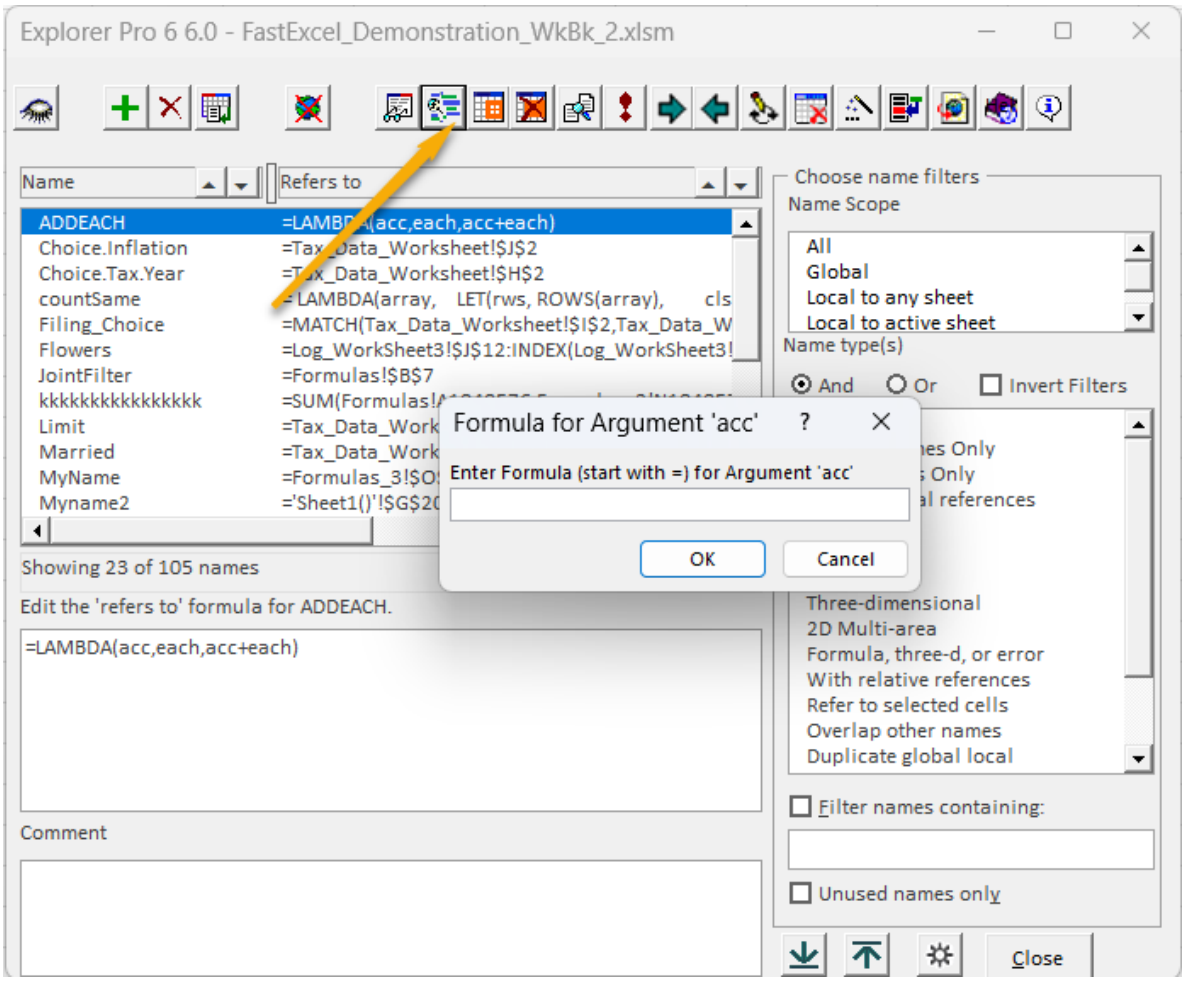
With large arrays you can scroll the results box and/or filter the results.



Launching Formula Explorer Pro 6 from Name Manager Pro

You can launch Formula Explorer Pro 6 directly for the currently selected Name by clicking the Name Manager Explore button.

If the selected name is a Named Lambda you will be prompted to enter the arguments for the Lambda.



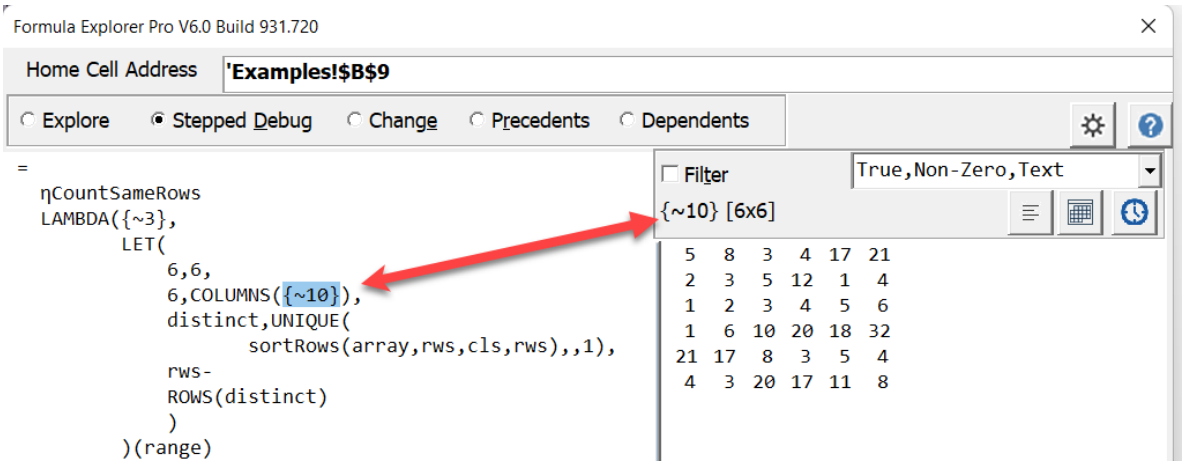
Step-by-Step Debug

Using Stepped Debug (Alt-D) you can use the **right and left arrow keys** on the keyboard to see the effect of replacing the parts of the formula (Components) with their values.

The right arrow key steps forward through the debug sequence.
The left arrow key steps backwards through the debug sequence.

Debugging Array Results

When a part of the formula (a Component) is replaced by an array of values it is replaced in the indented formula by a placeholder like {~10). Clicking on a placeholder shows the array results of the placeholder.



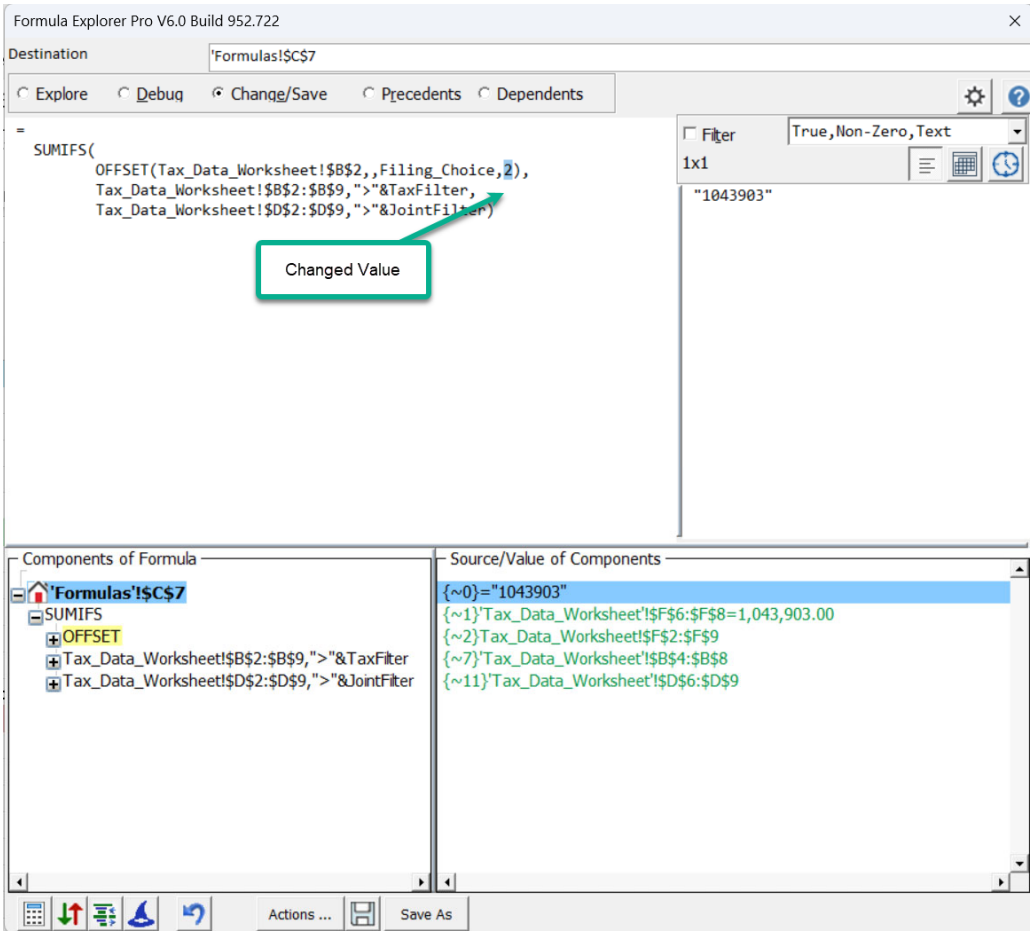
Non-Array results (scalars) are directly replaced within the formula.

With Formula Explorer Pro 6 Debug you get two views of the formula:

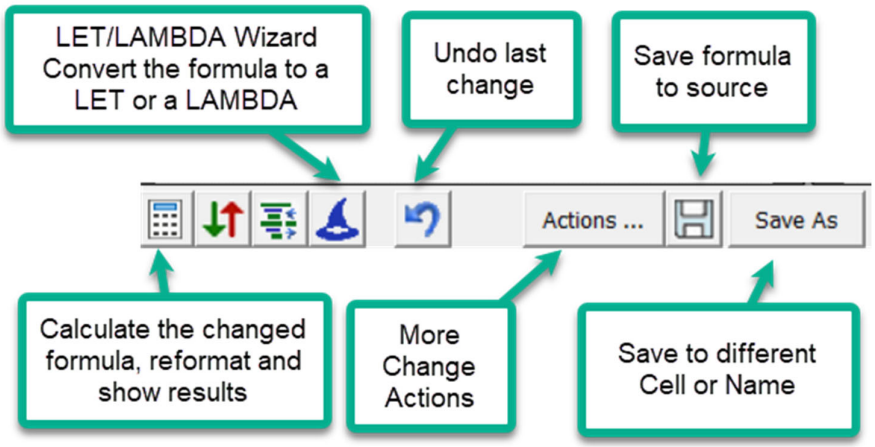
- An indented view that is progressively collapsed as the parts of the formula are replaced by results.
- A Component view that allows you to explore any of the Components in detail, including Components that have already been replaced in the Indented Formula view.

Change/Save

Change mode allows you to **make changes to the indented formula** and see the results from the changed formula before saving the changed formula..



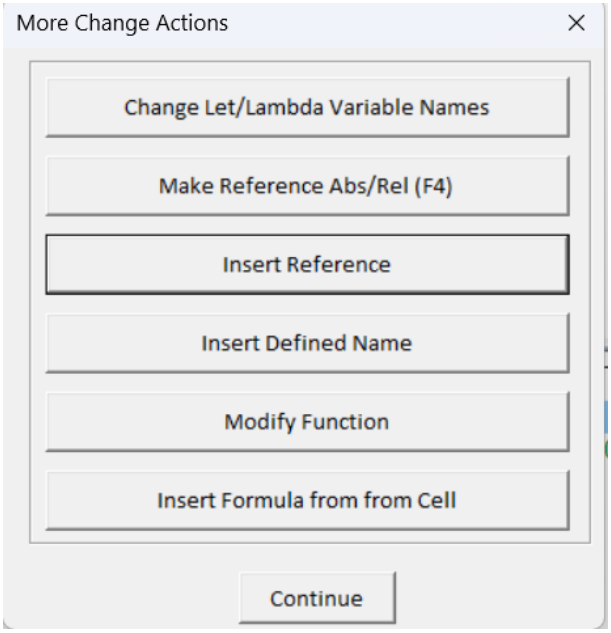
In change mode there are some additional command buttons at the bottom of the Formula Explorer form.



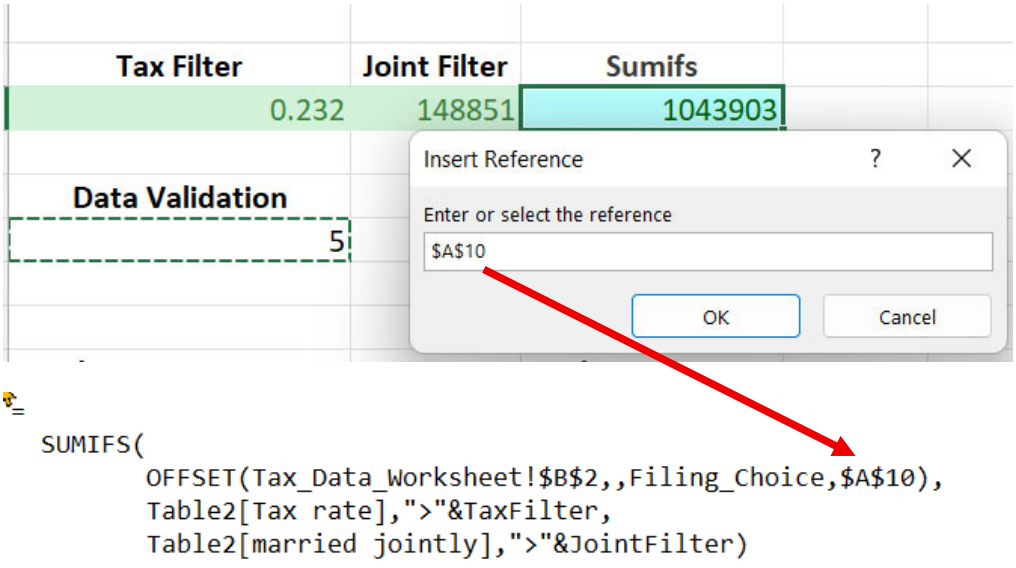
Alt-Click on the Save button saves the indented form of the formula.

Actions .. button in Change/Save mode

Additional Change actions are available using the Actions … button.



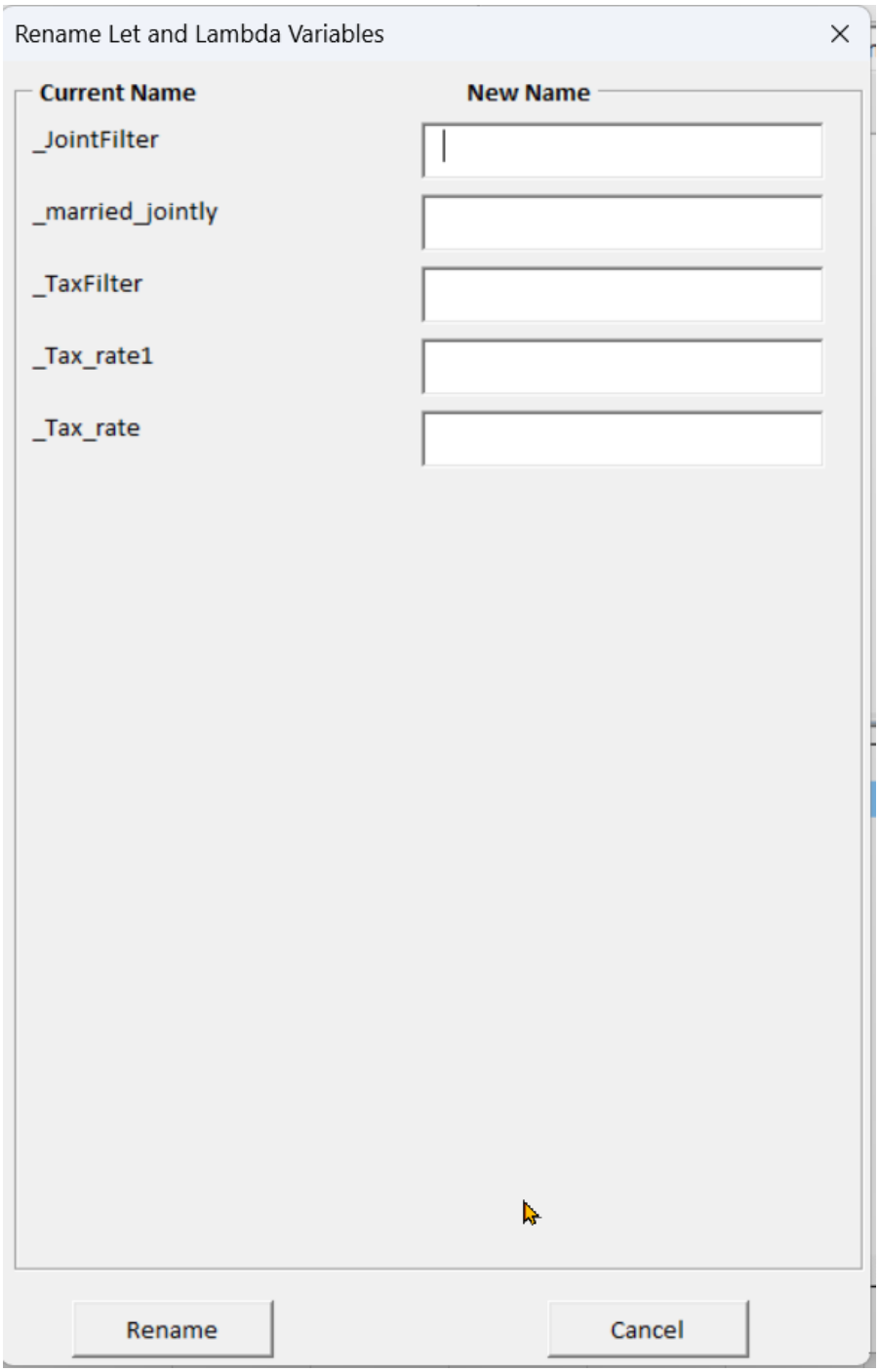
These change actions take effect at the insertion point in the indented formula or replace the selected characters.



Change Let/Lambda Variable Names

Shows the first 16 LET and LAMBDA variable names in the formula, so that they can be changed.

Although this is most useful after the LET/LAMBDA wizard you can use it at any time.



Make Reference Abs/Rel (F4)

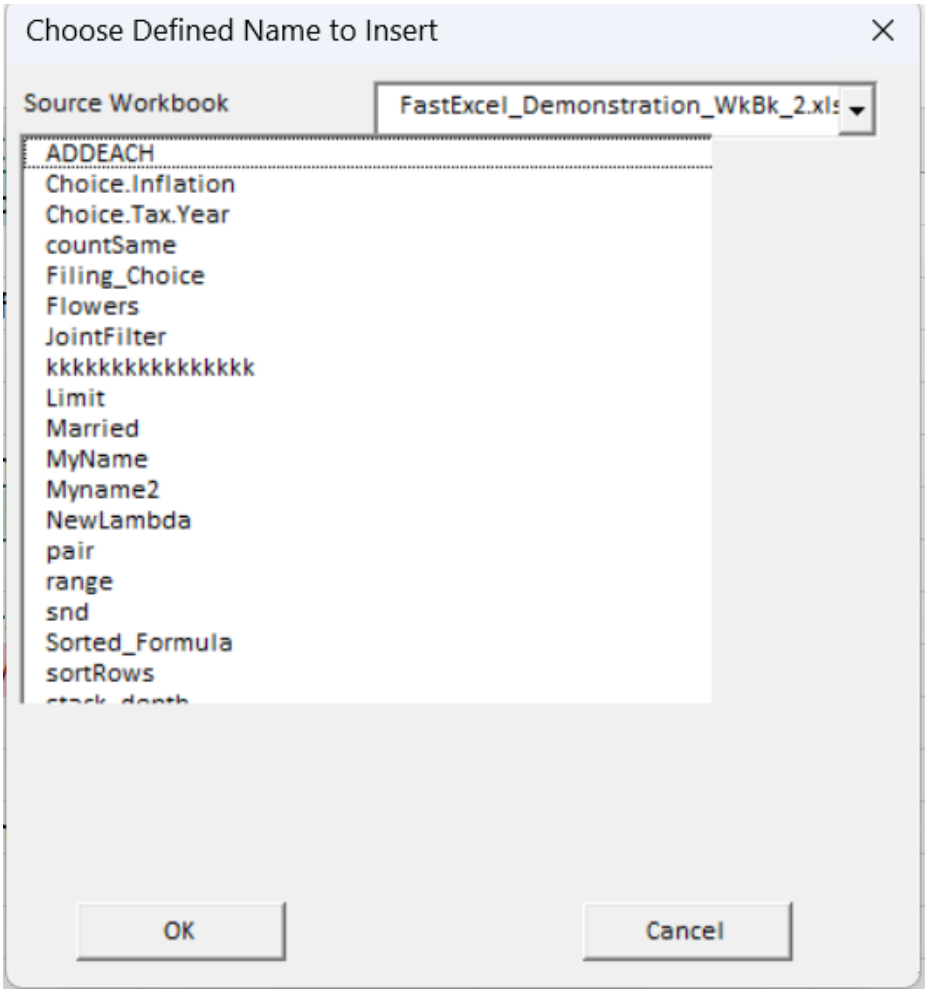
Use this button or click F4 to cycle the currently selected reference from relative to absolute etc.

Insert Reference

Click Insert Reference and select a Range. The reference address of the range will be inserted at the selection point in the formula.

Insert Defined Name

Shows a list of the Defined Names in the workbook. Choose a name to insert it into the formula at the insertion point.



Modify Function

Invokes Excel's Function Wizard for the currently selected Function within the formula, so that the arguments of the Function can be changed.

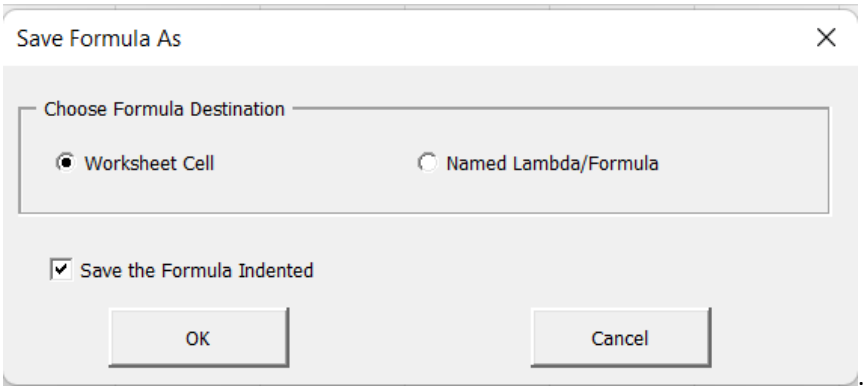
Insert Formula from Cell

Create a new formula by modifying another formula

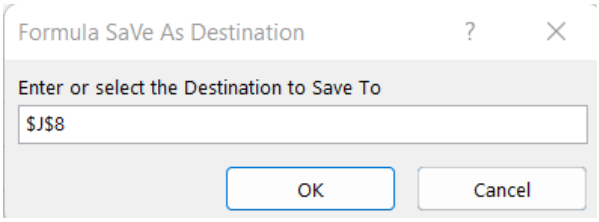
1. Select an empty cell
2. Ctrl-Shift-M to start formula Explorer
3. Click Change
4. Click More …
5. Click Copy from Cell
6. Select the cell to copy the formula from
7. Click OK
8. Make your changes to the formula in the indented formula box
9. Click the Recalculate and Reformat button to check your new formula
10. Click the Explorer Save button to save the changed formula into the empty cell
11. Or click Save As to choose the Save destination.

Save As

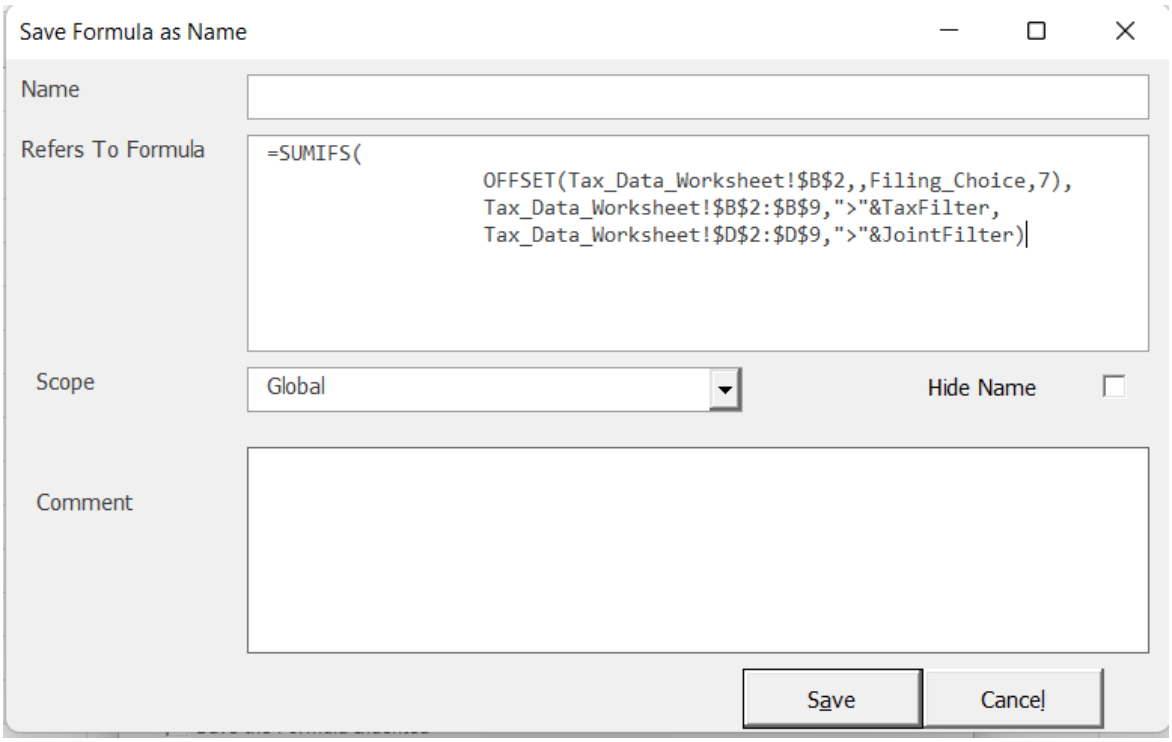
By clicking the Save As button, you can choose either to save the formula to a different worksheet cell or to a Defined Name in Name Manager, and whether to save the formula in its indented form or not.



Choosing **Worksheet cell** and clicking OK shows a dialog to choose a cell by clicking it or by entering its address.



Choosing Named Lambda/Formula shows:



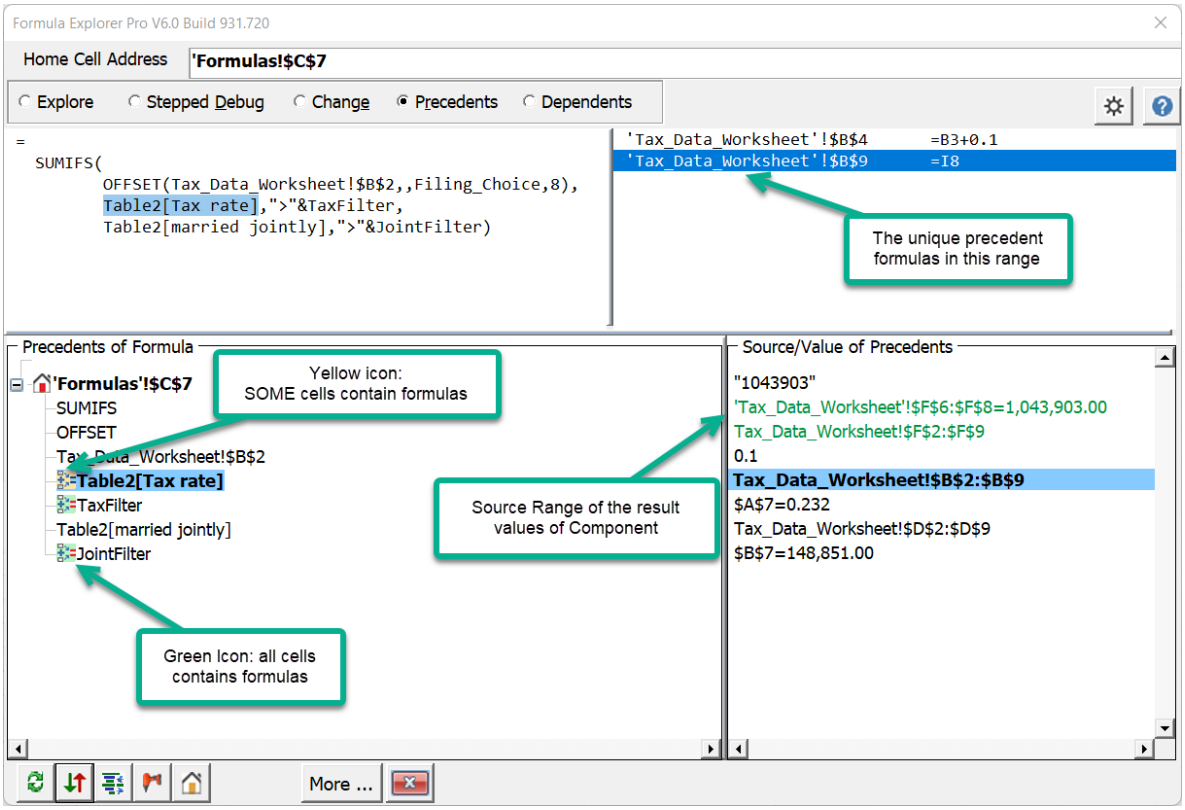
Precedents

Precedents mode shows you all the unique on-sheet and off-sheet precedents of the formula.

These include precedents of functions like **INDIRECT** and **OFFSET** that do not work with the native Excel precedent tools.

Yellow icon means that the precedent contains a mixture of formulas and constants.
Green icon means that all the cells in the precedent contain formulas.
Green text in the Source/Value box shows the range that the Function used to give its resulting values.

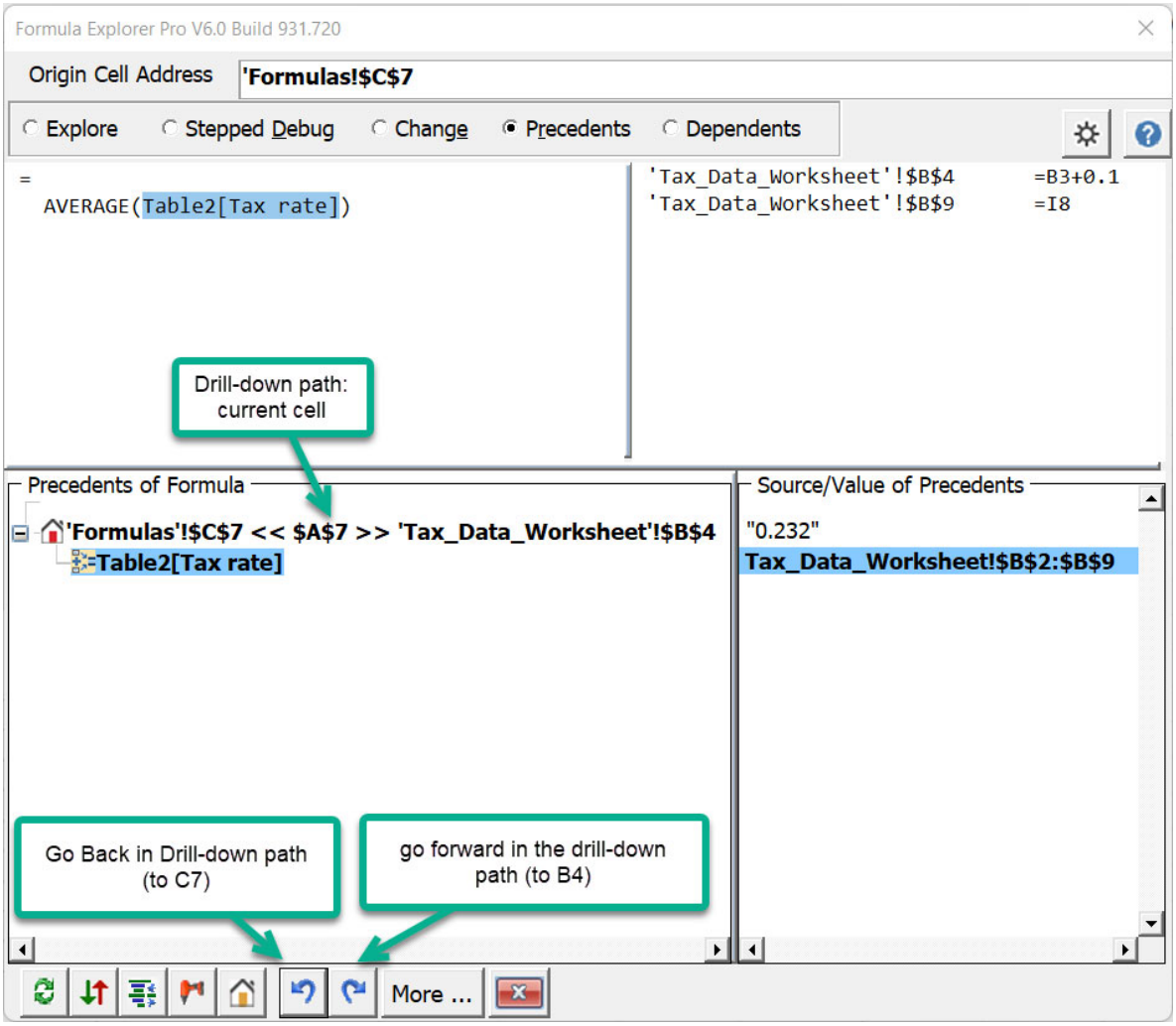
The values box shows the location and formula(s) in the precedent range.



When the precedent contains multiple formulas selecting one will select the worksheet cell containing the formula.

Precedent Drill-Down

Clicking the **drill-down** button (or **right-clicking**) on a selected precedent will load the formula in the precedent and show its precedents. Using Drill-Down activates the forward and backward buttons and shows the forward and backward drill-down path.



Mixing Precedents and Dependents

Clicking Dependents will show the dependents of the current cell in the drill-down path.

This way you can trace all the precedents and dependents of a cell.

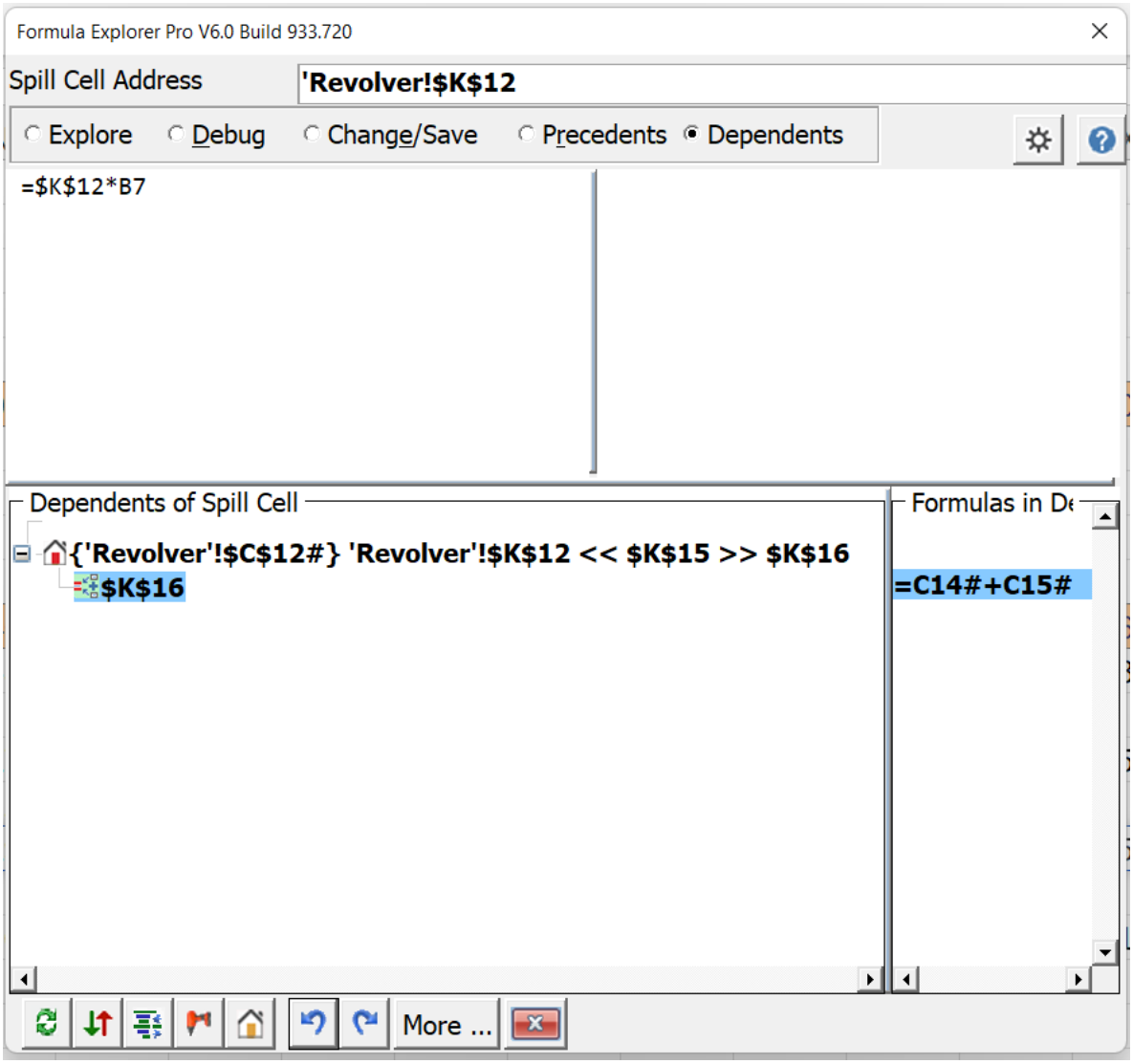
Precedents of Dynamic Array Spilled Cells

For spilled cells Explorer Pro dynamically creates equivalent formulas from the parent spill formula.

Dependents

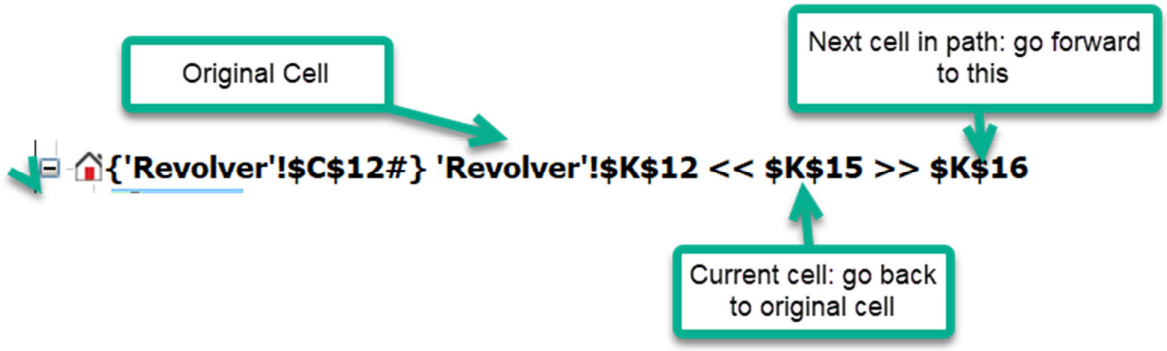
Dependents mode shows you all the on-sheet and off-sheet dependents of the current formula.

Because this mode uses the native Excel dependency tracking it suffers from the same limitations.



This example shows dependency tracing on spill cells. The parent spill cell formula address is shown in curly braces: **{'Revolver'!$C$12#}**

This is followed by the drill down path showing the drill-down history and the cells that the forward and backward arrows will drill to.

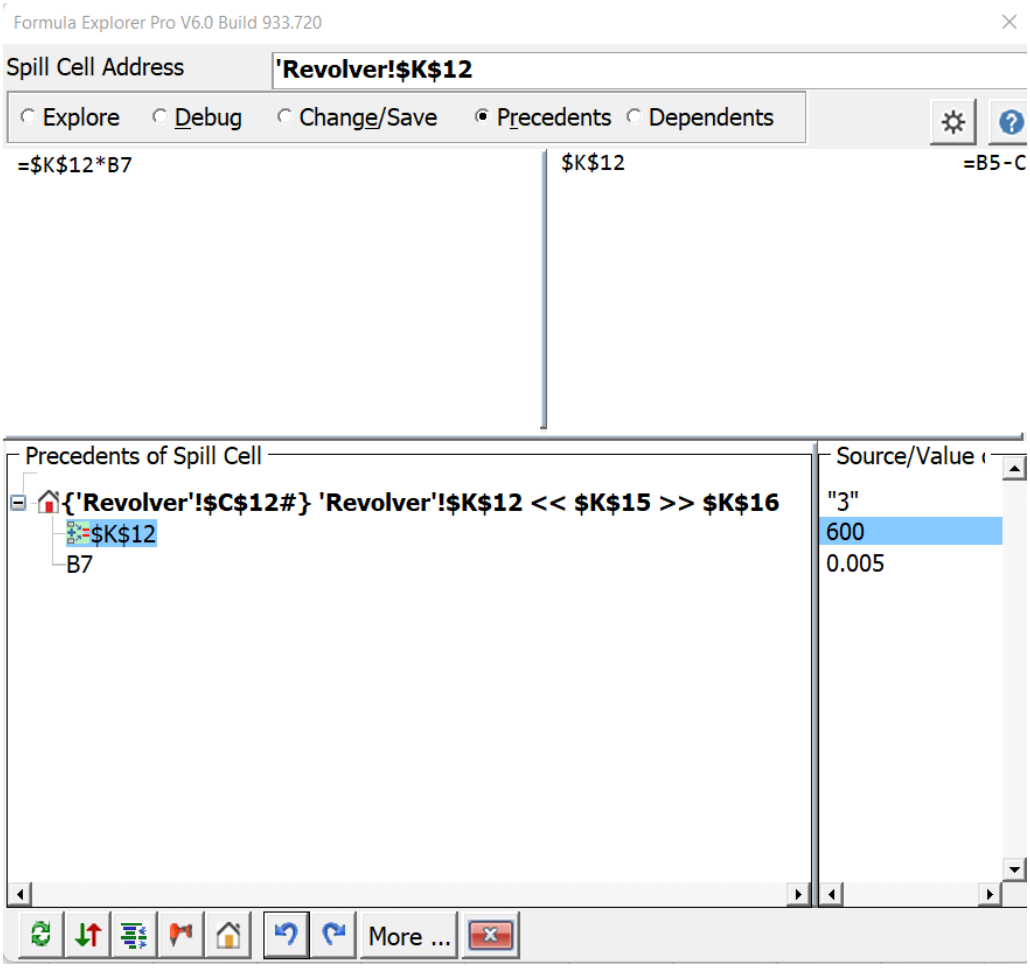


The Green icons show that these cells ALL contain formula, yellow icons show that SOME cells contain formulas and no icons show NO cells contain formulas.

You can switch from Dependency mode to precedent mode from within the drill-down chain.

Mixing Dependents and Precedents Mode

With current cell K15 switching to precedents shows this:



Resizing and Moving Formula Explorer Pro 6

You can move and resize Formula Explorer Pro 6 using either the mouse or the keyboard.

When Formula Explorer Pro 6 has the focus use these keyboard shortcuts to move and resize the form:

- **F8 or Ctrl End** - positions Formula Explorer Pro 6 bottom right
- **Ctrl-Shift-End** – positions Formula Explorer Pro 6 bottom left
- **F5 or Ctrl Up Arrow** or **Control +** (numeric keypad) – increases size of Formula Explorer Pro 6
- **F6 or Ctrl Down Arrow** or **Control –** (numeric keypad) – decreases size of Formula Explorer Pro 6
- **F7 or Ctrl Home** – resets Formula Explorer Pro 6 size and centres it on the screen
- **Ctrl Alt Home** – resets all Formula Explorer Pro 6 settings and size, and centres it on the screen

Using the Mouse and the Arrow keys

The 4 boxes on the form are all linked so that clicking in the Formula Box, the Component Treeview box or the Source Reference box will select the corresponding items in the other boxes.

Clicking the **Down Arrow key** will select the next Component down in the Component Treeview.

Formula Explorer Pro 6 Shortcut and Function keys

Shortcut keys when a worksheet has the Focus:

- Ctrl-Shift M launches or refreshes Formula Explorer Pro 6 for the **active cell formula**.
    - You can change this hotkey in Settings
- Ctrl-Alt-Home Moves Formula Explorer Pro 6 to the bottom right of the Excel Window

Shortcut keys when Formula Explorer Pro 6 has the Focus

Click

- **Left-click** selects an Component or clicks a command button

Function Keys and Ctrl key combinations

- F1 Help
- F5 or Ctrl Up arrow or Ctrl numeric keypad + Increases size
- F6 or Ctrl Down arrow or Ctrl numeric keypad - Decreases size
- F7 or Ctrl-Home Recentres Formula Explorer Pro 6 and resets size
- F8 or Ctrl-End Moves Formula Explorer Pro 6 to bottom right

Navigating the Treeview with the Arrow keys

- Up Arrow – move selection up an Component
- Down Arrow– move selection down an Component
- Right Arrow – Next debug step
- Left Arrow – Previous debug step

Expanding/Contracting the Treeview

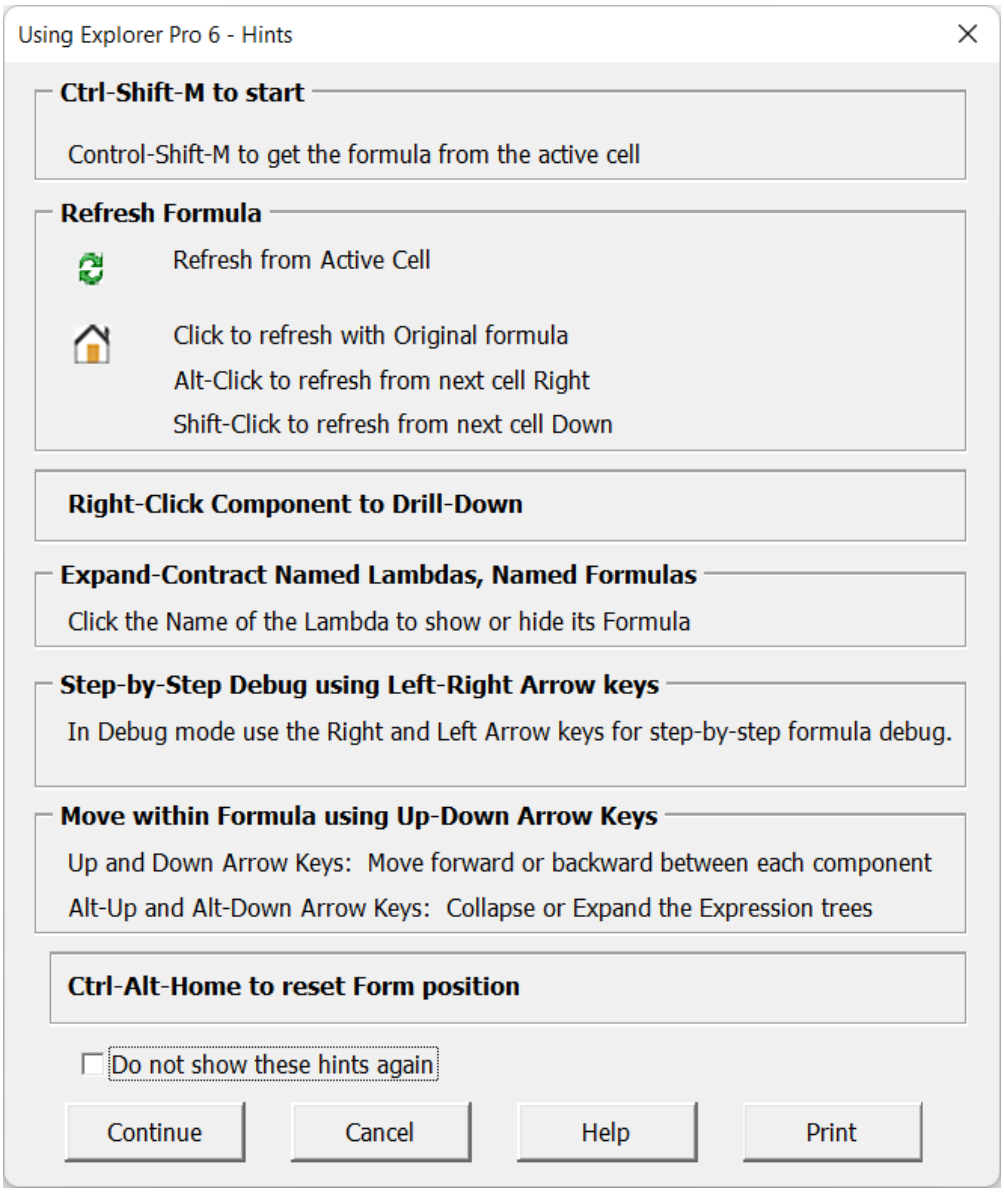
-  Toggles Expansion on/off
- + Icon Expand this Node in the Tree
- - Icon Contract this Node in the Tree
- Alt Up Collapse TreeView to Home node
- Alt Down Expand all Component nodes
- Alt Right Expand the TreeView one level
- Alt Left Contract the TreeView one level
- Shift any Arrow key Expand/Contract the active Component node

Accelerator Keys using Alt

- Alt-D Stepped Debug Mode
- Alt-F Refresh Formula Explorer Pro 6 Formula from the current active cell
- Alt-I Toggles Indent on off/on
- Alt-P Prints an A4 snapshot of the form
- Alt-S Settings
- Alt-T Filter On/Off
- Alt-V Explore Mode

Show Hints when Formula Explorer Pro 6 starts

The first time Formula Explorer Pro 6 is shown in an Excel session the most useful keyboard shortcuts and hints are shown.



Check "**Do not show these hints again"** to turn off showing this start up form.

Click **Continue** to close this form and show Formula Explorer Pro 6.

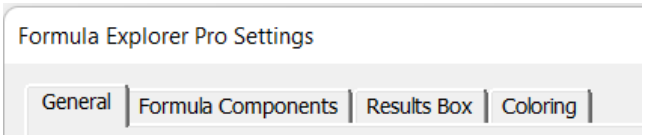
Click **Print** to create a handy reference hint sheet.

Formula Explorer Pro 6 Settings

In addition to the settings accessible from the More… button you can access the full set of settings:

The **settings button** allows you to change your default settings.

There are 4 tabs for different collections of settings.



At the bottom of the Settings form:



OK

Any changed settings will be stored and used.

Show Hints

The Hints Form will be shown.

Reset Form

The Formula Explorer Pro 6 form will be reset to its default size and centred in the Excel Window.

Reset All to Defaults

Clicking this button will **reset all** the Formula Explorer Pro 6 settings, form size and position **to the default settings.**

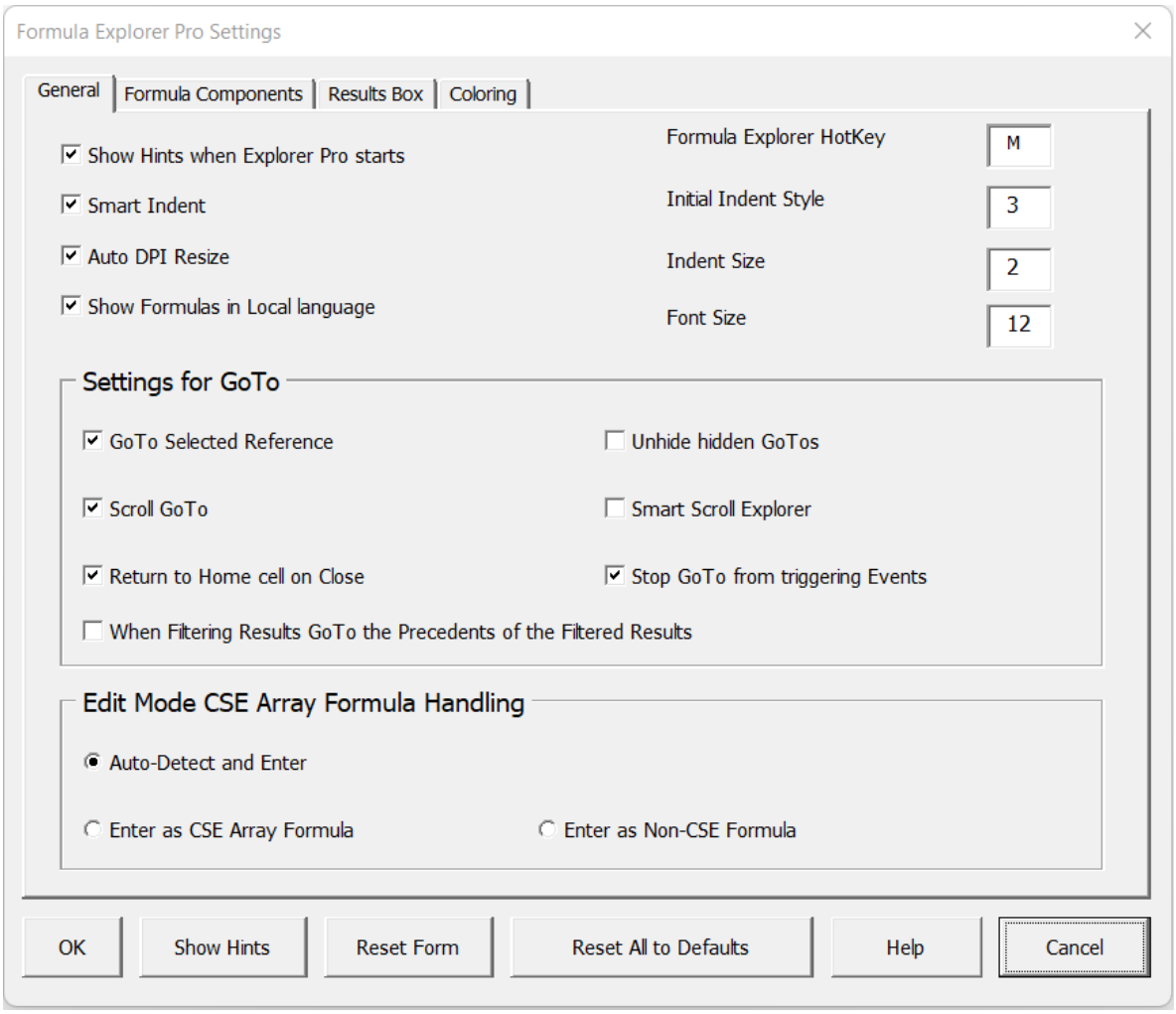
Help

Help opens a browser window showing help for Formula Explorer Pro 6 Settings

Cancel

Any changed settings will be discarded

General Settings



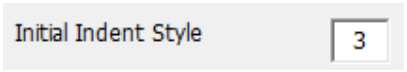
Formula Explorer Pro 6 Hotkey

Use Ctrl-Shift-*Hotkey* to start or refresh Formula Explorer Pro 6. The default is M, so Ctrl-m or Ctrl-Shift-M will start or refresh Formula Explorer Pro 6. If you change the *hotkey* it must be a single character.

Smart Indent

Smart Indent recognises the function being used and adjusts the indentation accordingly the next time you refresh or reformat the formula.

Initial Indent Style



This is a number from 1 (no indents or new lines) to 7 (maximum indentation and new lines) that controls the Indent style to be used the next time you start Formula Explorer Pro 6.
The initial default setting is 3.

Indent Styles

- 1 – No Indentation
- 2 – New line for each Function or smart indent

- 3 – New line on change of parenthesis level or before Function or smart indent
- 4 – New line on change of parenthesis level or before Function or after first function parameter or smart indent
- 5 – New line on change of parenthesis level or before Function(and after Function(
- 6 - New line on change of parenthesis level or before Function(and after Function(and after each separator
- 7 - New line on change of parenthesis level or before Function(and after Function(and after each operator or separator

Auto DPI Resize

When this is checked the size of the Formula Explorer Pro 6 Form and the Font size will be increased if the main screen uses a high DPI setting.

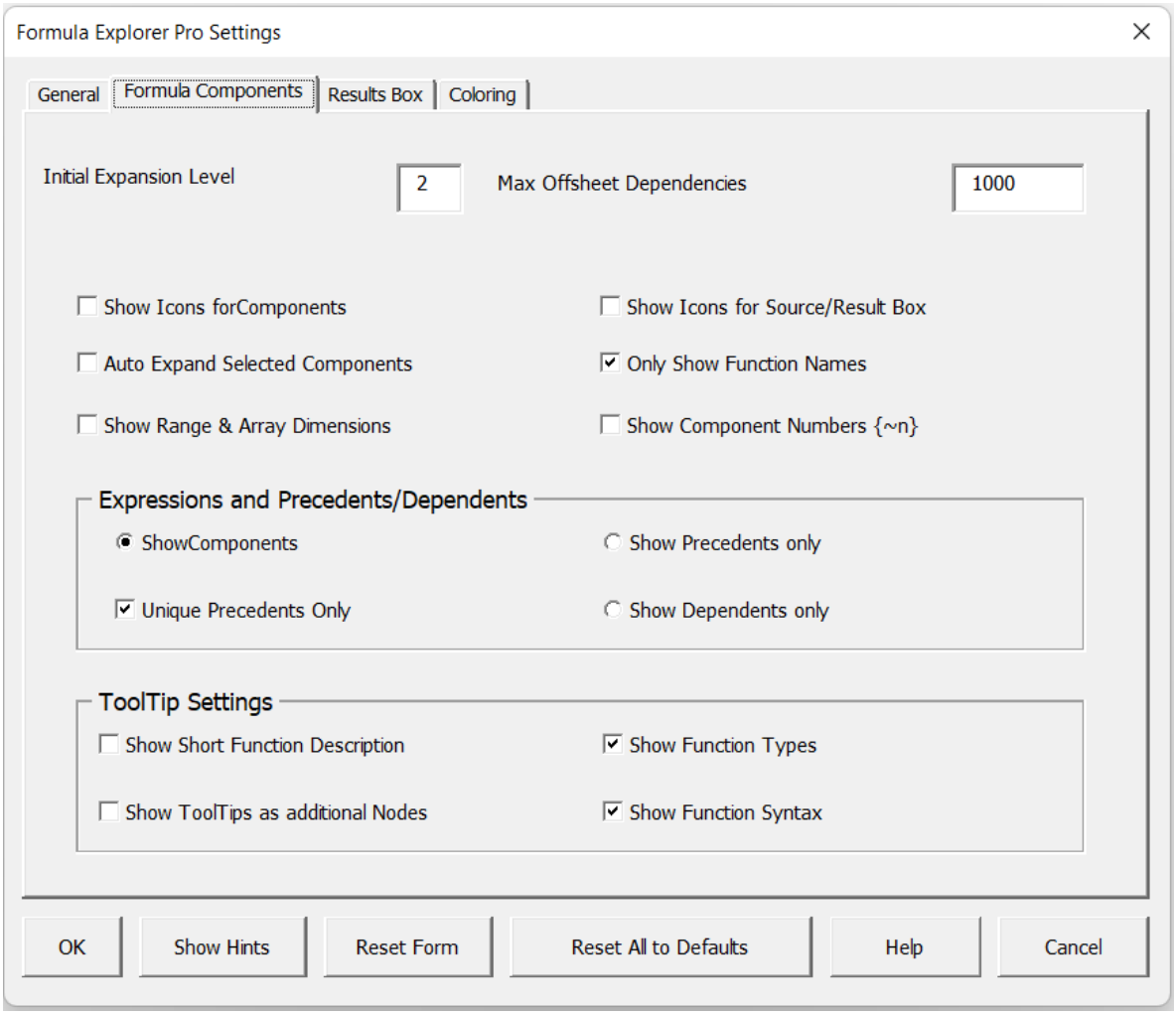
Font Size

You can change the font size used in the 4 display boxes. The default is 10 for Windows and 10 for Mac.

Show Formulas in Local Language

If you uncheck this option Formula Explorer Pro 6 will show formulas using English function names and separators. 21 languages are supported for localised function names.

Formula Components Settings



Initial Expansion Level

This setting controls the initial expansion level of the TreeViews. The home or root node in the tree is considered level 0. Its direct children are level 1 and their children are level 2 and so on.

Max Offsheet Dependencies

Only uo to this number of Offsheet dependencies will be shown.

Show Icons for Components Box

Theis options controls whether the Component type icons are shown in the left-hand Components box.

Show Icons for Source/Result Box

This option controls whether the Component type icons are shown in the right-hand Source/Result box.

Auto Expand Selected Nodes

If checked selecting a node will automatically show all its children.

Only Show Function Names

When checked the Component for a Function will only show the name of the function rather than the function with all its parameters (the parameters are shown as children of the function anyway).

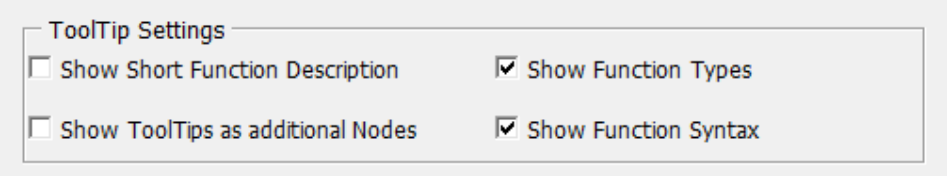
Show Range and Array Dimensions

When checked the size of the range or array is shown in the right-hand Source/result box.

Show Component Numbers

Component numbers of the form {~6} are always shown in Formula Debug mode but are not shown in other view modes unless this option is checked.

ToolTip Settings



When you mouse hovers overs an Component in the Component Treeview a descriptive tooltip appears.

Show Short Function Description

A short description in English of the selected function will be shown.

Show Function Types

Information about the function will be shown:

- Source: Native or XLL or VBA/Automation
- Volatile or Non-Volatile or Not Known (?)
- Single-Threaded or Multi-Threaded

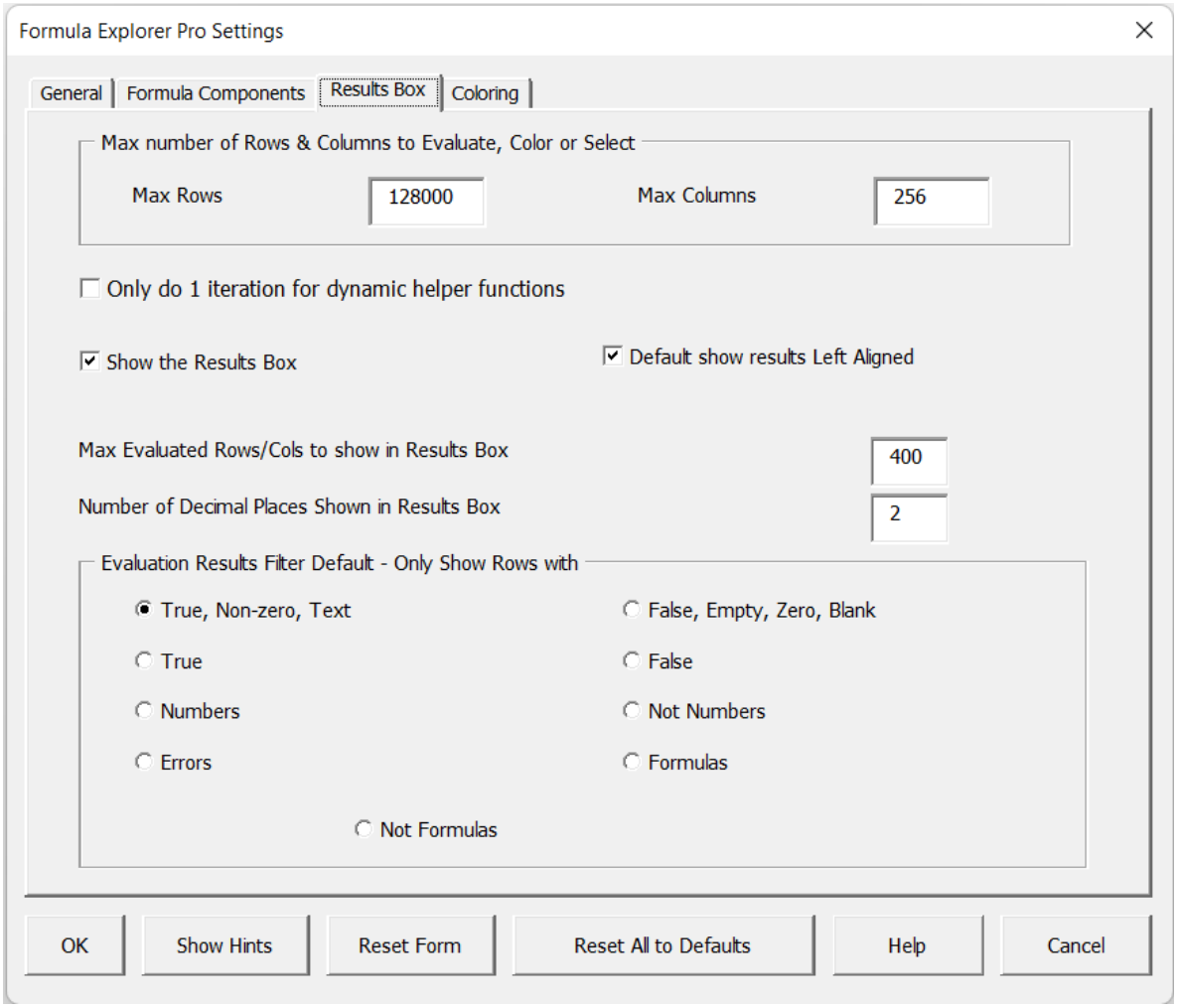
Show ToolTips as additional Nodes

Checking this option adds extra nodes to show all the ToolTips.

Show Function Syntax

Each function will show (in English) the name of the function and its parameters.

Results Box Settings



Max Number of Rows & Columns to Evaluate, Color or Select

For performance reasons you may want to restrict the maximum number of rows and columns that are evaluated or selected.

Only do 1 Iteration for Dynamic Helper Functions

Check this to restrict the number of iterations calculated with Helper functions like BYROW etc.

Show the Results Box

This sets the default start up behaviour for showing the Results box.

Default show results Left Aligned.

Sets the startup behaviour of Alignment in the Results box.

Max Evaluated Rows/Cols to show in Results Box

When a sub-Component results in a large number of rows or columns this setting controls the maximum number shown in the Results Box.

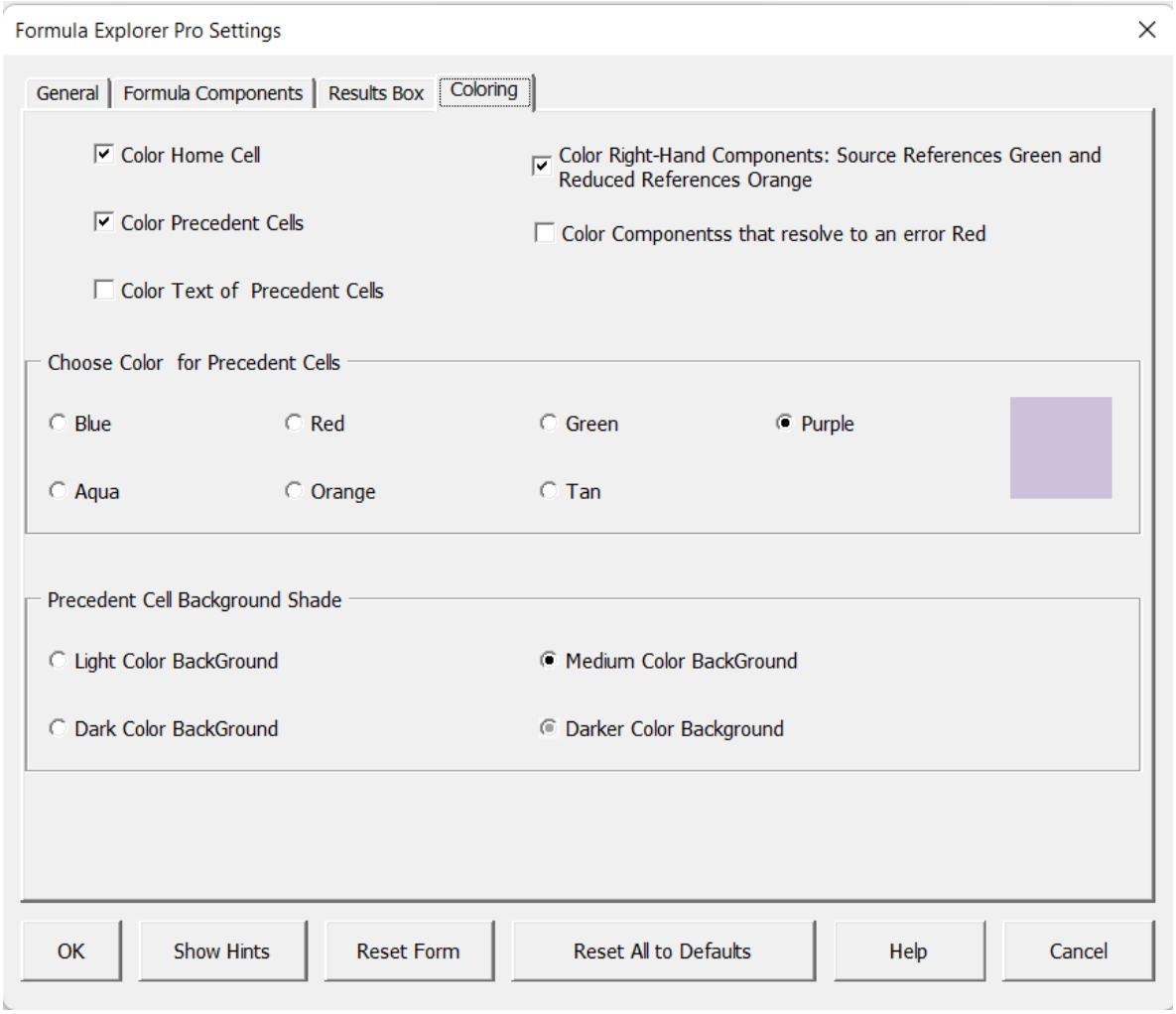
Number of Decimal Places to Show in Results Box

This setting controls the number of decimal places shown in the Results box.

Evaluation Results Filter Default

This option allows you to filter the results being shown for array or range results.

Coloring Settings



Color Right-Hand Nodes: Source References Green and Reduced References Orange

When checked the text in the right-hand Source/Result box is colored:

- Restricted References resulting from Intersections are colored Orange
- Source References resulting from Functions and Components are colored Green

All other text is colored black.

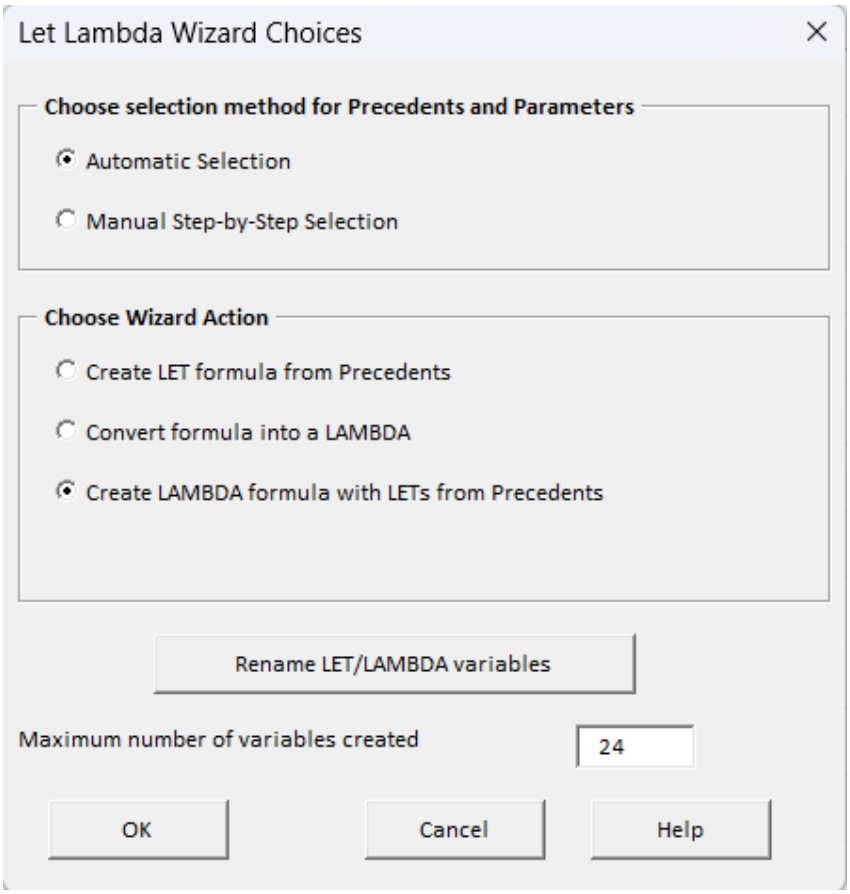
Color Nodes that resolve to an error Red

When checked nodes that resolve to errors such as #Value or #Calc are colored red

LET/LAMBDA Wizard

This button launches the LET/LAMBDA Wizard.

The Wizard converts the current formula to a LET or LAMBDA Formula.



Automatic Selection

Automatic Selection finds all the precedents of the current formula.

Precedent references that contain formulas are replaced by LET variables with calculation definitions created from the precedent formulas. Precedent references that do not contain formulas are converted to LAMBDA parameters and the references are added as arguments to the LAMBDA.

	A	B	C	D	E	F	G	H
1	phrase	trim	which word		add caret	After caret	Answer	
2	hi yoy airport id	hi yoy airport id	2		hi yoy^airport id	airport id	airport	
3		=TRIM(A2)	=LEN(B2)-LEN(SUBSTITUTE(B2," ",""))-1		=SUBSTITUTE(B2," ","^",C2)	=MID(E2,FIND("^",E2)+1,30)	=LEFT(F2,FIND(" ",F2)-1)	

The current formula is cell G2 colored blue: =LEFT(F2,FIND(“ “)-1)

The precedent cells with formulas are colored green.

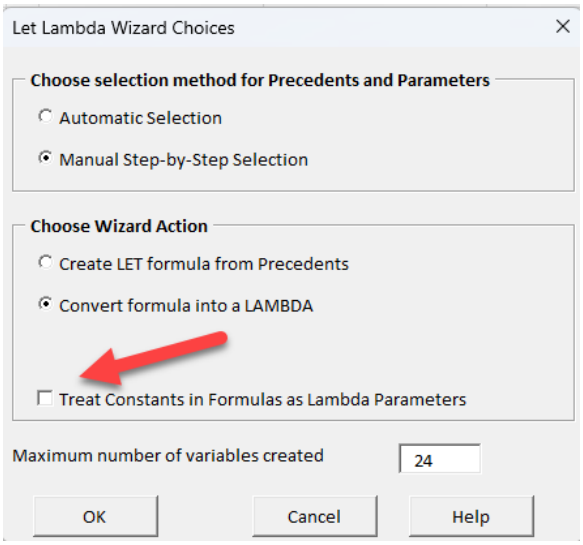
The precedent cell that does contain a formula and has no precedents is colored red (A2).

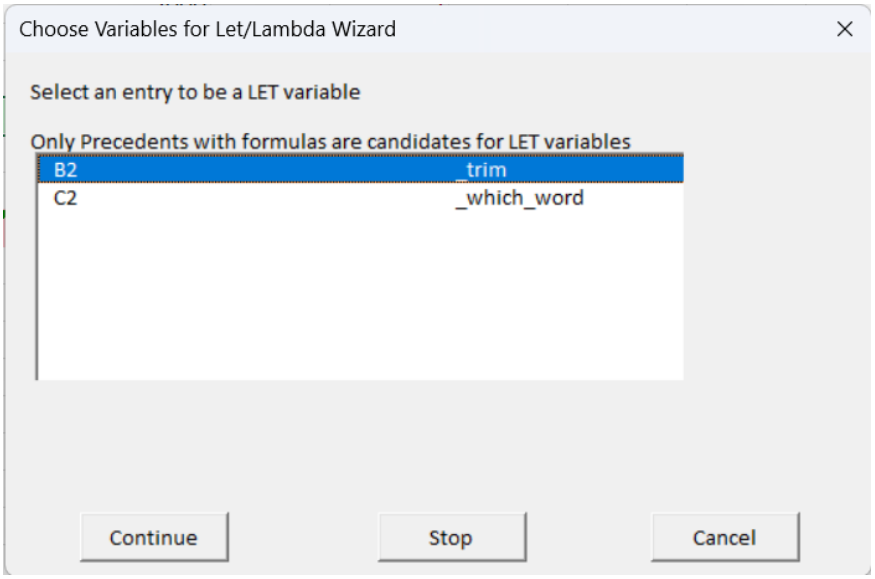
The converted formula is shown below.

```
=
  LAMBDA(_phrase,
         LET(
             _trim1,TRIM(_phrase),
             _which_word,LEN(_trim1)
             -
             LEN(
                 SUBSTITUTE(_trim1," ","")
                 )
             -1,
             _trim,TRIM(_phrase),
             _add_caret,SUBSTITUTE(_trim," ","^",_which_word),
             _After_caret,MID(_add_caret,
                 FIND("^",_add_caret)
                 +1,30),
             LEFT(_After_caret,
                  FIND(" ",_After_caret)
                  -1)
             )
         )(A2)
```

Manual Step-by-Step Selection

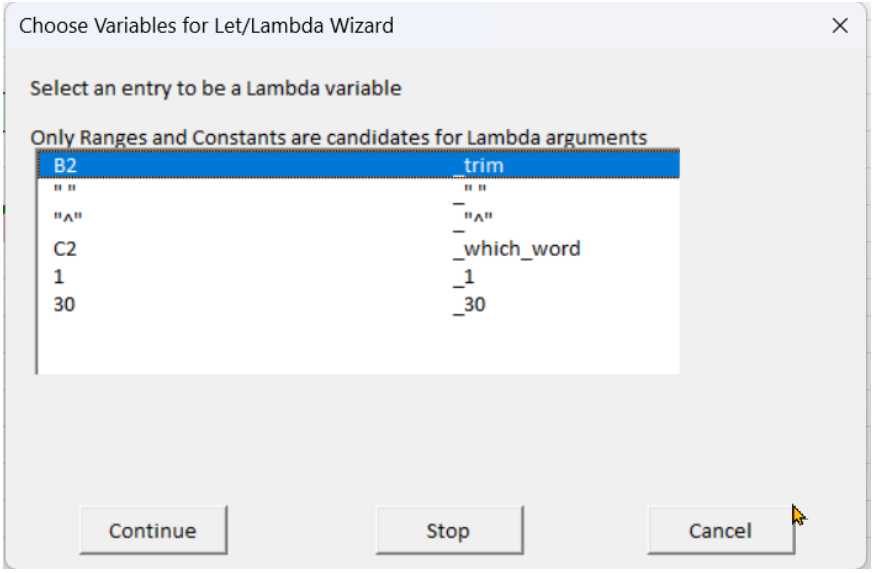
Does the same actions as automatic but allows precedents to be individually selected as required. Precedents with formulas can be converted to LAMBDA variable if preferred. Optionally constants can be converted to Lambda Variables and Arguments





Continue will convert the selected Precedent and then move to the next Precedent.

Stop will stop the precedent selection and show the converted formula.



Variable Names

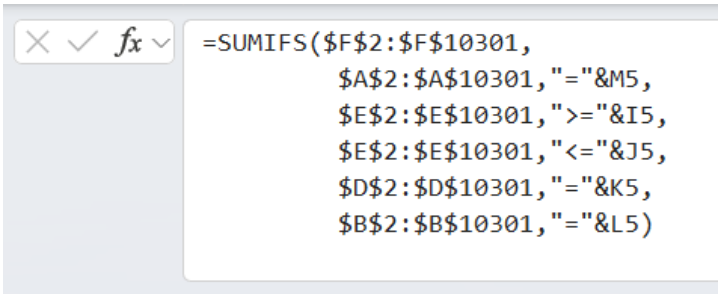
The LET/LAMBDA wizard will look for suitable Text names for the LET and LAMBDA variables in adjacent cells to the Precedent, or will convert the reference address of the precedent into a Name.

Use the 'Actions…' 'Change Let/Lambda Variable Names' button to change the generated names into more meaningful Names.

Formula Indenter



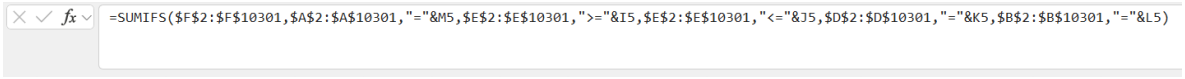
Clicking Formula Indenter auto-indents the formula in the active cell, and expands the formula bar to show the indented formula.



Formula UnIndenter



Clicking Formula UnIndenter removes indentation from the formula in the active cell, and contracts the formula bar.



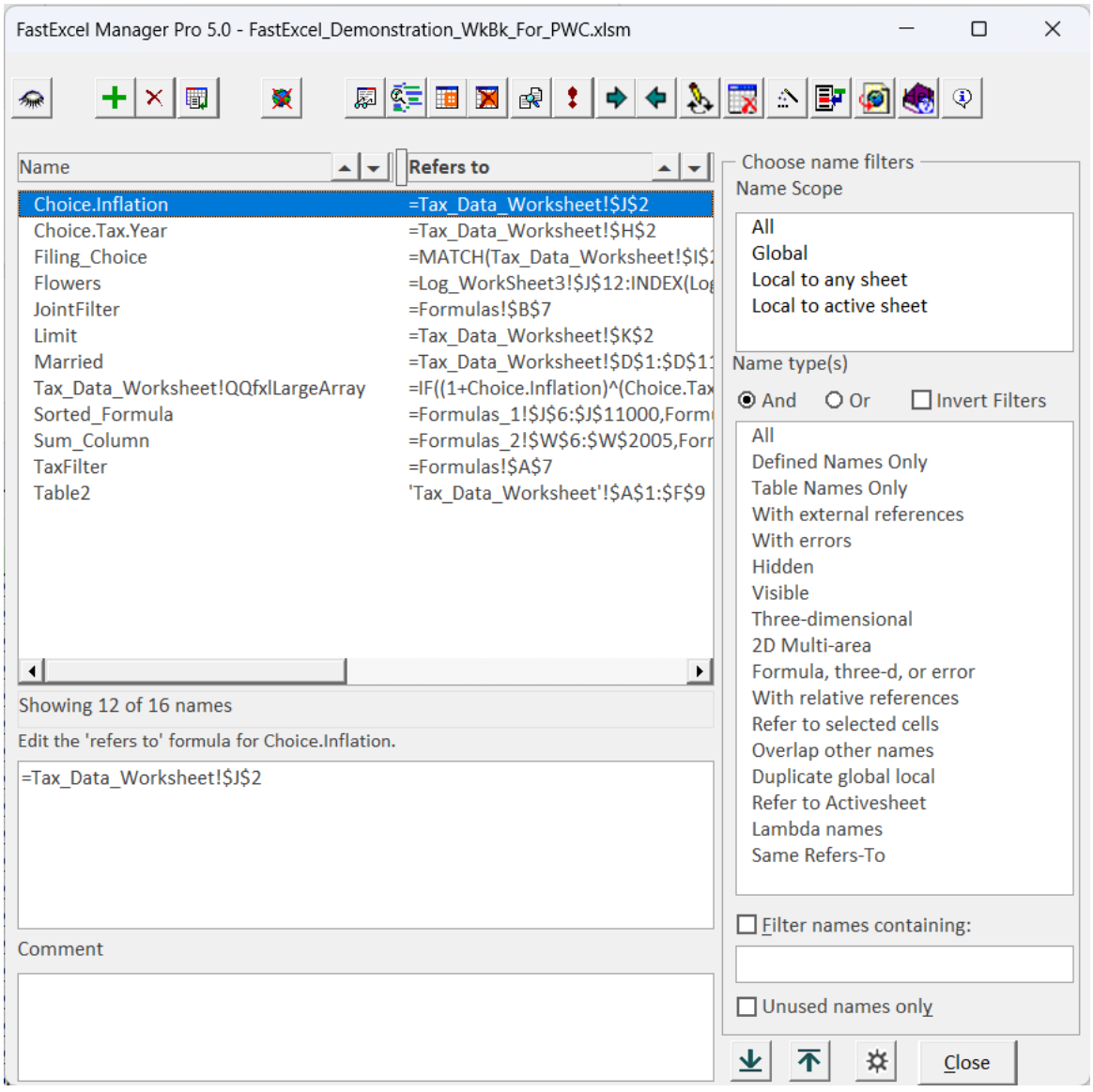
Name Manager Professional

The best available tool for managing Excel Defined Names.

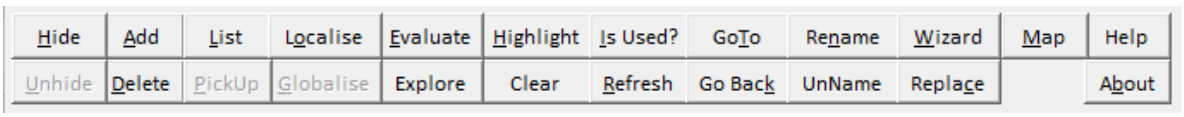
Name Manager Credits

Decision Models developed the Name Manager Pro component of FastExcel in collaboration with Jan Karel Pieterse, jkpieterse@jkp-ads.com.

Working with Name Manager



Note that you can also have buttons with descriptive text instead of icons for the commands:



(Uncheck Icons in Name Manager Settings)

Name Manager is Modeless

The Name Manager's dialog screen is in Modeless state for Windows Excel 2003 and Mac Excel 2016 and up.

You can use name manager with many workbooks open at the same time. When you select a different workbook and then click on the Name Manager Window, it will update with the names in the current workbook.

Modeless means you can have the dialog open and work in Excel at the same time. Not all changes made in excel will be automatically reflected in the names list though. For example: names deleted or added from the normal Excel interface ("Insert", "Name" menu choices) or from VBA whilst the name manager is showing will not be immediately reflected in the dialog. Clicking inside the names list will update the list when Name manager detects that it has changed. Clicking the **Refresh** button will rebuild the list.

If you want to change names using Excel's normal methods or through VBA we recommend:

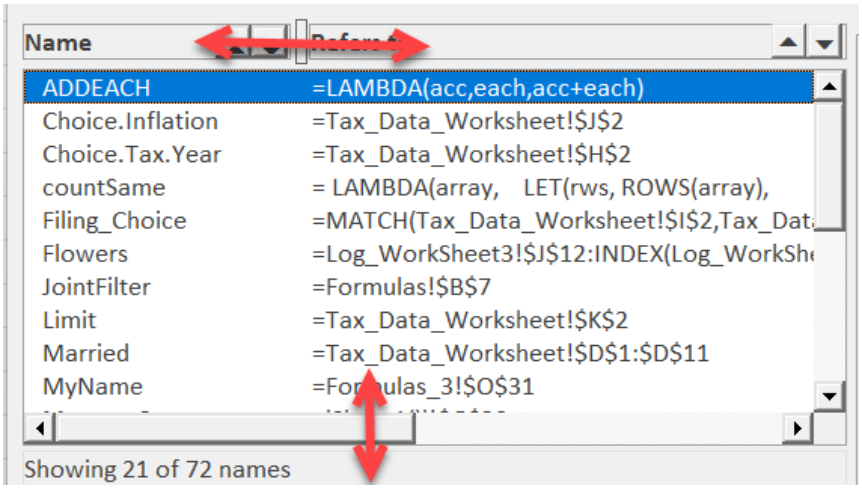
- Either close the name manager before making the changes.
- Or click the Refresh button after making the changes.

Name Manager is Resizable

The Name Manager form is dynamically resizable: just drag the resize button in the bottom right-hand corner to make the form the size you want.

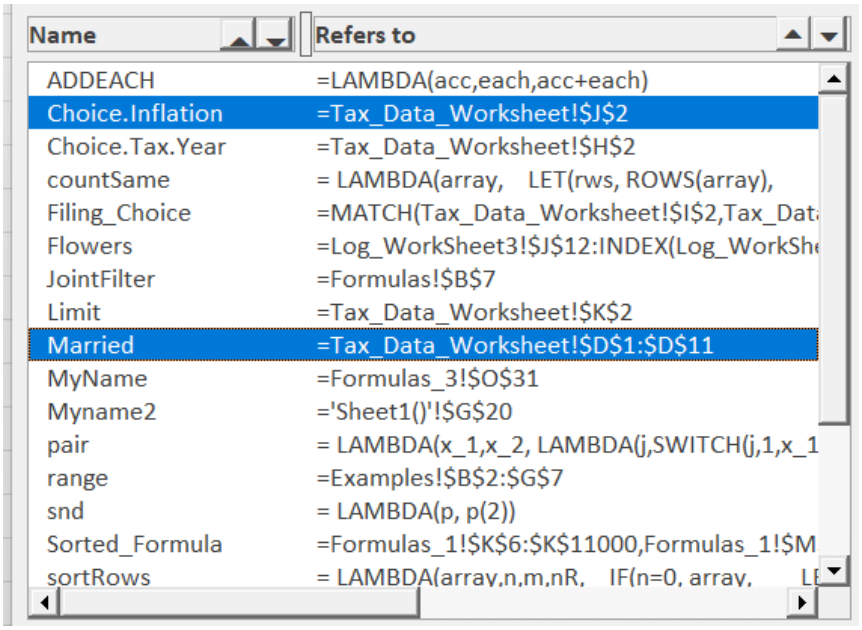
Name Manager Splitter Bars

There are two splitter bars on the Name Manager form, which allow you to control the way the space is divided horizontally between the Names and their Refers-to formulas, and vertically between the Names ListBox and the Refers-To Edit box.



Just drag the splitter bars to the position you want.

The Names Listbox



The names Listbox shows the names that are currently selected by the filters.

Sorting the Names Listbox

You can sort the names ascending or descending by the names or their refers-to formulas by clicking the arrow buttons next to the Name or Refers to headings.

Dividing the Space between Name and Refersto

You can control the way the space in the Names Listbox is divided between the Names and their Refersto by dragging sideways the small splitter bar located just to the left of the Refersto Label.

Selecting one or more Names

Select multiple names using control+click

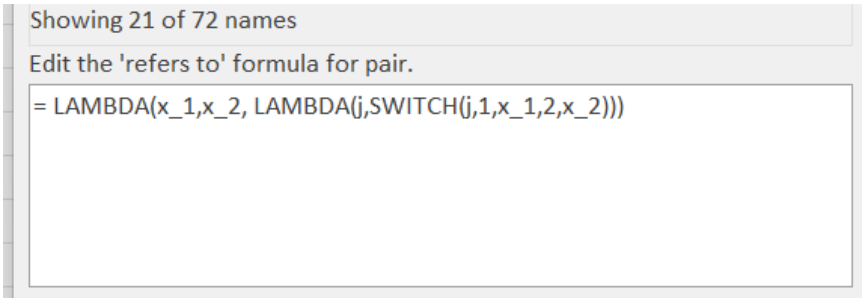
You can click on any name to perform actions on that name. You can select more than one name and perform actions on all selected names in one go.

Note that certain controls will be enabled or disabled, depending on whether or not one name is selected.

You can select multiple specific names by control+click on the names; you can select a sequence of names by clicking the first and shift+click on the last or by dragging the mouse over the names you want to select.

Control-A will select all the names currently shown.

Refers-to edit box



Below the Name Listbox is the Refers To Edit box. Use that to edit a name's refers to property. When more than one name is selected, the Refers To Edit box is not available.

If a name contains a relative reference, the result of changing the refers-to property is influenced by which cell is the active cell during the update.

Therefore, the Name Manager will prompt you for the active cell when you enter the edit box whilst a name with a relative reference is highlighted, and will warn you if you change a name from absolute to relative.

Important: Due to an internal limitation of Excel, it is not possible to have a name with a refersto string longer than approximately 240 characters. When you edit a name's refersto in this box, it will be truncated at 240 characters automatically.

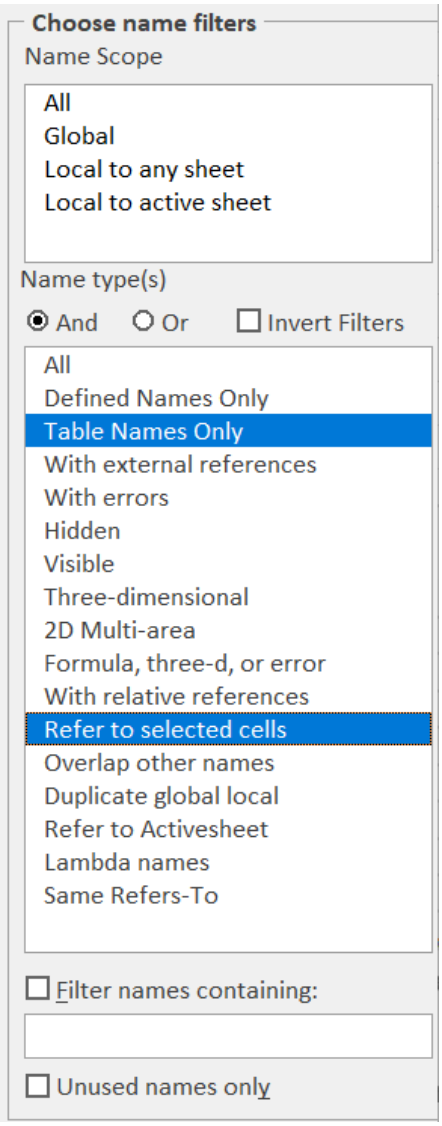
As from FastExcel 2.1 there is an exception: as long as the name refers to areas of cells directly (does not contain a formula), names can be edited up to 224 areas of cells.

Refers-to Splitter Bar

The raised bar that tells you how many names are showing is also a splitter bar that you can drag up and down to divide the space on the Name Manager form between the Names List box and the Refers to Edit box

Name Manager Filters

Name manager has four filters you can use to control the names that are shown in the Names Listbox. The filters act in combination: names shown must meet all four of the filter criteria.



Name Scope filter

Select one of the items (All, Global, Local to any sheet, Local to Active Sheet) in this listbox to restrict the names shown.

And/Or option buttons

If And is selected (default) only names are shown to which all chosen criteria in the “Type filter” apply. With “Or“ selected, names are shown to which any of the selected Type filter criteria apply.

Invert Filters

If the Invert Filters checkbox is ticked the filters are inverted so that, in this example, visible cells that Refer to selected cells are excluded rather than included.

NameType(s) filter

Select the type(s) of names you want shown. You can select more than one type of filter by holding the control or shift key while clicking in this listbox. When you select more than one type Name Manager will filter either names that match ALL the types selected (And) or names that match ANY of the types selected (Or).

Filter names containing Checkbox

Check this checkbox to only show names that contain the string you entered in the search edit box below. This box is checked automatically once you enter anything in the edit box. Of course the other filters will also apply.

Search Editbox

Enter any combination of characters you want the shown names to match to (including the usual wildcards).

The search string is matched against both the names and their refers-to properties.

When your workbook contains less than 100 names, the listing will be updated as you type. Because filtering the names can take a lot of time, when there are more than 100 names the listing will be updated when you leave the "Match filter" edit box by pressing the Tab key or enter or by clicking on another control, such as the Refresh button.

Unused names checkbox

Check this box to have the Name Manager only show names that are not used in any **formula** or any other **name** in the workbook, or as string constants in VBA.

Name Manager does **NOT** check some areas that can contain names:

- VBA code that uses string concatenation to create names.
- Names constructed using INDIRECT
- …

Make sure before you delete unused names that the names are not used in a way that this filter cannot detect: it is advisable to make a backup save before deleting.

Due to the heavy searching needed this option may take quite some time on large workbooks.

The other criteria will also apply!

This checkbox is cleared whenever one changes other filter criteria or when one changes the refers-to property.

Name Manager Action Buttons



Hide, Unhide Buttons



Hides or un-hides the selected name(s). With one name selected, only the button that applies is enabled, with more than one name selected, both buttons are enabled. Tables cannot be hidden.

Add Button



Opens the Add Name form: see below.

Delete Button



Deletes the selected names. Tables cannot be deleted by Name Manager.

List Button



Creates a new worksheet in the workbook with a listing of names in the workbook with all of their properties. You will be asked whether or not to use the filters set up in the dialog to filter the names to be listed. Tables are not included.

Pickup Button



This button is only enabled when the Name Manager finds a worksheet named according to this scheme: “Names yyyy-mmm-dd”. A sheet by that name will be created automatically by clicking the “List” button.

The button picks up **the selected names** from the names listing that has been created by the List Button. You can edit the names list (not the names themselves, but their refersto property and their visible property), you can even add new names to this listing (be sure to include the refersto and visible property, the other properties can be omitted). All **selected** rows of this listing will be picked up.

Note that the values of the cells will be used to create the names, NOT the formulas in the cells!

Existing names are changed to reflect the listing, new names are added.

You can use the List and Pickup buttons to transfer names between workbooks by copying the Names worksheet into a new workbook and then using the Pickup button.

You can also do multiple edits on the Refersto formulas on the Names sheet and then reload the changed definitions back into the workbook using the Pickup button.

Localize Button



Makes the selected names local to a worksheet.

This Button is enabled when either a global name is selected or multiple names are selected.

Three cases are possible here:

- A name refers to one sheet: The name is localized to that sheet automatically
- A name refers to more than just one sheet: You are prompted to choose **one** sheet to localize that name to.
- A name refers to no sheet: The name will be localized to the active worksheet.

Please note, that only the name itself will be changed, not the formulas in your worksheets.

If you have the confirmation checkbox checked, you will be prompted whether or not to delete the global name(s). If confirmation is switched off, the global name(s) will NOT be deleted.

Tables cannot be local to a worksheet and are ignored by this command

Globalize Button



The Button is enabled when either a local name is selected or one is in multi-mode. Local names will be made global by removing the sheet name prefix.

If you have the confirmation checkbox checked, you will be prompted whether or not to delete the local name(s). If confirmation is switched off, the local name(s) will NOT be deleted.

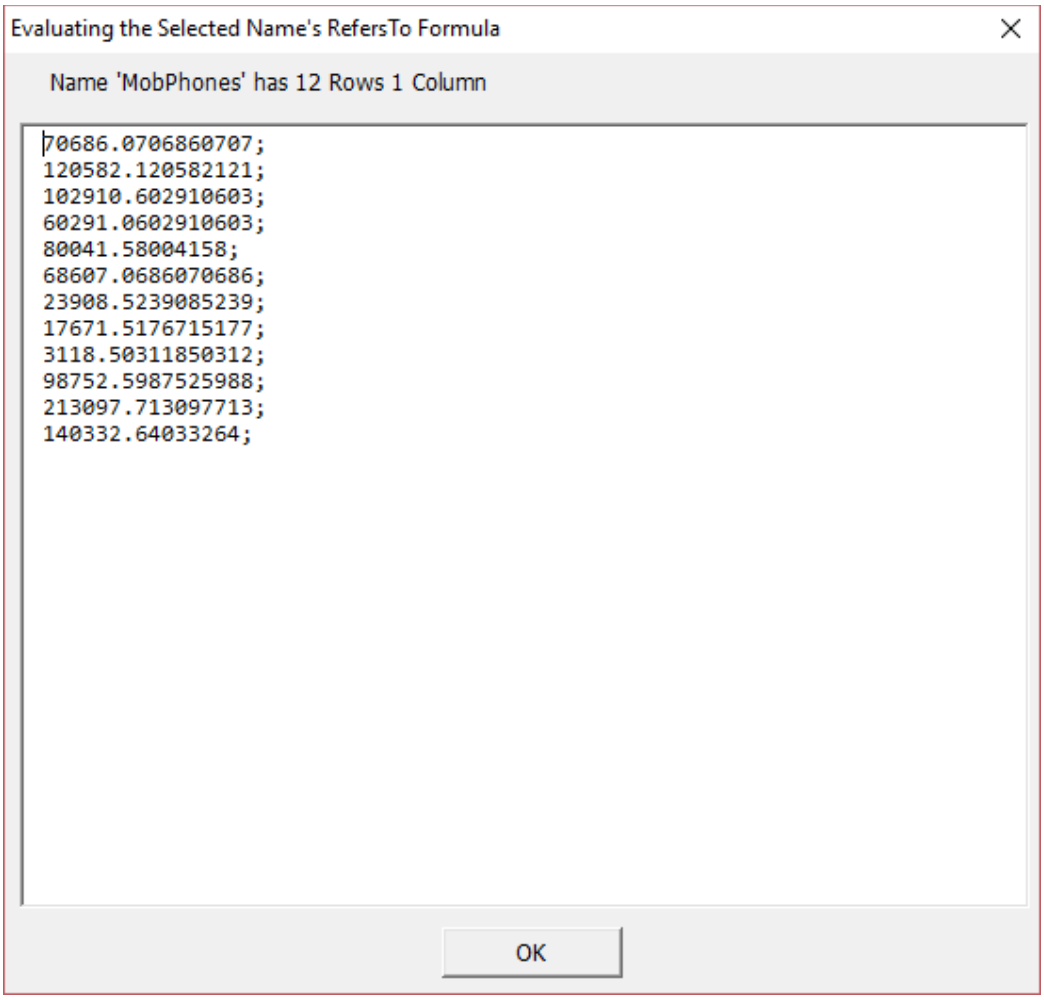
Note: only the name itself will be changed, not the formulas in your worksheets.

Tables cannot be local to a worksheet and are ignored by this command

Evaluate Button



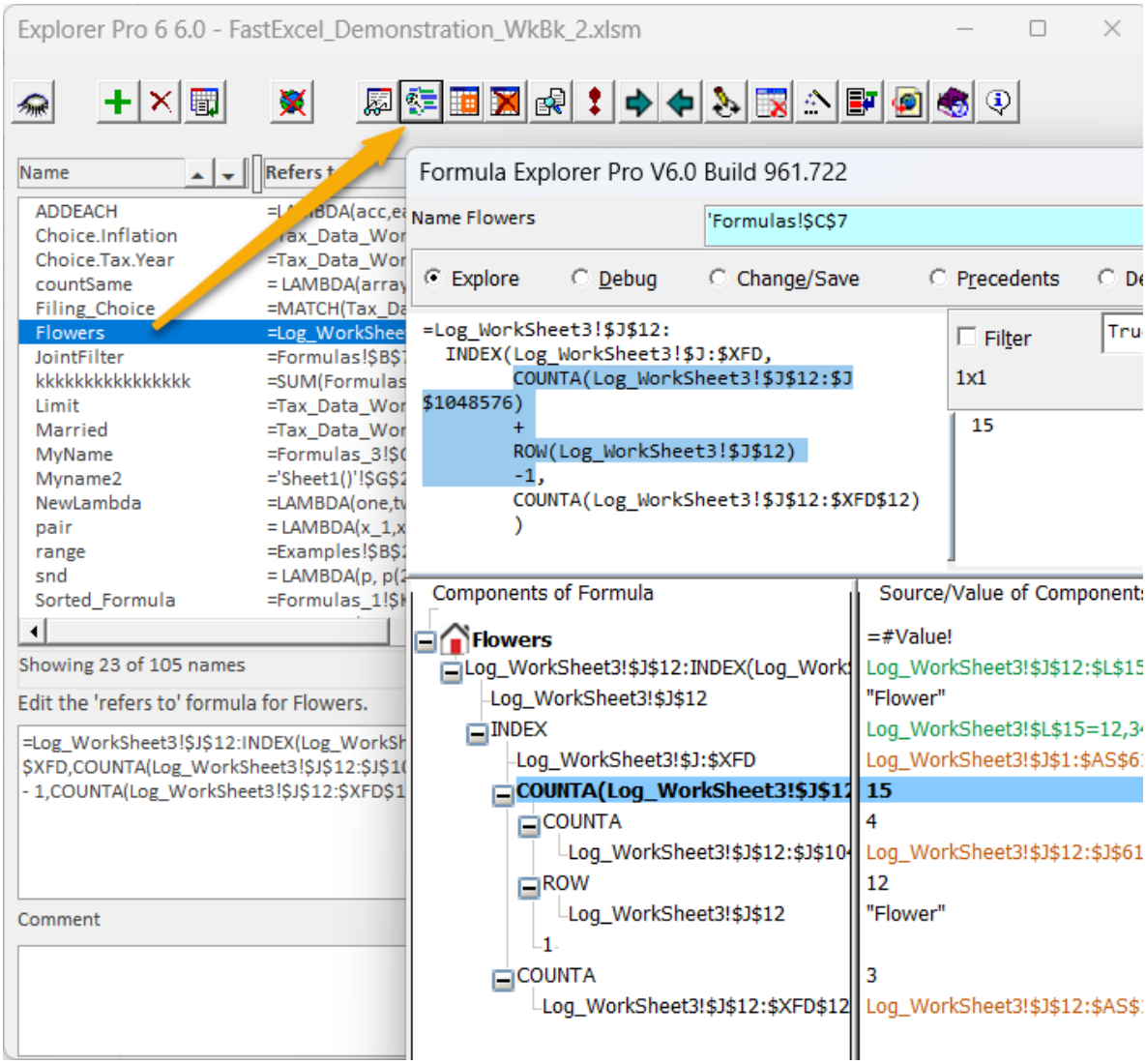
Click this Button to get a scrollable textbox with the value(s) the first selected name/table evaluates to.



Explore Name Button



When one name is highlighted in the main window, you can press the Explore button to show Formula Explorer Pro for the selected Name.



All Explorer Pro functions are available.

In the Explorer Pro form the name of the Name being explored is shown at the top left, and the home cell textbox is shown with a light blue background to indicate you are exploring a Named Formula.

Highlight Button



Use this button to highlight the ranges referred to by all names as they are currently shown in the Name Manager's main screen (names not shown due to filtering will not be highlighted).

After clicking this button you will first be prompted whether you wish to remove any existing highlights. The Name Manager will show a message stating all names it had trouble highlighting. Especially names referring to a 3D range and names that have a formula may be impossible to highlight.

Clear Button

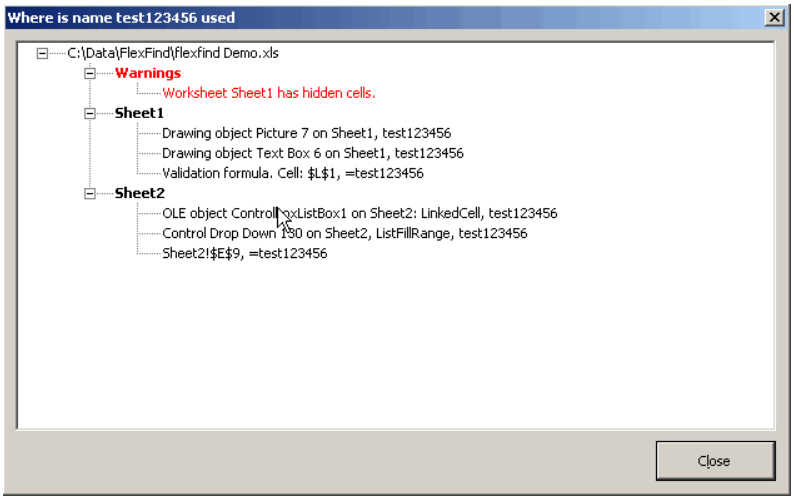


Clears all highlights produced with the Highlight button.

Is Used ? Button



Press this button to let Name Manager search for uses of the first selected name. A screen will be shown indicated all objects and cells where the name is in use. Click on one of the items to have the object selected. Tables are ignored by Is Used.



Refresh Button



In XL 2003 and up, the Name manager's form is shown Modeless and you can switch to Excel without closing the name manager's window. To make sure the name manager is up to date, press this button after doing edits in your workbook while the name manager is showing.

GoTo button



Clicking this button with a Name selected (or double-clicking a Name in the Names Listbox) will cause Excel to switch to the workbook and worksheet and referred-to range of the Name.

GoTo will have no effect for Names such as Names containing Formulas, or referring to ranges in closed workbooks.

GoBack button

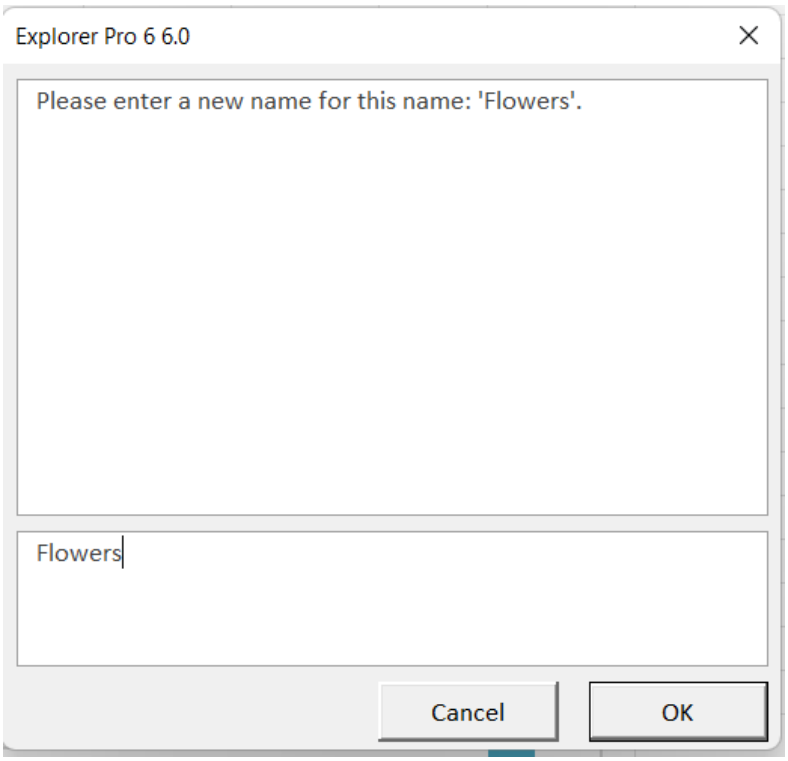


Clicking this button will GoTo the Name that was last Gone To.

Renaming a Name



You can change the name of a name or table by clicking the Rename Button or hitting F2, to bring up this dialog box.



UnName

This button converts selected Tables and Names back to ranges.

About Button



The About button shows the current version and build number of the component and the developers of Name Manager.

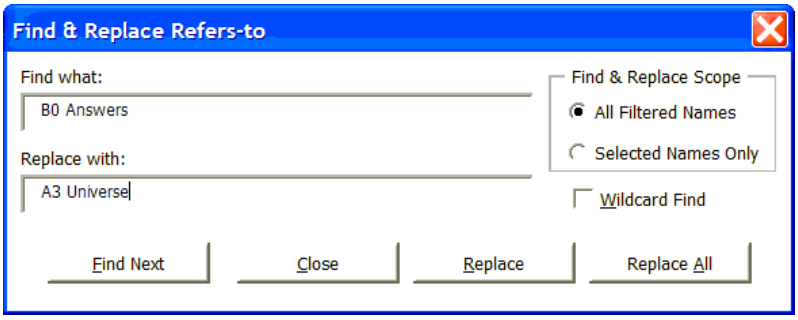
Dynamic Range Wizard Button

 This button launches the Dynamic Range Wizard. See the Dynamic Range Wizard section of this guide for details.

Find and Replace button



The Find and Replace button launches the find and replace dialog:



Find what:

Enter the text (Find text) you want to be found or replaced in the Refers-To in this box. If you want to use the wildcard characters * and ? then you must also check the Wildcard Find checkbox.

Replace With:

Enter the text (Replace Text) you want to replace the text found in the Refers-To.

Find & Replace Scope

Choose to apply the find and replace operation either to all the names that have been filtered in the names listbox, or just to all the names that are currently selected in the names listbox.

Find Next Button

Finds and selects the next occurrence of the Find Text within the Filtered or Selected names Refers-To.

Close Button

Closes the Find and replace dialog.

Replace Button

Finds **the first** Refers-To that contains the Find Text within the Find & Replace Scope and replaces it with the Replace text. If the first Refers-To found contains multiple copies of the find text then they are all replaced.
If the Find text cannot be found an error message will be shown.

If Confirm Changes is checked then you will be asked to confirm the replace operation.

Replace All Button

Finds **every** Refers-To that contains the Find Text within the Find & Replace Scope and replaces them with the Replace Text.

Name Map Button



The Name Map button analyzes all the formulas on the worksheets in the workbook and in other names to produce a Name Map worksheet showing counts of the usage of the Names by worksheet and by other Name.

- Names created by INDIRECT formulas are shown in bold italic.
- Named Lambdas are shown in Green
- Names in formulas with no Name Manger Definition are colored Red.

							Name Counts by Worksheet - Use GoTo Arrow to Show Where Name is Used			
Name	**Total**	**Explanation**	**UniVerse**	**Answers**	**Products**	**Respondents**	**RespondentData**	**ProductData**	**Sectors**	**SegmentNames**
AddTwo	**1**	0	1	0	0	0	0	0	0	0
AnEmbeddedName	**1**	0	1	0	0	0	0	0	0	0
Answers.Product	**120**	0	0	120	0	0	0	0	0	0
Answers.SectorName	**72**	0	0	72	0	0	0	0	0	0
DontKnowfactor	**533**	0	0	0	533	0	0	0	0	0
MobPhones	**37**	0	37	0	0	0	0	0	0	0
MobSpend	**37**	0	37	0	0	0	0	0	0	0
Network	**24**	0	24	0	0	0	0	0	0	0
OurPhones	**37**	0	37	0	0	0	0	0	0	0
TotalOurSpend	**2**	0	2	0	0	0	0	0	0	0
Universe	**1734**	0	0	0	1066	668	0	0	0	0
Universe.Emps	**1**	0	1	0	0	0	0	0	0	0
Universe.Emps2001	**0**	0	0	0	0	0	0	0	0	0
Anonymous	**1**	0	1	0	0	0	0	0	0	0

					Names Embedded in Other Names
Name	**ContainsName**	**Start Pos**	**Characters**	**NameType**	**Names Found**
AnEmbeddedName	**ADDTWO**	2	6	Lambda	1

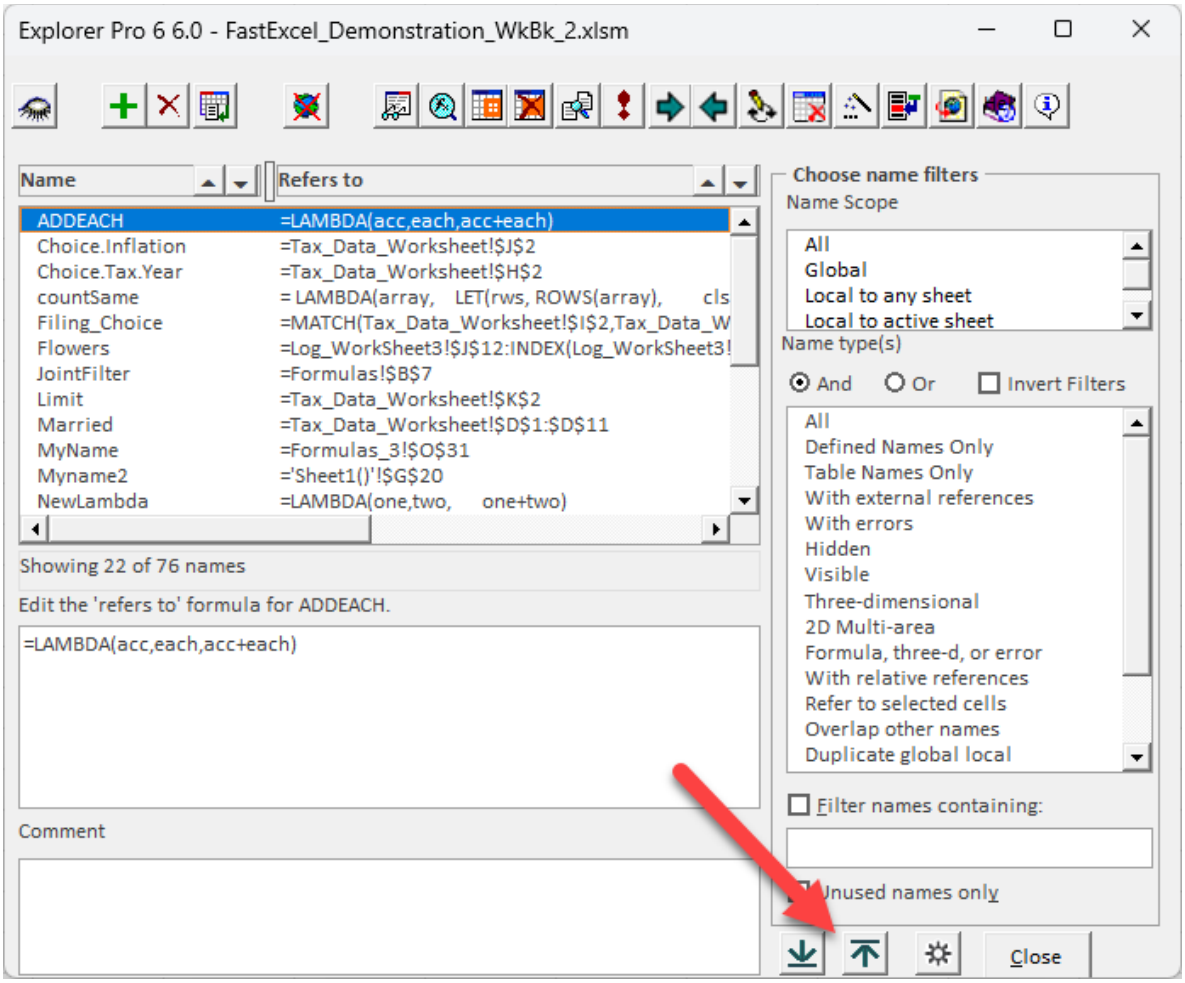
Name Manager Help Button



The Name Manager Help button provides on-line help about Name Manager

Import Export Names to External .TXT files

Use the Import and Export buttons to copy Names to and from external .txt files



Format of Names in the .txt files

Each Name in the .txt file consists of a single line.

If the Name has a comment the line starts with the comment enclosed by a preceding /* and followed by */ This is followed by the Name of the Name and then its Refers-to formula.

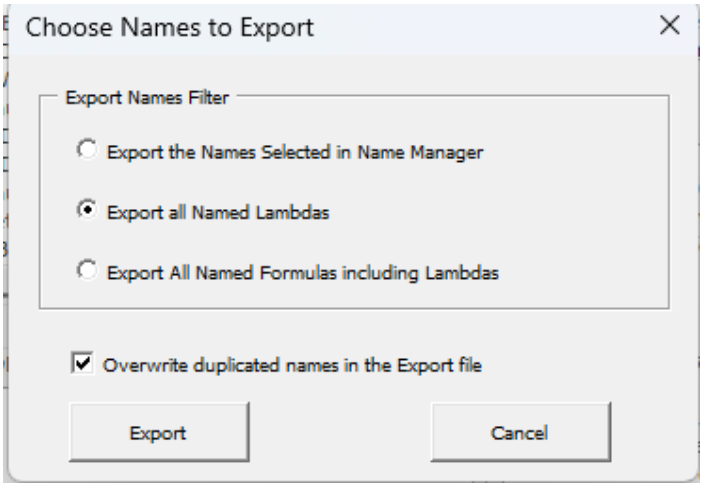
[/* Comment text */] Name=Formula

Formatting of the Name Formula is preserved in in Export/Import operations by changing both carriage return characters (CR) and carriage return-Line feed characters (CRLF) to line-feed characters (LF).

Name definitions in .txt files are always in US English format.

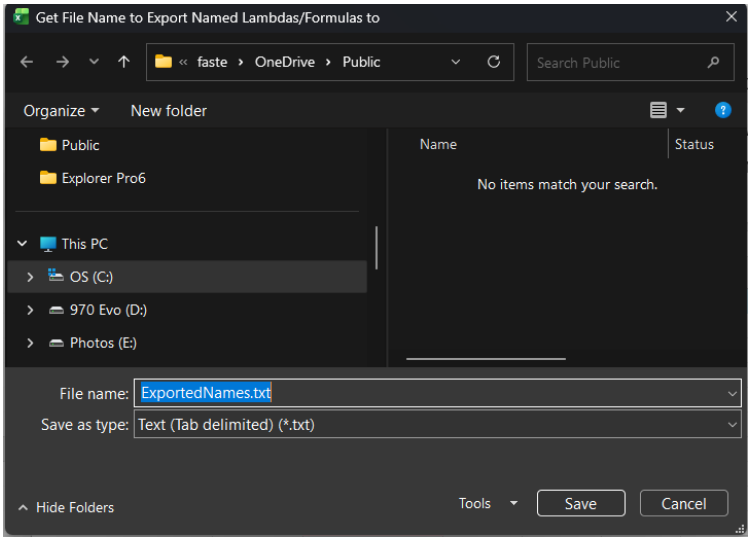
Exporting Names

Clicking the Export Names button  shows a form to choose names to export.

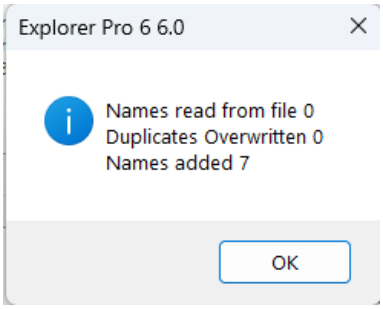


If a Name already exists in the .txt file you can choose whether to overwrite it or not.

Click Export to choose a file name and location for the Export text File.

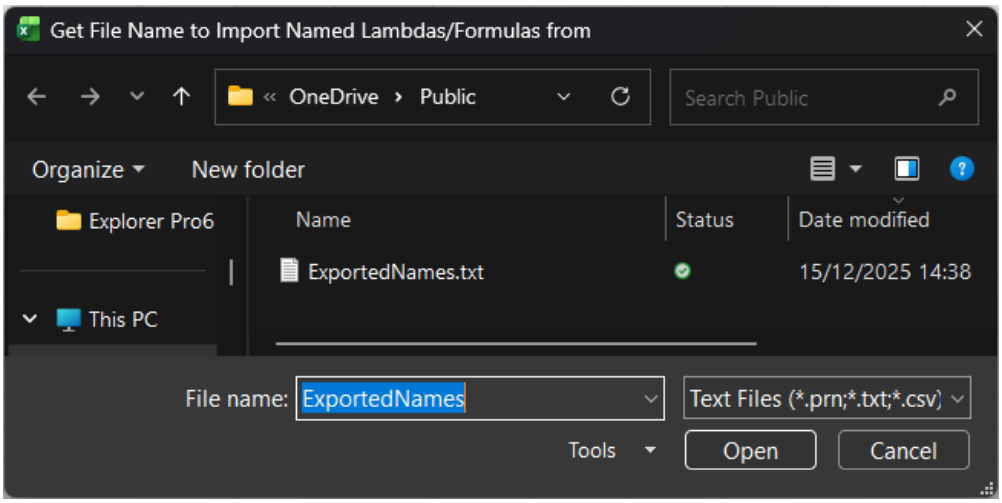


Click Save to export the selected names to the file.

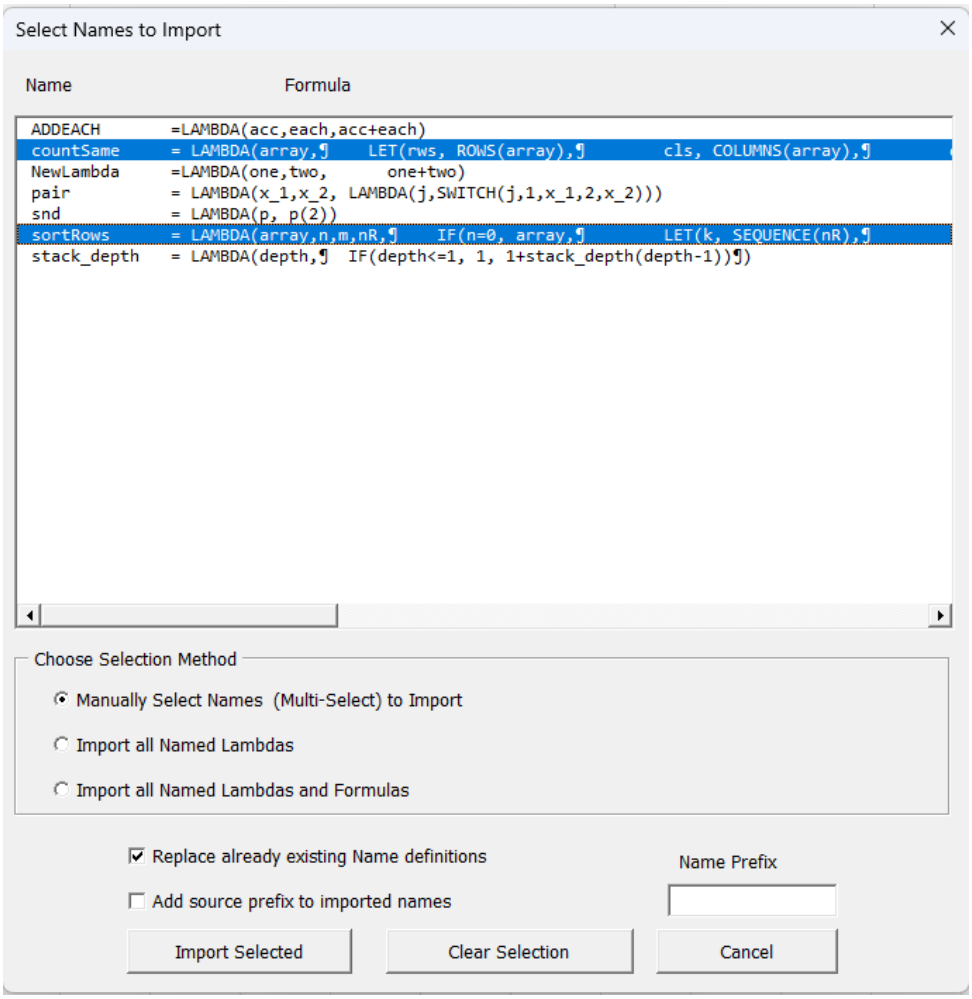


Importing Names

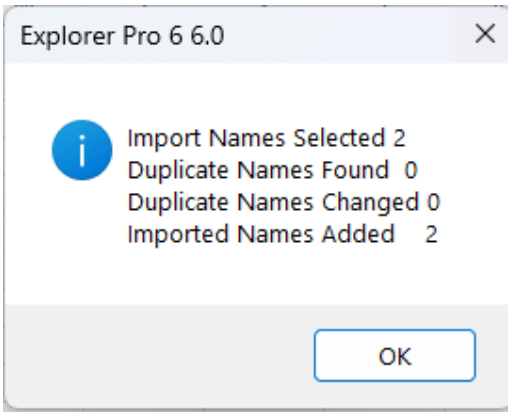
Clicking the Import Names button  shows a form to choose the Import File.

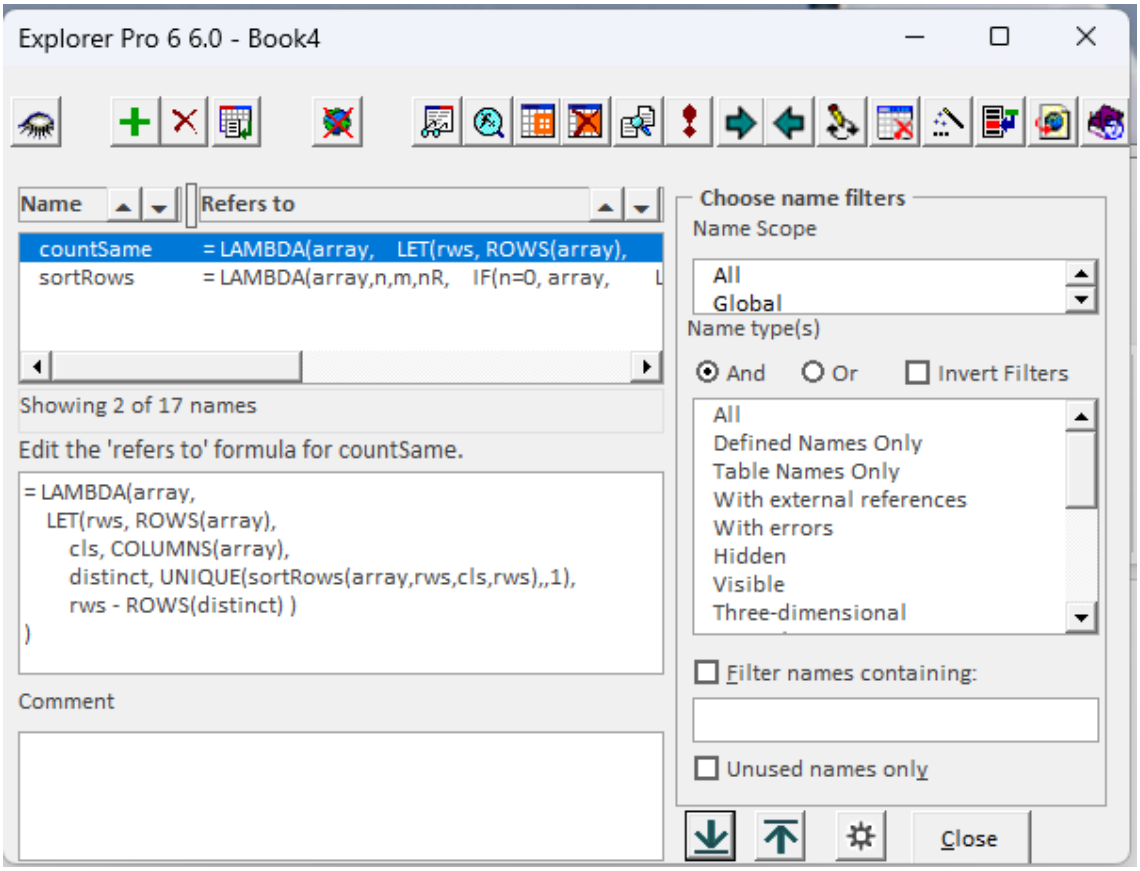


Click open to show the Import Names selection form.



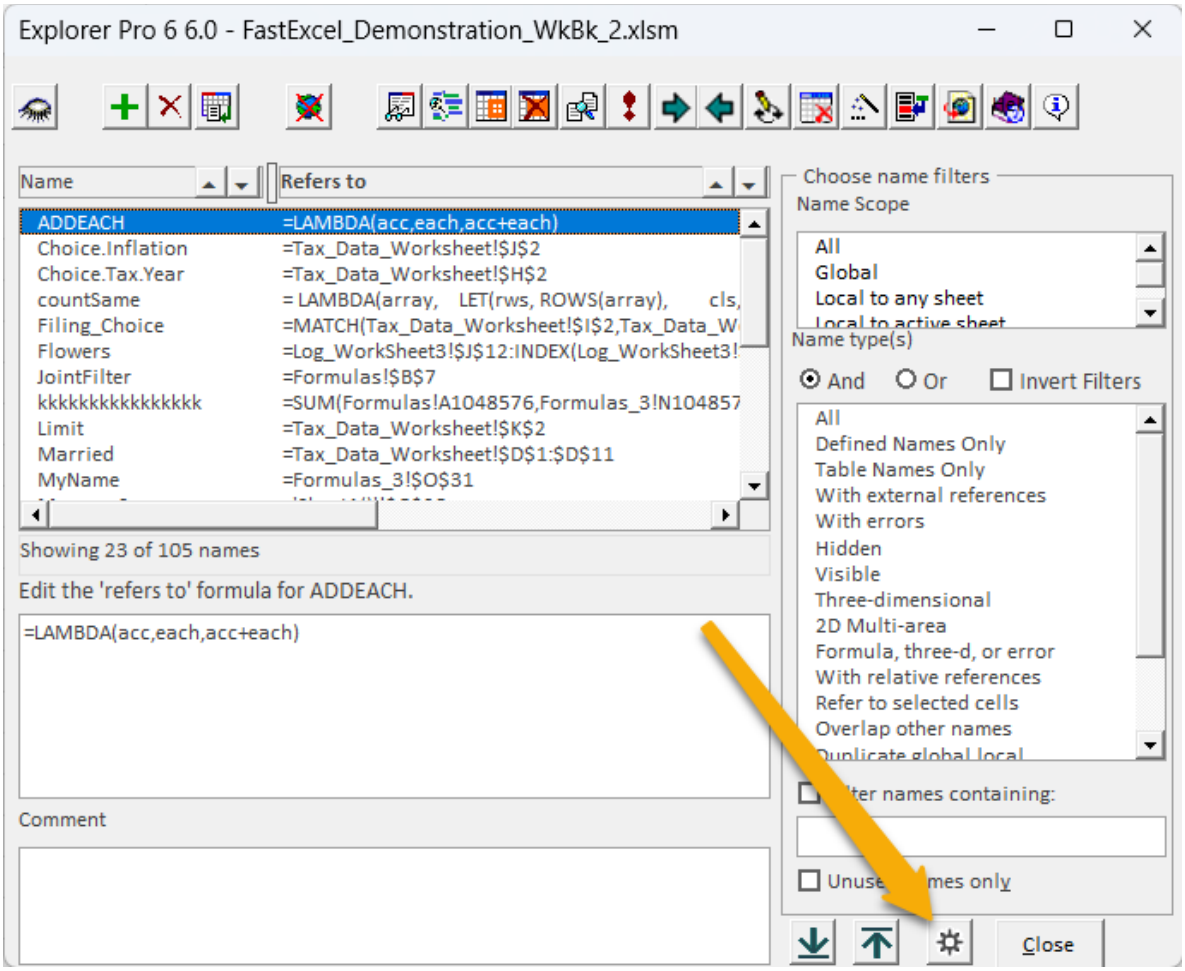
After choosing Names click Import Selected to import the Names and their definitions into the active workbook and show them in the Name Manager Pro form.

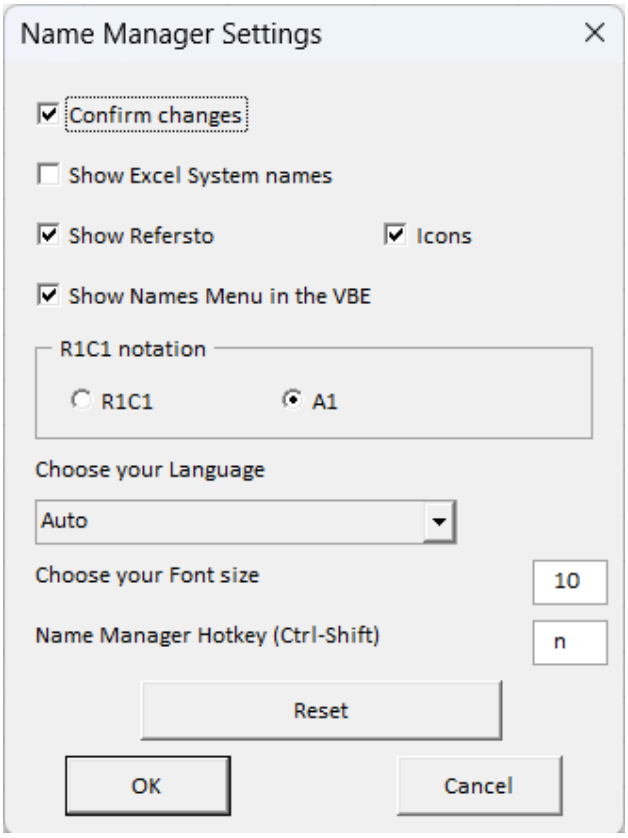




Name Manager Settings

Click the Settings button to show the Name Manager Settings form.





Confirm Changes



Check the Confirm Changes box to get prompts to confirm any changes you make with the action buttons

Show Excel System Names

Check this box to show Excel's system names (like Print_Area, Print_Titles, _FilterDatabase). **In general it is recommended not to modify these names or to delete them.**

Show Refersto

Check this box to have the name manager show the refersto properties next to the names listing.

Icons

Check this box to show Icons for the Name manager Action buttons:



Uncheck this box to show Buttons:

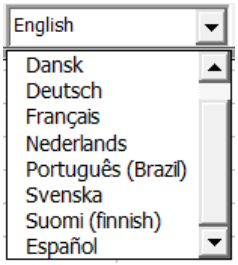


R1C1 Notation

Repair corrupt names by clicking the R1C1 names checkbox twice!	Toggles between R1C1 and A1 worksheet reference style (Same as in Tools, Options, General tab). Please note that this is a "permanent" change, it stays in effect after closing the name manager

This checkbox may also be used to repair corrupt names in any workbook. Simply click it twice and you will be prompted to rename any corrupt name!

Choose Language



Choose one of the available languages. After pressing OK, this language will be used in all messages and on all user forms.

Choose Font Size

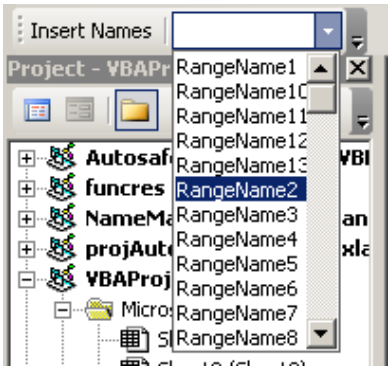
The font size chosen will apply to noth Name manager Oro and Formula Explorer

Name Manager Hotkey

Changes the hotkey used to launch Name Manager Pro

Name Manager and the VBE (Windows Only)

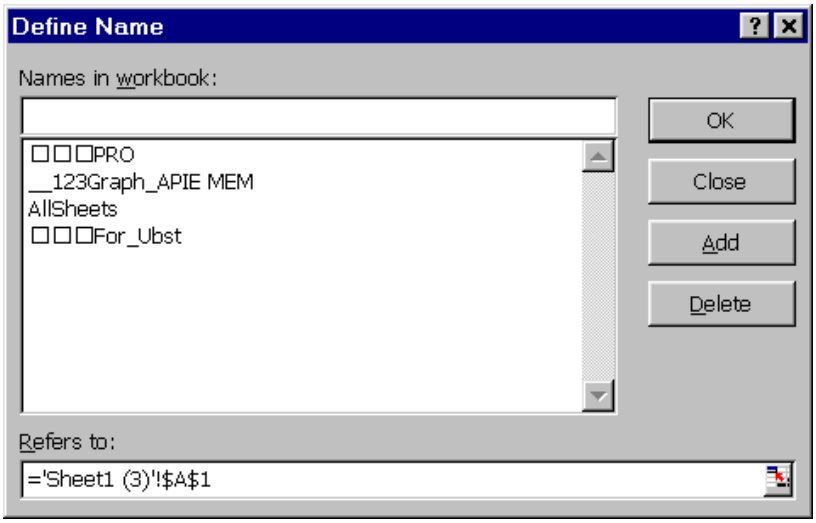
With version 4.1 we've introduced a new nifty tool: a toolbar with a dropdown with range names to pick from in the Visual Basic Editor:



Selecting a name inserts that name at the current insertion point in your code.

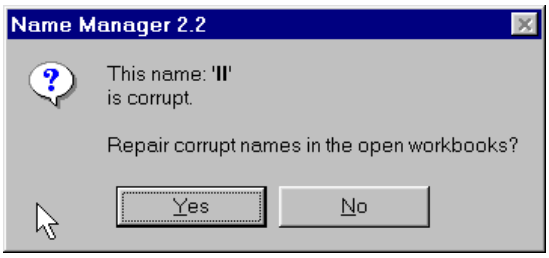
Corrupt names

Sometimes a workbook may contain corrupted names, like these:



Names like these cannot be deleted or edited at all using the normal methods.

The name manager will detect this when you try to edit or delete such a name and offer you the opportunity to rename them to a valid name. After changing the invalid names they can be edited and/or deleted.



Problems discovered during the development of this utility

There are some bugs in Excel's Names collection and Name Object:

Non US List separators

The RefersToLocal property of a name will not accept other list separators than the US default comma. For instance, this code line:

```
Names("Test").RefersToLocal="=SUM($A$1;$B$1)"
```

Gives a runtime error, even if the semicolon is set as the list separator in Control panel and XL accepts this formula in its cells. In the name manager a workaround has been used to overcome this problem.

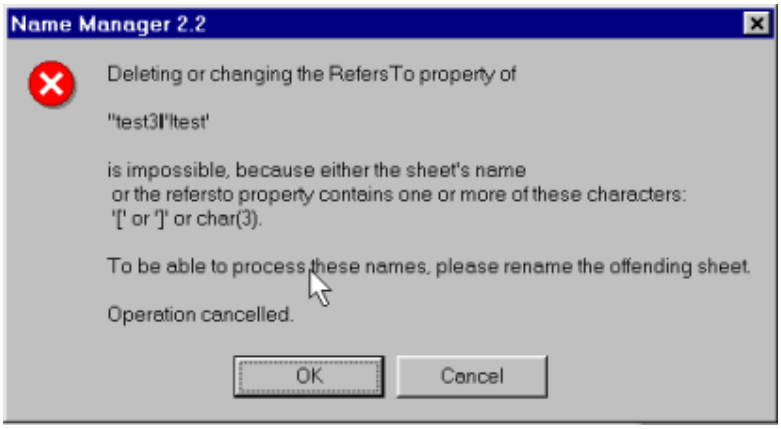
Unusual Characters in Names

When one defines a local name on a Sheet named "Test":

Name: Test!test Refersto: "1"

and renames this sheet to e.g. "Hi! There!" (without the quotes), this name becomes inaccessible for editing and deleting, yielding an invalid name error message.

Other strange characters in sheet names (especially "[", "]" and char(3)) may even cause a crash of Excel when trying to access these local sheet names. A check has been included in the name manager to overcome this problem, yielding this message:



Press cancel if you have multiple names selected and wish to abort the process you have chosen.

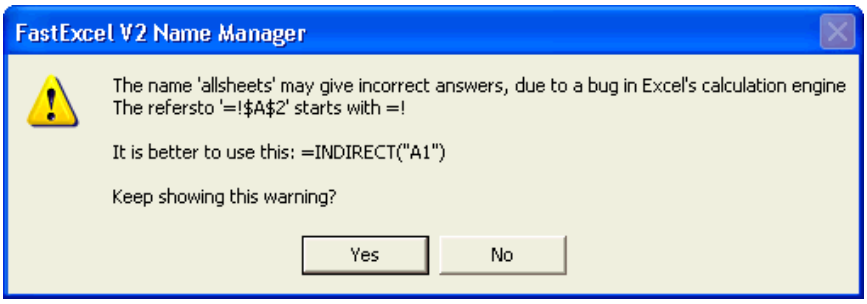
Duplicate Global Local Names

Accessing a global name whilst the active sheet has an identically named name local to that sheet, will change the properties of the local name and NOT the global name, even if the name is fully qualified with the workbook name. Name Manager bypasses this problem.

Names with refers-to starting with =!

Names with refers-to starting with =! may give incorrect results when calculation is called from VBA. They are calculated as though they always refer to the active worksheet rather than the sheet that they are being used on.

Name manager will show a warning message whenever it finds a name of this type.



Dynamic Range Wizard

A wizard for creating Defined Names that expand and contract automatically.

Creating Dynamic Range Names

Use the Dynamic Range Wizard when you need to refer to tables of data that can change in size. The Dynamic Range Wizard gives you an easy way to create range names that dynamically expand and contract as the amount of data changes.

The ranges can dynamically expand and contract by rows or by columns or by both rows and columns.

There are a variety of methods available to handle embedded blanks and multiple tables on a worksheet.

Starting the Dynamic Range Wizard

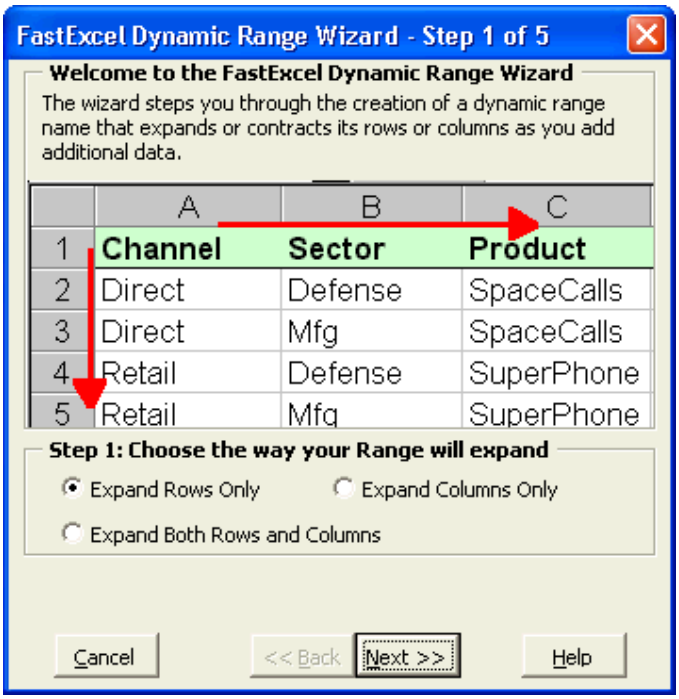
You start the Dynamic Range Wizard from the Wizard button on the Name Manager form.



The wizard will then guide you through the 5 steps to create your dynamic range name.

Dynamic Range Wizard Step 1

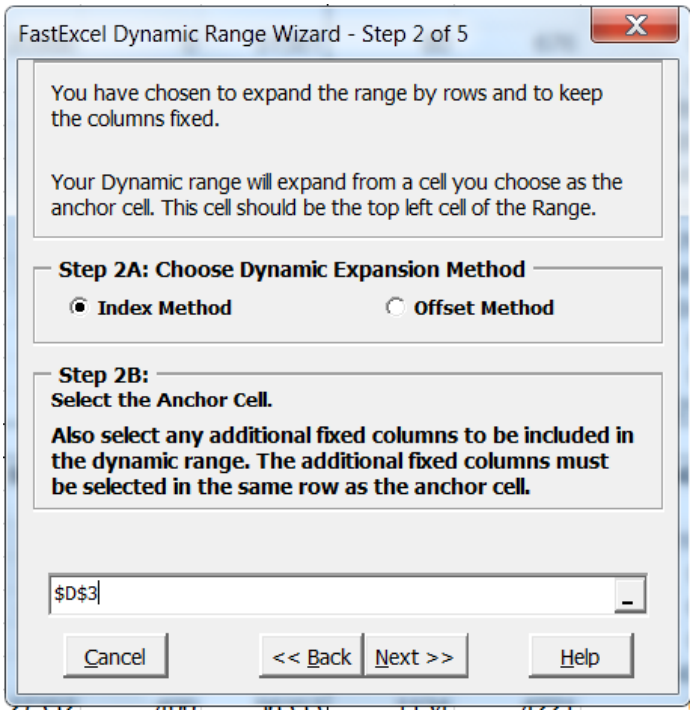
In this step you choose whether your dynamic range will expand by rows, by columns or by both rows and columns.



Select one of the three options and then press the Next button.

Dynamic Range Wizard Step 2

In this step you select the anchor cell, the expansion method, and any additional fixed rows or columns you want to include in the Dynamic Range.



This is the form you will see if you chose to expand by rows only in Step 1. The words will change appropriately if you select a different option in Step 1.

Step 2A: Choose Dynamic Expansion Method

The Dynamic Range Wizard creates formulas stored in Excel Defined Names that return automatically resizing ranges. These formulas can use either of the Excel INDEX or OFFSET functions.

- INDEX is not a volatile function but consumes more memory and slows down opening the workbook.
- OFFSET is a volatile function, and so will be recalculated at every calculation, which slows down the recalculation, but uses less memory than INDEX.

Step2B: Select the Anchor Cell

When expanding by rows you identify the anchor cell and fixed columns by clicking on the anchor cell and selecting any additional columns by dragging the mouse across the cells in the same row as the anchor cell.

When expanding by columns you identify the anchor cell and fixed rows by clicking on the anchor cell and selecting any additional rows by dragging the mouse **down** the cells in the same column as the anchor cell.

When expanding by both rows and columns you must only select a single cell for the anchor cell.

If you click on the grey button showing … on the right of the input box the form will disappear and you will see:



In this example I have chosen to build a dynamic range that:

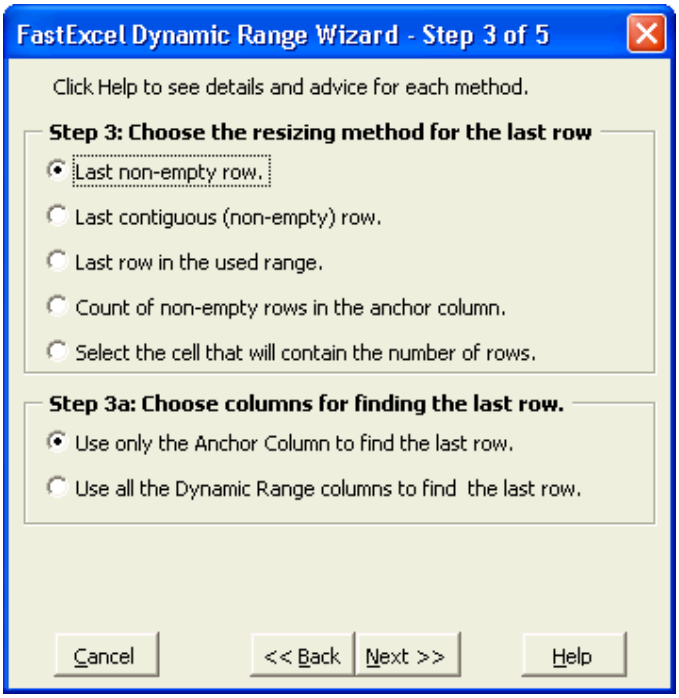
- Starts in row 16.
- Expands dynamically downwards by rows.
- Includes three columns: B, C and D.

When you have selected the Anchor Range press Next to go to Step 3, or press Back to return to Step 1.

Dynamic Range Wizard Step 3

In Step 3 you choose the expansion method to use for the rows of your dynamic range, or confirm the anchor selection and fixed rows if you are expanding only by columns.

Choosing the expansion method for the last row.



Last non-empty row.

Because this method finds the last visible cell it should be ***used with care on ranges that are filtered, contain hidden rows, or contain rows with zero height.***

This method looks up from the last row to find the last **visible** non-empty cell in a column. This is the default re-sizing method.

You can use this method even if your data contains blanks. The last cell in a column is the last **visible** cell that contains any character (including ‘), number or formula. Empty cells that have been formatted are ignored.
See **COUNTROWS2** for more details.

Last contiguous (non-empty) row.

This method is not recommended for ranges that are filtered, contain hidden rows, or contain rows with zero height

This method looks down from the anchor row to find the first **visible** empty cell, and re-sizes to include all the rows from the anchor row to the row before the empty cell. This results in a range of all the contiguous (adjacent) non-empty cells in the column.

Use this method if you want your dynamic range to be delimited by a blank/empty cell. This is useful when you have multiple tables stacked vertically on the same worksheet.
See **COUNTCONTIGROWS2** for more details.

Last row in the used range.

This method looks down from the anchor row to the last row in Excel's used range.

This will include all cells on the worksheet with any formatting even if they are empty, and will include all the columns, not just the columns you have selected for the dynamic range.
See **COUNTUSEDROWS2** for more details.

Count of non-empty cells in the anchor column.

This method uses Excel's **COUNTA** function to count non-empty cells from the anchor cell down to the last row.

If your data includes any empty cells this method will not include all the cells including data.

Use this method only if you require compatibility with users who do not have FastExcel installed.

Select the cell that will contain the number of rows.

Choosing this option will show a reference box for you to select the cell that contains a formula giving the number of rows in the dynamic range.
Use this option when:

- You have a large number of dynamic ranges that all have the same number of rows, so that it is more efficient to only find the number of rows once.
- You are using a special calculation to determine the number of rows.

Step3A: Choose columns for finding the last row

These two additional options are only available if you have selected either "Last non-empty row" or "Last contiguous non-empty row", and you have chosen to expand only by rows.

Use only the Anchor Column to find the last row.

This option finds the last row only in the Anchor Column of your dynamic range. Use this option if all the columns in your dynamic range will always have the same last row, or if you want the last row to always be determined by the Anchor column.

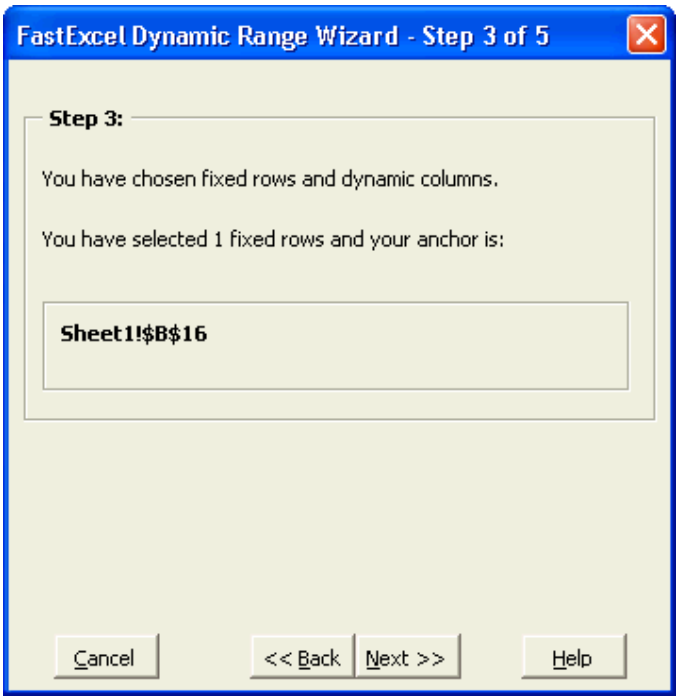
Use all the dynamic range columns to find the last row.

This option looks in all the columns of your dynamic range and uses the largest last row found. Use this option if some of the cells in the last row of your dynamic range may be empty.

The calculation time for this option increases with the number of columns in your dynamic range.

Confirm the Anchor Cell and fixed columns

If you selected fixed rows and dynamic columns in Step 2 you are asked to confirm your selection in Step 3.

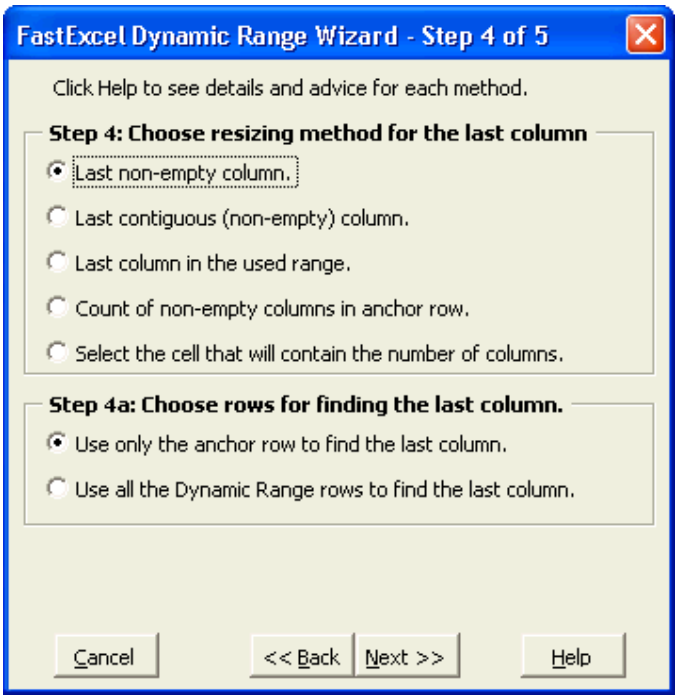


If you are happy with your selection press **Next** to go to Step 4.

Dynamic Range Wizard Step 4

In Step 4 you choose the expansion method to use for the columns of your dynamic range, or confirm the anchor selection and fixed columns if you are expanding only by row.

Choosing the expansion method for the last column.



Last non-empty column.

Because this method finds the last visible cell it should be ***used with care on ranges that contain hidden columns, or contain columns with zero width.***

This method looks left from the last column to find the last **visible** non-empty cell in a row. This is the default re-sizing method.

You can use this method even if your data contains blanks. The last cell in a row is the last cell that contains any character (including ‘), number or formula. Empty cells that have been formatted are ignored.
See **COUNTCOLS2** for more details.

Last contiguous (non-empty) column.

This method is not recommended for ranges containing hidden columns or columns with zero width.

This method looks to the right from the anchor column to find the first **visible** empty cell, and re-sizes to include all the columns from the anchor column to the column before the empty cell. This results in a range of all the contiguous (adjacent) non-empty cells in the row.

Use this method if you want your dynamic range to be delimited by a blank/empty cell. This is useful when you have multiple tables stacked adjacent to one another on the same worksheet.

Do not use this method on ranges containing hidden columns or columns with zero width.
See **COUNTCONTIGCOLS2** for more details.

Last column in the used range.

This method looks to the right from the anchor column to the last column in Excel's used range.

This will include all cells on the worksheet with any formatting even if they are empty, and will include all the columns and rows, not just the rows you have selected for the dynamic range.
See **COUNTUSEDCOLS2** for more details.

Count of non-empty cells in the anchor row.

This method uses Excel's **COUNTA** function to count non-empty cells from the anchor cell across to the last column.

If your data includes any empty cells this method will not include all the cells including data.

Use this method only if you require compatibility with users who do not have FastExcel installed.

Select the cell that will contain the number of columns.

Choosing this option will show a reference box for you to select the cell that contains a formula giving the number of columns in the dynamic range.

Use this option when:

- You have a large number of dynamic ranges that all have the same number of columns, so that it is more efficient to only find the number of columns once.
- You are using a special calculation to determine the number of columns.

Step4A: Choose rows for finding the last column

These two additional options are only available if you have selected either “Last non-empty column” or “Last contiguous non-empty column”, and you have chosen to expand only by columns.

Use only the Anchor Row to find the last column.

This option finds the last column only in the Anchor Row of your dynamic range. Use this option if all the rows in your dynamic range will always have the same last column, or if you want the last column to always be determined by the Anchor row.

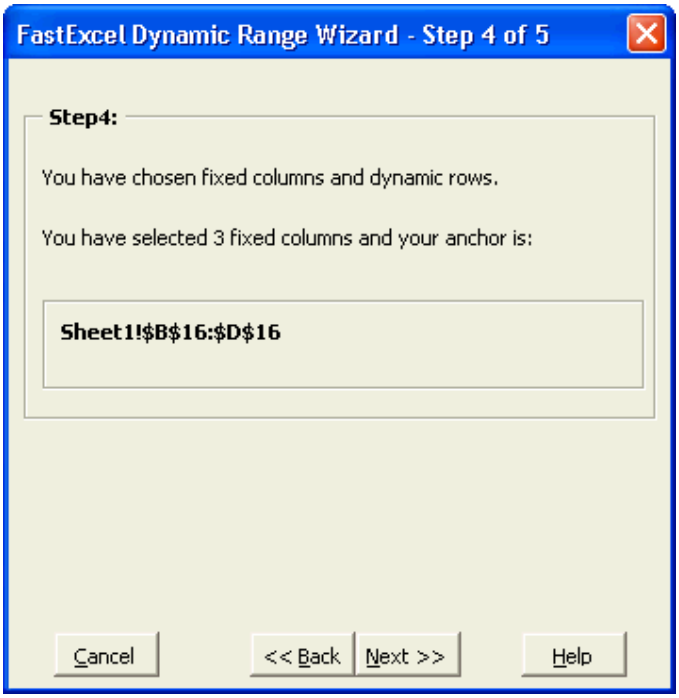
Use all the dynamic range rows to find the last column.

This option looks in all the rows of your dynamic range and uses the largest last column found. Use this option if some of the cells in the last column of your dynamic range may be empty.

The calculation time for this option increases with the number of rows in your dynamic range.

Confirm the Anchor Cell and fixed rows

If you selected fixed columns and dynamic rows in Step 2 you are asked to confirm your selection in Step 4.



If you are happy with your selection press **Next** to go to Step 5.

Dynamic Range Wizard Step 5

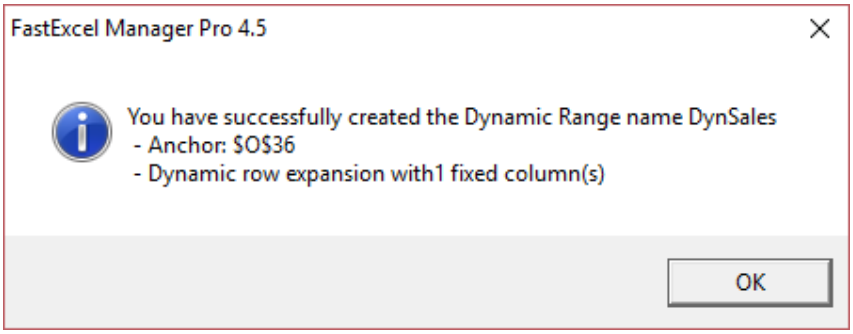
The last step in the Dynamic Range Wizard is to give a name to your dynamic range.

The name will be checked for validity: names must start with a letter and can contain only letters, numbers, full stops and underscores. Blanks are not allowed.



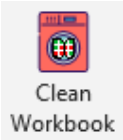
If the name you enter already exists you will be asked if you want to change the definition of the name.

Press Finish to create the Dynamic Range name: you will get a confirmation message similar to this:



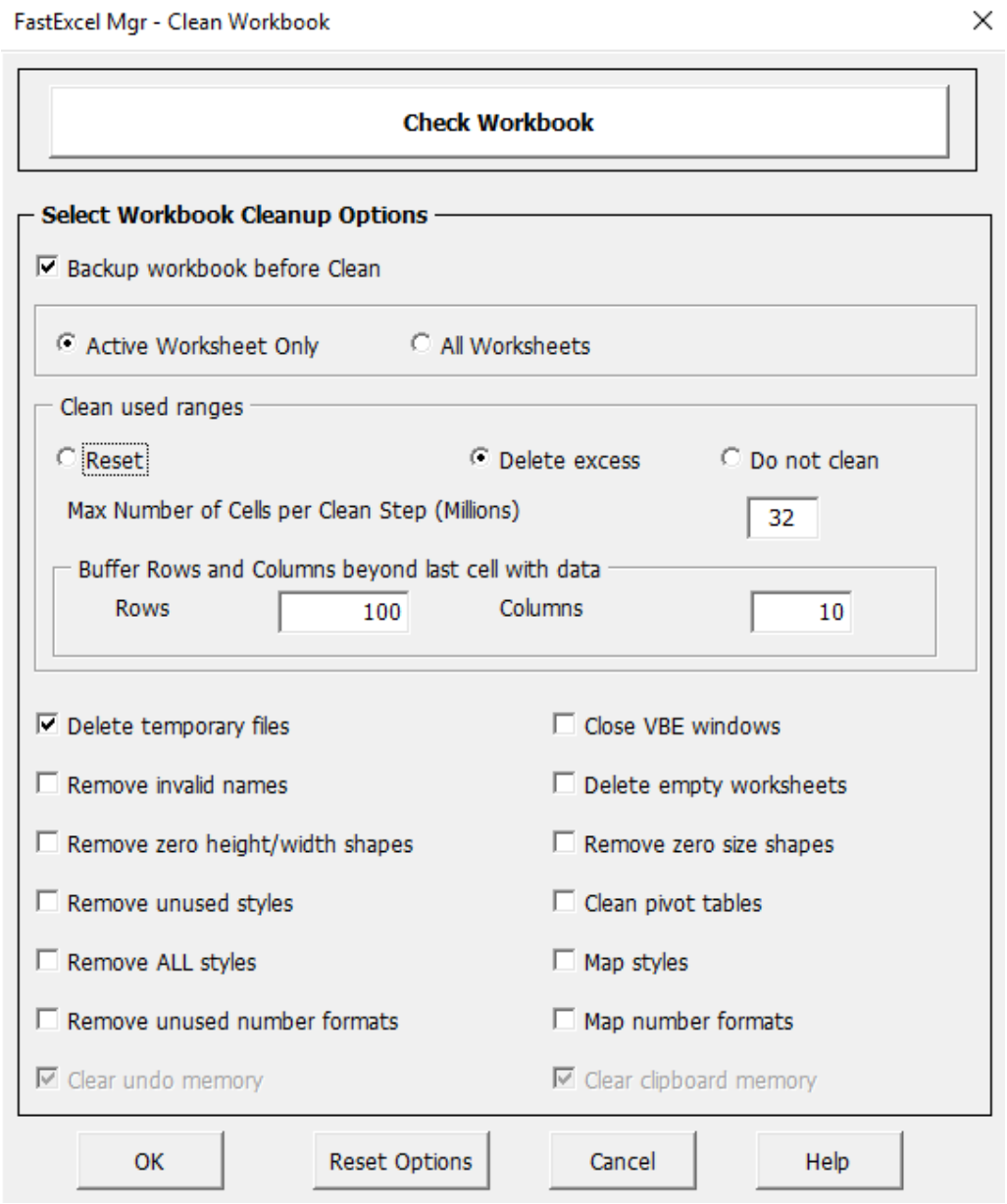
Clean Workbook

Clean Workbook helps you minimise the size and memory footprint of your workbooks.



The Clean Workbook button shows you the Clean workbook options form. Some options are not available with Mac Excel:

- Delete temporary files
- Close VBE Windows
- Remove unused Number Formats & Map Number Formats



Check Workbook

This command produces a report showing statistics for the active workbook.

Potential problem areas are highlighted in Orange.

See the Clean Workbook command for details.

Backup Workbook before Clean

Because you cannot "UNDO" the changes made by clean workbook, we strongly recommend that you let FastExcel backup your workbook before cleaning. A copy of the workbook will be saved in the same directory with a .BAC file extension.

Active or All Worksheets



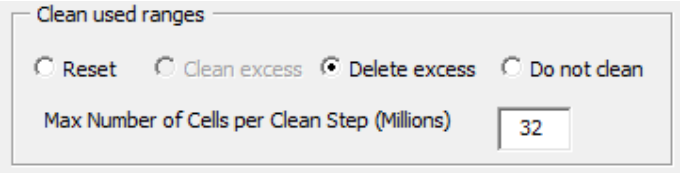
Choose to clean either only the active worksheet or all worksheets.

Clean Used Ranges

Excel's Used Range and Last Cell:

Check the Last Cell using Ctrl-End. Too large a Used Range can slow down calculation and increase memory usage and file size	Excel only tracks information for the range of cells on a worksheet that it considers as used. This is known as the "Used Range" and is the rectangular area of cells with the "last cell" at the bottom right. You can select the last visible used cell on a worksheet by using Ctrl-End, or Edit→Goto→Special→Last cell. Excel considers a cell used if it has been formatted in any way, or contains a constant or a formula or a blank. When you delete cells Excel does not immediately reset the Last Cell or shrink the Used Range.

FastExcel gives you three different methods of cleaning the used range:



Reset Used Range

This method resets the used range for all worksheets. No information is removed from the workbook, so this is the safest available method.

Clean Excess Used Range

Clean Excess used Range is the recommended method.	This method removes excess formatting beyond the last cell containing data or a formula. The method used does not cause alterations to formula which reference cells that are cleaned, so this is a safe method to use. The method will handle a large number of special, "difficult-to-clean" problem used ranges. Cleaning complex used ranges with hidden rows and columns can be slow. Unfortunately this method does not work effectively with Excel 2007 and later versions, and is disabled for these versions.

Delete Excess Used range

This method deletes all rows and columns beyond the last cell containing data or a formula.

Be careful if you use Delete Excess	This action will adjust all formulas that refer to these cells and if the entire range referenced has been deleted the formula is replaced with #N/A:

For Example:

Formulas before delete excess used range:
`=SUM(Z1:Z1000)`
`=SUM(A500:A600)`

Rows 500 to 1000 are deleted by Delete Excess Used range

Formulas after Delete Excess Used range:
`=SUM(Z1:Z499)`
`=#N/A`

Do Not Clean

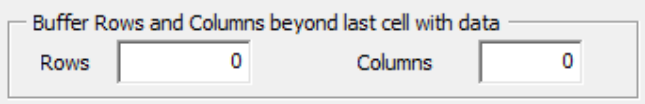
Allows you to use the other Clean Workbook options without cleaning the used range.

Max Number of Cells per Clean Step

Because deleting rows and columns can be a very memory and resource intensive operation FastExcel does it in small steps. This option allows you to control the how many million cells will be cleaned in each step.
The default is 32 (million cells). The maximum allowable is 64 (million cells) and the minimum allowable is 1 (million cells).

If Excel experiences memory or resource problems during a used-range clean you should retry using a smaller number.

Buffer Rows and Columns



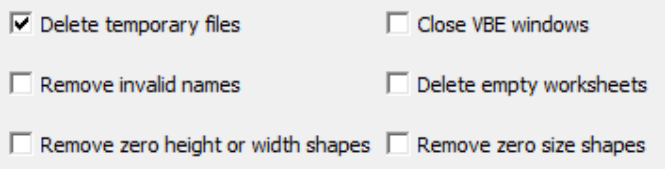
You can set the number of buffer rows and columns to reserve some rows and/or columns beyond the last cell containing data or a formula.

Use this when you want to:

Keep some additional formatted rows or columns

Prevent references in formulas from being shrunk too much

Clean Workbook Options



Delete Temporary Files (not available with Mac Excel)

Temporary files may accumulate in your \Windows\Temp directory (Win95/98/ME), or your \Documents and Settings\<user>\local settings\temp directory (Win2K/WinXP/Win 7/Win 8/Win 10).

Excel creates Temporary files for the workbook, and in particular for controls being used by open workbooks. If Excel crashes for any reason these files may not be deleted.
Software installation programs may also create temporary files.

Make sure you have completed any pending software install, including a reboot if required, before deleting the Temp Files	Too many temporary files can cause problems, so delete them from time to time Be careful not to delete temp files if you have done a software install that requires you to reboot your PC, but have not yet done so. In this case you should reboot before deleting the temp files. Note: a very large number of temp files may cause FastExcel to hang with the status bar showing “Checking Temp Files”. If this happens close Excel, reboot your PC and then delete all files in your temp folder. You can locate your temp folder using Start→Run, entering %temp% in the run box and pressing enter.

Close VBE Windows (not Available with Mac Excel)

Each open Visual Basic Environment (VBE) window consumes resources, and the number that are open can build up very rapidly.
This option closes all VBE windows except for windows like Project Explorer.

Remove Invalid Names

This option deletes all names containing errors.

Delete Empty Worksheets

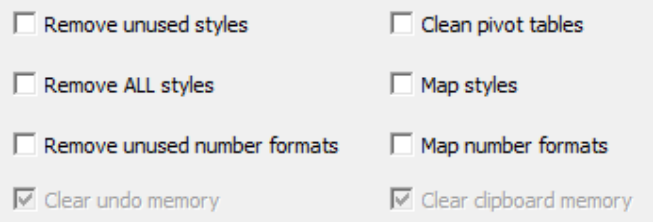
This option deletes any worksheets that do not contain any cell content (formatting, data, formulas) or shapes.

Remove zero height or width shapes

In some conditions a large number of shapes with either zero height or width can be created on a sheet. It can be very difficult to see, select or delete these shapes, so this option deletes them for you.

Remove Zero-sized Shapes

In some conditions a large number of shapes with both zero height and width can be created on a sheet. It can be very difficult to see, select or delete these shapes, so this option deletes them for you.



Clean Pivot Tables

If you change the data for a pivot table and refresh it old items which are no longer in the data may still be held in the Pivot Cache Clean Pivot Tables removes these leftover items from each of the pivot tables in the workbook. Calculated Items and Fields are preserved.

Remove Unused Styles

Selecting this option will delete any styles which are not currently in use, excluding the built-in styles. For very large numbers of styles this option can take a long time.

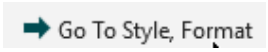
Remove ALL styles

This option will remove ALL the non-built-in styles from the workbook:
Make sure you have backed up the workbook first.

Map Styles

									Styles Counts by Worksheet - Use GoTo Arrow to Select Cells on the Worksheet
Format	**Built-In**		**Formulas**	**Tax_Data_Worksheet**	**Log_WorkSheet1**	**Log_WorkSheet2**	**Log_WorkSheet3**	**DataTables_Ex02**	**BetaTest**
20% - Accent1	True	**0**	0	0	0	0	0	0	0
Comma	True	**0**	0	0	0	0	0	0	0
Comma [0]	True	**0**	0	0	0	0	0	0	0
Comma 2	False	**2**	0	0	0	0	0	2	0
Currency	True	**0**	0	0	0	0	0	0	0
Currency [0]	True	**0**	0	0	0	0	0	0	0
Explanatory Text	True	**0**	0	0	0	0	0	0	0
Followed Hyperlink	True	**0**	0	0	0	0	0	0	0
Good	True	**0**	0	0	0	0	0	0	0
Heading 1	True	**1**	0	0	0	0	0	0	1
Neutral	True	**0**	0	0	0	0	0	0	0
Normal	True	**31967**	42	4032	30	30	27675	154	4
Note	True	**0**	0	0	0	0	0	0	0
Output	True	**0**	0	0	0	0	0	0	0
Percent	True	**0**	0	0	0	0	0	0	0
Title	True	**0**	0	0	0	0	0	0	0
Total	True	**0**	0	0	0	0	0	0	0
Warning Text	True	**0**	0	0	0	0	0	0	0

The Map Styles option produces a report sheet showing the count of each style used by each worksheet. You can use this map to identify where and how often the styles are being used.



Selecting one of the count cells in the map (for instance the 169 TrueFalse on sheet 2Funding) and clicking the FastExcel GoTo button will show you that sheet with all the cells using that style selected. This makes it easy to change or remove styles.

Remove Unused Number Formats (not available with Mac Excel)

The Screen Flicker you see is expected!

The technique used to find the number formats in the workbook is based on a method developed by Leo Heuser, and is used in FastExcel with his kind permission.

Selecting this option will delete any custom number formats which are not currently in use, excluding the built-in number formats. The screen will flicker for several seconds as FastExcel scans the available number formats.

Because the Excel object model does not provide any standard method of accessing the number formats in a workbook, FastExcel uses a method developed by Leo Heuser of accessing Excel's number Formats Listbox using Sendkeys.

Map Number Formats

Custom Number Format Counts by Worksheet - Use GoTo Arrow to Select Cells on the Worksheet									
Format	Built-In		Formulas	Tax_Data_Worksheet	Log_WorkSheet1	Log_WorkSheet2	Log_WorkSheet3	DataTables_Ex02	BetaTest
"$"#,##0.00_);[Red]("$"#,	FALSE	31	0	0	0	0	0	31	0
# ?/?	TRUE	0	0	0	0	0	0	0	0
#,##0;[Red]-#,##0	TRUE	0	0	0	0	0	0	0	0
@	TRUE	10	0	0	0	10	0	0	0
[$-F400]h:mm:ss AM/PM	FALSE	1	0	0	0	0	1	0	0
[$-F800]dddd, mmmm dd	FALSE	1	0	0	0	0	1	0	0
[h]:mm:ss	TRUE	0	0	0	0	0	0	0	0
_(* #,##0.00_);_(* (#,##0.(	TRUE	2	0	0	0	0	0	2	0
_(£* #,##0.00_);_(£* (#,##	FALSE	1	0	0	0	0	1	0	0
_-* #,##0.00_-;-* #,##0.0(	TRUE	0	0	0	0	0	0	0	0
£#,##0;-£#,##0	TRUE	0	0	0	0	0	0	0	0
0	TRUE	0	0	0	0	0	0	0	0
0%	TRUE	6	0	0	0	0	0	6	0
0.00	TRUE	0	0	0	0	0	0	0	0
0.00%	TRUE	1	0	1	0	0	0	0	0
0.000	FALSE	1213	0	0	0	0	1213	0	0
0.0000	FALSE	289	0	0	0	0	289	0	0
0.00000000000000000000	FALSE	2	0	0	0	0	2	0	0
0.00E+00	TRUE	0	0	0	0	0	0	0	0
dd/mm/yyyy	TRUE	0	0	0	0	0	0	0	0
dd/mm/yyyy hh:mm	TRUE	0	0	0	0	0	0	0	0
dd-mmm	TRUE	0	0	0	0	0	0	0	0
dd-mmm-yy	TRUE	0	0	0	0	0	0	0	0
General	TRUE	30415	42	4031	30	20	26168	117	7

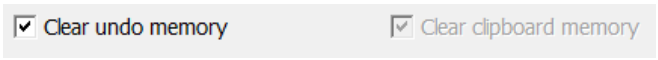
The Map Formats option produces a report sheet showing the count of each number format used by each worksheet.
You can use this map to identify where and how often the number formats are being used.

➡ GoTo cells using Active Style, Format

Selecting one of the count cells in the Map Formats sheet and clicking the FastExcel GoTo button will show you the sheet with all the cells on the sheet that use this Number Format selected.

This makes it easy to change or remove Number Formats.

Clear Undo Memory



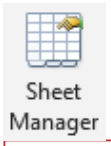
Excel uses memory to store the information required to be able to undo recent actions. This option allows you to clear this memory.

Many of the Clean Workbook options will automatically clear the Undo Memory. For these cases the option will be ticked but disabled (greyed out).

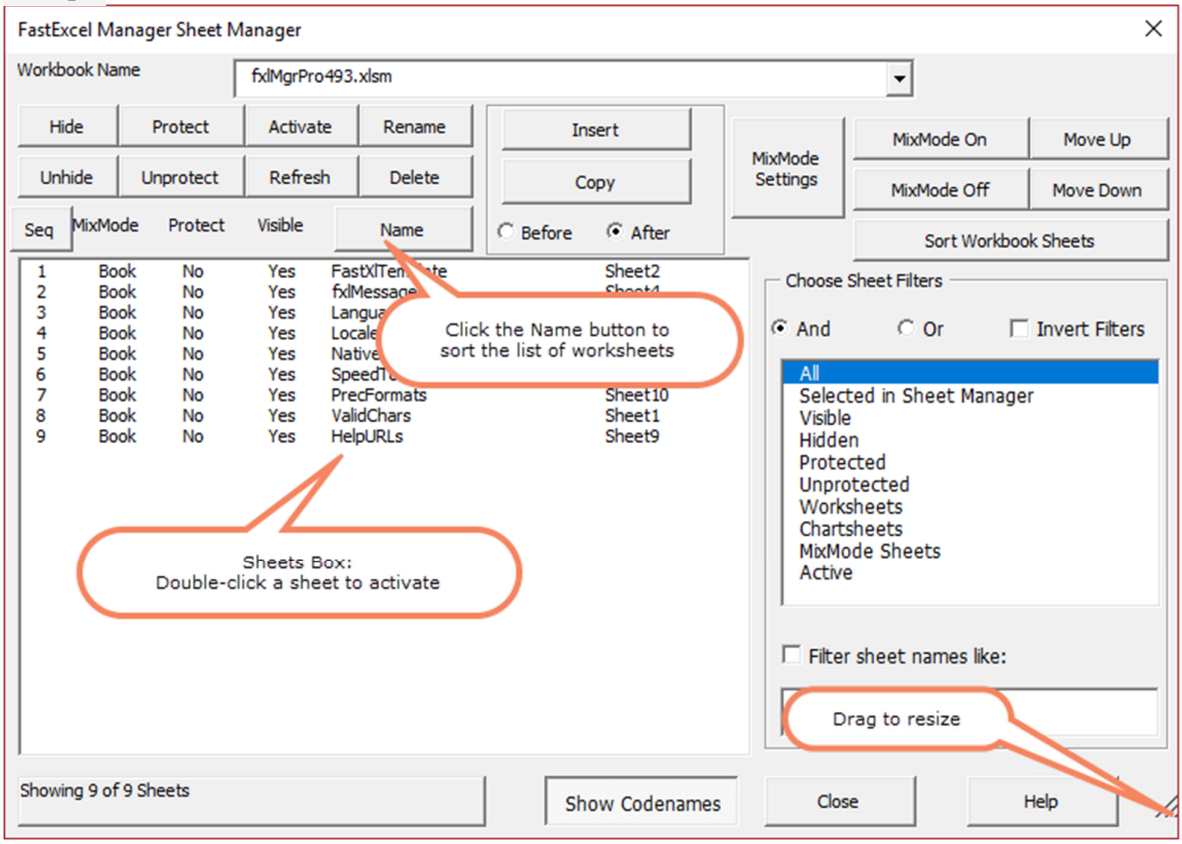
Clear Clipboard Memory

Many of the Clean Workbook options will also automatically clear the Excel Windows clipboard Memory. For these cases the option will be ticked but disabled (greyed out).

Sheet Manager



Sheet manager provides a convenient way of managing workbooks containing a large number of sheets by allowing you to change properties and sort multiple sheets with one command.



The Sheet Manager form is a modeless and resizable form.

- You can keep showing the Sheet Manager form whilst working on the active workbook.
- Drag the bottom right corner of the Sheet Manager form to resize it.
- Click the Name button to sort the filtered list of worksheets by name, or the Seq button to sort the list by sequence number.
- Double-click a sheet in the Sheets Box to activate it in the workbook.

Workbook Name



This dropdown allows you to choose the workbook to operate on from the list of open workbooks. The initial workbook selected will be the active workbook.

Sheets Box

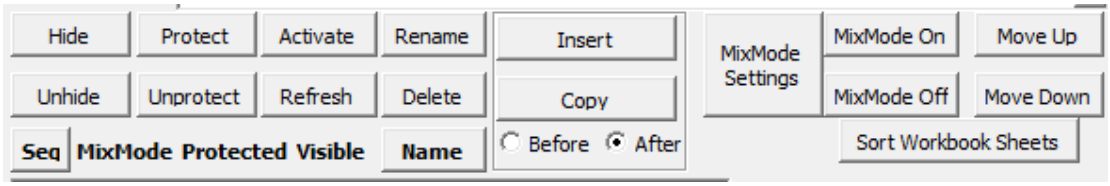
The sheets box contains 5 columns of information for each sheet (worksheet or chart sheet) that matches the sheet filters.

Double-clicking a sheet in the Sheets Box activates that sheet in the workbook.

- **Seq** – shows the sequence number of the worksheet within the workbook
- **MixMode** – shows when the sheet will be calculated:
    - **Book or Chart** – the sheet will be calculated each time its parent workbook is calculated
    - **F** – the sheet will be calculated at each Full calculation
    - **S** – the sheet will be calculated at a Sheet calculation when selected
    - **M** – the sheet will be calculated at each Manual calculation
- **Protected** – shows whether the sheet is protected or not
- **Visible** – shows yes for Visible, No for Hidden and VH for Very Hidden
- **Name** – shows the name of the sheet

You can sort the filtered list of sheets in the sheetbox by clicking Name or Seq. This does not change the sequence of the sheets in the workbook.

Sheet Manager Action Buttons



These buttons act directly on the sheets in the chosen workbook.

Hide Unhide

Hide or unhide the selected sheets. The Visible column in the Sheets box will show Yes or No or VH for very hidden sheets. You cannot hide or unhide Very Hidden sheets.

Protect Unprotect

Protect or unprotect the selected sheets. The Protected column in the Sheets box will show Yes or No.

Activate

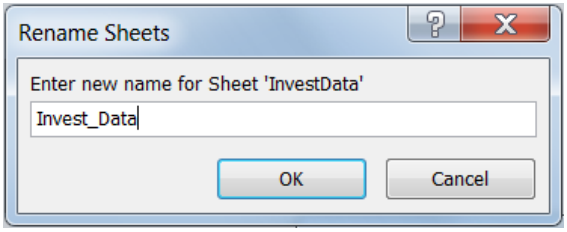
All selected sheets will be grouped and selected in the workbook. This allows you to make edits simultaneously across a range of worksheets.

Refresh

The Sheets box will be refreshed from the workbook using the filtering settings.

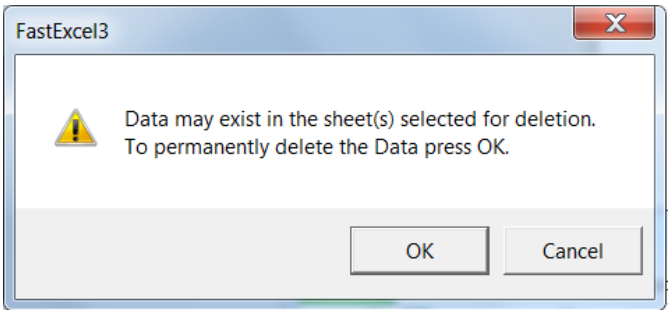
Rename

Rename will prompt you for a new name for each selected sheet.

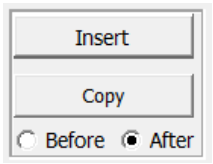


Delete

Delete will request confirmation once before deleting all the selected sheets.



Insert or Copy Before or After

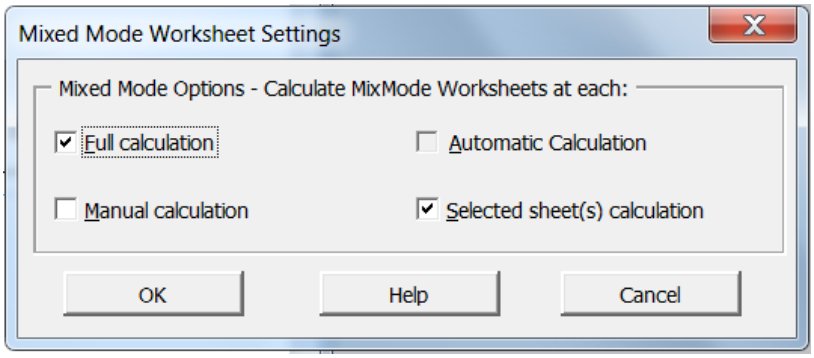


Insert will add a worksheet before or after (depending on the Before/After option setting) every selected sheet.
Copy will copy every selected sheet before or after itself.

Mix Mode Settings

Use this button to control when the Mixed Mode sheets are calculated. These settings are saved with the workbook. The default settings are:

- Do NOT calculate Mixed Mode sheets at a Manual (F9) or Automatic recalculation
- Calculate Mixed Mode Sheets at each Full Calculation (Ctrl/Alt/F9) and, when selected, at a Sheet Calculate (Shift/F9 and Alt/Shift/F9)



- **Full Calculation**: when this option is checked all formulas including those on MixMode sheets in the active workbook will be calculated when you press Ctrl-Alt-F9 or the FastExcel Full Calculate button. The default is checked.
- **Manual Calculation**: when this option is checked pressing F9 or FastExcel's Recalculate button will recalculate formulas that are flagged as uncalculated, including those on MixMode sheets in the active workbook. The default is not checked.
- **Selected Sheet(s) Calculation**: when this option is checked pressing Shift-F9 or FastExcel's Calculate Sheets button will recalculate formulas that are flagged as uncalculated on all selected sheets, MixMode or enabled. The default is checked.
- **Automatic Calculation**: this option is permanently disabled: Excel's automatic calculations do not recalculate MixMode sheets.

Mixed Mode On or OFF

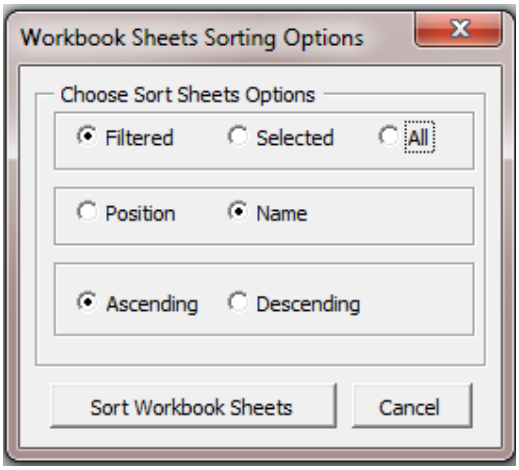
A subset of the sheets in a workbook can be assigned Mixed Mode calculation. Mixed Mode sheets can have a different calculation mode to that of the workbook: for example, F9 could calculate all the sheets except the Mixed Mode sheets, and Mixed Mode sheets would only be calculated at a Full Calculation or Sheet Calculation of a Mixed Mode sheet. Use the Mix Mode buttons to control which sheets are to be treated as Mix Mode sheets. Mixed Mode settings are saved with the workbook.

Move Up Move Down

These buttons will move all the selected sheets either one position up or one position down.

Sort Workbook Sheets

This button shows the Workbook Sheets Sorting Options



You can use a variety of options to sort and group the sheets in the workbook.

- Filtered – All the sheets that satisfy the filters will be sorted
- Selected – Only the sheets that are actually selected within the Sheets box will be sorted
- All – All the sheets in the workbook will be sorted

- Position – the relative position of the chosen sheets will be maintained but the chosen sheets will be sorted next to one another into a group. The position of the first chosen sheet will be unchanged.
- Name – the chosen sheets will be sorted by name.

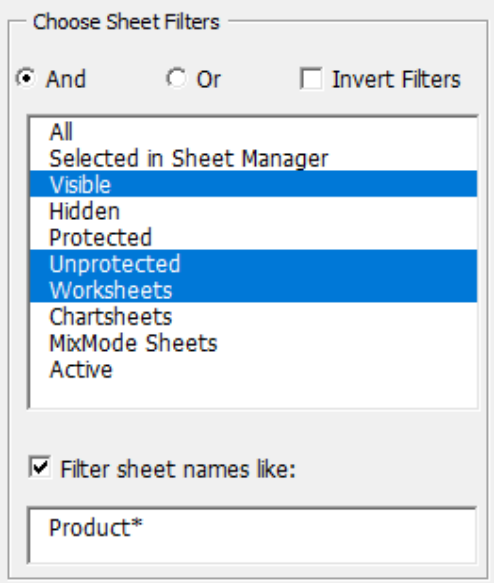
- Ascending – the chosen sheets will be sorted ascending
- Descending – the chosen sheets will be sorted descending

When you click the Sort Workbook Sheets button the sheets will be sorted within the workbook.

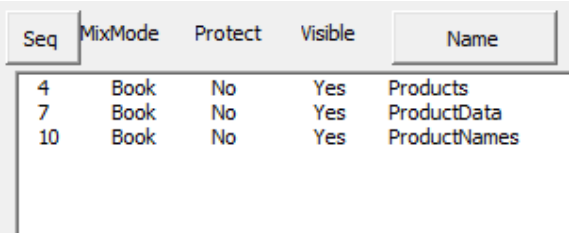
Note: Sorting sheets can take a long time with large workbooks.

Choose Sheet Filters

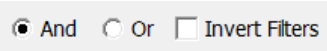
You can use a combination of filters to show only a subset of sheets in the sheets box.



This combination of filters shows only sheets that are visible **and** unprotected **and** worksheets **and** whose name contains 'Product'.



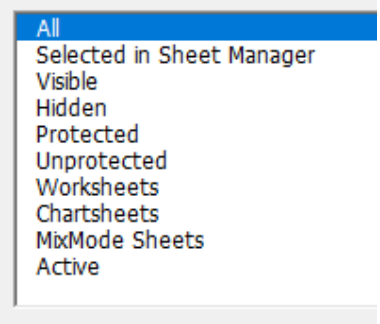
And Or Invert Filters



The default (**And**) is that **all** the filters must be satisfied for a sheet to be shown in the sheets box. You can also choose **OR** so that a sheet that satisfies **any** of the filters will be shown.

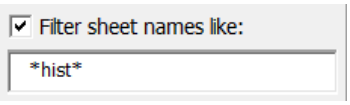
Checking **Invert Filters** reverses the filters action so that only the sheets that satisfy **none** of the filters are shown.

Available Sheet Filters



The sheet filters are:

- All – all sheets are shown
- Selected in Sheet Manager – Only sheets that have been selected within the Sheet Manager Sheets box are shown
- Visible – Only sheets that are visible in the workbook are shown
- Hidden – Only sheets that are hidden in the workbook are shown
- Protected – Only sheets that are protected are shown
- Unprotected – Only sheets that are un-protected are shown
- Worksheets – Only sheets that are worksheets are shown
- Chart Sheets – Only sheets that are chart sheets are shown
- MixMode Sheets – Only sheets that have been flagged as Mixed Mode are shown
- Active – Only the sheet(s) within the current workbook that are active are shown.



You can also filter sheets by name using wildcards: * means any combination of characters or none, and ? means a single character. You can use any combination of the wildcard characters that are useable by the VBA Like function.

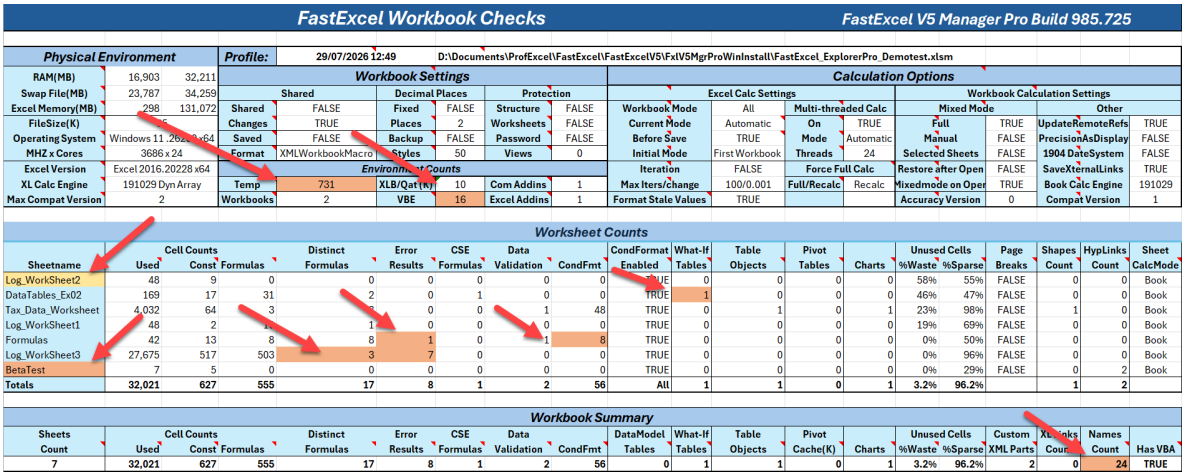
Show Codenames

Toggling **Show Codenames** on of off causes the codename of the worksheets to be shown after the sheet name.

Check Active Workbook

This command produces a report showing statistics for the active workbook.

Potential problem areas are highlighted in Orange.



FastExcel Workbook Checks — FastExcel V5 Manager Pro Build 985.725

Physical Environment			Profile:	29/07/2026 12:49	D:\Documents\ProfExcel\FastExcel\FastExcelV5\FxlV5MgrProWinInstall\FastExcel_ExplorerPro_Demotest.xlsm																		
RAM(MB)	16,903	32,211	Workbook Settings								Calculation Options											
Swap File(MB)	23,787	34,259	Shared		Decimal Places		Protection				Excel Calc Settings				Workbook Calculation Settings							
Excel Memory(MB)	298	131,072	Shared	FALSE	Fixed	FALSE	Structure	FALSE			Workbook Mode	All	Multi-threaded Calc		Mixed Mode		Other					
FileSize(K)	[illegible]		Changes	TRUE	Places	2	Worksheets	FALSE			Current Mode	Automatic	On	TRUE	Full	TRUE	UpdateRemoteRefs	TRUE				
Operating System	Windows 11 [illegible] x64		Saved	FALSE	Backup	FALSE	Password	FALSE			Before Save	TRUE	Mode	Automatic	Manual	FALSE	PrecisionAsDisplay	FALSE				
MHZ x Cores	3686 x 24		Format	XMLWorkbookMacro	Styles	50	Views	0			Initial Mode	First Workbook	Threads	24	Selected Sheets	FALSE	1904 DateSystem	FALSE				
Excel Version	Excel 2016.20228 x64		Environment Counts								Iteration	FALSE	Force Full Calc		Restore after Open	FALSE	SaveXternalLinks	TRUE				
XL Calc Engine	191029 Dyn Array		Temp	731	XLB/Qat (K)	10	Com Addins	1			Max Iters/change	100/0.001	Full/Recalc	Recalc	Mixedmode on Oper	TRUE	Book Calc Engine	191029				
Max Compat Version	2		Workbooks	2	VBE	16	Excel Addins	1			Format Stale Values	TRUE			Accuracy Version	0	Compat Version	1				

Worksheet Counts

Sheetname	Cell Counts Used	Const	Formulas	Distinct Formulas	Error Results	CSE Formulas	Data Validation	CondFmt	CondFormat Enabled	What-If Tables	Table Objects	Pivot Tables	Charts	Unused Cells %Waste	%Sparse	Page Breaks	Shapes Count	HypLinks Count	Sheet CalcMode
Log_WorkSheet2	48	9	0	0	0	0	0	0	TRUE	0	0	0	0	58%	55%	FALSE	0	0	Book
DataTables_Ex02	169	17	31	2	0	1	0	0	TRUE	1	0	0	0	46%	47%	FALSE	0	0	Book
Tax_Data_Worksheet	4,032	64	3	3	0	0	1	48	TRUE	0	1	0	1	23%	98%	FALSE	1	0	Book
Log_WorkSheet1	48	2	10	1	0	0	0	0	TRUE	0	0	0	0	19%	69%	FALSE	0	0	Book
Formulas	42	13	8	8	1	0	1	8	TRUE	0	0	0	0	0%	50%	FALSE	0	0	Book
Log_WorkSheet3	27,675	517	503	3	7	0	0	0	TRUE	0	0	0	0	0%	96%	FALSE	0	0	Book
BetaTest	7	5	0	0	0	0	0	0	TRUE	0	0	0	0	0%	29%	FALSE	0	2	Book
Totals	**32,021**	**627**	**555**	**17**	**8**	**1**	**2**	**56**	**All**	**1**	**1**	**0**	**1**	**3.2%**	**96.2%**		**1**	**2**	

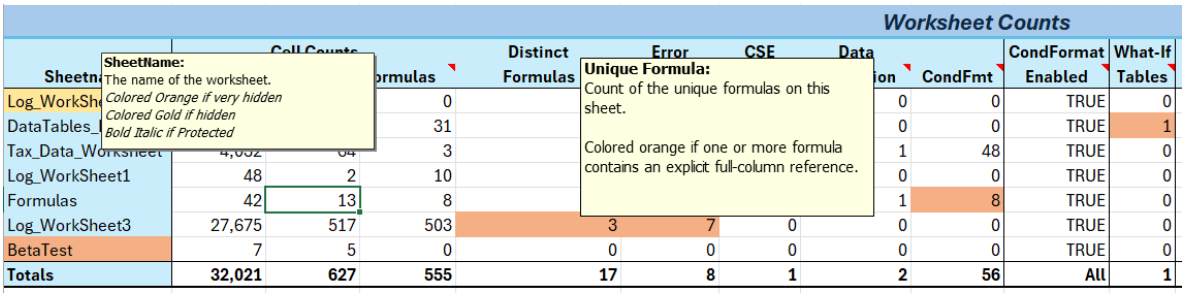
Workbook Summary

Sheets Count	Cell Counts Used	Const	Formulas	Distinct Formulas	Error Results	CSE Formulas	Data Validation	CondFmt	DataModel Tables	What-If Tables	Table Objects	Pivot Cache(K)	Charts	Unused Cells %Waste	%Sparse	Custom XML Parts	XLinks Count	Names Count	Has VBA
7	32,021	627	555	17	8	1	2	56	0	1	1	0	1	3.2%	96.2%	2	0	24	TRUE

Common problem areas that need clean-up are:

- Large number of styles.
- Large number of Temp Files
- Large amount of wastage: used range problem
- Large number of Defined Names.

Most of the statistics have cell comments indicated by a red triangle marker in the top left of the cell explaining what the numbers represent. When you hover your mouse over the cell with the red market the comment pops up.



Worksheet Counts

Sheetn	Cell Counts [illegible]	[illegible]	ormulas	Distinct Formulas	Error	CSE	Data [illegible]ion	CondFmt	CondFormat Enabled	What-If Tables
Log_WorkSh			0				0	0	TRUE	0
DataTables_I			31				0	0	TRUE	1
Tax_Data_Worksheet	4,032	64	3				1	48	TRUE	0
Log_WorkSheet1	48	2	10				0	0	TRUE	0
Formulas	42	13	8				1	8	TRUE	0
Log_WorkSheet3	27,675	517	503	3	7	0	0	0	TRUE	0
BetaTest	7	5	0	0	0	0	0	0	TRUE	0
Totals	**32,021**	**627**	**555**	**17**	**8**	**1**	**2**	**56**	**All**	**1**

SheetName:
The name of the worksheet.
Colored Orange if very hidden
Colored Gold if hidden
Bold Italic if Protected

Unique Formula:
Count of the unique formulas on this sheet.

Colored orange if one or more formula contains an explicit full-column reference.

Some statistics are not available for Mac Excel.

Check DA: Compatibility of Office 365 Dynamic Array Formulas

Note:
Check DA is not available in FastExcel V5 Manager Pro for Mac.

The introduction of Dynamic Array formulas in Office 365 Excel 2016 has made a fundamental change to formula behaviour and syntax:

- In previous versions such as Excel 2013, Excel automatically used implicit intersection to select a single value from a range in many circumstances.
- In Office 365 Dynamic Array Excel 2016 (Excel DA), Excel treats all formulas as array formulas unless the implicit intersection operator @ is used, and single-cell dynamic array formulas will spill their arrays to surrounding cells.

Forward compatibility for workbooks authored in previous versions of Excel is good: implicit intersections will be silently converted to the new @ syntax.

In most cases workbooks authored in Dynamic Array Excel (Excel DA) will also be silently converted to the old syntax (@ will be removed where possible, and spilling dynamic arrays converted to array (CSE) formulas) when opened in previous versions.

But it is possible to create formulas in Excel DA which cause difficulties when opened in previous versions.

CheckDA is a tool to scan Excel DA formulas, highlight potential backward compatibility problems and optionally convert problem formulas to more compatible versions.

Backward Compatibility Problem Areas

Unexpected @ in a formula producing =_xlfn.SINGLE()

Excel will only remove @ from a formula where previous Excel versions would have used Implicit Intersection to return a single value from a Range or Named Range or function parameter.

You will be warned by Excel if you try to enter a formula with @ in an unexpected place, but it is still possible to create such a formula. An unexpected @ will create a _xlfn.SINGLE() in previous versions and will result in #Name when calculated.

For example =@A1 will be converted to =_xlfn.SINGLE(A1) because Excel cannot do Implicit Intersection on a single cell.

CheckDA will flag such formulas as type **@**

Formula containing a Spill Reference producing _xlfn_ANCHORARRAY()

A formula reference to a dynamic array can use the spill reference suffix #. For example =SUM($B$3#) will SUM the entire dynamic array that starts in $B$3. Spill references get converted to _xlfn_ANCHORARRAY(Reference) in previous versions and will result in #Name when calculated.

CheckDA will flag such formulas as type {#}

Unwanted Array Formulas (CSE) in previous versions

Any formula that Excel DA thinks could return an array (even if it is actually only returning a single value) is converted to a CSE array formula in previous versions.

This may or may not produce a backward compatibility problem – you have to inspect these formulas carefully.

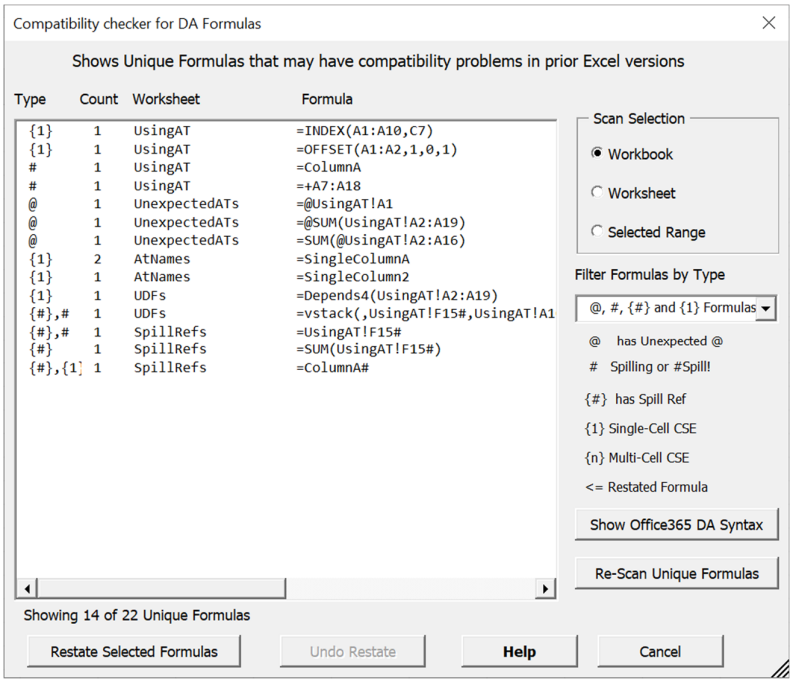
CheckDA flags these formulas as types:

- **{1}** a single-cell non-spilling formula
- **#** An Excel DA Dynamic Array formula that is spilling or blocked (#Spill!) and will be converted to a fixed CSE formula in Excel 2013
- **{n}** a formula entered in Excel DA as a multi-cell CSE formula

Using CheckDA

CheckDA requires Windows Office 365 Dynamic Array Excel 2016.

Clicking the Check DA Formulas button shows the Check DA form.



The form:

- Shows formulas in Non-DA Syntax
- Is Modeless (you can edit formulas while still showing the form)
- Is Resizeable
- At start-up scans **the active worksheet** for unique formulas
- At start-up filters out formulas with unexpected @ or Spill Ref or Spill or single-cell Array formulas

Restate Selected Formulas

Any @ or {1} formulas selected in the form will be changed in the workbook.
@ formulas will have their unexpected @s removed.
{1} formulas will be re-entered as non-array formulas.
Spill formulas and {#} Spill Ref formulas cannot be automatically restated.

Undo Restate

Any formulas restated in this session of CheckDA will have their restatement undone.

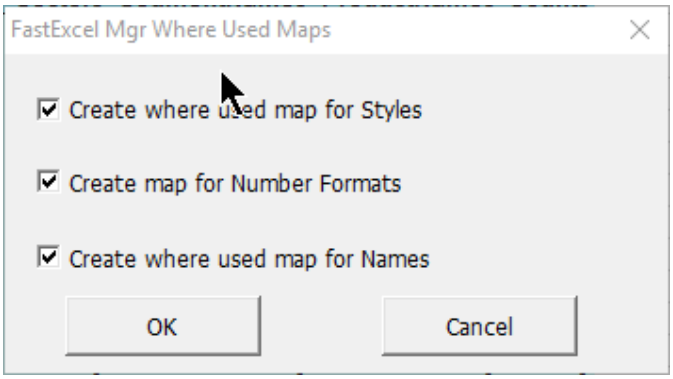
Show Office 365 DA Syntax

This button toggles between showing the formulas in Non-DA syntax and Office 365 Dynamic Array syntax.

Where Used Map Styles and Names



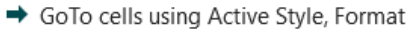
This command allows you to choose which of the three available where-used maps you want to create.



Map Styles

									Styles Counts by Worksheet - Use GoTo Arrow to Select Cells on the Worksheet
Format	**Built-In**		**Formulas**	**Tax_Data_Worksheet**	**Log_WorkSheet1**	**Log_WorkSheet2**	**Log_WorkSheet3**	**DataTables_Ex02**	**BetaTest**
20% - Accent1	True	**0**	0	0	0	0	0	0	0
Comma	True	**0**	0	0	0	0	0	0	0
Comma [0]	True	**0**	0	0	0	0	0	0	0
Comma 2	False	**2**	0	0	0	0	0	2	0
Currency	True	**0**	0	0	0	0	0	0	0
Currency [0]	True	**0**	0	0	0	0	0	0	0
Explanatory Text	True	**0**	0	0	0	0	0	0	0
Followed Hyperlink	True	**0**	0	0	0	0	0	0	0
Good	True	**0**	0	0	0	0	0	0	0
Heading 1	True	**1**	0	0	0	0	0	0	1
Neutral	True	**0**	0	0	0	0	0	0	0
Normal	True	**31967**	42	4032	30	30	27675	154	4
Note	True	**0**	0	0	0	0	0	0	0
Output	True	**0**	0	0	0	0	0	0	0
Percent	True	**0**	0	0	0	0	0	0	0
Title	True	**0**	0	0	0	0	0	0	0
Total	True	**0**	0	0	0	0	0	0	0
Warning Text	True	**0**	0	0	0	0	0	0	0

The Map Styles option produces a report sheet showing the count of each style used by each worksheet.
You can use this map to identify where and how often the styles are being used.



Selecting one of the count cells in the Map Styles sheet and clicking the FastExcel GoTo button will show you the sheet with all the cells on the sheet that use this Style selected.

Map Number Formats

Custom Number Format Counts by Worksheet - Use GoTo Arrow to Select Cells on the Worksheet									
Format	**Built-In**		**Formulas**	**Tax_Data_Worksheet**	**Log_WorkSheet1**	**Log_WorkSheet2**	**Log_WorkSheet3**	**DataTables_Ex02**	**BetaTest**
"$"#,##0.00_);[Red]("$"#,	FALSE	**31**	0	0	0	0	0	31	0
# ?/?	TRUE	**0**	0	0	0	0	0	0	0
#,##0;[Red]-#,##0	TRUE	**0**	0	0	0	0	0	0	0
@	TRUE	**10**	0	0	0	10	0	0	0
[$-F400]h:mm:ss AM/PM	FALSE	**1**	0	0	0	0	1	0	0
[$-F800]dddd, mmmm dd	FALSE	**1**	0	0	0	0	1	0	0
[h]:mm:ss	TRUE	**0**	0	0	0	0	0	0	0
_(* #,##0.00_);_(* (#,##0.(	TRUE	**2**	0	0	0	0	0	2	0
_(£* #,##0.00_);_(£* (#,##	FALSE	**1**	0	0	0	0	1	0	0
_-* #,##0.00_-;-* #,##0.0(	TRUE	**0**	0	0	0	0	0	0	0
£#,##0;-£#,##0	TRUE	**0**	0	0	0	0	0	0	0
0	TRUE	**0**	0	0	0	0	0	0	0
0%	TRUE	**6**	0	0	0	0	0	6	0
0.00	TRUE	**0**	0	0	0	0	0	0	0
0.00%	TRUE	**1**	0	1	0	0	0	0	0
0.000	FALSE	**1213**	0	0	0	0	1213	0	0
0.0000	FALSE	**289**	0	0	0	0	289	0	0
0.00000000000000000000	FALSE	**2**	0	0	0	0	2	0	0
0.00E+00	TRUE	**0**	0	0	0	0	0	0	0
dd/mm/yyyy	TRUE	**0**	0	0	0	0	0	0	0
dd/mm/yyyy hh:mm	TRUE	**0**	0	0	0	0	0	0	0
dd-mmm	TRUE	**0**	0	0	0	0	0	0	0
dd-mmm-yy	TRUE	**0**	0	0	0	0	0	0	0
General	TRUE	**30415**	42	4031	30	20	26168	117	7

The Map Formats option produces a report sheet showing the count of each number format used by each worksheet.
You can use this map to identify where and how often the number formats are being used.

➡ GoTo cells using Active Style, Format

Selecting one of the count cells in the Map Formats sheet and clicking the FastExcel GoTo button will show you the sheet with all the cells on the sheet that use this Number Format selected.

This makes it easy to change or remove Number Formats.

Map Defined Names

Name Map analyzes all the formulas on the worksheets in the workbook and in other names to produce a Name Map worksheet showing counts of the usage of the Names by worksheet and by other Name.

- Names created by INDIRECT formulas are shown in Bold and Italic..
- Named Lambdas are colored Green
- Names found in Formulas but not in Name Manager are colored Red.
- LET and LAMBDA variables are not treated as Names.

							Name Counts by Worksheet - Use GoTo Arrow to Show Where Name is Used			
Name	**Total**	**Explanation**	**UniVerse**	**Answers**	**Products**	**Respondents**	**RespondentData**	**ProductData**	**Sectors**	**SegmentNames**
AddTwo	**1**	0	1	0	0	0	0	0	0	0
AnEmbeddedName	**1**	0	1	0	0	0	0	0	0	0
Answers.Product	**120**	0	0	120	0	0	0	0	0	0
Answers.SectorName	**72**	0	0	72	0	0	0	0	0	0
DontKnowfactor	**533**	0	0	0	533	0	0	0	0	0
MobPhones	**37**	0	37	0	0	0	0	0	0	0
MobSpend	**37**	0	37	0	0	0	0	0	0	0
Network	**24**	0	24	0	0	0	0	0	0	0
OurPhones	**37**	0	37	0	0	0	0	0	0	0
TotalOurSpend	**2**	0	2	0	0	0	0	0	0	0
Universe	**1734**	0	0	0	1066	668	0	0	0	0
Universe.Emps	**1**	0	1	0	0	0	0	0	0	0
Universe.Emps2001	**0**	0	0	0	0	0	0	0	0	0
Anonymous	**1**	0	1	0	0	0	0	0	0	0

				Names Embedded in Other Names	
Name	**ContainsName**	**Start Pos**	**Characters**	**NameType**	**Names Found**
AnEmbeddedName	**ADDTWO**	2	6	Lambda	1

➡ GoTo cells using Active Style, Format

Selecting one of the count cells in the Map SNames sheet and clicking the FastExcel GoTo button will show you the sheet with all the cells on the sheet that use this Name selected.

Go To Cells using Style, Format

➡ GoTo cells using Active Style, Format

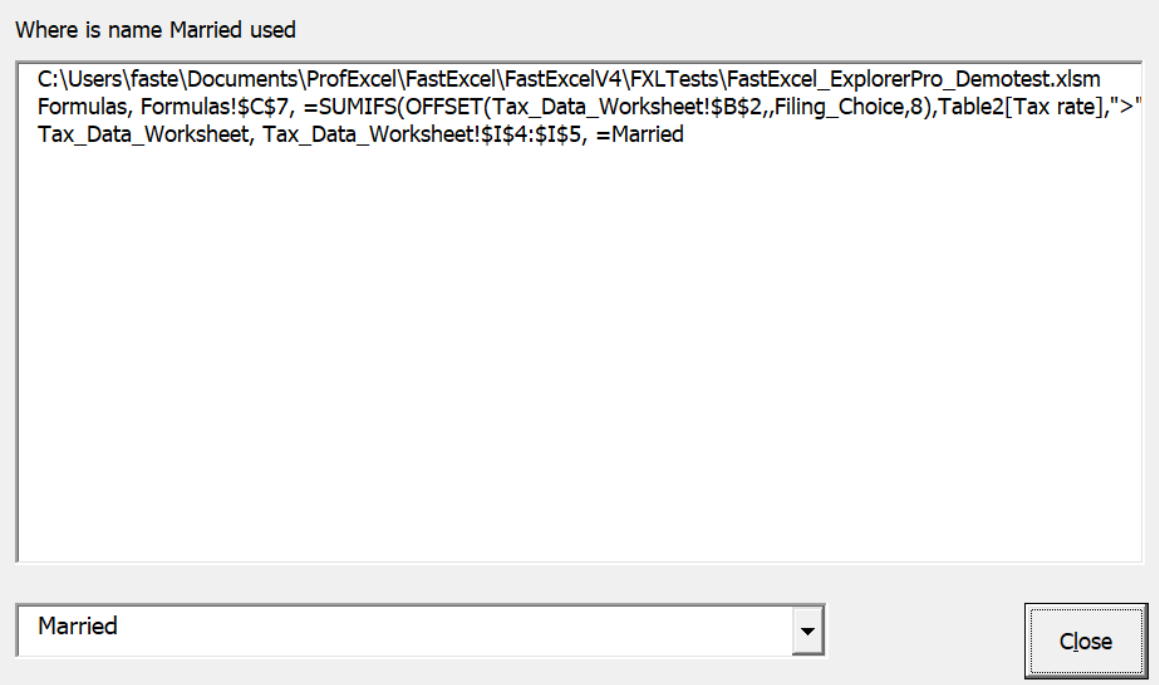
The result from clicking the Go To button depends on the location of the active cell.

Active cell is within a Style or Number Format Map

Go To will attempt to select the cells on the sheet that are using that style or number format.

Active Cell is within a Name Map

Go To will attempt to show all the places where that Name is being used.

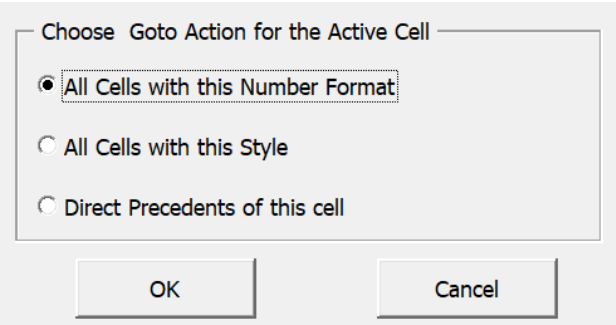


Active Cell is in an ordinary Worksheet

You can choose which GoTo action to use for the active cell.

Clicking OK will result in selecting all the cells on the sheet that:

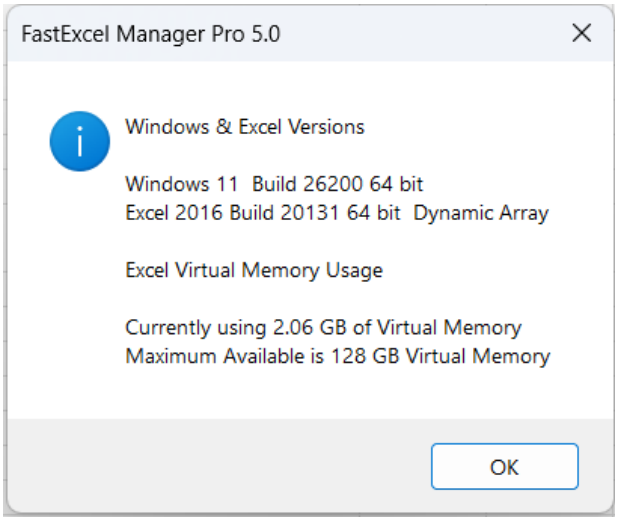
- Have the same number format as the active cell
- Use the same Style as the active cell
- Are direct precedents of the active cell



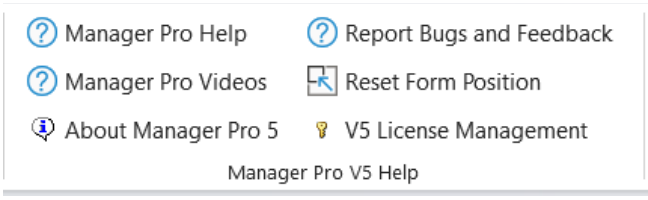
Memory and Versions

This button shows the amount of virtual memory used and available in Gigabytes.

The memory shown supports all combinations of 32 and 64 bit versions of both Windows and Excel, and the Excel Large Address Aware (LAA) memory extensions.



Manager Pro V5 Help



Manager Pro Help

Help links to the web-based help pages which are the equivalent of this guide.

About Manager Pro 5



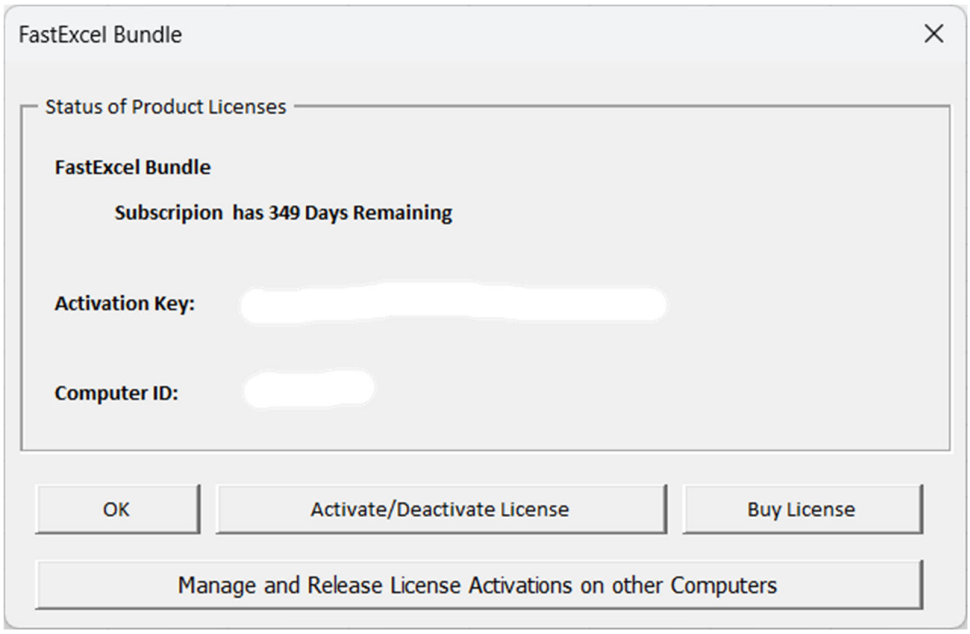
Shows the installed and latest Manager Pro build numbers.

You can down load and install the latest build from the website link at the bottom of the form.

If one of the FastExcel Manager forms disappears from view or becomes hidden, the Reset FastExcel Form Positions button will reset all FastExcel forms to their default position.

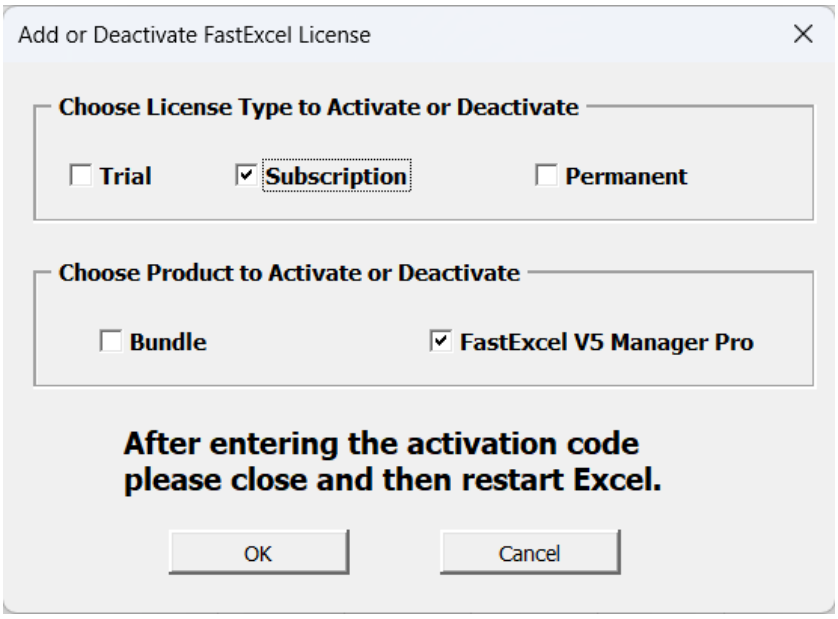
V5 License Management

License shows you the current state of your FastExcel V5 Windows License.



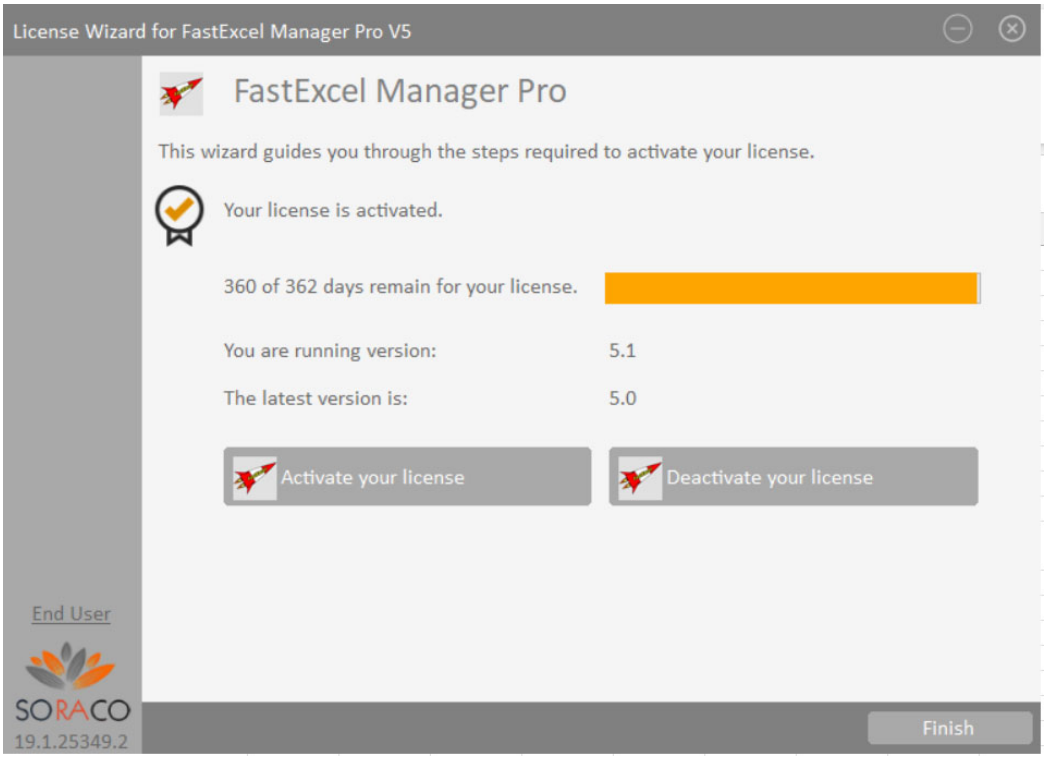
Activate/Deactivate License –

First choose what kind of license you want to activate or deactivate:

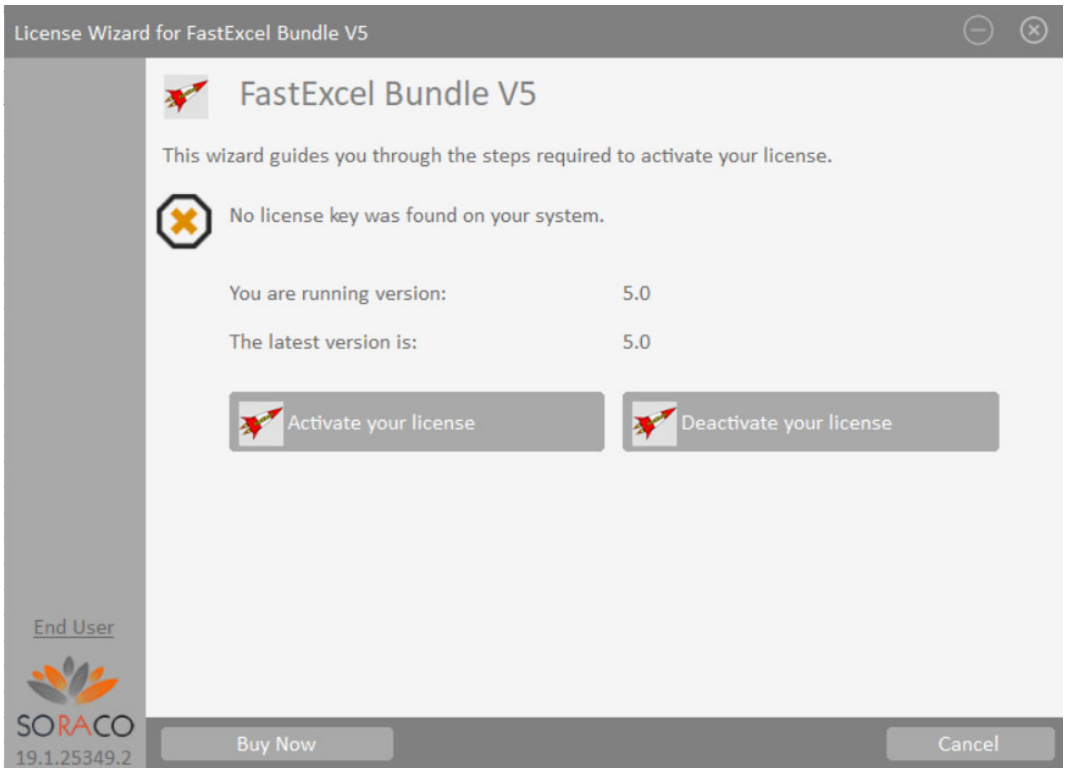


Clicking Ok will launch the QLM License Wizard:

Deactivate an existing License:



Activate a new license



Buy a license

Links to the FastExcel Store.

Manage and Release License Activations on other computers

Links to the Decision Models QLM Customer Site where you can manage your FastExcel Licenses and deactivate licenses on other computers.

