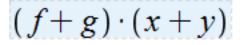
What's New in Maple 2017



# Interface

## Improvements to Equation Editing

To avoid common errors in entering expressions in 2-D math, Maple 2017 automatically inserts an explicit multiplication symbol in certain cases. For example, if you write (f+g)(x+y) with a space between the parts, Maple replaces the implicit multiplication (the space) with a visible multiplication symbol ( $\cdot$ ).



This makes it clear that the space is interpreted as multiplication. This change is designed to help you avoid common errors in writing expressions and troubleshoot your work more quickly.

If you did not mean multiplication (instead you meant to apply the functions f + g to (x + y)), write the expression with adjacent parentheses.

#### **Multiplication:**

 $(f\!+\!g)\cdot(x\!+\!y)$ 

$$(f+g)(x+y)$$

#### Function application: (no space)

(f+g)(x+y)

$$f(x+y) + g(x+y)$$

Expression in 2-D math	Meaning
(expr1)(expr2) with no space between the closing and opening parenthesis	function application
(expr1) (expr2) with a space	The space means multiplication and to clarify that, Maple replaces the space with an explicit multiplication symbol.

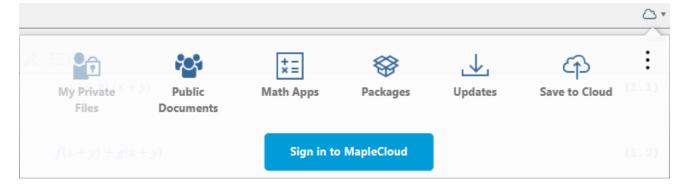
You can control this feature using the Options dialog.

## New MapleCloud Access from Toolbar

You can now access the MapleCloud right from the worksheet toolbar. Click the cloud

icon ( / . From here, log in, browse shared content, or check for updates on

packages you've downloaded from the MapleCloud.



## Equation Label Improvements

You can now insert a sequence or range of equation labels in one easy step using the equation label dialog.

### Context Menu Updates

Many more operations are now available in the context menu, including signal processing options and new curve fitting options are available for two-column matrices and data frames.

Examples:

SignalProcessing:-GenerateUniform(10,-1,1); [-0.785218492150308, 0.588413964957000, --0.210756972897798, 0.74960021581500

Number of Dimensions	AutoCorrelation
Number of Elements	Conversions +
Plots	Discrete Cosine Transform
Ranges of Dimensions	Discrete Wavelet Transform
Select Elements	Down-Sample
Tabulate	Fourier Transform
Conversions Export As In Place Options Language Conversions Map Integer Functions Onto	Inverse Discrete Cosine Transform Inverse Fourier Transform Periodogram SignalPlot Spectrogram Up-Sample
Signal Processing	Windowing Functions

DataFrame([[0, 1, 2, 3], [1, 1, 3, 5]]);

	Unassign	B-Spline
$ \begin{bmatrix} 1 & 2 \\ 1 & 0 & 1 \\ 2 & 1 & 1 \end{bmatrix} $	Conversions Operations Queries Visualization	Interactive Curve Fitting Least Squares Polynomial Interpolation Rational Spline
323 435	Curve Fitting Data Analysis	Thiele

### Menu Updates

There are some new and updated items in Maple menus. Some of the changes are highlighted here.

#### Edit Menu

Two new menu items to **Provide Workbook Password** and **Set/Reset Workbook Password**.

#### View Menu

The **View > Zoom Factor** submenu now includes **Zoom In** and **Zoom Out**.

The **View > Workbook Navigator** submenu now includes **Numbering**.

#### Tools Menu

New menu item to **MapleCloud** provides access the new interface to the MapleCloud, similar to the cloud icon on the toolbar.

## New Shortcut Keys

Several new shortcut keys have been added to Maple 2017 for interface zooming:

• Zoom In

- Alt+Plus or Alt+=, Windows and Linux

-Control+Shift+=, Mac

- Zoom Out
  - Alt+Minus, Windows and Linux

#### - Control+Minus or Control+Shift+Minus, Mac

A new shortcut key gives quick access to the <u>help search box</u> in the toolbar:

- Alt+S, Windows and Linux

- Control+S, Mac

## Default Options

The **Multiple Help Navigators** option has been turned on by default. This means that any hyperlink in the help browser can be opened in a new help window. To open a link in a new window, right-click (**Control**-click, on Mac) the hyperlink and choose **Open in New Window**.