

What's New in MATLAB R2023a?

Environment

MATLAB install

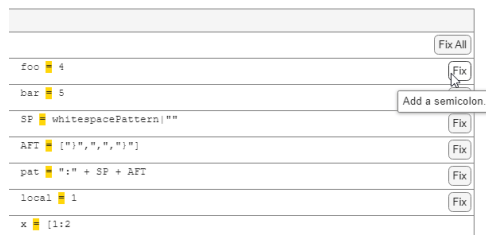
Reduce footprint using default installation without local documentation

Starting in R2023a, the documentation is not installed as part of a MATLAB® or other product installation. This change significantly reduces the installation footprint of products.

Language & Programming

Code Analyzer App

Fix certain code issues directly from the [Code Analyzer](#) app using the **Fix** button.



Data Import & Export

Parallel Processing

Use `readtable` in thread-based environments

You can use the `readtable` function in thread-based environments. Parallel processing results in improved performance when reading data, especially with remote data.

Import Data Live Editor

Import data in live scripts

The [Import Data Live Editor](#) task allows you to import various types of data in a live script within a single framework. You can import these types of data: MAT-file, text & spreadsheet, image, audio, video, etc.



Data Analysis

Pivot function

Summarize tabular data using pivot table

Perform a pivoting operation on data in a table or timetable by using the `pivot` function. Specify grouping variables that define variables or rows in the pivoted table using `colvars` or `rowvars`.

T = 7x3 table

	HealthStatus	Smoker	Location
1	Excellent	1	"County"
2	Fair	0	"VA"
3	Good	0	"St. Mary's"
4	Good	0	"VA"
5	Good	0	"County"
6	Excellent	0	"St. Mary's"
7	Poor	1	"VA"

P = pivot(T,columns="Smoker",Rows="HealthStatus")

P = 4x3 table

	HealthStatus	false	true
1	Poor	0	1
2	Fair	1	0
3	Good	3	0
4	Excellent	1	1

Table and Timetable

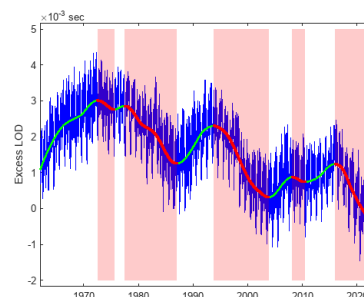
Perform calculations directly on tables and timetables without extracting their data

For more information, see [Direct Calculations on Tables and Timetables](#) and [Rules for Table and Timetable Mathematics](#).

Timetable events and Timetable

Find and label events in timetables using attached event tables

An [event](#) consists of an event time (when something happened), often an event length or event end time (how long it happened), often an event label (what happened), and sometimes additional information about the event.



Apps & Graphics

uihtml Function

Send events between MATLAB and HTML

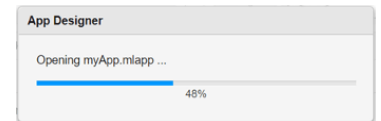
To send an event to MATLAB, call the `sendEventToMATLAB` function on the `htmlComponent` JavaScript object in your setup method.

For more information, see [Send Event from JavaScript to MATLAB](#) and [Send Event from MATLAB to JavaScript](#).

App Designer

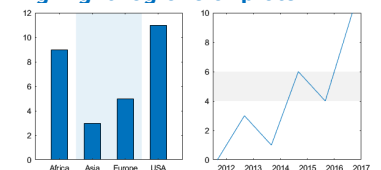
View progress when loading app

When you load an app in App Designer, a progress bar now displays an estimate of its loading progress.



xregion and yregion Functions

Highlight regions of plots



New! MATLAB Test

MATLAB Test

Develop, manage, analyze, and test MATLAB applications

MATLAB® Test™ provides tools for developing, executing, measuring, and managing dynamic tests of MATLAB code, including deployed applications and user-authored toolboxes.

