

MATLAB R2025a Prerelease – New Desktop, Graphics and Java Compatibility Update

Dear MathWorks Connections Program Contact,

We are sending this message to selected partners to highlight some of the major changes which are coming with Release R2025a. This includes a new MATLAB desktop which has been in beta since R2022b and is now officially available in the R2025a Prerelease. We encourage you to download and refer to the Prerelease documentation for more details on any areas that you think may affect your product integration.

Release Highlights: The new MATLAB desktop includes several new capabilities:

- A new layout designed to improve productivity and streamline workflows with customizable sidebars on the left, right, and bottom of the desktop. The sidebars show tools, such as the Files panel (previously the Current Folder browser), the Workspace panel, and the Command Window, that are docked in the desktop.
- Dark and light themes to change the look of the MATLAB desktop, graphics, apps, and custom UI components.
- New side panels for high-frequency coding and software development tasks: Debugger, Project, Source Control, Test Browser, Code Issues, and Code Outline.
- The new desktop framework is based on modern web technologies offering a more modern look and feel for MATLAB apps and enabling them to be run in an installed MATLAB or over the web using MATLAB Online.

Functional Changes: We recommend you review the R2025a Prerelease Release Notes to learn about functionality being removed or changed and to assess any potential impact on your applications, particularly those that make extensive use of MATLAB graphics and/or undocumented Java APIs. Some key changes to highlight are:

- **GUIDE:** The GUIDE design environment has been removed. You can still run existing GUIDE apps in MATLAB, but you can no longer edit apps using the drag-and-drop GUIDE environment.
- **Text & Layout Changes:** Some figure/uicontrol apps may render with some minor layout changes.
 - o **UIControl:** The default font used by the uicontrol function might have a different appearance.
 - o **Axes & Containers:** Axes or containers within a figure might appear with a different location or size depending on the value of the Units property.
 - o **Text Sizes:** Graphics objects now use a conversion value of 1 pixel = 1/96 inch on macOS systems which is now consistent between macOS and Windows systems.
- **ActiveX Controls:** The actxcontrol, actxcontrollist, and actxcontrolselect functions have been removed.
- **JavaComponent:** The undocumented javacomponent function now relies on a Javacomponent bridge functionality that allows you to keep using your app, but with changes in behavior and some functionality removed.

The [R2025a Prerelease Release Notes for Graphics and App Building](#) offer more details on these and other functional changes, along with recommended edits or workarounds if you experience any impact.

JRE Support: Release R2025a still ships with a Java Runtime Environment (JRE).

Interfacing to Java: MATLAB still supports calling Java from MATLAB and calling MATLAB from Java. There are no changes to the programming interface for calling Java from MATLAB.

If you have customers who you expect to upgrade to R2025a immediately at its release, we suggest that you download and test compatibility of your product with this Prerelease. This e-mail is being sent to selected partners to help you update your Connections Program products and maintain compatibility in a timely manner. As such, do not share this e-mail or any other Prerelease information with third parties.

Feedback & questions

Please send MathWorks any technical feedback or questions on the prerelease.

Use the following support form (be sure to select “R2025a Prerelease” as the product release):

https://www.mathworks.com/support/contact_us.html

Many of our customers depend on the ecosystem of third-party products in the Connections Program for their success. We appreciate your support and look forward to continued growth and collaboration in the future.

Thank You,

Connections Program Team

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