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Release Notes for Prerelease 14



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### *Release Notes for Prerelease 14*

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# MATLAB Software Acknowledgments

MATLAB and/or its associated products include software developed by the following third parties.

## ARnoldi PACKage (ARPACK)

Rich Lehoucq, Kristi Maschhoff, Danny Sorensen, and Chao Yang  
<http://www.caam.rice.edu/software/ARPACK>

Assertion blocks were developed in cooperation with

Helmut Keller, Andreas Rau, and Joachim Boensch, members of the Control System Design (CSD) group at DaimlerChrysler Germany.

## Automatically Tuned Linear Algebra Software (ATLAS)

R. Clint Whaley and Jack Dongarra  
<http://www.netlib.org/atlas>

## FDLIBM C math library for machines that support IEEE 754 floating-point

Developed at SunSoft, a Sun Microsystems, Inc. business, by Kwok C. Ng and others. FDLIBM is freely redistributable and is available through NetLib. For information about FDLIBM, see <http://www.netlib.org>.

fft and related MATLAB functions are based on the FFTW library

Developed by Matteo Frigo and Steven G. Johnson  
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<http://www.fftw.org>

HDF capability in the functions `imread`, `imwrite`, `imfinfo`, and `hdf` and HDF 5 capability in the functions `hdf5info` and `hdf5read` is based on code of which portions were developed at

The National Center for Supercomputing Applications at the University of Illinois at Urbana-Champaign.

J2PrinterWorks .class files are a product of Wildcrest Associates.

JPEG capability in the functions `imread`, `imwrite`, `imfinfo`, `print`, and `saveas`

This software is based in part on the work of the Independent JPEG Group.

## Linear Algebra PACKage (LAPACK)

<http://www.netlib.org/lapack> (for general information about LAPACK)  
For details, see the *LAPACK User's Guide*.  
E. Anderson, Z. Bai, C. Bischof, L. S. Blackford, J. Demmel, J. Dongarra, J. Du Croz, A. Greenbaum, S. Hammarling, A. McKenney, and D. Sorensen  
For a printed version of the *LAPACK User's Guide*, go to <http://www.siam.org>.  
For an online version of the *LAPACK User's Guide*, go to  
[http://www.netlib.org/lapack/lug/lapack\\_lug.html](http://www.netlib.org/lapack/lug/lapack_lug.html).

## Qhull based computational geometry capability in MATLAB

Qhull copyright (c) 1993 The National Science and Technology Research Center for Computation and Visualization of Geometric Structures, The Geometry Center, University of Minnesota  
e-mail: [software@geom.umn.edu](mailto:software@geom.umn.edu)  
For complete copyright information, issue the MATLAB command `help qhull`.

Sparse matrix minimum degree permutation functions colamd and symamd

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Authors of the code are Stefan I. Larimore and Timothy A. Davis (davis@cise.ufl.edu), University of Florida. The algorithm was developed in collaboration with John Gilbert, Xerox PARC, and Esmond Ng, Oak Ridge National Laboratory.

This work was supported by the National Science Foundation, under grants DMS-9504974 and DMS-9803599.

For complete copyright information, issue the MATLAB command `edit colamd` or `edit symamd`.

TAUCS for solving sparse symmetric positive definite linear systems

Developed by Sivan Toledo, with Doron Chen and Vladimir Rotkin, at Tel-Aviv University. TAUCS is distributed under the GNU LGPL (Library or Lesser GNU Public Library). See <http://www.math.tau.ac.il/~stoledo/taucs/> for information about TAUCS.

TIFF capability in the functions `imread`, `imwrite`, `imfinfo`, `print`, and `saveas`:

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Unsymmetric MultiFrontal PACKage (UMFPACK) for solving unsymmetric sparse linear systems.

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See <http://www.cise.ufl.edu/research/sparse/umfpack> for general information about UMFPACK.

For details, the *UMFPACK Version 4.0 User Guide* is available at

<http://www.cise.ufl.edu/research/sparse/umfpack/v4.0/UserGuide.pdf>.

Unsymmetric MultiFrontal PACKage (UMFPACK) for solving unsymmetric sparse linear systems.

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# Release Notes for Prerelease 14

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## Overview

Prerelease 14 contains many products that are updated with new features and/or major bug fixes. In addition, this release incorporates several product updates that were made available in Web download form between when Release 13 with Service Pack 1 was shipped and Prerelease 14.

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**Note** Prerelease 14 is intended as an early release for the purpose of evaluation and bug reporting before the first shipments. Release 14 *FCS* (first customer shipment) will include additional performance tuning, refinement of some features, bug fixes, and updated documentation.

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## Where to Find Information About This Release

The following kinds of documents describe what's new in this release:

- “Release Notes for Prerelease 14” on page 2
- “Product-Specific Release Notes” on page 3
- “Prerelease 14 Late-Breaking News” on page 3

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**Note** To quickly check to see whether a product has been updated for Prerelease 14, see “Quick Access to Product-Specific Release Notes” on page 29. That section includes links to the product-specific release notes for each product.

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## Release Notes for Prerelease 14

These general release notes give you a quick overview of what products have been updated for Prerelease 14.

These general release notes include the following sections:

- “Product Restructuring” on page 4
- “Products with New Features” on page 6
- “Products with Major Bug Fixes” on page 8

- “Products with Minor Changes” on page 10
- “Supported Platforms” on page 13
- “Accessibility Notes” on page 15
- “Installation Notes” on page 21
- “Known Software and Documentation Problems” on page 26
- “Quick Access to Product-Specific Release Notes” on page 29

### **Printing the Release Notes for Prerelease 14**

If you are reading the general release notes for Prerelease 14 online and would like to print them, you can link to a PDF version.

### **Product-Specific Release Notes**

There are release notes for almost all the products included in Prerelease 14. The product-specific release notes include one or more of the following sections:

- New Features
- Major Bug Fixes
- System Limitations
- Upgrading From an Earlier Release
- Known Software and Documentation Problems

The product-specific release notes are available as part of each product’s online documentation set and on the MathWorks Web site.

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**Note** The Prerelease software has been updated since it was originally released. Some of the documentation has been updated as well. However, some of the product-specific release notes may describe some bugs that have been fixed by the more recent version of the software.

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### **Prerelease 14 Late-Breaking News**

For the latest information about Prerelease 14, see the Prerelease 14 Late-Breaking News in the Documentation section of the MathWorks Web site.

## Product Restructuring

The following products were renamed or restructured for Prerelease 14.

### DSP Blockset Renamed

The DSP Blockset has been renamed. The new name is the Signal Processing Blockset.

### Fixed-Point Blockset Replaced

The Fixed-Point Blockset has been replaced by two new products, Fixed-Point Toolbox and Simulink® Fixed Point. This product restructuring reflects the broad expansion of fixed-point capabilities in MATLAB® and Simulink®. The Fixed-Point Toolbox introduces fixed-point operations to the MATLAB language and Simulink Fixed Point enables fixed-point capabilities across much of the Simulink product family.

See the Simulink Fixed Point and Fixed-Point Toolbox release notes for details

### Filter Design Toolbox Changed

The Quantizer object and its associated methods have been moved from the Filter Design Toolbox to the Fixed-Point Toolbox, a new product that introduces fixed-point capabilities for verifying your fixed-point designs in MATLAB.

For details, see the Filter Design Toolbox release notes.

### MATLAB COM Builder Renamed

The MATLAB® COM Builder product has been renamed. The new name is MATLAB® Builder for COM.

### MATLAB Excel Builder Renamed

The MATLAB® Excel Builder product has been renamed. The new name is MATLAB® Builder for Excel.

## **Nonlinear Control Design Blockset Renamed**

The Nonlinear Control Design Blockset has been renamed. The new name is Simulink® Response Optimization.

## **Simulink Performance Tools and Requirements Management Interface Changes**

Prerelease 14 splits the product formerly known as the Simulink® Performance tools into two new products: the Simulink® Accelerator and the Simulink® Validation and Verification Tools. The Simulink Accelerator product consists of the Simulink Accelerator and Profiler. The Simulink Verification and Validation Tools includes the Model Coverage Tool and the Requirements Management Interface (no longer being offered as a separate product).

## Products with New Features

The Prerelease 14 versions of the products listed below contain new features introduced after Release 13 with Service Pack 1 (R13SP1). Some of these new features are incorporated from Web download releases that occurred between R13SP1 and Prerelease 14.

Note that several of these products also include major bug fixes, as highlighted in “Products with Major Bug Fixes” on page 8.

Prerelease 14 also includes some products with new features that were released in Web download form after R13SP1; see “Products with Minor Changes” on page 10.

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**Note** If you are reading the HTML version of these release notes, the links below take you to the individual release notes for specific products. These product-specific release notes are available in online documentation for each product and on the MathWorks Web site.

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### MATLAB

- MATLAB
- MATLAB® Report Generator
- MATLAB® Compiler

### Toolboxes

- Communications Toolbox
- Database Toolbox
- Datafeed Toolbox
- Filter Design Toolbox
- Image Acquisition Toolbox
- Image Processing Toolbox
- Instrument Control Toolbox
- Mapping Toolbox

- Model-Based Calibration Toolbox
- Model Predictive Control Toolbox
- Optimization Toolbox
- Signal Processing Toolbox
- Statistics Toolbox
- Symbolic Math Toolbox
- Virtual Reality Toolbox
- Wavelet Toolbox

## **Simulink**

- Simulink
- Embedded Target for Motorola® MPC555
- Embedded Target for OSEK/VDX®
- Embedded Target for TI C6000™ DSP
- Real-Time Windows Target
- Real-Time Workshop®
- Real-Time Workshop® Embedded Coder
- SimMechanics
- SimPowerSystems
- Simulink Fixed Point
- Simulink Report Generator
- Simulink® Response Optimization
- Stateflow® and Stateflow® Coder
- xPC Target

## **Blocksets**

- Communications Blockset
- Signal Processing Blockset

## Products with Major Bug Fixes

The following products include major bug fixes added in Prerelease 14. Note that several of these products also include new features, as highlighted in “Products with New Features” on page 6.

### **MATLAB**

- MATLAB

### **Toolboxes**

- Communications Toolbox
- Curve Fitting Toolbox
- Data Acquisition Toolbox
- Database Toolbox
- Genetic Algorithm and Direct Search Toolbox
- Image Acquisition Toolbox
- Image Processing Toolbox
- Mapping Toolbox
- Optimization Toolbox
- Statistics Toolbox
- Virtual Reality Toolbox
- Wavelet Toolbox

### **Simulink**

- Simulink
- Embedded Target for Motorola MPC555
- Embedded Target for TI C6000 DSP
- Real-Time Windows Target
- Real-Time Workshop
- Real-Time Workshop Embedded Coder
- SimMechanics



- SimPowerSystems
- Stateflow and Stateflow Coder
- xPC Target

## **Blocksets**

- Communications Blockset
- Dials & Gauges Blockset
- Signal Processing Blockset

## Products with Minor Changes

The following products have very minor updates. They do not have new features or major bug fixes added in Release 14.

### MATLAB

- MATLAB Link for Code Composer Studio® Development Tools
- MATLAB Builder for COM
- MATLAB Builder for Excel

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**Note** MATLAB Builder for COM and MATLAB Builder for Excel are not included in Prerelease 14, but will ship to all licensed users with Release 14.

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### Toolboxes

- Control System Toolbox
- Data Acquisition Toolbox
- Datafeed Toolbox
- Financial Time Series Toolbox
- Financial Derivatives Toolbox
- Financial Toolbox
- Fixed-Income Toolbox
- GARCH Toolbox
- Neural Network Toolbox

### Simulink

- Embedded Target for Infineon C166 Microcontrollers
- Embedded Target for Motorola HC12
- Embedded Target for the TI C6000 DSP Platform
- xPC TargetBox™

## **Blocksets**

- Aerospace Blockset

## New Products

The following new products have been added to the MathWorks product family since Release 13 with Service Pack 1 (R13SP1) was released. Some of these products were initially introduced in Web download form prior to Prerelease 14.

### MATLAB

- MATLAB Builder for COM (see “Product Restructuring” on page 4)
- MATLAB Builder for Excel (see “Product Restructuring” on page 4)

### Toolboxes

- Bioinformatics Toolbox (introduced post-R13SP1)
- Fixed-Point Toolbox
- Genetic Algorithm and Direct Search Toolbox (introduced post-R13SP1)
- [Link for ModelSim®](#)

### Simulink

- Embedded Target for TI C2000™ DSP
- Simulink Accelerator (see “Product Restructuring” on page 4)
- Simulink® Control Design
- Simulink Fixed Point (see “Product Restructuring” on page 4)
- Simulink Parameter Estimation
- Simulink Response Optimization (see “Product Restructuring” on page 4)
- Simulink Verification and Validation (see “Product Restructuring” on page 4)

### Blocksets

- Signal Processing Blockset (see “Product Restructuring” on page 4)

## Supported Platforms

The following platforms are supported for Release 14 Prerelease:

- Windows 2000
- Windows NT
- Windows XP
- Linux ix86 2.4.x, glibc 2.2.5
- Sun Solaris 2.8 and 2.9
- HP-UX 11.0 and 1i
- Mac OS X 10.3.2

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**Note** For the most up-to-date, and more detailed, information about supported platforms and system requirements, see “Planned Release 14 System Requirements” on the MathWorks Web site: [http://www.mathworks.com/products/system\\_requirements/planned\\_r14.shtml](http://www.mathworks.com/products/system_requirements/planned_r14.shtml).

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### Sun Solaris Runtime Libraries

MATLAB dynamically links against the Solaris C++ Runtime Library, which must reside on the same machine.

To determine whether this library is already installed, type the following line in a UNIX shell:

```
ls -l /usr/lib/libCstd.so.*
```

If you get a “No match” response, then you need to install it from your Solaris system CD.

## **256 Color Displays No Longer Supported**

For all supported platforms, MATLAB requires a 16-bit or higher graphics adapter:

- On Windows: 16-, 24-, or 32-bit OpenGL graphics adapter
- UNIX and Mac: 16-bit graphics or higher adaptor and display (24 bit recommended)

## Accessibility Notes

Prerelease 14 includes a number of modifications to make our products more accessible to all users.

For installation instructions relating to accessibility support, see “Installation Notes for Accessibility Support” on page 22.

### Products Updated

The MathWorks has made general modifications to make its products more accessible. Particular emphasis was placed on the accessibility of following products/features for Prerelease 14:

- The product installation process
- MATLAB
- Simulink
- Control System Toolbox
- Curve Fitting Toolbox
- Optimization Toolbox
- Signal Processing Toolbox
- Statistics Toolbox
- Excel Link
- MATLAB Compiler

### Summary of Accessibility Support

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**Note** For Prerelease 14, you must use our products on a Microsoft Windows platform to use all of the accessibility support features.

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For Prerelease 14, the focus was on the following kinds of accessibility support for blind and visually impaired users:

- Support of screen readers and screen magnifiers, as described in the next section, “Assistive Technologies”
- Command line alternatives for most GUI (graphical user interface) options

- Keyboard access to GUI components
- A clear indication of the current cursor focus
- Information available to assistive technologies about user interface elements, including the identity, operation and state of the element
- Nonreliance on color coding as the sole means of conveying information about working with a GUI
- Consistent meaning for bit-mapped images used in GUIs
- Noninterference with user-selected contrast and color selections and other individual display attributes, as well as noninterference for other operating system-level accessibility features
- HTML documentation that is accessible to screen readers

The MathWorks believes that its products do not rely on auditory cues as the sole means of conveying information about working with a GUI. However, if you do encounter any issues in this regard, please report them to the MathWorks Technical Support group:

<http://www.mathworks.com/support/>

Keyboard access to the user interface includes support for “sticky keys,” which allow you to press key combinations (such as **Ctrl + C**) sequentially rather than simultaneously.

The MathWorks software does not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.

## Organization of the Accessibility Notes

These notes about product accessibility cover the following topics:

- “Assistive Technologies” on page 17
- “Troubleshooting” on page 17
- “Documentation” on page 19



## Assistive Technologies

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**Note** For Prerelease 14, to take advantage of accessibility support features, you must use MathWorks products on a Microsoft Windows platform.

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### Tested Assistive Technologies

For Prerelease 14, The MathWorks has tested the following assistive technologies:

- JAWS 4.5 for Windows (screen reader), from Freedom Scientific
- Built-in accessibility aids from Microsoft, including the Magnifier and “sticky keys”

### Use of Other Assistive Technologies

Although The MathWorks has not tested other assistive technologies, such as other screen readers or ZoomText Xtra (screen magnifier) from Ai Squared, The MathWorks believes that most of the accessibility support built into its products should work with most assistive technologies that are generally similar to the ones tested.

If you choose to experiment with using other assistive technologies than the ones tested, The MathWorks is very interested in hearing from you about your experiences.

## Troubleshooting

This section identifies work-arounds for some possible issues you may encounter related to accessibility support in MathWorks products.

### JAWS Stops Speaking

When there are lot of Desktop components open, JAWS with MATLAB sometimes just stops speaking.

If this happens, close most of the Desktop components, exit MATLAB, and restart.

## Command Output Not Read

In the MATLAB Command Window, JAWS does not automatically read the results of commands.

To read command output, first select **File --> Preferences --> Command Window**, select the option **Use arrow keys for navigation instead of command history recall**, and click **OK**. Then, in the Command Window, press the arrow keys to move to the command output and use JAWS keystrokes to read the output.

With this preference set, you cannot use arrow keys to recall previous commands. Instead use the following key bindings:

- Windows key bindings:
  - Previous history: **CTRL-up arrow**
  - Next history: **CTRL-down arrow**
- Emacs key bindings:
  - Previous history: **CTRL-p**
  - Next history: **CTRL-n**

To return to using the up and down arrow keys to recall previous commands, clear the preference.

## Menus of Some GUIs Are Treated As Checkboxes

For some GUIs (graphical user interfaces), for example from the Figure Window, all menus are treated by JAWS as though they are checkboxes, whether or not they actually are checkboxes.

You can choose a menu item for such GUIs by using accelerator keys (e.g., **CTRL-N** for New Figure), if one is associated with a menu item. You can also use mnemonics for menu traversal (e.g., **ALT-E**).

Note that checkboxes that you encounter by tabbing through the elements of a GUI are handled properly.

## Text in Some GUIs Is Ignored

For some dialog boxes, JAWS reads the dialog box title and any buttons, but ignores any text in the dialog box.

Also, parts of some GUIs, such as some text-entry fields, JAWS ignores the label of the field. However, JAWS will read any text in the text box.

## Documentation

Documentation is available in HTML format for all MathWorks products that are included in Prerelease 14.

### Accessing the Documentation

To access the documentation with a screen reader, go to the Prerelease 14 documentation area on the MathWorks Web site at this URL:

[http://www.mathworks.com/access/helpdesk\\_r14pr/help/helpdesk.shtml](http://www.mathworks.com/access/helpdesk_r14pr/help/helpdesk.shtml)

### Navigating the Documentation

Note that the first page that comes up is a listing of the products. To get the documentation for a specific product, click on the link for that product.

The table of contents is in a separate frame. You can use a document's table of contents to navigate through the sections of that document.

Because you will be using a general Web browser, you will not be able to use the search feature included in the MATLAB Help browser. You will have access to an index, although the index will be for the specific document you are using; the cross-product index of the MATLAB Help browser is not available when you are using a general Web browser.

### Products

The following product documentation has been modified (as described below) to enhance its accessibility for people using a screen reader such as JAWS:

- MATLAB (most sections)
- Signal Processing Toolbox
- Statistics Toolbox
- Optimization Toolbox
- Excel Link
- MATLAB Compiler

**Documentation Modifications.** Modifications to the documentation include:

- Describing illustrations in text (either directly or via links)
- Providing text to describe the content of tables (as necessary)

- Restructuring information in tables to be easily understood when a screen reader is used
- Providing text links in addition to any image mapped links

**Equations.** Equations that are integrated in paragraphs are generally explained in words. However, most complex equations that are represented as graphics are not currently explained with alternative text.

## Installation Notes

To install Prerelease 14 on a Windows or UNIX system, follow the instructions in the prerelease 14 installation guide for that platform.

Prerelease 14 introduces some new features of the MathWorks Installer program, including:

- New **Typical** and **Custom** installation options
- New method of delivering documentation

Release 14 also introduces product modifications to make our products more accessible to all users, including visually impaired and blind users. “Accessibility Notes” on page 15 describes these modifications. “Installation Notes for Accessibility Support” on page 22 discusses some installation issues involved in setting up your environment to work with assistive technologies.

### Typical and Custom Installations

The MathWorks Installer program on Windows platforms provides two paths through the installation process: a path for typical installations and a path for custom installations.

A typical installation is the simplest type of installation to perform. In this type of installation, the installer installs all the products your license authorizes you to install. The installer does not present a list of products from which you can pick and choose. The installer installs the products in a default directory, but you can specify a different installation directory.

The custom installation option lets you select the products you want to install and provides access to several other installation options that are not accessible in a typical installation. For example, in a custom installation, you can choose to set the permission of all of the installed files to read only.

### Installing the Online Documentation

The MathWorks Installer program always installs the online HTML documentation associated with each product it installs. The installer no longer includes options to install documentation. Because the online documentation files are stored in compressed form in Java Archive (JAR) files, they take up less disk storage than in previous releases.

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**Note** Because the documentation files are shipped in compressed form, you can no longer view the help directly from the installation CDs.

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The Release 14 installation CDs do not include PDF documentation. The PDF documentation is available from the MathWorks Web site, at

[http://www.mathworks.com/access/helpdesk\\_r14pr/help/helpdesk.shtml](http://www.mathworks.com/access/helpdesk_r14pr/help/helpdesk.shtml)

For the PDF version of a manual, click on the product in the list of products to display its Roadmap page; then see “Printing the Documentation Set.”

## **Installation Notes for Accessibility Support**

This section describes the installation process for setting up your MATLAB environment to work effectively with JAWS, a screen reader assistive technology.

Use the regular MATLAB installation script to install the products for which you are licensed. The installation script has been modified to improve its accessibility for all users.

After you complete the product installation, there are some additional steps you need to perform to ensure JAWS works effectively with MathWorks products.

### **Setting Up JAWS**

Make sure that JAWS is installed on the machine. If it is, there is probably a shortcut to it on the Windows Desktop.

Setting up JAWS involves five tasks:

- 1 Download the Java AccessBridge 1.1.
- 2 Expand the downloaded zip file.
- 3 Add AccessBridge to your path.
- 4 Copy the AccessBridge JAR files to the MATLAB installation directory.
- 5 Create the accessibility.properties file.

Each of these tasks is described in more detail below.

**Download the AccessBridge 1.1.** You need to have the latest version of AccessBridge (Version 1.1) installed.

- 1 Go to the AccessBridge page at

<http://java.sun.com/products/accessbridge>

and select the **Download** button that is in the section called “Java Access Bridge for Microsoft Windows Operating System 1.1.”

- 2 Follow the steps of the download instructions.

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**Note** Sun provides a readme file with information about installing and working with the Java Access Bridge. You can get to the readme file from this URL: <http://java.sun.com/products/accessbridge/README.txt>.

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**Expand the Downloaded Zip File.** Expand the downloaded AccessBridge zip file into your C:\ drive (or other location of your choice).

This causes an AccessBridge-1.1 directory to be created.

**Add AccessBridge to Your Path.** Add AccessBridge to your Windows path. If you downloaded the zip file to your C:\ drive, then you would add C:\AccessBridge-1.1\ to the Windows path.

- 1 Put the latest version of the AccessBridge dlls on your Windows system path:
  - a Select the **Control Panel** from **My Computer**.
  - b From the **Start** button, select **Settings**, next select **Control Panel**, and then **System**.
  - c In the **System Properties** dialog box, select the **Advanced** tab.
  - d Click **Environment Variables**
  - e Under the **System variables**, select the **Path** option.

**f** Select the **Edit** option.

**g** To the start of the Path environment variable, add (assuming you downloaded to your C:\ drive)

C:\AccessBridge\_1.1\_GA;

Be sure to include that semicolon between the end of this directory name and the text that was already there.

**h** Click **OK** three times.

**Copy the AccessBridge JAR files to the MATLAB Installation Directory.** Copy the following two files (assuming you downloaded to your C:\ drive):

- C:\AccessBridge-1.1\access-bridge.jar
- C:\AccessBridge-1.1\installer\installerFiles\jaccess-1\_4.jar

into

\$(matlabroot)\sys\java\jre\win32\jre1.4.2\lib\ext\

**Create the accessibility.properties file.**

**1** Create a text file that contains the following line:

assistive\_technologies=com.sun.java.accessibility.AccessBridge

**2** Use the file name accessibility.properties.

**3** Move the accessibility.properties file into

\$(matlabroot)\sys\java\jre\win32\jre1.4.2\lib\

## Testing

Once you have installed JAWS and set up your environment as described above, you should test out whether JAWS is working properly.

**1** Start JAWS.

**2** Start MATLAB.

JAWS should start talking to you as you select menu items and work with the MATLAB user interface in other ways.



## **JAWS Pronunciation Dictionary**

As a convenience, the MathWorks provides a pronunciation dictionary for JAWS. This dictionary is in a file called `MATLAB.jdf`.

During the installation, the file will be copied to your system under the MATLAB root directory at `sys\Jaws\matlab.jdf`.

To make use of the dictionary, you must copy it to the `\SETTINGS\ENU` folder located beneath the JAWS root installation directory.

You need to restart JAWS and MATLAB for the settings to take effect.

`$MATLAB/extern/lib/mac`

`$MATLAB/bin/mac`

where `$MATLAB` is the MATLAB root directory on your system.

## Known Software and Documentation Problems

This section describes software and documentation problems discovered after the rest of the Prerelease 14 documentation set was completed. The problems apply to the following products:

- “MATLAB” on page 26
- “Mapping Toolbox” on page 27
- “Simulink” on page 27
- “SimMechanics” on page 28

### MATLAB

#### **dbstack Function Uses New Format for Name Field**

The `dbstack` function was updated to support nested functions. If you use `dbstack` in M-files, you might need to update your files because of this change. When you run `dbstack` and return results to a structure, there are now three fields, whereas in previous versions, there were only two fields. The fields are:

- `file`, the file in which the function appears
- `name`, the function name within the file
- `line`, the line number in the function

The `file` field does not return a complete pathname, as it did with the `name` field in previous versions. To get the complete pathname, use

```
dbstack('-completenames')
```

#### **Japanese Version GUIs Not All Translated**

On the Japanese version of MATLAB, some parts of the GUIs are shown in English instead of Japanese. As a workaround, type the following at the Command Window:

```
set(0,'lang','ja')
```

That should update all GUIs to show Japanese for the rest of the session. You can put the statement in your `startup.m` file, which automatically runs it each time you start MATLAB.

### **(Macintosh) Dragging to Move Text Copies Instead**

On the Macintosh, when you try to move selected text by dragging it, such as in the Command Window or Editor, MATLAB instead copies the text. As a workaround, cut and paste the text using menu items or shortcut keys.

### **Notebook Error Prevents Use in Some Situations**

When you run notebook, you might get the following error:

```
??? Error using ==> actxserver
Server creation failed. Invalide ProgID 'matlab.autoserver'
Error in ==> $MATLAB\toolbox\matlab\codetools\notebook.m
On line 52 ==> hAppMatlab =
startMatlabAutomationServer(hAppMatlab);
```

If you get this error, type the following at the Command Window:

```
hAppMatlab = actxserver('matlab.application');
```

This should permanently correct the problem for you.

## **Mapping Toolbox**

### **Mapping Toolbox Not Installable On Web for Unix and Mac**

For Prerelease 14, the Mapping Toolbox is available only on Windows platforms.

For Release 14 FCS (first customer shipment), the Mapping Toolbox will be available on Unix, Mac, and Windows platforms.

## **Simulink**

### **Simulink Dynamic Loading**

Simulink software modules now load on demand rather than at MATLAB startup. This makes MATLAB startup faster, but it may make some Simulink operations, such as loading a model or opening the Library Browser, slower the first time they are performed in a MATLAB session.

Sometimes Simulink model files may not load properly on Windows NT platforms. If there is a problem, it will be reflected in an error message such as:

You cannot run the Model Discretizer on Japanese systems at this time.

## Quick Access to Product-Specific Release Notes

Below are links to the product-specific release notes for each MathWorks product. If a product is not listed below, it has not changed significantly since Release 11.

**Note** Products with an asterisk (\*) include *changes* for Release 14 and products that have been made available in Web download form after Release 13 with Service Pack 1. Refer to release notes for products that do *not* have an asterisk only if you are upgrading from a release prior to Release 13 with Service Pack 1.

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### MATLAB

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MATLAB*	Filter Design HDL Coder (new)
MATLAB Report Generator*	MATLAB Link for Code Composer Studio Development Tools*
MATLAB Web Server	

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### Toolboxes

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Bioinformatics Toolbox* (new)	Communications Toolbox*
Control System Toolbox*	Curve Fitting Toolbox (not shipped for Prerelease 14)
Data Acquisition Toolbox*	Database Toolbox*
Datafeed Toolbox*	Excel Link
Filter Design Toolbox*	Financial Derivatives Toolbox*
Financial Time Series Toolbox*	Financial Toolbox*
Fixed-Income Toolbox*	Fixed-Point Toolbox (new)

Toolboxes (Continued)	
Fuzzy Logic Toolbox (no release notes)	GARCH Toolbox
Genetic Algorithm and Direct Search Toolbox*	Image Acquisition Toolbox*
Image Processing Toolbox*	Instrument Control Toolbox*
Mapping Toolbox*	Model-Based Calibration Toolbox*
Model Predictive Control Toolbox*	Neural Network Toolbox*
OPC Toolbox (Beta for Prerelease 14)	Optimization Toolbox*
RF Toolbox (new)	Signal Processing Toolbox*
Spline Toolbox	Statistics Toolbox*
Symbolic Math Toolbox*	System Identification Toolbox
Virtual Reality Toolbox*	Wavelet Toolbox*
Simulink	
Simulink*	Embedded Target for Infineon C166 Microcontrollers*
Embedded Target for Motorola HC12*	Embedded Target for Motorola MPC555*
Embedded Target for OSEK/VDX*	Embedded Target for TI C6000™ DSP*
Real-Time® Windows Target*	Real-Time Workshop®*
Real-Time Workshop Embedded Coder*	Requirements Management Interface (incorporated into new Simulink Verification and Validation Tools)

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**Simulink (Continued)**

SimMechanics*	SimPowerSystems*
Simulink Accelerator (new)	Simulink Control Design (new)
Simulink Fixed Point* (new)	Simulink Parameter Estimation (new)
Simulink Performance Tools (tools are now in new Simulink Accelerator and Simulink Verification and Validation Tools products)	Simulink Report Generator*
Simulink Response Optimization (new)	Simulink® Verification and Validation Tools* (new)
Stateflow and Stateflow Coder*	xPC Target*
xPC TargetBox*	

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**Blocksets**

Aerospace Blockset	CDMA Reference Blockset
Communications Blockset*	Dials & Gauges Blockset*
DSP Blockset (now called Signal Processing Blockset)	Fixed-Point Blockset (incorporated into new Simulink Fixed Point)
Nonlinear Control Design Blockset (renamed Simulink® Response Optimization)	RF Blockset (new)
Signal Processing Blockset*	

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