

# **MATLAB<sup>®</sup> Compiler<sup>™</sup> Release Notes**

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*MATLAB® Compiler™ Release Notes*

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# R2013b

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**Version: 5.0**

**New Features: Yes**

**Bug Fixes: Yes**

## **Automatic download of version- and platform-specific MATLAB Compiler Runtime from MathWorks website**

The MATLAB® Compiler™ apps generate a platform specific installer that will automatically download and install the proper MATLAB Compiler Runtime if it is needed.

## **Toolstrip-style user interface for MATLAB Compiler apps**

The MATLAB Compiler apps use a toolstrip for commonly used interface components and required input fields.

## **Customizable installers for deployed applications and libraries, including graphics, splash screen, and icons**

The MATLAB Compiler apps have fields for supplying custom graphics, icons, developer profile details, and version numbers to the generated installer.

# R2013a

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**Version:** 4.18.1

**New Features:** No

**Bug Fixes:** Yes



# R2012b

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**Version: 4.18**

**New Features: Yes**

**Bug Fixes: Yes**

## **Apple Xcode 4.2 compiler support for generating or using C/C++ shared libraries on Mac OS X**

MATLAB Compiler now supports C and C++ shared libraries generation for Mac OS X, using Apple Xcode compiler, version 4.2.

For more information on using Mac with MATLAB Compiler, see Writing Applications for Mac or Linux.

## **MATLAB Compiler Runtime (MCR) available for Web download**

The MATLAB Compiler Runtime (MCR) is available for downloading from the Web to simplify the distribution of your applications or components created with the MATLAB Compiler.

Direct your end users to the MATLAB Compiler Runtime page at <http://www.mathworks.com/products/compiler/mcr/> to download the MCR, as opposed to redistributing or packaging it with your applications or components.

## **Support for lcc Compiler To Be Removed** **Compatibility Considerations: Yes**

The lcc compiler that ships with Windows® will no longer be supported as of R2013a.

For release R2012b, selecting the lcc compiler using `mbuild -setup` results in a warning, though the compiler is available. In R2013a, lcc will no longer appear in the list of available compilers.

# R2012a

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**Version: 4.17**

**New Features: Yes**

**Bug Fixes: Yes**

## **MATLAB Compiler Runtime (MCR) Available for Web Download**

The MATLAB Compiler Runtime (MCR) is available for downloading from the Web to simplify the distribution of your applications or components created with the MATLAB Compiler.

Direct your end users to the MATLAB Compiler product page to download the MCR, as opposed to redistributing or packaging it with your applications or components.

## **Support for Linux gcc 4.4 Compiler**

MATLAB Compiler now supports Linux<sup>®</sup> gcc 4.4.x compilers for both 32-bit and 64-bit architectures.

See [http://www.mathworks.com/support/compilers/current\\_release/](http://www.mathworks.com/support/compilers/current_release/) for a complete up-to-date list of supported compilers and software.

## **Example of Deploying Graphical Function with Apple Xcode**

An example demonstrating how to deploy a graphical MATLAB function with the Mac OS X Cocoa development layer, is available.

The function is compiled to a shared library target and then integrated into a deployed application using Apple Xcode.

See Writing Applications for Mac or Linux for more details.

## **Changes in MCR User Data Interface Arguments for Compiling Parallel Computing Toolbox Applications** **Compatibility Considerations: Yes**

Parallel Computing Toolbox<sup>™</sup> configurations are now referred to as *parallel profiles*, as of R2012a.



See Profiles in Compiled Applications in the Parallel Computing Toolbox Release Notes for complete information.

## Compatibility Considerations

The older MCR User Data Interface argument `ParallelConfigurationFile` and `MAT` files will still be supported until Parallel Computing Toolbox documentation states otherwise, but note that if you use the `ParallelConfigurationFile` argument, you must supply a configuration `.mat` file, rather than a profile `.settings` file. If the `ParallelProfile` argument is used, a configuration `.mat` file or a profile `.settings` file can be used.

## Support Updates for Microsoft Visual Studio Versions

The following changes to Microsoft® Visual Studio® support apply for R2012a and R2012b.

Microsoft Visual Studio Version	What Happens When You Attempt to Use This Version in R2012a	What Happens When You Attempt to Use This Version in R2012b
Microsoft Visual Studio 2010 Express, for 32-bit or 64-bit architectures	Not Available	Not Available
Microsoft Visual C++® 2008 for 32-bit or 64-bit architectures	Warns	Not Available

## Support for lcc Compiler To Be Removed

**Compatibility Considerations: Yes**

The `lcc` compiler that ships with Windows will no longer be supported as of R2013a.

For releases R2012a and R2012b, selecting the `lcc` compiler using `mbuild -setup` results in a warning, though the compiler is available. For R2013a, `lcc` will no longer appear in the list of available compilers.

## Functions and Function Elements Being Removed

**Compatibility Considerations: Yes**

<b>Function or Function Element Name</b>	<b>What Happens When You Use the Function or Element</b>	<b>Do This Instead</b>	<b>Compatibility Considerations</b>
<i>libraryGetMcrID</i>	Errors	Use one of the following functions without specifying an MCR ID: <ul style="list-style-type: none"> <li>• <code>getmcruserdata</code></li> <li>• <code>setmcruserdata</code></li> </ul>	For more information, see <i>Setting and Retrieving MCR Data for Shared Libraries</i> .
<code>mclGetMcrUserData</code>	Errors	Use <code>getmcruserdata</code> .	For more information, see <i>Setting and Retrieving MCR Data for Shared Libraries</i> .
<code>mclSetMcrUserData</code>	Errors	Use <code>setmcruserdata</code> .	For more information, see <i>Setting and Retrieving MCR Data for Shared Libraries</i> .
<code>mclSetCmdLineUserData</code>	Errors	No replacement	Not applicable

# R2011b

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**Version: 4.16**

**New Features: Yes**

**Bug Fixes: Yes**

## Faster Installation of MATLAB Compiler Runtime (MCR) with Improved MCR Installer

The Application Deployment products now feature faster installation of the MATLAB Compiler Runtime (MCR) through improved MCR Installer technology. In addition to improved performance, the new installer provides a common interface for all platforms.

## Support for Graphics Processing Unit (GPU) in Parallel Computing Toolbox Applications

MATLAB Compiler generated executables and components now benefit from better performance when used with Parallel Computing Toolbox applications. The improvement is due to support of the Graphics Processing Unit (GPU) feature.

For more information, see GPU Computing in the Parallel Computing Toolbox User's Guide, as well as the Parallel Computing Toolbox examples in the deployment user's guides for additional information about compiling your deployable application with GPU.

## Functions and Function Elements Being Removed

**Compatibility Considerations: Yes**

Function or Function Element Name	What Happens When You Use the Function or Element	Do This Instead	Compatibility Considerations
<code> %#external </code>	Errors	Rewrite the C or C++ function as a MEX-file and call it from your application.	For additional information, see <i>Interfacing MATLAB Code to C/C++ Code</i> in the User's Guide and <i>Creating C/C++ Language MEX-Files</i> in the

Function or Function Element Name	What Happens When You Use the Function or Element	Do This Instead	Compatibility Considerations
			<i>MATLAB External Interfaces User's Guide.</i>
<i>libraryGetMcrID</i>	Warnings	Use one of the following functions without specifying an MCR ID: <ul style="list-style-type: none"> <li>• <code>getmcruserdata</code></li> <li>• <code>setmcruserdata</code></li> </ul>	For more information, see <i>Setting and Retrieving MCR Data for Shared Libraries</i> .
<code>mclGetMcrUserData</code>	Warnings	Use <code>getmcruserdata</code> .	For more information, see <i>Setting and Retrieving MCR Data for Shared Libraries</i> .
<code>mclSetMcrUserData</code>	Warnings	Use <code>setmcruserdata</code> .	For more information, see <i>Setting and Retrieving MCR Data for Shared Libraries</i> .
<code>mclSetCmdLineUserData</code>	Warnings	No replacement	No support as of version R2012a.
Control System Toolbox™ prescale GUI	Errors	No replacement	The Control System Toolbox prescale GUI is no longer compatible with MATLAB Compiler and cannot be deployed.



# R2011a

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**Version: 4.15**

**New Features: Yes**

**Bug Fixes: Yes**

## **Local Worker Support for Parallel Computing Toolbox Applications**

MATLAB Compiler and the builders now support local workers in Parallel Computing Toolbox applications.

For information about this feature, see *Use a Local Cluster* for general information on Local Workers. Also, see the *Parallel Computing Toolbox User's Guide* for information about working with compilable PCT applications.

## **Error Reporting for Graphical Applications**

MATLAB Compiler now provides error messages in pop-up windows for Windows and Macintosh graphical applications. You do not need to run a console in order to view these messages.

## **Microsoft Visual Studio Express 2010 Compilers Supported**

Effective with this release, Microsoft Visual Studio Express 2010 compilers (32- and 64-bit versions) are now supported. Microsoft Visual Studio Express 2008 compilers (32- and 64-bit versions), which have been dropped from support. See *Installation and Configuration* in the *MATLAB Compiler User's Guide* for information about installing and configuring them. See [http://www.mathworks.com/support/compilers/current\\_release/](http://www.mathworks.com/support/compilers/current_release/) for an up-to-date list of supported compilers.

## **Functions and Function Elements Being Removed**



**Compatibility Considerations: Yes**

<b>Function or Function Element Name</b>	<b>What Happens When you use the Function or Element</b>	<b>Use This Instead</b>	<b>Compatibility Considerations</b>
mcc -F	Errors	deploytool -n	For information about using the command-line version of the Deployment Tool, see Using the Deployment Tool from the Command Line.



# R2010bSP1

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**Version: 4.14.1**

**New Features: No**

**Bug Fixes: Yes**



# R2010b

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**Version: 4.14**

**New Features: Yes**

**Bug Fixes: Yes**

## **Support for Microsoft Visual Studio 2010 Added**

This release adds support for Microsoft Visual Studio software on both 32-bit and 64-bit systems. See the Installation and Configuration chapter in the *MATLAB Compiler User's Guide* for more information.

## **Include the MCR Installer from a Link on Your Local Network**

This feature lets you add a link to an MCR Installer residing on a local area network. Adding this link allows you to invoke the installer over the network, as opposed to copying the installer physically into each deployable package.

See Packaging (Optional) in the MATLAB Compiler User's Guide, or in your respective Builder product User's Guide, for more details.

## **mbuild -setup No Longer Needed Before Compiling Standalone Targets**

You no longer need to specify a third-party compiler with `mbuild -setup` when building a standalone target. This is the case for both standalones and Windows standalones (standalone applications that suppress the DOS command window when running). For more information about when `mbuild -setup` is not needed, see [When Not to Use mbuild -setup](#).

## **mcc Caching Automatically Managed for Linux Systems**

In previous releases, you could manually manage cache for `mcc` on Linux systems.

As of R2010b, caching for `mcc` is automatically managed and tuned. No user intervention is required.

## **Mixing MATLAB Files and C or C++ Files Workflow Deprecated for Alternate Workflow**

**Compatibility Considerations: Yes**

In previous releases, the workflow described in the procedure “Mixing MATLAB Files and C or C++ Files” detailed how to mix MATLAB and C or C++ source files. This workflow has been replaced with a more straight-forward approach for release R2010b.

**Compatibility Considerations**

Running the obsolete workflow (documented prior to R2010b) now results in a warning.

See [Combining Your MATLAB and C/C++ Code](#) for details on the recommended replacement workflow.

**mcc -F Option Deprecated with Warning****Compatibility Considerations: Yes**

As of R2011a, the `mcc -F` option will no longer process Deploytool Tool project files passed in or generate project files when invoked with command line arguments.

**Compatibility Considerations**

In R2010b, a warning will appear when the `mcc -F` command is issued. In R2011a, the command will generate an error.

Instead of using `mcc -F`, see [Using the Deployment Tool from the Command Line](#) in the User’s Guide for replacement functionality.

**%#EXTERNAL Pragma Deprecated For Standalones****Compatibility Considerations: Yes**

Use of the `%#external` pragma to combine C/C++ code with a MATLAB application has been deprecated for standalone targets in release R2010b.

## **Compatibility Considerations**

Using the `%#external` pragma in release R2010b results in a warning. In a future release, usage will result in an error.

See *Interfacing MATLAB Code to C/C++ Code* for details of the replacement workflow.

## **New Deployment Tool Project Format**

**Compatibility Considerations: Yes**

Beginning in release R2010b, the Deployment Tool will store projects in a new format.

## **Compatibility Considerations**

If you open a supported legacy project file with `deploytool`, you will automatically be prompted to save it in the new format.

If your legacy project files are in a nonuser-customized format, there is no action you need to take beyond converting your projects to the new format, when prompted.

## **Intel Macintosh 32-Bit Systems (Maci) No Longer Supported**

**Compatibility Considerations: Yes**

Intel Macintosh 32-Bit systems, also known as Maci, are no longer supported as of release R2010b.

The software still supports Intel Macintosh 64-Bit systems, also known as Maci 64.



## **Compatibility Considerations**

All MacIntosh bundles produced by deployment products are designed to run on 64-bit architectures and specific releases of the Apple operating system. Incompatibilities will result in an error from the Apple operating system.



# R2010a

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**Version: 4.13**

**New Features: Yes**

**Bug Fixes: Yes**

## **Desktop Icon Available for Launching 64-Bit Mac Applications**

Macintosh 64-bit applications can now be launched conveniently from the desktop. See [Using MATLAB Compiler on Mac or Linux](#) for details about the Mac Application Launcher and other guidelines for UNIX, Linux, and Mac users.

## **New Video Demo Available**

Watch a video about deploying applications using MATLAB Compiler.

## **Support for MATLAB Sparse Matrices**

This release provides support for MATLAB sparse matrices via a C++ API. See [Static Factory Methods for Sparse Arrays](#) for a listing of capable classes and methods.

## **Deployment Tool Now Available from Command Line**

You can now invoke the Deployment Tool GUI from the command line. See [Using the Deployment Tool from the Command Line](#) for more information.

## **linkdata on Not Supported in Deployed Standalones**

In MATLAB, setting `linkdata on` can be used to link data between multiple plots in the same figure. This feature is not available for standalone applications run in deployed mode.

# R2009bSP1

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**Version: 4.12**

**New Features: No**

**Bug Fixes: Yes**

## **MCR Version Number Change**

As described in the MATLAB Release Notes, the version number of the MATLAB Compiler Runtime (MCR) in release R2009bSP1 is different from the MCR version number in release R2009b.

# R2009b

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**Version: 4.11**

**New Features: Yes**

**Bug Fixes: Yes**

## **Redesigned Deployment Tool GUI**

The new Deployment Tool (`deploytool`) interface features intuitive task-based navigation, a cancellable progress dialog, fast loading of previously-created projects, and ability to add supporting files as folders. The GUI also features new context sensitive help.

## **Customizable MCR Start-Up Message**

Console applications can now display a user-customizable message indicating that the MATLAB Compiler Runtime (MCR) is in the process of starting up. See [Displaying MCR Initialization Start-Up and Completion Messages For Users](#) for more information.

## **MATLAB Memory Shielding Available**

The same memory shielding process available in MATLAB is now available for deployed applications. The process reserves memory to ensure resource-intensive applications are allocated proper run-time resources. See [Reserving Memory for Deployed Applications with MATLAB Memory Shielding](#) for more information.

## **Mac 64-Bit Support Available**

Support for Macintosh® 64-bit processors is now available.

## **New Format for Deployment Tool Projects**

**Compatibility Considerations: Yes**

As of this release, deployment projects are being created in a new file format.

### **Compatibility Considerations**

If you have projects that were created with the Deployment Tool prior to R2009b, those projects will continue to work. However, projects created or changed in R2009b cannot be opened in previous versions of Deployment



Tool (deploytool). Recreate old projects with Deployment Tool to ensure they function properly.

## **Change in Windows Library Path**

The path `matlab\bin\arch` has been removed for Windows and replaced by `matlabroot\runtime\win32|win64`. You may be required to reconfigure your deployment target computers. See [Set MCR Paths for Development and Testing](#) and [Set MCR Paths for Run-Time Deployment](#) for more information.

## **INLINE Option to MEX Function Deprecated**

For more information on this change in support that will occur in R2010a, see [Functionality Being Removed in the \*MATLAB Release Notes\*](#).



# R2009a

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**Version: 4.10**

**New Features: Yes**

**Bug Fixes: Yes**

## **Reduced MCR Size Saves on Transfer Time**

MCR copying and transfer time has been improved by 50% following a reduction in the file's contents. The change will not reduce processor time or memory consumption since the deleted files were not loaded into RAM.

## **MATLAB Pcode Files Can Now Be Compiled**

You can now compile protected MATLAB files (Pcode files or "P-files"). For more information about Pcode and P-files, see the MATLAB Function Reference.

## **New Functions Return Information About MCR State**

New functions have been introduced that return data about MCR state, such as whether the MCR has been properly initialized or whether the MCR was launched with a JVM™ instance enabled. For more information, see Retrieving MCR Attributes in the user guide.

## **Microsoft Visual Studio Express 2008 Compilers Supported**

Microsoft Visual Studio Express 2008 compilers (32- and 64-bit versions) are now supported instead of Microsoft Visual Studio Express 2005 compilers (32- and 64-bit versions), which have been dropped from support. See Installation and Configuration in the MATLAB Compiler User's Guide for a complete list of supported compilers and information about installing and configuring them.

## **Customized readme.txt Produced with Each Compilation**

An enhanced version of the `readme.txt` file, which is generated with each successful compilation, is now customized to include specific instructions about MATLAB Compiler deployment requirements.

# R2008b

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**Version: 4.9**

**New Features: Yes**

**Bug Fixes: Yes**

## **Applications Created with Parallel Computing Toolbox Can Be Compiled**

You can now compile MATLAB applications that use the Parallel Computing Toolbox. Resulting executables and components can scale to multicore and multiprocessing environments using the MATLAB Distributed Computing Server™. For more information, see *Improving Data Access Using the MCR User Data Interface* in the MATLAB Compiler User's Guide for more information.

## **Data Sharing Between MATLAB Code, MCR Instance, and Wrapper Code Available**

It is now possible to share data between an MCR instance, the MATLAB code running on that MCR, and the wrapper code that created the MCR, by implementing two MATLAB functions and four external C functions in a new API that may be called from within deployed application wrapper code. Using these functions may potentially improve performance and promote efficient use of computing resources. See *Improving Data Access Using the MCR User Data Interface* in the MATLAB Compiler User's Guide for more information.

## **64-Bit Addressing of mxArray Is New Default, 32-Bit Addressing No Longer Supported**

The `MX_COMPAT_32_OFF` variable, which allowed 32-bit addressing of `mxArrays`, is no longer supported. As in R2008a, the default is 64-bit (large array support). See “Addressing `mxArrays` Above the 2 GB Limit” in the MATLAB Compiler User's Guide for more information.

## **Microsoft Visual Studio 2008, 32-Bit and 64-Bit Editions, Now Supported**

Support is now available for Microsoft Visual Studio 2008, 32-bit and 64-bit editions.

## **Warning Results When Running Figure-Generating Applications or Printing with -nojvm Flag**

**Compatibility Considerations: Yes**

As of R2008b, running a figure-generating application or printing with the -nojvm option results in a warning message.

### **Compatibility Considerations**

In some cases, figure rendering may succeed, and in other cases it may not. Similarly, various MATLAB graphics functions dependent on Java®, such as graphics passed with -R -nojvm, will not result in displayable graphics. In a future release, the -nojvm option will no longer support figure-generating or printing and will be removed.

### **Same Name Class Objects Shared Between MCR Instances Will Not Work Correctly**

If the same class name is used in two or more separate MCR instances within the same process, the object will not work correctly. This bug impacts all component based targets: C/C++ shared libraries, COM/.NET targets, and Java targets. This bug does not affect standalone executables. This is due to a bug in the MATLAB Object System and is being addressed.





# R2008a

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**Version: 4.8**

**New Features: Yes**

**Bug Fixes: Yes**

## **C++ API Now Supports 64-Bit Default**

**Compatibility Considerations: Yes**

In R2007b, the `MX_COMPAT_32_OFF` variable allowed for 64-bit support. In this release, 64-bit is the default setting.

### **Compatibility Considerations**

If you still require explicit 32-bit execution, see “Addressing mxArray Above the 2 GB Limit” in the *MATLAB Compiler User’s Guide* for more information.

## **CTF Archives Now Embedded in a Single Binary Executable for Convenient Deployment**

As of R2008a, CTF data is now automatically embedded directly in the C/C++, main and Winmain, shared libraries and standalones by default for convenient deployment of applications. In order to override this default functionality, you must compile with the `-C` option. See “MCR Component Cache and CTF Archive Embedding” in the *MATLAB Compiler User’s Guide* for more information.

## **Support Added for Microsoft Visual Studio 2008 Compiler**

Support has been added for the compiler included with Microsoft Visual Studio 2008. See “System Requirements ” in the *MATLAB Compiler User’s Guide* for more details.

## **Replacement of the `mclmcr` Header File**

**Compatibility Considerations: Yes**

Starting with R2008a, replace all occurrences of `#include mclmcr.h` with `#include mclmcr.h`.

## Compatibility Considerations

If the library header created by MATLAB Compiler software is included in the external code, neither of these files need to be included, since the library header includes the correct file.

## Run-Time Libraries Required for Applications Built with Microsoft Visual Studio 2008 Compiler

If you distribute a MEX-file, an engine application, or a MAT-file application built with the Visual Studio 2008 compiler, you must provide the Visual C++ run-time libraries. These files are required to run applications developed with Visual C++ on a computer that does not have Visual C++ 2008 installed. For information on locating the Microsoft Visual C++ 2008 Redistributable Package (x86), containing `vc redistrib_x86.exe` and `vc redistrib_x64.exe`, consult your Microsoft documentation.

## Large Array Support Now Default for C and C++ Code

In R2008a, the default definition of `MX_COMPAT_32` has been removed, and large array support is now the default for both C and C++ code. This new default may, in some cases, cause compiler warnings and errors. You can define `MX_COMPAT_32` in your `mbuild` step to return to the previous default behavior.

Code compiled with `MX_COMPAT_32` is *not* 64-bit aware. In addition, `MX_COMPAT_32` controls the behavior of some type definitions. For instance, when `MX_COMPAT_32` is defined, `mwSize` and `mwIndex` are defined to `ints`. When `MX_COMPAT_32` is not defined, `mwSize` and `mwIndex` are defined to `size_t`. This can lead to compiler warnings and errors with respect to signed and unsigned mismatches.

For information about expected behavior of this feature in R2007b, see “Addressing `mwArrays` Above the 2 GB Limit” in the MATLAB Compiler User’s Guide for more information..

This feature changes how the mxArray C++ Library functions are implemented. For more details, see “Addressing mxArray Above the 2 GB Limit” in the *MATLAB Compiler User’s Guide*.

## **Support Dropped for Borland Compilers**

Borland compilers are no longer supported as of this release.

## **MATLAB Component Runtime Renamed**

The MATLAB Component Runtime has been renamed to the MATLAB Compiler Runtime.

## **MATLAB Application Deployment Web Example Guide Available**

A new publication, the *MATLAB Application Deployment Web Example Guide*, is now available from the MATLAB Compiler, MATLAB Builder™ NE, and MATLAB Builder JA roadmap pages.

The guide provides full examples of common tasks performed by the MATLAB programmer, IT specialist, and others who play significant roles in deploying MATLAB applications to the Web.

## **Enforcement of Proper Return Types For C/C++ Methods**

As of R2008a, the LCC compiler is more strict in enforcing `bool` return types from C and `void` returns from C++. For more information, see Code Proper Return Types From C and C++ Methods in the MATLAB Compiler User’s Guide.

## **Changes in `mc1mcr.h` and `mc1mcr.h` Include Order**

**Compatibility Considerations: Yes**

Changes introduced in this release now require that the header file mclmcr.h always be included after mclmcrprt.h in the preprocessing stage.

**Compatibility Considerations**

This change introduces a potential compatibility problem in subsequent releases of MATLAB Compiler. See the MathWorks® support Web site for further information.



# R2007b

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**Version: 4.7**

**New Features: Yes**

**Bug Fixes: Yes**

## Support Added for the Microsoft Platform SDK

Support has been added for the Microsoft Platform SDK Compiler. See System Requirements in the *MATLAB Compiler User's Guide* documentation for more details.

## Project Files Use Relative Paths and Can Be Shared

Project files can now be enabled for use with other computers since project files now use relative paths. See Using Relative Paths with Project Files in the *MATLAB Compiler User's Guide* documentation for more details.

## Replacement of MCRInstaller.zip and BUILDMCR Functionality

In past releases, you needed to include `MCRInstaller.zip` in your packaged application (created by running the `buildmcr` command). Now you must run the following files, which trigger self-extracting archives, that replace the functionality previously provided by `MCRInstaller.zip`. These files ship with MATLAB Compiler:

Platform	File Replacing MCRInstaller.zip
Windows	<code>MCRInstaller.exe</code>
UNIX (Except for Mac)	<code>MCRInstaller.bin</code>
Mac	<code>MCRInstaller.dmg</code>

Since there is no longer a need to create `MCRInstaller.zip`, `buildmcr` is no longer supported.

Type `mcr` or `mcrinstaller` at the MATLAB command prompt for a list of all available MCR installers, compatible platforms, version numbers, and other information. In addition, typing `help mcr` or `help mcrinstaller` at the command prompt will provide further details and assistance.

See Distribute MATLAB Code Using the MATLAB Compiler Runtime (MCR) for more information.



## Addressing MWEArrays Above the 2 GB Limit

As of R2007b, you can address MWEArrays above the 2 GB limit. This is enabled by defining `MX_COMPAT_32_OFF` in your `mbuild` step. This feature will be the default as of R2008a.

This feature changes how the MWEArray C++ Library functions are implemented. For more details, see “Addressing mweArrays Above the 2 GB Limit” in the *MATLAB Compiler User’s Guide* documentation.

## New Compiler Option `-e`

This new `mcc` option suppresses the appearance of the MS-DOS command window when generating a standalone application. Use `-e` in place of the `-m` option. See `-e Suppress MS-DOS Command Window` in the *MATLAB Compiler User’s Guide* documentation.

## Support for Borland Compilers Removed

Borland compilers are supported in Version 7.5 (R2007b), but will not be supported in a future version of MATLAB. Please prepare and plan accordingly.

## Functions Being Removed

**Compatibility Considerations: Yes**

The following functions were removed in R2007b:

<b>Function Being Removed</b>	<b>What Happens When You Run the Function?</b>	<b>Use This Instead</b>	<b>Compatibility Considerations</b>
buildmcr	Errors	MCRInstaller.exe (Windows), MCRInstaller.bin (UNIX), MCRInstaller.dmg (Mac)	See Distribute MATLAB Code Using the MATLAB Compiler Runtime (MCR) in the MATLAB Compiler User's Guide documentation.
comtool	Undefined Function Error	deploytool	Migrate to deploytool.
dotnettool	Undefined Function Error	deploytool	Migrate to deploytool.
mx1tool	Undefined Function Error	deploytool	Migrate to deploytool.
opennb1	Undefined Function Error	deploytool	Migrate to deploytool.
openmx1	Undefined Function Error	deploytool	Migrate to deploytool.
opencb1	Undefined Function Error	deploytool	Migrate to deploytool.

# R2007a

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**Version: 4.6**

**New Features: Yes**

**Bug Fixes: Yes**

## **Support Added for Intel Mac and Solaris 64**

Support has been added for the following operating systems:

- Intel Mac
- Solaris 64-bit

## **Support Dropped for Solaris 2**

Support has been dropped for the Solaris 2 operating system. It has been replaced by support for Solaris 64.

## **Readme File Added**

A readme file containing a customized checklist of deployment prerequisites is now generated in the output folder with each compiled application.

## **Warning About Future Borland Compiler Support**

While still supported in this release, customers should prepare for discontinuance of support for the following Borland compilers:

- Borland C++Builder version 6.0
- Borland C++Builder version 5.0
- Borland C/C++ (free command-line tools) version 5.5

## **New Compiler Option -F**

MATLAB Compiler 4.6 includes the -F option for both `mcc` and `deploytool`. Use this option to feed back a specific project file's settings to MATLAB Compiler. For more information, see the MATLAB Compiler User's Guide documentation.

## Issues with the Microsoft Windows Vista Operating System

The following are known issues with Windows Vista™ as of this release. To resolve these issues, ensure you are logged in as Administrator.

- With User Account Control (UAC) enabled, a standard user is not able to write to a folder in the c:\Program Files folder. See the MATLAB Release Notes for more details regarding this issue.
- With User Account Control (UAC) enabled, a standard user is not able to register DLLs. When `mbuild -setup` attempts to register `mwcomutil.dll`, the following errors are displayed:

```
Trying to update options file:
  C:\Users\qe\AppData\Roaming\MathWorks\MATLAB\R2007a\compopts.bat
From template:
  C:\PROGRA-1\MATLAB\R2007a\bin\win64\mbuildopts\msvc80comp.bat

Done . . .

--> "C:\PROGRA-1\MATLAB\R2007a\bin\win64\mwregsvr C:\PROGRA-1\MATLAB\R2007a\bin\
win64\mwcomutil.dll"

Error: DllRegisterServer in C:\PROGRA-1\MATLAB\R2007a\bin\win64\mwcomutil.dll
failed
Undefined subroutine &mexsetup::expire called at C:\PROGRA-1\MATLAB\R2007a\bin\
mexsetup.pm line 839.
```

This is also the case when MATLAB Builder for Excel invokes `mbuild` in an attempt to register DLLs after a compilation completes.

- The following message is displayed when MATLAB Builder for .NET, attempts to install a DLL into the Global Assembly Cache from a network location:

```
Unhandled Exception: System.IO.FileLoadException: could not load file or assembly
'GACInstaller, Version=1.0.2568.30711, Culture=neutral, PublicKeyToken=null' or
one of its dependencies. Failed to grant permission to execute. (Exception from
HRESULT: 0x80131418)
File name: 'GACInstaller, Version=1.0.2568.30711, Culture=neutral,
```

```
PublicKeyToken=null' ---> System.Security.Policy.PolicyException: Execution
permission cannot be acquired.
```

```
    at System.Security.SecurityManager.ResolvePolicy(Evidence evidence,
PermissionSet reqdPset, PermissionSet optPset, PermissionSet denyPset,
PermissionSet& denied, Boolean checkExecutionPermission)
```

```
    at System.Security.SecurityManager.ResolvePolicy(Evidence evidence,
PermissionSet reqdPset, PermissionSet optPset, PermissionSet denyPset,
PermissionSet& denied, Int32& securitySpecialFlags, Boolean
checkExecutionPermission)
```

- Printing from a compiled application is not currently available with Microsoft Windows Vista. The following message is displayed if you attempt to print on systems with the Microsoft Windows Vista 32-bit operating system installed:

```
PrintImage Error
```

```
StartPage failed with error 6: The handle is invalid.
```

Printing with Vista 64-bit installed results in an error message that lists a manifest as missing. Please check <http://www.mathworks.com/support/> for updates on these issues.

# R2006b

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**Version: 4.5**

**New Features: Yes**

**Bug Fixes: Yes**

## Support for Java Components

MATLAB Compiler, in conjunction with the optional MATLAB Builder JA, lets you convert MATLAB files into Java components.

## Deployment Tool Graphical User Interface

As an alternative to the `mcc` command to invoke MATLAB Compiler, you can invoke the graphical user interface for MATLAB Compiler by issuing the following command at the MATLAB prompt:

```
deploytool
```

Use the Deployment Tool to perform the tasks shown in the following conceptual illustration:





# R2006a

---

**Version: 4.4**

**New Features: Yes**

**Bug Fixes: Yes**

## **Support for .NET Components**

This release provides support for a new target, .NET components. With the optional MATLAB Builder for .NET product, you can create both COM components that can be used in native code applications and .NET components that can be used in managed code applications.

MATLAB Compiler, in conjunction with the optional MATLAB Builder for .NET, lets you convert MATLAB files into .NET components that are accessible from any Common Language Specification (CLS)-compliant client code. In addition, you can build Common Object Model (COM) components that are accessible from Visual Basic, C/C++, Microsoft Excel, or any other COM client.

## **Support for Microsoft Visual C++ Version 8.0**

MATLAB Compiler supports Microsoft Visual C++ Version 8.0 as a third-party compiler. However, if you use Microsoft Visual C++ Version 8.0 to generate applications/components, you must have the Microsoft Visual Studio 2005 run-time libraries available on the computer used for deployment. If you distribute your applications/components, you must make sure that any machine used for deployment has these run-time libraries installed. For more information, see solution 1-2223MW.

## **HP-UX No Longer Supported**

MATLAB Compiler 4.4 (R2006a) does not support HP-UX. MATLAB Compiler 4.3 (R14SP3) was the last release to support HP-UX.

# R14SP3

---

**Version: 4.3**

**New Features: Yes**

**Bug Fixes: Yes**

## Platform Support

You can use MATLAB Compiler 4.3 on the following supported systems to create redistributable, standalone applications or software components. These applications or components can then be deployed to other systems with the same operating system.

### Supported Platforms

MATLAB Compiler 4.3 is supported on these platforms:

- Windows
- Linux
- Solaris™
- HP-UX®
- Linux x86-64
- Mac OS® X

The MATLAB Compiler documentation has been updated to include configuration information for all the supported platforms.

# R14SP2

---

**Version: 4.2**

**New Features: Yes**

**Bug Fixes: No**

## **Platform Support**

You can use MATLAB Compiler 4.2 on the following supported systems to create redistributable, standalone applications or software components. These applications or components can then be deployed to other systems with the same operating system.

### **Supported Platforms**

MATLAB Compiler 4.2 is supported on these platforms:

- Windows
- Linux
- Solaris
- HP-UX
- Linux x86-64

The MATLAB Compiler documentation has been updated to include configuration information for all the supported platforms.