

MATLAB[®] Builder[™] EX Release Notes

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MATLAB® Builder™ EX Release Notes

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Summary by Version

This table provides quick access to what's new in each version. For clarification, see “Using Release Notes” on page 2.

| Version (Release) | New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--|---------------------------------|---|--------------------------------------|---|
| Latest Version V1.2.11 (R2008b) | Yes Details | Yes Summary | Bug Reports Includes fixes | Printable Release Notes: PDF Current product documentation |
| V1.2.10 (R2008a) | No | No | Bug Reports Includes fixes | No |
| V1.2.9 (R2007b) | Yes Details | Yes Summary | Bug Reports Includes fixes | No |
| V1.2.8 (R2007a) | Yes Details | No | Bug Reports Includes fixes | No |
| V1.2.7 (R2006b) | Yes Details | Yes Summary | Bug Reports Includes fixes | No |
| V1.2.6 (R2006a) | No | No | Bug Reports Includes fixes | No |
| V1.2.5 (R14SP3) | No | No | Bug Reports Includes fixes | No |
| V1.2.4 (R14SP2) | No | No | Fixed bugs | No |
| V1.2.2 (R14SP1) | No | No | Fixed bugs | No |
| V1.2.1 (R14+) | No | No | Fixed bugs | No |
| V1.2 (R14) | Yes Details | Yes Summary | No | No |
| V1.1 (R13) | Yes Details | No | No | No |

Using Release Notes

Use release notes when upgrading to a newer version to learn about:

- New features
- Changes
- Potential impact on your existing files and practices

Review the release notes for other MathWorks™ products required for this product (for example, MATLAB® or Simulink®) for enhancements, bugs, and compatibility considerations that also might impact you.

If you are upgrading from a software version other than the most recent one, review the release notes for all interim versions, not just for the version you are installing. For example, when upgrading from V1.0 to V1.2, review the release notes for V1.1 and V1.2.

What's in the Release Notes

New Features and Changes

- New functionality
- Changes to existing functionality

Version Compatibility Considerations

When a new feature or change introduces a reported incompatibility between versions, the **Compatibility Considerations** subsection explains the impact.

Compatibility issues reported after the product is released appear under Bug Reports at the MathWorks Web site. Bug fixes can sometimes result in incompatibilities, so you should also review the fixed bugs in Bug Reports for any compatibility impact.

Fixed Bugs and Known Problems

The MathWorks offers a user-searchable Bug Reports database so you can view Bug Reports. The development team updates this database at release time and as more information becomes available. This includes provisions for any known workarounds or file replacements. Information is available for bugs existing in or fixed in Release 14SP2 or later. Information is not available for all bugs in earlier releases.

Access Bug Reports using your MathWorks Account.

Version 1.2.11 (R2008b) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.11 (R2008b):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|---|
| Yes | Yes Summary | Bug Reports Includes fixes | Printable Release Notes: PDF Current product documentation |

New features and changes introduced in this version are:

Applications Created with Parallel Computing Toolbox Now Able to Be Compiled

MATLAB applications that make use of the Parallel Computing Toolbox (PCT) are now able to be compiled. Resulting executables and components can scale to multicore and multiprocessing environments using MATLAB Distributed Computing Server. See “Improving Data Access Using the MCR User Data Interface, COM Components, and MATLAB® Builder™ EX” for more information.

Warning Results When Running Figure-Generating Applications or Printing With -nojvm Flag

As of R2008b, running a figure-generating application, or printing, with the -nojvm option results in a warning message. In some cases, figure rendering may succeed, and in other cases it may not. 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.

Version 1.2.10 (R2008a) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.10 (R2008a):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|---|
| No | No | Bug Reports Includes fixes | Printable Release Notes: PDF Current product documentation |

Version 1.2.9 (R2007b) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.9 (R2007b):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| Yes Details below | Yes Summary | Bug Reports Includes fixes | No |

Functions Being Removed

The following functions were removed in R2007b:

| Function Being Removed | What Happens When You Run the Function? | Use This Instead | Compatibility Considerations |
|------------------------|---|---|---|
| buildmcr | Errors | MCRInstaller.exe (Windows), MCRInstaller.bin (UNIX), MCRInstaller.dmg (Mac) | See the MATLAB Compiler User's Guide documentation. |
| comtool | Undefined Function Error | deploytool | Migrate to deploytool. |
| dotnettool | Undefined Function Error | deploytool | Migrate to deploytool. |
| mxltool | Undefined Function Error | deploytool | Migrate to deploytool. |
| opennbl | Undefined Function Error | deploytool | Migrate to deploytool. |
| openmxl | Undefined Function Error | deploytool | Migrate to deploytool. |
| opencbl | Undefined Function Error | deploytool | Migrate to deploytool. |

Version 1.2.8 (R2007a) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.8 (R2007a):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| Yes Details below | No | Bug Reports Includes fixes | No |

New features and changes introduced in this version are:

- “Support Added for Win 64” on page 8
- “Qualified Against Excel 2007 Beta” on page 8
- “Issues with the MicrosoftWindows Vista Operating System” on page 8

Support Added for Win 64

Support has been added for the Windows 64-bit operating system.

Qualified Against Excel 2007 Beta

MATLAB® Builder for Excel® has been qualified against Excel 2007 Beta version.

Issues with the MicrosoftWindows Vista Operating System

The following are known issues withWindows Vista™ as of this release:

- With User Account Control (UAC) enabled, a standard user is not able to write to a directory in the c:\Program Files directory. 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.

Version 1.2.7 (R2006b) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.7 (R2006b):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|---|-------------------------------|-----------------------------------|
| Yes Details below | Yes—Details labeled as Compatibility Considerations , below. See also Summary. | Bug Reports Includes fixes | No |

New features and changes introduced in this version are

New User Interface

This release of MATLAB Builder for Excel provides a new graphical user interface (GUI) called the Deployment Tool. You can use this tool to create and build projects. To launch the Deployment Tool, enter the `deploytool` command in MATLAB.

Compatibility Considerations

Projects built with the previous user interface cannot be used with the new interface. For R2006b, you can still issue the `mx1tool` command to access projects from a previous release.

Version 1.2.6 (R2006a) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.6 (R2006a):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| No | No | Bug Reports Includes fixes | No |

Version 1.2.5 (R14SP3) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.5 (R14SP3):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| No | No | Bug Reports Includes fixes | No |

Version 1.2.4 (R14SP2) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.4 (R14SP2):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| No | No | Fixed bugs | No |

Fixed Bugs

This release includes the following bug fixes:

- Components generated by MATLAB Builder for Excel now pass an output variable containing a structure within a structure to the client code correctly.
- Components generated by MATLAB Builder for Excel no longer return a complex output variable as an empty variant to the client application.

Version 1.2.2 (R14SP1) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.2 (R14SP1):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| No | No | Fixed bugs | No |

Fixed Bugs

This release includes the following bug fix:

- MATLAB figure windows no longer hang when opened through a component created with MATLAB Builder for Excel. In Version 1.2.1, you had to use the task manager to dismiss the window. To fix this bug, the **Create a singleton MCR** option in New Project Settings tells MATLAB Compiler to generate code such that it creates only one instance of the MCR per application.

Version 1.2.1 (R14+) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.2.1 (R14+):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| No | No | Fixed bugs | No |

Fixed Bugs

This release includes the following bug fix:

- When a packaged component that is generated by MATLAB Builder for Excel is deployed to a machine that does not have MATLAB installed, users receive the following error message when MCRInstaller is installed with the package:

```
LoadLibrary (component_name failed - The specified module could
not be found)
```

As a workaround, register the component manually using the regsvr32 utility. To do this, enter

```
regsvr32 component_name.dll
```

at the Windows command prompt.

Verify that the current working directory is the one that contains the component generated by MATLAB Builder for Excel.

Version 1.2 (R14) MATLAB® Builder™ EX Software

This table summarizes what’s new in Version 1.2 (R14):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|---|-------------------------------|-----------------------------------|
| Yes Details below | Yes—Details labeled as Compatibility Considerations , below. See also Summary. | No | No |

This version includes the following new feature:

New Product Name

The name of this product has been changed from MATLAB® Builder for Excel® to MATLAB Builder EX.

Compatibility Consideration

Various screens within this product have been changed for consistency with similar products. Note, however, that the functionality is unchanged from previous releases.

Version 1.1 (R13) MATLAB® Builder™ EX Software

This table summarizes what's new in Version 1.1 (R13):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|--------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| Yes Details below | No | No | No |

Note MATLAB Builder for Excel 1.0 was initially released in Web-downloadable form after Release 12.1 was released, but before Release 13.

MATLAB Builder for Excel provides the capability to incorporate seamlessly and quickly MATLAB models and functions into Excel worksheets. A graphical user interface enables you to build and deploy Excel Add-Ins containing functionality designed in MATLAB but accessed from the Excel environment.

Using MATLAB Builder for Excel to create a deployable application is a simple process requiring a sequence of six steps:

- 1 Creating a project
- 2 Managing M- and MEX-files
- 3 Building a project
- 4 Testing the model
- 5 Creating an Excel Add-In
- 6 Packaging and distributing the component

The new feature introduced in Version 1.1 is the Function Wizard.

Function Wizard

The Function Wizard lets you pass Microsoft Excel worksheet values to a compiled MATLAB model and to return model output to a cell or range of cells in the worksheet. The Function Wizard provides an intuitive interface to Excel worksheets. Knowledge of Visual Basic for Applications (VBA) programming is not required.

The Function Wizard reflects any changes that you make in the worksheets, such as range selections. Going in the opposite direction, you can use the Function Wizard to control the placement and output of data from MATLAB functions to the worksheets. For complete documentation of this new feature, see the User's Guide.

Note At this release the Function Wizard is not able to process the sparse, struct, or complex data types.

Compatibility Summary for MATLAB® Builder™ EX Software

This table summarizes new features and changes that might cause incompatibilities when you upgrade from an earlier version, or when you use files on multiple versions. Details are provided in the description of the new feature or change.

| Version (Release) | New Features and Changes with Version Compatibility Impact |
|--|---|
| Latest Version V1.2.11 (R2008b) | “Warning Results When Running Figure-Generating Applications or Printing With -nojvm Flag” on page 4. |
| V1.2.10 (R2008a) | None |
| V1.2.9 (R2007b) | See “Functions Being Removed” on page 7. |
| V1.2.8 (R2007a) | None |
| V1.2.7 (R2006b) | See the Compatibility Considerations subheading for “New User Interface” on page 11. |
| V1.2.6 (R2006a) | None |
| V1.2.5 (R14SP3) | None |
| V1.2.4 (R14SP2) | None |
| V1.2.2 (R14SP1) | None |
| V1.2.1 (R14+) | None |
| V1.2 (R14) | See the Compatibility Considerations subheading for “New Product Name” on page 17. |
| V1.1 (R13) | None |