

MATLAB Builder for Java Release Notes

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Summary by Version

This table provides quick access to what's new in each version. For clarification, see “About Release Notes” on page 1.

Version (Release)	New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
New Product V1.0 (R2006b)	Yes Details	No	Bug Reports	Printable Release Notes: PDF Current product documentation

About Release Notes

Use release notes when upgrading to a newer version to learn about new features and changes, and the potential impact on your existing files and practices. Release notes are also beneficial if you use or support multiple versions.

If you are not upgrading from the most recent previous version, review 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 New Features and Changes, Version Compatibility Considerations, and Bug Reports for V1.1 and V1.2.

New Features and Changes

These include

- New functionality
- Changes to existing functionality
- Changes to system requirements (complete system requirements for the current version are at the MathWorks Web site)
- Any version compatibility considerations associated with each new feature or change

Version Compatibility Considerations

When a new feature or change introduces a known incompatibility between versions, its description includes a **Compatibility Considerations** subsection that details the impact. For a list of all new features and changes that have compatibility impact, see the “Compatibility Summary for MATLAB Builder for Java” on page 5.

Compatibility issues that become known after the product has been released are added to Bug Reports at the MathWorks Web site. Because bug fixes can sometimes result in incompatibilities, also review fixed bugs in Bug Reports for any compatibility impact.

Fixed Bugs and Known Problems

MathWorks Bug Reports is a user-searchable database of known problems, workarounds, and fixes. The MathWorks updates the Bug Reports database as new problems and resolutions become known, so check it as needed for the latest information.

Access Bug Reports at the MathWorks Web site using your MathWorks Account. If you are not logged in to your MathWorks Account when you link to Bug Reports, you are prompted to log in or create an account. You then can view bug fixes and known problems for R14SP2 and more recent releases.

Related Documentation at Web Site

Printable Release Notes (PDF). You can print release notes from the PDF version, located at the MathWorks Web site. The PDF version does not support links to other documents or to the Web site, such as to Bug Reports. Use the browser-based version of release notes for access to all information.

Product Documentation. At the MathWorks Web site, you can access complete product documentation for the current version and some previous versions, as noted in the summary table.

Version 1.0 (R2006b) MATLAB Builder for Java

This table summarizes what's new in Version 1.0 (R2006b):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports	Printable Release Notes: PDF Current product documentation

MATLAB Builder for Java (also called Java Builder), a new product, is an extension to the MATLAB Compiler. Use Java Builder to wrap MATLAB functions into one or more Java classes that comprise a Java package. Each of the MATLAB functions is encapsulated as a method of a Java class and can be invoked from within a Java application.

When you distribute the application to your users, you must include supporting files generated by Java Builder as well as the MATLAB Component Runtime (MCR), which is provided by the product. Your users do not have to purchase and install MATLAB.

New features and changes introduced in this version are

- Support for MATLAB Features in Java
- Deployment Tool User Interface

Support for MATLAB Features in Java

Java Builder provides robust data conversion, indexing, and array formatting capabilities to preserve the flexibility of MATLAB when called from Java code. To support the MATLAB data types, Java Builder provides the `MWArray` class hierarchy. You can use `MWArray` and other Java class members in your application to convert native arrays to MATLAB arrays and vice versa. Java Builder also provides automatic data conversion for passing arguments that are Java types.

Java Builder provides custom error handling so that errors originating from MATLAB functions are reported as standard exceptions. The error description contains specific references to the MATLAB code, thus simplifying the debugging process.

Deployment Tool User Interface

To use Java Builder, open the Deployment Tool by issuing the following MATLAB command:

```
deploytool
```

You can use the Deployment Tool to create a project that encapsulates MATLAB code. You can perform the following tasks using the Deployment Tool:



Known Issues

The following issue is known and a patch to fix the problem is available at the linked bug report.

Data Returned by toArray Referencing Sparse Format May be Corrupt

The data returned by calling `toArray` on a `MWNumericArray` or `MWLogicalArray` object that references a MATLAB array stored in sparse format may be incorrect or corrupted. More information and a patch that corrects this issue may be found at the Customer Bug Reports area of the MathWorks Web site: <http://www.mathworks.com/support/bugreports/index.html?release=R2006b>. At the Bug Reports page, select **R2006b** in the Release list, and select **MATLAB Builder for Java** in the Product list.

This bug does not affect normal (non-sparse) arrays, nor does it affect other methods of retrieving data from a sparse array, such as `get`, `getDouble`, and `getData`.

Compatibility Summary for MATLAB Builder for Java

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 V1.0 (R2006b)	None