

# Database Toolbox Release Notes

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“Database Toolbox 3.1 Release Notes” includes new features and bug fixes made since Version 3.0.2:

- “New Features”
- “Major Bug Fixes”
- “Known Software and Documentation Problems”
- “Upgrading from an Earlier Release”

If you are viewing these release notes in PDF form on the MathWorks Web site, please refer to the HTML form of the release notes on the MathWorks Web site and use the link provided.

The Database Toolbox Release Notes also provide information about recent versions of the product, in case you are upgrading from a version that was released prior to Release 14 with Service Pack 2.

- Database Toolbox 3.0.2 includes only major bug fixes that you can view on the MathWorks Web site
- Database Toolbox 3.0.1 includes only major bug fixes
- “Database Toolbox 3.0 Release Notes”
- “Database Toolbox 2.2.1 Release Notes”

## **Printing the Release Notes**

If you would like to print the Release Notes, you can link to a PDF version.



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# Database Toolbox 3.1

## Release Notes

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These release notes are for Version 3.1 (R14SP3) of the Database Toolbox:

New Features	What's new, plus changes to existing features and functions including <ul style="list-style-type: none"><li>• New <code>fastinsert</code> function that is about three times faster than <code>insert</code></li><li>• Visual Query Builder support for JDBC connections on Windows</li></ul>
Major Bug Fixes	User searchable database of known software and documentation problems, with available workarounds and solutions.
Known Software and Documentation Problems	User searchable database of known software and documentation problems, with available workarounds and solutions.
Upgrading from an Earlier Release	Changes that might impact compatibility with previous versions.

## New Features

This section summarizes new features and enhancements. in the Database Toolbox 3.1 (R14SP3).

If you not are upgrading from the most recent version containing new features (Database Toolbox 3.0, R14), then you should also see “New Features” in those release notes.

### Quick Access to New Features

- New fastinsert Function
- Visual Query Builder Now Supports JDBC on Windows
- Define Data Sources from Within the Visual Query Builder
- Dynamically Add JDBC Drivers File
- 64-Bit FLOAT for MS SQL Server Fully Supported
- Generate M-File from VQB
- update Function Can Export Multiple Records
- Support for logintimeout Function
- Summary of New and Changed Functions

### New fastinsert Function

There is a new function, `fastinsert`, that you can use instead of the `insert` function to export data about three times more quickly than `insert`. It also allows exporting for all object types, so that any data you can retrieve from a database you can now export to the database, including binary objects.

While there are no known problems with `fastinsert`, if you receive unexpected results, return to using `insert` and reportw the `fastinsert` problem via Technical Support.

Note that for this version, the Visual Query Builder `insert` feature uses the `insert` function instead of `fastinsert`.

## Visual Query Builder Now Supports JDBC on Windows

You can now use the Visual Query Builder (VQB) with JDBC drivers on Windows platforms. Previously, only ODBC drivers were supported for the VQB on Windows.

The `confds` function now displays an enhanced dialog box you use to define JDBC data sources. With it, you save and load data source information via MATLAB MAT-files.

For details, see [Setting Up a Data Source for JDBC Drivers](#).

## Define Data Sources from Within the Visual Query Builder

The Visual Query Builder now includes two new items under the **Query** menu:

- **Define JDBC Data Source**—Access the Define JDBC Data Source dialog box for defining JDBC data sources to use with the VQB. The function equivalent is `confds`.

When you define a JDBC data source, the information is saved in a MAT-file so you can use it again in a later session. Open the existing MAT-file using the Define JDBC Data Source dialog box, or using `setdbprefs('JDBCDataSourceFile','fullpathmatfile')`

- **Define ODBC Data Source**—Direct access to your Windows ODBC Data Source Administrator dialog box where you define ODBC data sources.

For details, see [Setting Up a Data Source](#).

## Dynamically Add JDBC Drivers File

You can now dynamically add a JDBC drivers file to the MATLAB Java classpath using the MATLAB `javaaddpath` function. You can use this method instead of including a reference to the JDBC drivers file in your `classpath.txt` file. The advantage of using `javaaddpath` is that you do not have to restart MATLAB after running the `javaaddpath` statement. The disadvantage is that this only applies to the current session and so you need to run the `javaaddpath` statement in each new session. Note

that when you use the `javaddpath` method, you might notice a delay the first time you connect to a database. For details, see [Dynamically Update the MATLAB Java Classpath](#).

## **64-Bit FLOAT for MS SQL Server Fully Supported**

You can now exchange 64-bit FLOAT data with MS SQL Server without any problems.

## **Generate M-File from VQB**

After running a query using the Visual Query Builder, you can generate an M-file consisting of the Database Toolbox functions that perform the query. This is useful if you know how to run queries with the VQB and want to determine the equivalent functions, particularly the SQL statements in `exec` and `insert`.

## **update Function Can Export Multiple Records**

The `update` function has been enhanced so that you can export multiple records based on different `where` clauses. The number of `where` clauses must equal the number of records in the array of data you are exporting. For details, see the reference page for `update`.

## **Support for `logintimeout` Function**

The `logintimeout` function is now supported on Linux platforms, but is not supported on the Macintosh.



## Summary of New and Changed Functions

### New Functions

These functions are new in the Database Toolbox 3.1 (R14SP3):

Function Name	Description
fastinsert	Add MATLAB data to database table. Provides the same functionality as insert, but runs about three times faster and supports additional data types.
getdatasources	Get names of valid ODBC and JDBC data sources on system

### Modified Functions

These functions work differently in the Database Toolbox 3.1 (R14SP3):

Function Name	Description of Change
confds	Now supported on Windows (formerly was only supported on Linux platforms). The Configure Data Source dialog box has been replaced by the Define JDBC Data Sources dialog box, which supports new fields.
setdbprefs	Supports a new property with which you can define JDBC data sources. The property is <code>JDBCDataSourceFile</code> and the value is the full path to a JDBC data sources MAT-file.
update	Export multiple records based on different where clauses.

### Obsoleted Functions

No functions were removed in the Database Toolbox 3.1 (R14SP3).

## Major Bug Fixes

To view major bug fixes made in R14SP3 for the Database Toolbox, use the Bug Reports interface on the MathWorks Web site.

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**Note** If you are not already logged in to Access Login, when you link to the Bug Reports interface (see below), you will be prompted to log in or create an Access Login account.

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After you are logged in, use this Bug Fixes link. You will see the bug report for the Database Toolbox. The report is sorted with fixed bugs listed first, and then open bugs.

If you are viewing these Release Notes in PDF form, please refer to the HTML form of the Release Notes, using either the Help browser or the MathWorks Web site and use the link provided.

For bug fixes added prior to R14SP2, see Major Bug Fixes for the Database Toolbox Version 3.0.1.

## Known Software and Documentation Problems

To view important open bugs in R14SP3 for the Database Toolbox use the Bug Reports interface on the MathWorks Web site.

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**Note** If you are not already logged in to Access Login, when you link to the Bug Reports interface (see below), you will be prompted to log in or create an Access Login account.

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After you are logged in, use this [Open Bugs](#) link. You will see the bug report for the Database Toolbox. The report is sorted with fixed bugs listed first, and then open bugs. You can select the Status column to list the open bugs first.

If you are viewing these Release Notes in PDF form, please refer to the HTML form of the Release Notes, using either the [Help](#) browser or the MathWorks Web site and use the link provided.

## **Upgrading from an Earlier Release**

Known issues involved in upgrading from the Database Toolbox 3.0.2 follow.

If you not are upgrading from the most recent version that had upgrade issues (Database Toolbox 3.0, R14), then you should also see “Upgrading from an Earlier Release” in those release notes.

### **Support for logintimeout Function**

The logintimeout function is now supported on Linux platforms, but is not supported on the Macintosh.

# Database Toolbox 3.0

## Release Notes

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These release notes are for Version 3.0 (R14) of the Database Toolbox:

New Features	What's new, plus changes to existing features and functions.
Major Bug Fixes	Fixes made since the previous version.
Platform Limitations	No changes since the previous version.
Upgrading from an Earlier Release	Changes that might impact compatibility with previous versions.

## New Features

This section summarizes the new features and enhancements introduced in the Database Toolbox 3.0.

### New Data Types Supported

The Database Toolbox now supports Java BINARY (BLOB or Binary Large Objects) and OTHER data types, such as bitmap images and MAT-files. For details, see the relevant sections in the Visual Query Builder documentation and the Database Toolbox functions documentation.

### Visual Query Builder (VQB) Enhancements

- You can now use the VQB to export data from MATLAB, and insert it into new rows in a database. See “Exporting Data Using the VQB” for details.
- You can now use **Display** menu items in the VQB with structure and numeric formats for retrieved data as specified in **Preferences** or with `setdbprefs`. In previous releases, you could use **Display** menu items for the cell array format only.
- You can now use the VQB for tables and fields that contain spaces in their names. They appear inside quotation marks in the VQB lists.
- When you double-click a variable in the **Data** field of the VQB, it now opens in the Array Editor. In previous versions, the contents display in the Command Window. You can still display the contents in the Command Window by typing the variable name in the Command Window.
- In the VQB, when you edit the query in the **SQL statement** field and then select **Query -> Save**, the query in the **SQL statement** field is saved rather than the query represented by the other VQB fields.

### Database Toolbox Functions Compilable

Because of changes made to the MATLAB Compiler, you can compile Database Toolbox functions to create stand-alone applications that do not require MATLAB when run.

## Major Bug Fixes

The Database Toolbox Version 3.0 includes performance improvements and bug fixes made since Version 2.2.1. You can see a list of the particularly important Version 3.0 bug fixes.

If you are viewing these Release Notes in PDF form, please refer to the HTML form of the Release Notes, using either the Help browser or the MathWorks Web site and use the link provided.

If you are upgrading from a version earlier than Release 2.2.1, you should also see “Major Bug Fixes” on page 3-2.

### Platform Limitations

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**Note** The platform limitations for the Database Toolbox 3.0 are the same as they were for Version 2.2. Those limitations are described below.

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#### **logintimeout Not Supported on Linux**

On Linux platforms, logintimeout is not supported.



## Upgrading from an Earlier Release

This section describes issues involved in upgrading from the Database Toolbox 2.2.1.

### **BOOLEAN Data Types Now Represented as 1's and 0's**

Previously, if you retrieved a BOOLEAN field from a database using `fetch`, the values were returned as `true` or `false` strings. Now they are returned as 1's and 0's in MATLAB and have a class of `logical`. For details see the Visual Query Builder documentation, and the `fetch` and `insert` function reference pages.



# Database Toolbox 2.2.1

## Release Notes

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These release notes are for Version 2.2.1 (R13SP1) of the Database Toolbox:

Major Bug Fixes	Performance improvements and bug fixes made since the previous version.
Upgrading from an Earlier Release	Changes that might impact compatibility with previous versions.

### Major Bug Fixes

The Database Toolbox Version 2.2.1 includes performance improvements and bug fixes made since Version 2.2. You can see a list of the particularly important Version 2.2.1 bug fixes.

If you are viewing these Release Notes in PDF form, please refer to the HTML form of the Release Notes, using either the Help browser or the MathWorks Web site and use the link provided.

## Upgrading from an Earlier Release

This section describes the upgrade issues involved in moving from Version 2.2 to Version 2.2.1.

### **Saving Edited SQL Statements in the VQB**

In the VQB, when you edit the query in the **SQL statement** field and then select **Query -> Save**, the query in the **SQL statement** field is saved rather than the query represented by the other VQB fields.

