Database Toolbox Release Notes

The Database Toolbox Version 2.2.1 consists of performance enhancements and bug fixes. For details, see “Major Bug Fixes”.

These release notes also describe the Database Toolbox “Platform Limitations” on page 1-3, which have not changed since Version 2.2.

The Database Toolbox Release Notes provide information about the earlier versions of the product, in case you are upgrading from a version that was released prior to Release 12.1. If you are upgrading from a release earlier than Release 12.1, you should also see these sections:

- “Database Toolbox 2.2 Release Notes” on page 2-1
- “Database Toolbox 2.1 Release Notes” on page 3-1

Database Toolbox 2.2.1 Release Notes

1

Major Bug Fixes 1-2

Platform Limitations 1-3
logintimeout Not Supported on Linux 1-3
No HP 10.2 Support 1-3

Database Toolbox 2.2 Release Notes

2

New Features 2-2
Retrieve Data as numeric or structure Format 2-2
Export Numeric or Structure Data 2-2
Specify Error Handling Preference 2-2
LONGCHAR Data Type Supported 2-3

Database Toolbox 2.1 Release Notes

3

New Features 3-2
Platforms Supported 3-2
Performance Improvement 3-2
Starting the Database Toolbox 3-2
Exporting Results to Report Generator 3-2
Grouping Constraints for a Single Field 3-2

Upgrading from an Earlier Release 3-3
Starting the Database Toolbox 3-3

1

Database Toolbox 2.2.1 Release Notes

Major Bug Fixes 1-2

Platform Limitations 1-3
logintimeout Not Supported on Linux 1-3
No HP 10.2 Support 1-3

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.

Platform Limitations

Note The platform limitations for the Database Toolbox 2.2.1 are the same as they were for Version 2.2. Those limitations are described below.

logintimeout Not Supported on Linux

On LINUX platforms, `logintimeout` is not supported.

No HP 10.2 Support

The Database Toolbox is not supported on the Hewlett-Packard 10.2 platform.

2

Database Toolbox 2.2 Release Notes

New Features 2-2
Retrieve Data as numeric or structure Format 2-2
Export Numeric or Structure Data 2-2
Specify Error Handling Preference 2-2
LONGCHAR Data Type Supported 2-3

New Features

This section introduces the new features and enhancements in the Database Toolbox 2.2, added since the Database Toolbox 2.1 (Release 12.0).

For information about Database Toolbox features that are incorporated from Version 2.0, see "New Features" on page 3-2 in the Database Toolbox 2.1 Release Notes.

Retrieve Data as numeric or structure Format

You can specify as a preference the format in which data is retrieved from a database, called the `DataReturnFormat`. Options are `numeric`, `structure`, and `cellarray`. Previous versions of the Database Toolbox only supported the `cellarray` format.

You can use the `numeric` format when all data to be retrieved is numeric or when nonnumeric data is not relevant. Any strings in the data are converted as specified in the `NullNumberRead` preference, for example, `NaN`. The `numeric` format allows for a significant reduction in memory usage. The `structure` format allows you to access the retrieved data as a MATLAB structure.

To set the preference, use the `setdbprefs` function. In the Visual Query Builder, set the format using the **Query -> Preferences** menu. For details on the options, see the reference page for `setdbprefs`.

Export Numeric or Structure Data

Using `insert` and `update`, you can export data that is a numeric matrix, a structure, or a cell array. Previous versions only supported data in a cell array for export. There is no specific action you take to specify the format for exported data; the data is exported in its current MATLAB format.

Specify Error Handling Preference

You can specify the behavior for handling errors when retrieving data from a database, called the `ErrorHandling` preference. The options are `store`, `report`, and `empty`. Previous versions of the Database Toolbox only supported the `store` option, meaning the error message is stored in the returned data. The `report` option immediately displays any error messages in the Command Window. For the `empty` option, the error message is in the returned data, but it returns objects that could not be created as empty handles.

To set the preference, use the `setdbprefs` function. In the Visual Query Builder, set the preference using the **Query -> Preferences** menu. For details on the options, see the reference page for `setdbprefs`.

LONGCHAR Data Type Supported

The `LONGCHAR` data type is supported. This is called the Memo data type in Microsoft Access.

3

Database Toolbox 2.1 Release Notes

New Features 3-2
Platforms Supported 3-2
Performance Improvement 3-2
Starting the Database Toolbox 3-2
Exporting Results to Report Generator 3-2
Grouping Constraints for a Single Field 3-2

Upgrading from an Earlier Release 3-3
Starting the Database Toolbox 3-3

New Features

This section introduces the new features and enhancements added in the Database Toolbox 2.1 since the Database Toolbox 2.0 (Release 11.0).

Platforms Supported

The Database Toolbox now runs on all platforms that support MATLAB 6, with the exception of the HP 10.2 (HP 700).

Performance Improvement

Version 2.1 performance for fetching data from your database has increased by a factor of roughly 100 over Version 2.0. This improvement was first introduced in Version 2.0.1.

Starting the Database Toolbox

Do not run `feature('dispatchjava',1)` to start the Database Toolbox, as was required for Version 2.0. Instead, begin by running the Database Toolbox function you want to use.

Exporting Results to Report Generator

When using the Visual Query Builder, you can now export query results using the Report Generator, if the Report Generator product is part of your system configuration. To use it, select **Report Generator** from the Visual Query Builder **Display** menu.

Grouping Constraints for a Single Field

A **Group** button has been added to the **Where**, **Subquery**, and **Having** dialog boxes. Use the **Group** button to group constraints for a single field, especially when using the `OR` operator. Basically, the **Group** button allows you to evaluate a set of constraints as a whole.

Upgrading from an Earlier Release

This section describes the upgrade issues involved in moving from the Database Toolbox 2.0.1 to the Database Toolbox 2.1.

Starting the Database Toolbox

Do not run `feature('dispatchjava',1)` to start the Database Toolbox, as was required for Version 2.0. Instead, begin by running the Database Toolbox function you want to use.