

## BioNumerics Tutorial:

# Entry information fields and their properties

## 1 Aim

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In BioNumerics, properties can be assigned to any non-default entry information field. These properties can be used to ensure correct inputting, updating, formatting and sorting of information. They also offer a quick visual discrimination of *field states* using colors. In this tutorial you will learn how to add new entry information fields to your BioNumerics database and how to change the properties of these fields.

## 2 Preparing the database

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The **DemoBase Connected** will be used in this tutorial and can be downloaded directly from the *BioNumerics Startup* window or restored from the back-up file available on our website:

1. To download the database directly from the *BioNumerics Startup* window, click the **Download example databases** link, located in the lower right corner of the *BioNumerics Startup* window. Select **DemoBase Connected** from the list and select **Database > Download**. Confirm the download action.
2. To restore the database from the back-up file, first download the file `DemoBase_Connected.bnbk` from <http://www.applied-maths.com/download/sample-data>, under 'DemoBase Connected'.

In the *BioNumerics Startup* window, press the  button, select **Restore database**, browse for the downloaded file and select **Create copy**. Specify a name and click **<OK>**.



In contrast to other browsers, some versions of Internet Explorer rename the `DemoBase_Connected.bnbk` database backup file into `DemoBase_Connected.zip`. If this happens, you should manually remove the `.zip` file extension and replace with `.bnbk`. A warning will appear ("If you change a file name extension, the file might become unusable."), but you can safely confirm this action. Keep in mind that Windows might not display the `.zip` file extension if the option "Hide extensions for known file types" is checked in your Windows folder options.

## 3 Entry information fields

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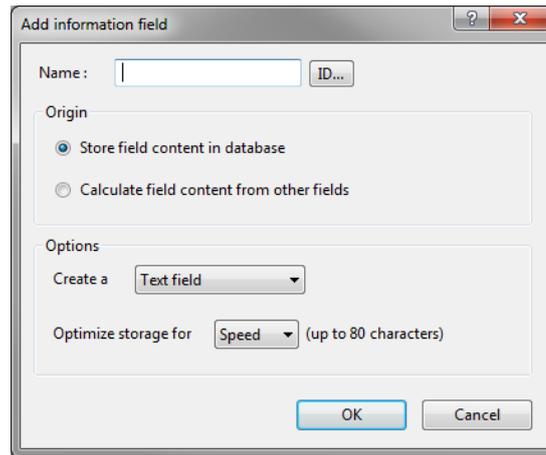
1. In the *BioNumerics Startup* window, double-click on the **DemoBase Connected** database to open it.
2. Make sure the *Database entries* panel is the active panel and select **Edit > Information fields > Add information field....** Alternatively right-click in the *Database entries* panel and select **Information fields > Add information field**.

The *Create new entry information field* dialog box pops up (see Figure 1).

3. Specify a *Name*, e.g. "Origin" and press **<OK>**.

The new entry information field is created and is displayed in the *Database entries* panel.

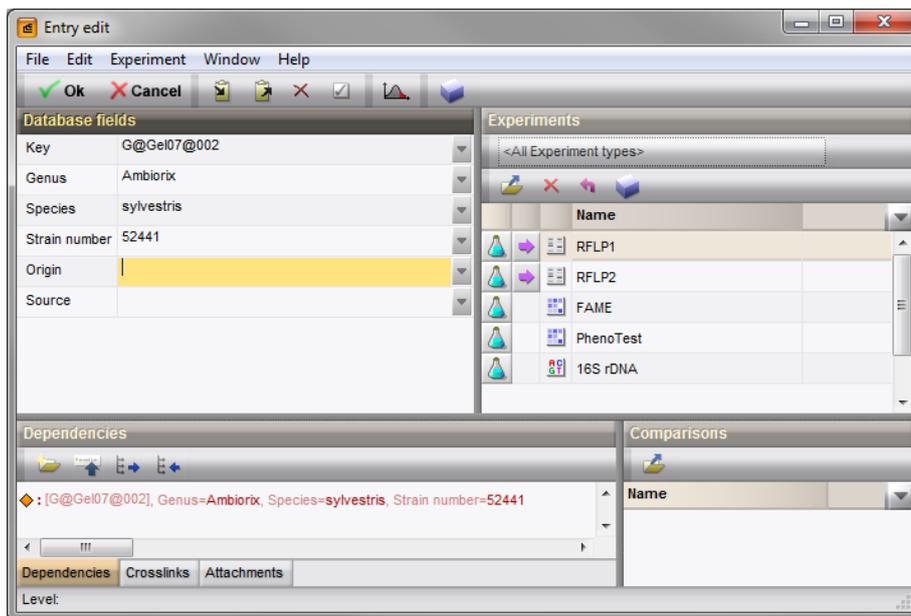
4. Repeat previous step to add a second information field called "Source".



**Figure 1:** The *Create new entry information field* dialog box.

5. Double-click on a database entry to open the *Entry* window.

Information can be edited in the *Entry* window and saved (see Figure 2).



**Figure 2:** The *Entry* window.

6. Close the *Entry* window.

Alternative to using the *Entry* window, information in the information fields can be edited directly by clicking twice (not double-click) on an information field in the database. The information will appear highlighted and can be edited.

7. Click twice on the information field **Genus** of an entry or select a field and press **Ctrl+Enter**.

The information appears selected blue against a bright colored background and can be modified (see Figure 3).

8. Use the **ArrowUp** and **ArrowDown**-keys on the keyboard to jump to the previous/next row.

9. To jump to the next column, use the **Tab**-key.

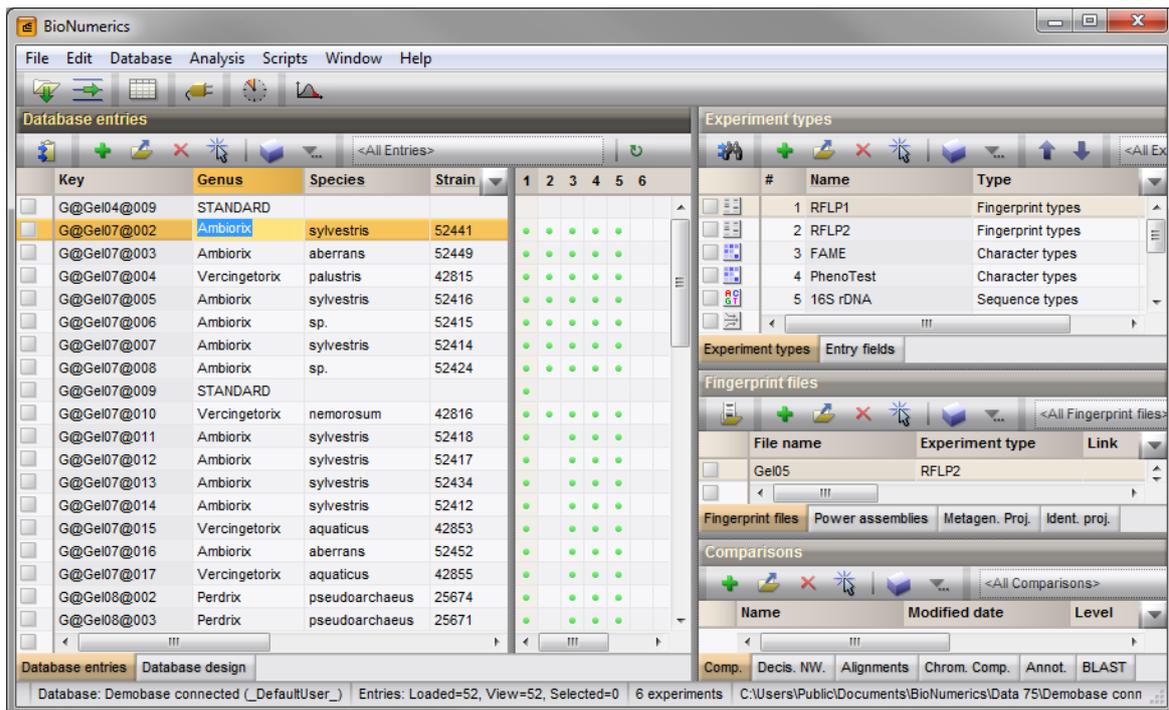


Figure 3: Clicking twice on an information field enables direct editing.

10. To jump to the previous column, press **Shift+Tab** on the keyboard.

## 4 Entry information fields properties

1. To set the properties of an entry information field, right-click on the entry field name, for example **Species**, in the *Database entries* panel and choose **Field properties** from the floating menu (see Figure 4).

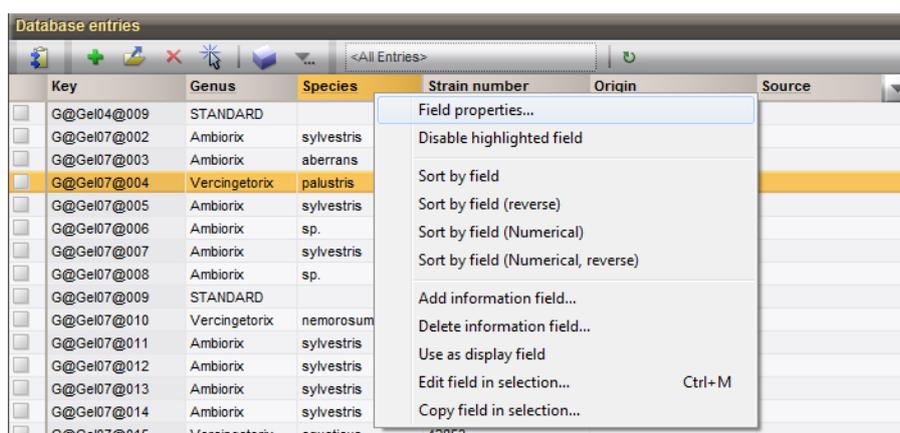


Figure 4: Floating menu.

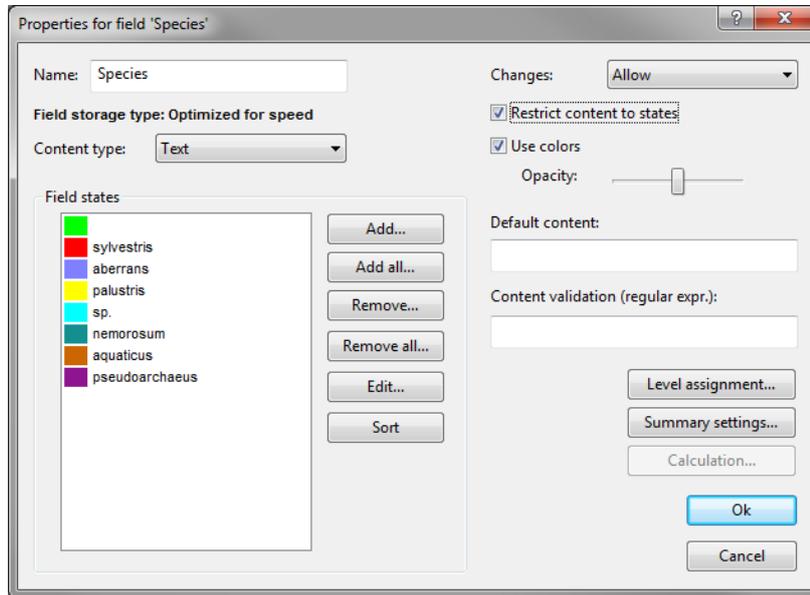
The *Database field properties* dialog box appears (see Figure 5).

2. Press **<Add all>** to create all existing states for the **Species** field. Confirm the action.

3. Check **Use colors** to display a specific color code for each field state.

4. Since our *Fields states* list contains all possible states for this information field check ***Restrict content to states***.

Turning on this feature forces to provide consistent information, as no other values than the ones specified in the *Fields states* list will be accepted for the information field.

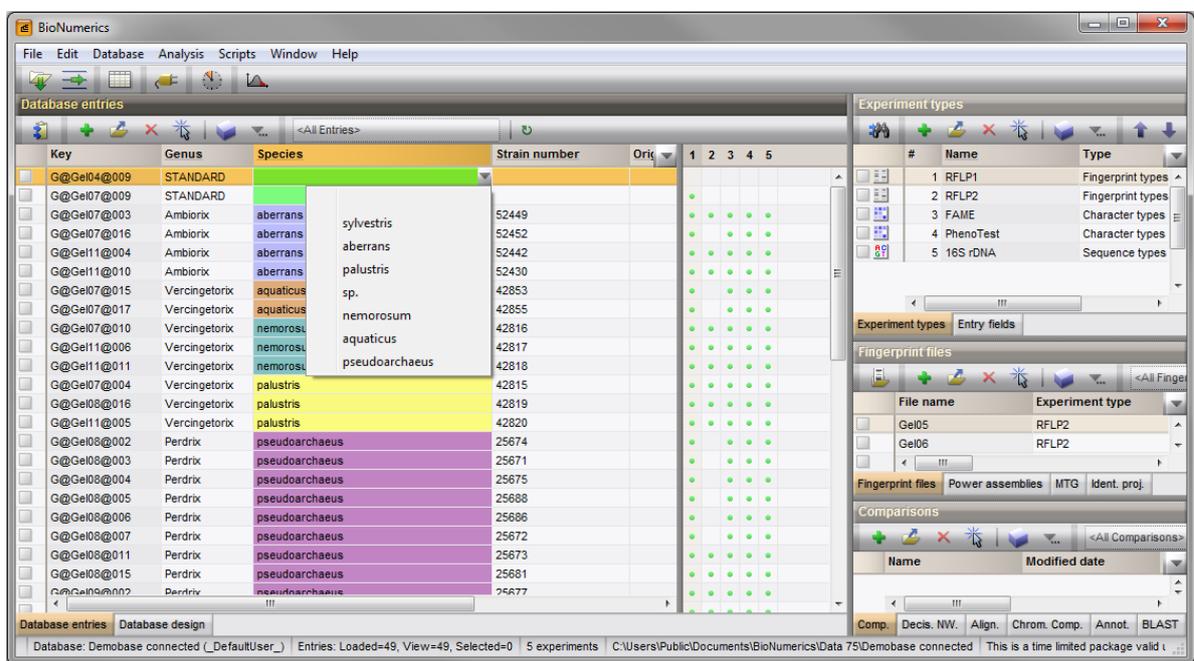


**Figure 5:** The *Database field properties* dialog box.

5. Press **<OK>** to accept the new settings.

The *Database entries* panel is updated:

- The coloring based on the *field states* offers a visual discrimination between the entries.
- The field states become available as a drop-down list, facilitating and harmonizing the input of data through direct field editing (see Figure 6).
- Correct inputting is ensured because the option ***Restrict content to states*** was checked in the *Database field properties* dialog box.



**Figure 6:** The *Database entries* panel, showing the drop-down list with field states for 'Species'.