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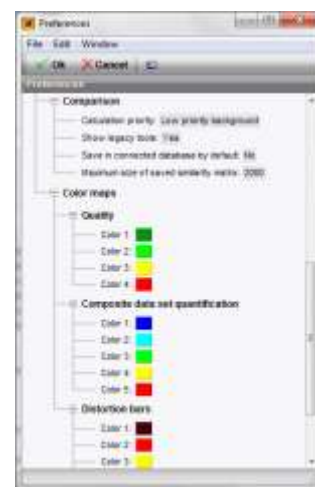
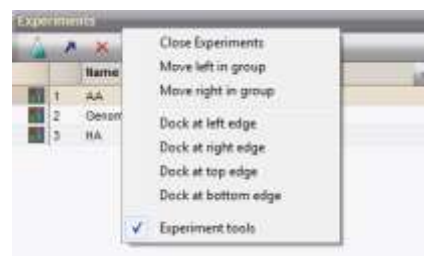
## RELEASE NOTE: GELCOMPARED II VERSION 6.1

Ten months after the impressive major upgrade to GelCompar II version 6.0, Applied Maths proudly presents GelCompar II version 6.1. Honoring a good old Applied Maths tradition of supplying its “minor” upgrades with a list of new features worth the label “major”, we have provided an impressive number of novel and improved features in this upgrade, covering many aspects of databasing, analysis and the user interface.

Below is a list of the new features.

### INTERFACE

- Context menu in panel headers: right-click on header (some extra, convenient panel re-arrangement functions).
- Columns in a grid panel can now be enabled or disabled using a menu “Set active fields”, which opens a dialog box where fields can be selected conveniently.
- More comprehensive logging to file BNLOG.TXT.
- In the *Main window*, the active (selected) experiment is highlighted in the *Experiment grid panel*.
- For *experiment types*, any custom field can now be selected as the *display field*, and the content of this field will be used to label that experiment type in the comparison window, entry window, etc. This option is more flexible and less intrusive than renaming the experiment types. The software now produces a warning if a user tries to rename an experiment type, recommending the *display field* as an alternative.
- The software now supports printing with Eastern character sets (e.g. Kanji).
- The *Preferences box* has been redesigned, using a more flexible user interface in the form of an editable tree. Some new preferences have been added:
  - Most important feature is the “*Color maps*” setting, that can be used to customize the color ranges used for the following items:
    - Quality scores.
    - Distortion bars on a gel.
    - Composite data set quantification colors.
  - The new setting “*Windows > Font > Dialog box font*”, with the options “*Use system font*” (=previous situation and still the default), and “*Use software font*”. The latter option uses the same font for dialog boxes as set for the windows in GelCompar II. It allows users

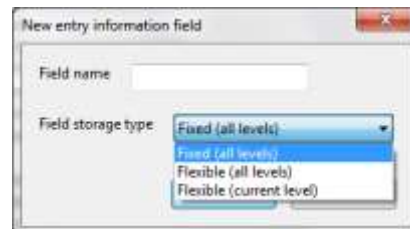


to have better control over the size of the dialog boxes, particularly useful with extremely low or high screen resolutions.

## DATABASE

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- A new type of entry information is introduced: *Flexible entry fields*. For querying, displaying and all other features, they behave just like the traditional *Fixed fields*, however they have a number of advantages:
  - They are stored in a separate, dedicated table in a normalized way.
  - They can be attached to a specific *level*, so that only entries belonging to this level possess this field.
  - They are easier to create, rename or remove, because no change in the table structure is required.



Both types of fields have their logical place. For example, when working with levels, the traditional fields can be thought of as the "base" set of fields that apply to every kind of entry, whereas flexible fields can be used to add specific information to specific levels.

- A new database field property "*Read only*". This property causes GelCompar II not to update the field and the user cannot edit the field either. It is useful for computed fields or field data that should not be altered after creation.
- The maximum number of entry information fields has been increased to 500 (previously 150). This maximum includes fixed and flexible fields.
- When a new experiment type is created, an error is reported if the invalid characters %/[ are present in the name.
- The use of the local file DBINFO.BNF has been discontinued in *connected databases*. As a result, in distributed connected databases, removing and adding information fields is now automatically adopted in all client users.
- New connected database settings option "*Do not use stored procedures*". This option is implemented to make GelCompar II version 6.1 compatible with PostgreSQL databases.



## FINGERPRINT TYPES

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- The maximum resolution of fingerprints has been increased to 100 000 points (previously 40 000). The increase allows GelCompar II to handle high-resolution profiles such as from MALDI and similar techniques.
- The maximum number of reference lanes in a gel or sequencer run has been increased from 150 to 300. This allows the import of high-throughput multi-dye based sequencer electrophoresis runs.

## PLUGINS

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### **General:**

The URL tools that offer synchronization with data servers in plugins have been made compatible with most proxy servers. Furthermore, in case of remaining problems, the connection settings in GelCompar II can be tuned by a system administrator.

### **New plugin: Import and analysis of Diversilab patterns**

In collaboration with bioMérieux ([www.biomerieux.com](http://www.biomerieux.com)) Applied Maths has developed a plugin for import and analysis of patterns generated using the Diversilab™ system. The web-based Diversilab software from bioMérieux allows XML files to be exported from sets of patterns, which can be imported in GelCompar II. GelCompar II stores the patterns as fingerprints in a database, offering the advantages of creating libraries of thousands of patterns and analyzing Diversilab patterns in combination with other techniques. The Diversilab plugin also provides smart on-the-fly normalization algorithms for automatically aligning the Diversilab patterns within a comparison.

### **New plugin: User Management**

This plugin provides easy export and import of groups of users and is particularly useful in multi-user environments.