INTRODUCTION

A graphical utility oriented to analysis of SQL tables using graphs of evolution.

The program allows high level of customization, althouht it is necessary to know in depth the possibilities of the program. For those who need simpler reports, there is a setup wizard.

CONFIGURATION

DATABASE CONFIG STRUCTURE

For managing databases by programs such as dbWinSQL and PlotSQL, the organization of the data in the document folder it consists of a hierarchical tree that allows different configurations for different databases.

The structure of this tree is: Server - database - data - configuration files.

NEW REPORT

When designing a new report, we do specifically for the database accessed data. The configuration file that can be edited with a word processor is named PLreport.ppn and is located in the data folder corresponding to the open database.

The basic concept of this program is to calculate the corresponding X and Y, depending on the variable data $n_{,}$ which would be the line position. From a practical standpoint, in general we can assume that the variable $n_{,}$ X.

We can generate two different reports, basic reports corresponding to a single line of evolution, and reports that allow multi-line grouping several previous reports.

Normally initially it is designed and tested basic reports. These may or may not appear in the menu of reports, as have applied or not avoided menu option.

NEW REPORT BASIC

To design a basic report of a single line, you must access the new report option, fill in the corresponding title or name of the report in the box and leave the multiline box unchecked. If this report will be part of a multiline report and do not wish to appear on the menu, we must check the avoid menu box.

Then select the main table that bring the statistical data. Normally it will be tables of movements.

Then indicate the fields that will be used to limit the selection of data in the table. We use L, when we want the data to go between limits (to), and S when we want a selective data.

Finally we access the screen for detailed report settings.

Axis X. In this box indicate the expression to calculate the coordinate X. In many cases it is derived from the date of the data. If the data correspond to the X coordinate of the days of month or months of the year, they will not require any correction while for the year it is usual to substract the initial year. The following shows how to extract day, month and year of a date:

- Day: D=FN#VALN(FN\$MIDS(TABLE_FIELD;7;2))

- Month: M=FN#VALN(FN\$MIDS(TABLE_FIELD,5,2))
- Year: Y=FN#VALN(FN\$MIDS(TABLE_FIELD,1,4))

If we want a graphical representation for years, usually we will not do it from the year zero, so we have to subtract the calculated year by the above formula, the base year or date corresponding to the initial date:

 $Y=FN\#VALN(FN\$MIDS(TABLE_FIELD,1,4))-FN\#VALN(FN\$MIDS(_ACCEPT\$(n),1,4)) where n is the number of edit box where we have introduced the initial date.$

Axis Y. The coordinate Y is usually easier to calculate since it coincides with the value we want to show in the graph. Imagine a table with one row per year with a value in the VALUE field. The expression to represent these values would be simply VALUE. It is slightly complicated when we have more than one row per year, since we have to accumulate values. It's all we do with the expression $S\#(_n)+VALUE$ where S# is the storage variable.

Reset. The expression of this box is processed at the beginning of each calculation. You must set the dimension of the storage variable to use, with the number of coordinates X we use. For example S#(12) tells us that we will have a maximum of twelve values for the storage variable. We must also reset to zero these values for if the statistics is repeated. FN#ACUM function is often very suitable for this, such as FN# ACUM(S#(x)=0;x;0;12). The value returned by the expression must be alphanumeric and is used for labels in the base of the graph. An example might be this:

S#(12);FN#ACUM(S#(x)=0;x;0;12);'Jan,Feb,Mar,Apr,May,Jun,Jul,Aug,Sep,Oct,Nov,Dec'

Scan Condition. In this box we can indicate an expression to filter data within the set limits, if necessary.

Store variables Here we indicate the storage variable used excluding parentheses. For the current example would be S#.

NEW REPORT MULTI

To create a multiline report, we must have previously created the basic reports, and be aware of the titles or names we had assigned, because we will need it later.

On the first screen of the wizard, indicate the name of the report and mark the multiline box. Select the appropriate table as the first of the basic reports, and do the same with the selection of limits.

Finally, we'll indicating the names of the basic reports that we want to group separated by commas. These should indicate identically to as and entered as the program is sensitive to case.

MODIFY REPORT

To edit or view a report previously configured we can access the option to modify menu settings. According to the accesed design is multi or not, the presentation of data on the screen will be different.

MODIFY REPORT BASIC

The first box is for the title or name of the report.

The second box corresponds to the expression that generates fracture screen reports.

The third box contains the name of the report table.

The fourth box indicates the index to use.

The fifth box is the expression reset.

The sixth box corresponding to the ${\tt X}$ coordinate and {\tt Y} coordinate

The seventh box corresponds to the condition or filter.

The eighth box contains the variable storage.

MODIFY REPORT MULTI

The first box contains the name of the report with the list of basic reports that compose it.

The second box contains the expression that generates the screen data capture.

The third box indicates the default table.

The fourth box are pointers to basic reports.

The fifth box are the storage variables of basic reports.

USAGE

With standard configurations, the end user selects the desired report in user reports in the menu. Fill limits and data selections as appropriate and the graph should appear on the screen in a few moments.

Once submitted the graphical screen, you can print or save the context menu by clicking the right mouse button.