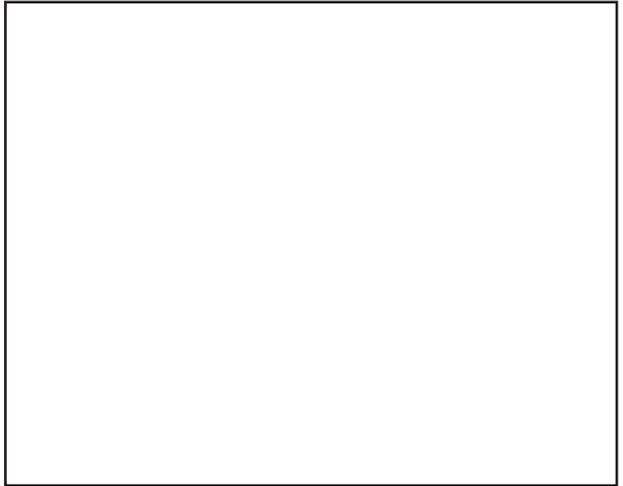


I have been using Pipedream continuously in my job for 3 years now and find that, while it is an extremely powerful spreadsheet, it lacks an easy to use graphical layout, making it difficult to enter data in the required cell and to present an eye catching report. Pipedream 4 improves the situation with the addition of charts and a slightly easier data entry but it still isn't enough. I tried Schema but found too many features were missing to make it a viable alternative though with the advent of Schema 2 this might possibly change, and Colton Software has also announced Resultz for release soon.

Now comes Eureka from Longman Logotron. This has been advertised for some time but was finally released in December last year. Eureka comes in an A5 binder with two discs. One contains the program along with System files and a fonts directory, while the other contains examples. Eureka installs on the icon bar and requires a minimum of 2Mb. Longman Logotron recommends the use of RISC OS 3 as some functions do not work with

Eureka

Alan Highet compares Longman Logotron's long awaited spreadsheet with the well established Pipedream from



Eureka's spreadsheet layout

RISC OS 2, although they do not tell you which. Eureka is fully RISC OS compliant.

Clicking Select on the icon opens a blank

worksheet which, as you can see from figure 1, has a separate movable work bar at the top of the screen.

Presenting Eureka's data in chart form

LAYOUT AND PRESENTATION

Eureka's main asset is its ability to alter the style of each individual cell. This lets you change the outline font used, justification and formatting of text or numbers, background colour and even the individual height and width of each

row or column.

This may sound like a lot of work, but like DTP packages, Eureka lets you design

styles, and a number of predefined styles are provided such as comma, currency and percent. At the top of the work bar is a window showing the style attributed to the currently selected cell. By clicking on the adjoining down arrow all available styles are displayed, and a single click adds that style to a selected cell or group of cells. Alignment of text or numbers can be achieved with a click on the work bar, while other individual style changes are available from a menu.

Graphic facilities enable the outlining of groups of cells or the addition of lines to any of the four sides of a cell in a range of line types and colours. Each cell's background may be individually coloured and together enable the construction of eye-catching reports. A single cell may be selected with a click, or a group of cells by dragging. This is also true when selecting references, in which case a range divider is automatically entered in the appropriate place if required. Unlike Pipedream you can also select unconnected cells or groups of cells.

SPREADSHEET FUNCTIONS

Anything typed in appears in the data entry box in the work bar and only enters the cell on pressing Return. Text and numbers are dealt with automatically, and text will overflow a cell to the left or right assuming there is nothing in that box, otherwise the text is truncated at the cell division. Formulae are specified by prefixing them with = saving confusion between cell references and text or numbers. Eureka contains over 150 built-in functions, but a large number of them have limited applications and I did miss Pipedream's database functions. Individual cells, ranges of cells and formulae may be named, allowing meaningful references elsewhere in the sheet.

To copy formulae or data you select a range of cells, and on selecting fill you are given the option to fill right, left, down or up with the most obvious choice already

selected. If you want to create a series rather than just a copy you can do this as well with the option to increment dates in day, month or year steps, linear progressions with start and stop values, or multiply by a constant value. Editing the worksheet is simple, with the usual tools such as cut, copy and paste along with the facility to clear a cell completely, or just remove the formats or the formula. The same is true of the paste menu which allows you to paste the whole cell or just the formula, the value, or the format. You can insert and delete rows and columns or just individual cells.

The sheet may be viewed on screen without grid lines or borders, and there is an option to remove zeros from sheets to improve their look. Several copies of each sheet may be viewed at any one time, but a much more elegant method of displaying different parts of the worksheet is offered. A black line can be seen in figure 1 just above the vertical scroll bar. Dragging this down with the mouse splits the sheet at that point and produces a second scrollbar allowing the two parts of the screen to be scrolled independently. A similar option is available in the horizontal plane. This setup along with the window size and screen position are all stored with the file so it will always reopen in the same style as when you last saved it.

Sheets may be linked by external references to other sheets, although linked sheets do not load their dependent sheets and the cells are referred to by their full pathname rather than their leaf name.

GRAPHS AND CHARTS

By selecting one or more series of data, a chart may be created by clicking on the chart icon on the workbar or from a menu option. If you have included category information or column headings, Eureka intelligently works out which is the category and which is the value, and displays the default bar chart with the categories at the bottom and the scaled value up the side, regardless of the

orientation of the original data, as can be seen in figure 2. You can select from bar, line, pie, column, area and scatter graphs and some formats allow stacked or percentage options as well.

Although there is not the total control over the graphs that Pipedream provides, virtually every part of the graph can be altered in some way and I didn't find anything lacking. You can alter the background and foreground colours of virtually everything, as well as displaying legends and graphs with shadows to any side, and major and minor grid lines can be displayed. The legend can be positioned to any side, and a title and axes legends may be added with any font style and size. With every change Eureka reformats the graph to ensure it retains its central position.

Printing is achieved through RISC OS printer drivers, but there is no option to print a selected part of a sheet or to print in draft mode, which is something I find invaluable. I would like to be able to export part or all of a sheet as a spaced ASCII file enabling printing via Edit for instance. It would also be nice to see page breaks which would help in page layout.



Table 1. Sizing comparisons

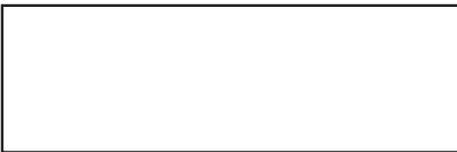


Table 2. Speed comparisons

SPEED AND CAPACITY

Comparisons of speed and size are very subjective, but as you can see from the two tables, Eureka is significantly faster on both calculating and formulating than

Pipedream 4. All the tests were carried out on a complicated formula replicated across 8 columns and 300 rows. In fact I noticed that most functions were faster in Eureka, making it easier to use on an ARM2 machine. This is reflected in the amount of memory used by the program and also in the larger disc space required to store a file, probably because of the greater amount of information required for the display attributes of each cell. However, Eureka uses available RAM more efficiently than Pipedream, and this is shown by the size of the same file when loaded.

Pipedream claims to have unlimited file size while Eureka has a limit of 16384 rows by 256 columns. In practice this is not a problem, as even a 4Mb machine will run out of memory before this limit is reached. In fact Eureka managed 19440 cells in memory against 13200 for Pipedream although this obviously depends on what is being stored.

IMPORT AND EXPORT

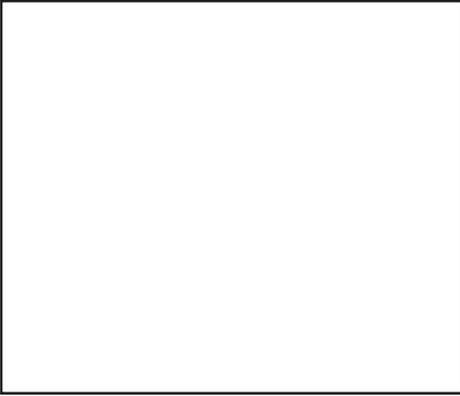
Eureka can import and export Lotus 123 WKS and WK1 files, and can preserve most formatting commands although charts are not interchangeable. Sheets can also be imported in CSV format, and can also be exported in either CSV or Draw format. The only problem is you cannot save a selection from Eureka, so editing needs to be carried out in Draw.

DOCUMENTATION

The handbook is well laid out and takes you through starting up and explains clearly what all the various parts of the program do. There is then a very short tutorial section backed up by files on the example disc. There is a reference section and then a function reference which is one of the clearest guides I have ever seen with function descriptions and a working example of nearly every function along with a cross reference to associated functions.

Unfortunately this is where the





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