GINO News......

for graphics and GUI application developers

www.gino-graphics.com

GINO Gets Animated

With the increase in power and performance of PCs improving all the time, animation techniques are becoming more and more important for developers to enhance their graphics applications. What are GINO's capabilities regarding real-time graphics and animation?

- GINO has supported OpenGL graphics for some years now, which provides much faster graphics than GDI and is essential for nearly all types of animation.

- Objects that are to be animated should be stored in segments. GINO has always had segment storage facilities and OpenGL cards use segment-storage for retaining objects in memory, so this will keep the performance at the maximum level.

- Double-buffering should be used where possible to speed up drawing and frame switching.

- For 3D animation, GINO's full 3D transformation and matrix-handling functionality is used to create the sequence either by segment transformations or use of the viewing functions to alter object position, projection or eye point.

GINOSURF

One of the most popular uses of animation is using GINOSURF for viewing surfaces. GINOSURF by nature, contains its own 3D viewing capabilities, however for maximum performance and flexibility, these can be turned off so that all 3D data is directed through to GINO and GINO's OpenGL 3D device-driver. This ensures that GINO's facet drawing facilities are used instead of GINOSURF's basic polygons. Once this has been done, GINO's OpenGL functionality can again be used to provide realistic lighting and shading, texture-overlays and of course high-performance surface 'fly-throughs' for real-time viewing of any part of the surface.
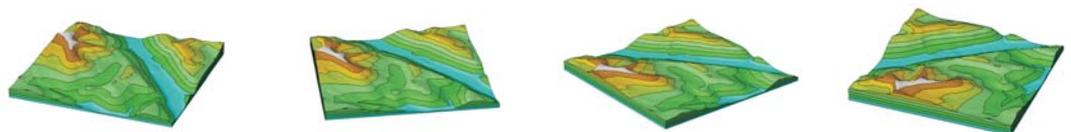
To view a white paper on using animation within GINO, visit http://www.gino-graphics.com/support/animation.html
This includes technical information on which routines to use and how to achieve optimum performance.

G95 Version now available for Linux

GINO is now available for the OpenSource G95 Fortran90/95 compiler for Linux x86 systems. It is a complete F90 version of GINO using all the standard constructs such as long-names, structures and optional arguments and an evaluation version can be downloaded from the GINO website.

50% Discount Launch Offer

As a special launch offer, order the GINO Bundle for G95 before 31st December 2005 and receive a discount of 50%.

GINO graphics
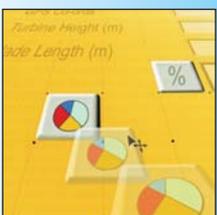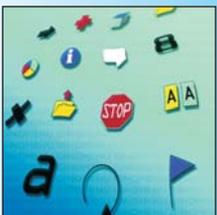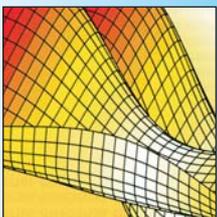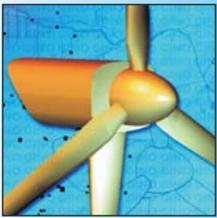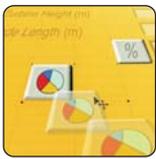
GINOMENU Studio v5.0

GINOMENU Studio v5.0 continues to build on its will-earned reputation as the only serious RAD tool for Fortran programmers.

Code Editors

- The User Code Editor and Callback Editor have now been merged into one Editor, with the different blocks of code being selected by a pull-down combobox.

- A new code block entitled 'Global Routines' has been added to allow the addition of routines to the project module or global block. This can be more efficient than placing them in the 'User Routines' section.

- All GINO Help files can now be accessed from GINOMENU Studio, either by the Help pulldown on the main menubar or directly from the Code Editor. The user can jump straight to the reference page of any command either by pressing F1 when viewing the list of commands available or by pressing F1 when the cursor is positioned over a command name within the editor.

- The Editor now provides a 'Code-Assist' popup window when adding GINO routines, assisting in the placement of arguments by giving the name and type of each argument required.

- The Editor now keeps a track of the current line and character number and displays this in the status bar.
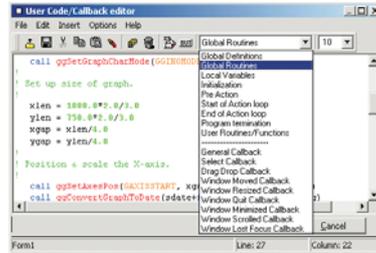
- The Find and Replace dialogue works more intuitively and contains combo lists of previous find and replace strings.

- Multi-level Undo is now available as well as Undo and Redo in the Find/Replace dialog.

- <ctrl>W can be used as a hot-key to bring up the list of current widgets available to use in the Editor.

GUI Designer

- A toolbar separator widget has been added into the tool box.

- Undo and redo options are now available for widget movement and resize.

- Icon resources can be added to menu entries, tree view entries and combo box and list box entries through new options in their respective editor dialogues.

Widget Properties

All new properties added to widgets in the new version of GINOMENU have been included for the same widgets in Studio, including:

- Quit mode for Toolbars
- Label alignment in user defined buttons and bubble help
- Read-only option for text, tty and value entries
- Border type, colours and border line types for text and value arrays

- OLE insertion control for RTF text widgets
- Double click callback for tree view entries
- File drop callback for master MDI forms
- Value error callback for value entries
- GTOP option for initial state of windows

Housekeeping

- The Options - Preferences menu has been reworked to provide auto-backup and project/code synchronization.

- The snap grid setting dialogue has been moved from the preferences dialogue to the project settings dialogue as the setting applies to the currently opened project only.

- The Widget Tab Order dialogue is now resizable and allows for the re-ordering of multiple widgets in one action.

- Additional hot-keys have been added to improve development speed. These include Esc to close windows, and Ctrl Y and Z for redo and undo actions.
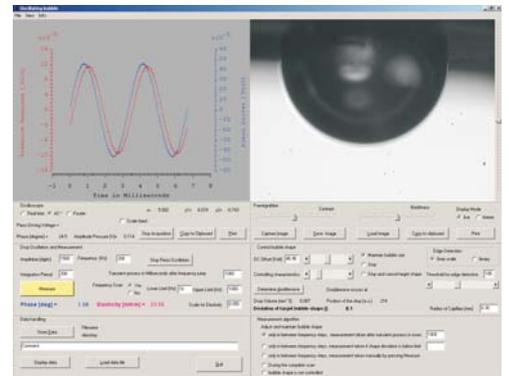
Using GINO to visualize the hydrophilicity of surfaces

Graphics Consultancy

Bradly Associates are keen to promote the increase in consultancy services particularly in the area of Graphics applications and programming. We can code in Fortran, C++, VB, Delphi and .NET and specialise in offering interface layers from one graphics system to another. There are still many applications still using legacy programming API's such as Calcomp's HCBS, Versatec's Versaplot, CA-DISSPLA, Textronix Plot-10, GKS and many others and all these can be converted to use newer techniques such as OpenGL, .NET and graphics for the Web.

Recent projects have included: An F90-C++ interface to a FlashBus video framegrabber, an F90-C++ interface to an OWIS stepping motor controller and a Fortran90 interface to the C++ Victor Image Processing Library to enable enhanced image handling in a F90 GINO application. 16 functions were interfaced including Bluring, Anding, Sharpening, Eroding and other conversion capabilities.

normal view

blurred

sharpened

For more information on the Victor Image processing library, go to http://www.catenary.com

GINOMENU v6.5

Seventeen new routines and 13 new optional arguments have been added to the library, with 8 existing optional arguments adding new facilities to existing routines:

Docking Panes

A new widget type has been added in v6.5 which is the powerful docking pane. This is a container widget which can hold several types of children which are automatically expanded to fit the pane. The pane can then be attached to the side of a window or made to float in a similar manner to the toolbar widget.

Value Entries

Value entries have been enhanced with new input controls and error checking facilities and the contents of both value cells and value entries can be cleared if required (without 0.0) through two new routines.

Array Grids

Various enhancements have been made to array grids, including:
- new colour control, font attributes and border type
- change callbacks
- combo box button display
- TAB control
- use of rogue values in value cells
- A new optional argument gmCount has been added to the add/remove row/column routine allowing for more efficient multiple operations in one call.

Bubble Help/Tooltips

Bubble help facilities have been extended to add justification of multi-line tool-tip messages as well as optionally inhibiting the display of all bubble help.

RTF Text Widgets

RTF text entries have been enhanced with
- multi-level undo features
- routine to prevent OLE inserts
- routine to buffer up application changes to prevent flashing
- routines to extract the currently pointed-to word and any specified text without having to select it first
- Single line RTF entries are now also permitted
- Colour syntax highlighting for numbers
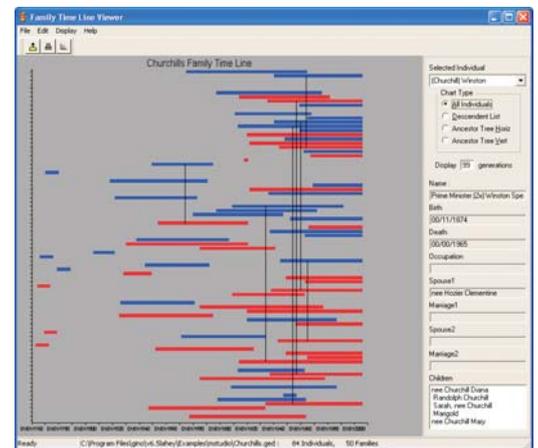
Additional Features

- In the area of callbacks, a new routine is provided to flush the callback queue, should that be required by an application and a routine has been added to generate (post) callbacks from application control as if the user had carried out an action on the display
- Addition of File Drop callback to MDI Master windows
- Addition of double-click callback to tree view entries
- Justification of button labels
- Read-only property for text, tty and value entries
- Addition of quit mode for tool bar widgets

GINOMENU application to visualize Genealogy GED files


Is this a Widget I see before me?

GraphOpus, GO, is an interactive Windows program developed using GINOMENU Studio that facilitates studying and visualizing a drama by creating, from a sequence of user-defined events, a graph of dramatic intensity. GO helps the user:

- Identify rising action, a climax, and resolution.
- Analyze a drama quantitatively.
- Discuss a play with authority.
- Learn and understand a play in an organized way.
- Enjoy a drama more by knowing it better!

The GO user, GOer, defines each event by specifying a range of lines within a scene and act. The GOer enters a synopsis of each event and assigns a weight that indicates her rating of the event's dramatic intensity. The result is a graph of the dramatic intensity and a user-written synopsis of the entire drama.

The origins of GO began in 1949 when Thomas M. Lahey learns the idea of graphing a play from Father Albert Durant, OSA, teacher of senior English at St. Rita High School, Chicago, IL. "One assignment was to graph Macbeth. As each student read Macbeth, we noted act, scene, from- and to- line numbers, a synopsis of the event, and assigned a weight to each event. After completing the series of events that defined Macbeth, we each created a graph using a ruler, pen, and ink. The graph's x-axis was the accumulation of the line numbers that define the sequence of events; the y-axis was the accumulation of the weights assigned to each event. From this graph, it was possible to visualize the play and identify the climax and anti-climaxes."

GraphOpus can be used by anyone wishing to study a drama, including teachers, students, directors or cast-members. Plays that have already been 'graphed' include Macbeth, The Comedy of Errors and Twelfth Night.

For more information on GraphOpus, visit: http://www.graphopus.com

GINOSURF v6.5

QSCad Siteworks
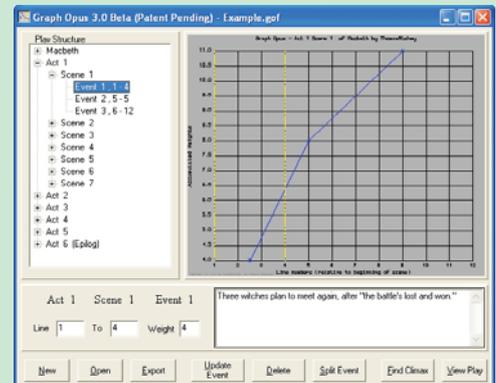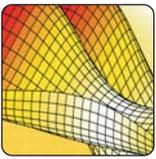
GINOSURF adds a New Dimension

Thirteen new routines have been added to GINOSURF v6.5, four of which provide enquiry functions for information that was difficult or impossible to obtain in previous releases.

- Two new routines have been added to generate 3D and 4D constrained triangulation networks composed of free data points, break-lines and excluded regions all in the one call.

- There are more controls over the style of contour map and cross-sections axes and the ability to define the projection of a polyline cross-section to be aligned along the X (or Y) axis direction as well as the current distance.

- In a new area of GINOSURF functionality, there are three routines which utilize the knowledge of the supplied data to calculate approximations for the area and volume data associated with a cross-section or surface. In addition, a fourth routine estimates cut-and-fill values for a 3D polyline traversing across a surface.
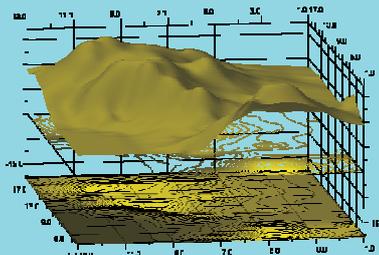
Measuring Earthworks volumes from drawings will never be the same again now that Construction Industry Software House, Masterbill, have incorporated GINOSURF into the latest releases of their CAD Measurement package QSCad.
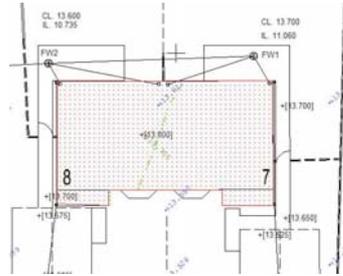
QSCad is designed to enable Quantity Surveyors and Estimators to cut the time they spend measuring by making use of the much more readily available electronic drawings without the need for a CAD system or the CAD skills to operate it.

Whilst the basic QSCad system copes with superficial areas, lengths and numeric items, it is the Siteworks module which produces the biggest gains in time and accuracy by enabling the user to plot and interpolate both existing and proposed site levels together with the proposed construction depths to calculate the volumes of cut and fill.

GINOSURF has been used for all the interpolation of levels and depths which enable accurate cut and fill volumes to be calculated. The speed of GINOSURF's interpolation routines has meant that thousands of calculations can be done in seconds rather than hours or even days with traditional manual measurement methods.

Although the Siteworks module carries out thousands of calculations it is often hard to gain an appreciation of the site and this is where GINOSURF's functionality has been used to provide graphical representations of the site including contour maps, sections and a 3D surface model.

It is often said that a picture is worth a thousand words, but in this case it's worth a thousand calculations and enables the user to easily visualise the site they are working on and more importantly spot any errors or 'rogue' entries in seconds.

"The ability to visualise the site provides the users with a great deal of reassurance that the system has interpreted the data correctly" explained Paul Watkins, Masterbill Sales & Marketing Director "which ensures that the system can deliver the time savings promised."
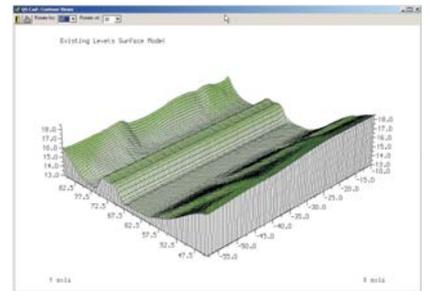
QSCad Siteworks, however, does not stop at measurement but also enables the user to 'Optimise' their site levels by calculating numerous options to balance cut and fill volumes and/or calculate the best cost option.

To find out more about QSCad take a look at Masterbill's website at http://www.masterbill.com

Win 9x/NT/2000/XP/Linux Price List

GINO Bundle v6.5	£1400	$2520	€2100
(includes GINO, GRAF, SURF, MENU)			
GINO Super Bundle v6.5	£1995	$3495	€2995
(Bundle + Studio + Manuals + Extended Warranty)			
GINO .NET Bundle v6.5	£995	$1795	€1495
GINO VB Bundle v6.5	£995	$1795	€1495
GINO Delphi Bundle v6.5	£995	$1795	€1495
GINOMENU Studio v5.0	£400	$720	€600

Win 9x/NT/2000/XP/Linux Upgrade Price List

GINO Bundle v6.0-v6.5 upgrade	£450	$810	€675
GINOMENU v6.0-v6.5 upgrade	£150	$270	€225
GINOMENU Studio v4.0-v5.0 upg.	£150	$270	€225

Due to fluctuations in the exchange rate, these prices may vary slightly.

Try before you buy!

All products (Windows & Linux) can be downloaded for evaluation at:
http://www.gino-graphics.com/downloads/download.htm

GINO graphics