

Graphics Editor TGML

Editor for TGML Graphics

The Graphics Editor for TGML is a tool for creating graphics in the TAC Vista and TAC Xenta 511/527/555 systems. TGML is an abbreviation for TAC Graphics Markup Language, and is an XML document format for description of the TAC vector graphics.

Graphics Editor for TGML enables licensees to create and edit TGML graphics in the target systems. It also enables users to create and edit reusable graphics parts called Components and Snippets.

The graphics editor contains functions for basic drawing of graphics and uses common graphics editing functions similar to many market leading tools or editors. Ready-made components for common graphics functions are available in component libraries. Easy-to-use simple tools for drawing shapes such as lines, rectangles and circles are available, as well as more advanced shapes and graphical effects tools.

For more advanced users, the graphics editor offers functions for flexible data conversion, animation, dynamics and interactivity. A JavaScript editor is available in the graphics editor, which enables programmers to develop custom data conversion routines and custom interactivity behaviors in TGML graphics.

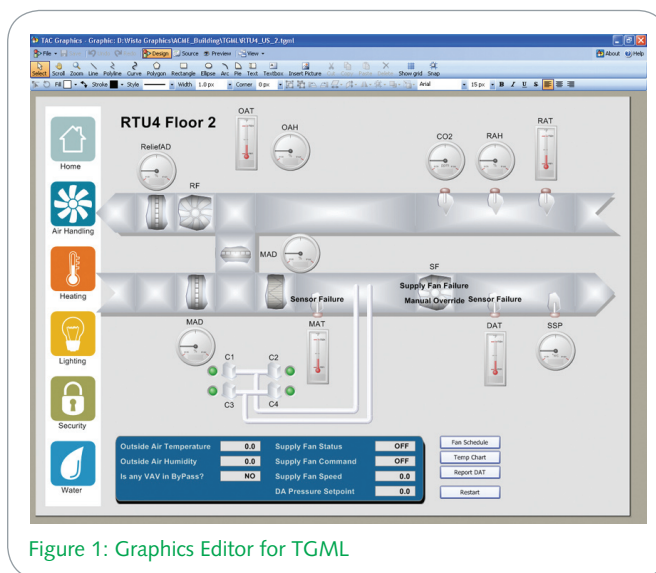


Figure 1: Graphics Editor for TGML

TECHNICAL DATA

Operating System

See requirements in TAC Vista Workstation data sheet, 03-00022-06 or later.

Hardware Requirements

PC Intel Pentium or compatible
 Minimum 2 GHz 32-bit (x86)
 Recommended primary memory 3 GB
 Minimum primary memory 1 GB

General Requirements

Graphics Super VGA, 1024x768
 Monitor size 17" or larger
 Printers Any printer supported by Microsoft Windows
 CD ROM Yes
 Mouse Any mouse supported by Microsoft Windows

Specifications

Fonts True Type
 Graphic formats
 Storage TGML
 Embedding
 . Bitmap, GIF, Animated GIF, JPEG, Metafiles, PNG, TIFF, ICO
 ImportSVG

Part Numbers

Graphics Editor for TGML 000882221
 Graphics Editor for TGML – Upgrade. 000883221
 Graphics Editor for TGML – 1 year subscription 000884220

FUNCTIONS

Engineering

- Components and Symbols – Ready-made objects are available in the Components and Snippets panes.
 - Basic Controls
 - DIN Symbols (EN)
 - ISO Symbols
 - TAC Vista Symbols (EN)
 - Basic Functions Snippets

A growing set of components and other graphics is published by Schneider Electric and others on <http://graphics.tac.com>

- Drag'n drop – Drag'n drop of components to the drawing surface. Components can also be dropped on e-mail message, MSN Messenger or Windows Explorer windows for easy distribution.
- Bindings – Connections to control system data are done through bindings. A Bindings window is available in the editor for convenience for users to create connections. Connections to bindings are primarily performed within the target system.
- Links – A Links window enables users to link graphics objects to other objects such as other graphics, trend charts or reports.
- Properties – A property grid enables easy editing of single or multiple selected graphics objects.
- Objects – The Objects window presents the objects of a TGML document in a hierarchical form and allows users to re-arrange, move, duplicate and edit objects.
- Printing – The editor provides functions for printing and print preview.
- Help – Extensive online help available.

Basic Drawing

- Shapes – A number of basic drawing tools are available within the graphics editor that allow users to create graphics such as flow diagrams, floor plans, maps, navigational maps or any type of presentation of dynamic data.
 - Line
 - Polyline
 - Curve
 - Polygon
 - Rectangle

- Ellipse
- Arc
- Pie
- Text
- Textbox
- Picture
- Options – A multitude of drawing options are available to enable users to create good looking and intuitive graphics.
 - Fill
 - Stroke
 - Style
 - Width
 - Corner
 - Font
 - Font size
 - Font style
 - Justification
- Effects – The graphics effects capabilities are improved and the graphics editor contains functions for editing effects such as gradients and semi-transparent colors.
- Editing – Many functions are available in the editor for common editing tasks such as moving, resizing, aligning, rotating, changing drawing order, copying and pasting.

Other Formats

- Image embedding – Images such as photos or illustrations can be embedded into TGML graphics. Most common formats are supported.
- Import – The system has the capability to convert other drawing formats to TGML. After conversion, the imported drawings can be edited and managed as any TGML graphical object.

Advanced Functions

- Animations – A built-in advanced animation engine allows users to animate most attributes of objects used in a TGML document. Animations can be used to improve operators' user experience.
- Dynamics – Any TGML object's attribute can be configured to be controlled by data from the control system.
- Conversions – Powerful ready-made functions are available to convert data from the control system format to what

is required for the TGML graphics. For instance, analog values can be converted to colors, binary values can control animations, values can be scaled etc.

- Custom conversions – Going beyond the ready conversion functions is not a problem with the script based custom conversion functionality.
- Interactivity – It is easy to create reusable components that use the default Workstation or web behavior when users click on the object. For even richer and more tailored user experience, the default behaviors can be overridden using scripts.
- Error indication – TGML graphics uses the default error indication methods for the target system platform. Custom error indication can be developed using scripts.
- Scripting – The scripting language for custom conversions, custom animations, custom interactions and for custom error indications is JavaScript, the same scripting language that is used in most web browsers and in many other off-the-shelf software systems.
- Document information – A TGML graphic contains data fields that can be used for specifying information about the document. The graphics editor provides the function for editing that data.

