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.

**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**: TGML
- **Embedding**: Bitmap, GIF, Animated GIF, JPEG, Metafiles, PNG, TIFF, ICO
- **Import**: SVG

**Part Numbers**
- **Graphics Editor for TGML**: 000882221
- **Graphics Editor for TGML – Upgrade**: 000883221
- **Graphics Editor for TGML – 1 year subscription**: 000884220

Figure 1: Graphics Editor for TGML
FUNCTIONS

Engineering
• Components and Symbols – Ready-made objects are available in the Com-
  ponents 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 compo-
  nents to the drawing surface. Compo-
  nents 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 bind-
  ings. A Bindings window is available in
  the editor for convenience for users to
  create connections. Connections to bind-
  ings 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 se-
  lected 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 graph-
  ics 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 capa-
  bilities are improved and the graphics
  editor contains functions for editing effects such as gradients and semi- transparent colors.
• Editing – Many functions are avail-
  able in the editor for common editing tasks such as moving, resizing, align-
  ing, rotating, changing drawing order, copying and pasting.

Other Formats
• Image embedding – Images such as photos or illustrations can be embed-
  ded into TGML graphics. Most com-
  mon 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 experi-
  ence.
• Dynamics – Any TGML object’s attri-
  bute 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 convert-
  ed 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 re-
  usable 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 anima-
  tions, custom interactions and for cus-
  tom 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 pro-
  vides the function for editing that data.