



GENESIS64

Smart Tiles for HMI SCADA Applications



APPLICATION NOTE

September 2013

Description: Introduction to the new “Smart Tiles” technology in GraphWorX64.

OS Requirement: Windows 8 x64 (Professional or Enterprise Edition), Windows 7 x64 (Professional or Enterprise Edition), Windows Server 2012 x64, Windows Server 2008 R2x64, Windows Vista x64 SP2 (Business, Ultimate, or Enterprise Edition), Windows Server 2008 x64

General Requirement: Installation of GENESIS64 v10.80

Introduction

Smart Tiles are at-a-glance graphic visualization tools that provide real-time information similar to Live Tile technology found in Microsoft Windows 8, Windows RT, and Windows Phone operating systems. The ICONICS Smart Tiles, created through the Smart Tile control in GraphWorX64, are applicable within HMI screens available to a wide range of clients including Desktop, Web and Mobile devices.

ICONICS Smart Tiles consist of the following features:

- Shows Live Process Values
- Used in GraphWorX64 and the Mobile-based AppHub

In GraphWorX64, Smart Tiles use/share GraphWorX64's existing data management components to retrieve runtime data and handle updates. In the AppHub, Smart Tiles instantiates their own shared data management components. The data management components are disposed when all instantiated smart tiles are unloaded or disposed.

1. Smart Tile Configuration in GraphWorX64 Open a new display in GraphWorX64 and then select the “Smart Tile” control from the 'Controls' ribbon.
2. A default Smart Tile shape will appear in the GraphWorX64 canvas. Configuration can be done either through Properties grid in GraphWorX64 or by double-clicking the Smart Tile to access the Smart Tile Configuration dialog similar to Figure 1..

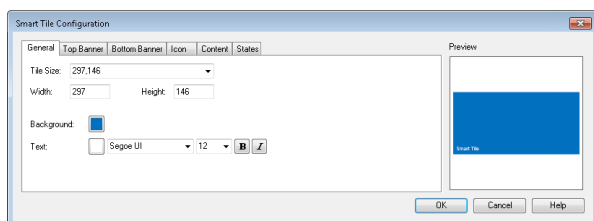


Figure 1 – Smart Tile Configuration dialog

Each Smart tile is split to three sections – Top Banner, Bottom Banner and Content. Each banner can contain a dynamic value with a label and unit definition. You can also change the position of all these elements as well as changing the color, font or adding your own image as background.

You can then include a uniform resource identifier (URI) to the “Content” that provides the content for the Smart Tile. The uri can point to an image file (.png, .jpg, etc.) or a configuration file for graphics, trends, or alarms (.gdfx, .twxx, .awxx).

NOTE: It is more efficient to embed content directly within a Smart Tile, rather than setting a Content Source.

You can either enter a location into the text entry field or navigate to a source by clicking on the ellipsis [...] button (which would open the Windows Explorer). When a Content Source is specified, the Smart Tile checks the file extension of the uri, instantiates the appropriate control for that extension, and then instructs that control to load the URI.

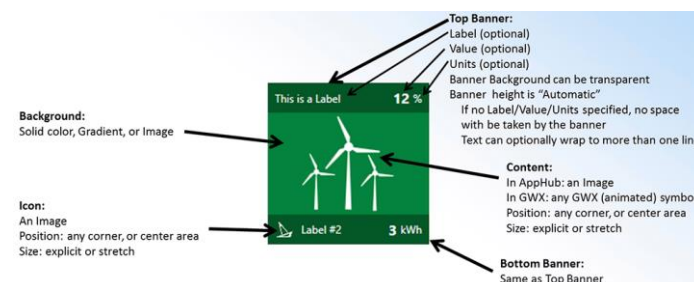


Figure 2 - Smart Tile Example with Area Description

Click OK to save your changes. Your configured Smart Tile will now be added to your GraphWorX64 display canvas. Figure 3 shows several Smart Tiles in runtime.



Figure 3 - Smart Tiles Example with Area Description