# **Graphical Dynamic Displays**



# **Graphical Displays**

## **Advanced Graphical Technology**

FactoryStudio is the first complete product where all of the configuration and execution tools are pure Windows Presentation Foundation, the latest graphical technology from Microsoft. WPF uses the full potential of the current graphics cards and computers, providing superior quality and performance.

## **Dynamic 3D Models**

Connect real-time tags to control properties in 3D models created with 3DMax or other systems that supports the .3DS extension.

#### **Smart Symbols**

Smart Symbols are asset and template based reusable graphical components, with runtime dynamics or static binding and centralized management. The symbols can keep a live link with the library, so you can modify the symbol only once and automatically apply to all displays.

#### **Code Behind and Expressions**

Develop code behind, using C# or VB.NET, or HTML5/Javascript, expressions on dynamic animations and client-side event-driven scripts, providing flexible customization.

# In this section ...

## **Touch Panel Applications**

Customizable on-screen keyboard, multi- touch support, momentary buttons and other features deliver rich touch panel systems.

#### Unique set of Dynamic Animations

Unique new dynamics, such as opacity, shine and skew, combined with move, scale, color change, rotate, and others, applied to any object, provide the most comprehensive set of animations. No more difficult laborious workarounds dealing with drawing tools created on top of legacy graphics systems.

#### Images, Colors and Transparency

Images are added to the project database for centralized management, low and hi resolution versions of the image are automatically created, optimizing the project. Transparency, alpha color, image brushes, all designer tools are there.

#### **Advanced Controls**

All Windows controls are included, as well web browser, child-displays, doc viewer and many others. Add WPF controls to extended functionality, such as scheduler controls, Gantt or live video cameras. Legacy Active-X controls can also be used for compatibility.

#### **Deployment Scenarios**

FactoryStudio is based on a unified-package architecture, so the server is always the standard FactoryStudio software. However, all FactoryStudio modules such as Scripts, Device, Historian, Database, etc. may be placed on different computers, in a distributed system context. The server computers can run in different Operating Systems, connecting to many options of client visualization stations, allowing flexible deployment scenarios.

#### From Standalone to World-Wide

The FactoryStudio family of products is uniquely designed to provide the most reliable, flexible, and powerful application development platform. Whether you are building an application to run on a small device with very limited amount of I/O, to run on a production line or a commercial building, or looking to provide information across the globe to those that need it, on any device, anywhere.

#### High degree of scalability and performance

The same configuration tool can create applications for desktops, mobile, HTML5, and embedded devices.

#### Data Aggregation from multiple locations

FactoryStudio is the perfect platform to collect data from multiple locations to a centralized location. Hundreds to thousands of distributed FactoryStudio nodes, provide the process data acquisition, and publish data to a cloud server, or to the corporate office.

#### **Multiple User Security**

User security can use Application Security, Windows Authentication (Active-Directory), or WS-Federation concurrently, mapping to the same application server.

# **Dynamic Symbols**

#### Map Symbols to Assets

Create assets and templates based on reusable components with runtime binding, standard graphical visualization, and centralized management

## Import Objects and XAML

Images and symbols can be imported from the most popular formats used today. XAML standard simplifies automated import of displays from legacy HMI and SCADA system.

# Linking Tags to Symbols

FactoryStudio has many rapid application development tools. One example is the ability to define Categories in which Tags and Symbols can be tightly integrated. Using Categories expedites screen development by specifying graphical symbols to automatically be used in displays simply by copying Tags and pasting them into your displays.

For example, Users can define a default Pump symbol and all of its' attributes to use in displays. Then by specifying a Tag to have the same Category as the Pump, when the Tag is pasted into the display it comes in as the default Pump symbol for that category. There is simply no need to go through the manual steps of placing individual symbols on the display and assigning the attributes.

# **Extended Symbol Library**

FactoryStudio has its' native library of symbols created with properties assigned to them. To help you create the most advanced graphical displays however, FactoryStudio was the first software package of its' type to also include the SymbolFactory.NET library of over 5,000 vectorbased graphics... at no charge! This library installs with every FactoryStudio development package and is unlimited in terms of how many symbols you use and how many times you use them. S Edit multiple symbols, rows and properties combined

