GENESIS32 – Using GenBrowser or WebHMI

APPLICATIONS NOTE

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Description: Guide to knowing the differences between GenBrowser and WebHMI products
OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7
General Requirement: Knowledge of GENESIS32

Introduction

The ICONICS GENESIS32 suite comes in two client forms: GENESIS32 Browser or GenBrowser and WebHMI. There are many reasons why one might want to use GenBrowsers or WebHMI Clients instead of a full GENESIS32 installation. These reasons include, but are not limited to:

- Smaller installation footprint
- Less overhead caused from running applications
- Cost effective Floating/Concurrent "Shared" Licenses
- Retain WYSIWYG two-way interaction of Graphic Display files
- Windows Authentication level security providing granularity in HMI access control through a centralized Security Server

Whatever the reason is that makes you decide to use a client, you should understand the information presented in this document to choose between the two clients that we offer to best suite your needs.

WebHMI Client

A WebHMI Client is considered a "Thin Client" because it can be viewed from any remote computer using Windows Internet Explorer v6 and up. There is no software installation required to view the graphics, which makes it very versatile in where you can access the server.

Because WebHMI takes advantage of the ActiveX technology, the first time you access any WebHMI page, you are required to have local Administrative privilege. Without it, you will not be able to install the required ActiveX and your page may not load correctly. Once you installed the ActiveX, you can run it with a regular user, but keep in mind that if someone deletes your downloaded objects, you will have to install the ActiveX again.

Here are some important facts about WebHMI Client that you should consider:

- You can view and control your HMI over the internet or intranet
- No pre-installation on client computers
- Software upgrades required on Server only. Clients will automatically get updates if new files are available
- Runs VBScripts or JScripts but no VBA Scripting support

For more information about WebHMI, please refer to our other Application Notes.

GenBrowser Client

A GenBrowser (also known as a GENESIS32 Browser Node) is a GENESIS32 system client, much like a WebHMI client. However, a GenBrowser requires software installation. It is considered as a client because you must obtain licensing and OPC data from a different computer, but beside this, it is no different from a GENESIS32 system.

Here are some important details to keep in mind when considering a GenBrowser:

- Can run all GENESIS32 applications
- Optional runtime only installation
- Full VBA scripting support as well as VBScript and JScript
- Graphic displays can be centralized on a Server or distributed residing on each GenBrowser node
- Requires remote license
- Requires remote OPC data
- Can also run any third party applications alongside the GenBrowser

Since GENESIS32 components are installed, you can use GenBrowsers to develop GraphWorX32 displays. But keep in mind that if your displays reside locally, you must make the changes on other GenBrowsers. Also, because GENESIS32 componets are installed, you are allowed to run scripts using ScriptWorX32 and ScriptWorX2006.

Due to performance, reliability, and other aspects (i.e. the internet) that we cannot control, ICONICS generally suggest using GenBrowsers for critical operation control functions.

Redundancy Features

Both GenBrowsers and WebHMI Client support runtime switching. In addition, GenBrowsers can run AlarmWorX32 and TrendWorX32 (e.g. logging locally) but it collects remote data. WebHMI supports IIS Redundancy via Network Load Balancing. For more information about Network Load Balancing, please refer to the *WebHMI – Server Redundancy via Network Load Balancing* Application Note.