WebHMI – Setting up a Web Server and Client

APPLICATIONS NOTE

October 2013

Description: Guide to set up a WebHMI Server and client
OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7
General Requirement: General knowledge of the GENESIS32 and web applications. The Server machine should have GENESIS32 and WebHMI installed. The client machine should have Internet Explorer 6 or above. You should log into both machines as an Administrator. You may also need a windows CD for installing IIS.

Introduction

WebHMI allows you to view your GraphWorX32 displays and control the necessary process over the internet. This technology gives you the flexibility to and ease to control your process from any where at any time securely. Here is how it works.

First, a web client requests data (i.e. html, images, CAB files, GraphWorX32 displays, GenBroker files, etc) from the server via standard HTTP. The server sends the client the requested information. The runtime components of the requested are packaged in separate cabinet (CAB) files. Once these files are received by the client, Internet Explorer knows how to install the components of the CAB files and take care of the dependencies via INF files.

The client also downloads the GenBroker configuration (.GBX) file. This files contains information on how (the default using TCP/IP on port 38080) and where to get OPC data, licensing, security, global and language aliasing and where to send GenEvents.

Once GenBroker communications are established, data flows constantly via GenBroker until the session ends either by browsing away from the page or closing Internet Explorer.

You can experiences how WebHMI works by going to http://www.WebHMI.com. Feel free to explore around the website to get a feel of how WebHMI works.

This document will go through the basic steps to correctly configure your WebHMI server and client.

Setting up the Server

1. Install the Web Server: Internet Information Services (IIS). You must do this before you install WebHMI
2. Install ICONICS WebHMI after you have successfully installed IIS.
3. Create your GENESIS32 network friendly displays. Meaning that your tag names should include the node name or IP addresses of the Server machine in the OPC tag path (\\ServerMahcine\OPCServer\Group.SubGropu.Tag). You should also make sure that your alarm viewer has a node name in the subscription.
4. Publish your displays to your Web Server using the Web Publishing Wizard.

   NOTE: If you need more information on how to publish your display, please refer to the application note entitled *WebHMI – Web Publishing Wizard Quick Start*.

5. Run GenBroker Server on the WebHMI server machine. You can start GenBroker in GenTray. You can launch GenTray by going to Start → Programs → ICONICS Tools → GENESIS32 Tray
6. You should then see a pink triangle in your system tray near your clock.
7. Click on the pink triangle and select GenBroker → Start.

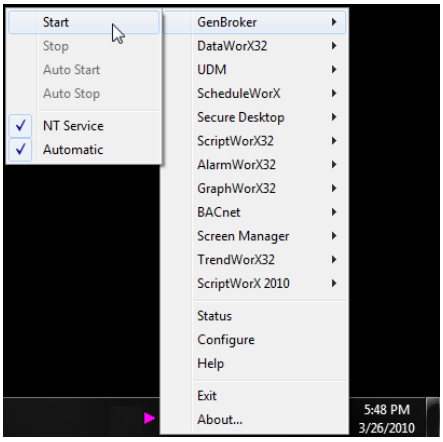

Figure 1 - Start GenBroker from GenTray

Setting up the Client

There is not much you need to do on the client as long as it has Internet Explorer (IE) on it and you are logged into the machine as an Administrator (or someone with Administrative privileges).

You can bring up IE and go to http://WebHMI_Server_Name/WebHMI. This will bring up the ICONICS WebHMI Sample Page. You can go through all the sample pages to download the required ActiveX(s). Alternatively, you can go to your own page by going to http://WebHMI_Server_Name/WebHMI/DisplayName.htm.

After you have downloaded and installed all of the required ActiveX objects, you should be able to login as any user and run bring up the WebHMI pages as normal.