



ICONICS Alarm Server Quick Start

APPLICATIONS NOTE

January 2003

Description: Quick Start for configuring and running the Alarm Server

OS Requirement: The operating system required is Win XP/2000/NT/95/98/Me.

General Requirement:

AlarmWorX32 manages the Alarm and Event (A/E) information of your SCADA application. The following table shows the specific alarm management tasks and the AlarmWorX32 module performing the task. The highlighted task is described in this application note.

Functionality	AlarmWorX32 Module
Alarm Generator	ICONICS Alarm Server
Event Generator	GenEvent Server
Alarm & Event logging	Alarm Logger
Current A/E presentation	Alarm Viewer ActiveX
Historical A/E presentation	Alarm Report ActiveX
Multimedia Annunciation	AlarmWorX MMX
A/E container application	AlarmWorX32

Capabilities:

- The ICONICS Alarm Server monitors your process data and generates alarms. The alarm server is in fact an OPC **Data Access Client** as well as an OPC **A/E Server**. The alarm server allows you to configure alarm tags. Each tag has its own OPC DA input tag. The alarm tag can monitor limits, rate of change, digital states, or deviation in the process value.
- Configuration Export/Import CSV (comma separated variable format) for bulk editing alarm tag lists in for instance Text Editors.
- Online configuration

Configure the Alarm Server

To configure the Alarm Server, the following steps have to be completed.

- Start the **Alarm Server Configurator**. Click Start, Programs, ICONICS GENESIS-32, AlarmWorX32, Alarm Server Configurator
- Select **File, New** from the menu.
- Select the **File, Save As** and specify **myAlarmServer.mdb** as the name for your configuration file.
- Select **File, Make Active** from the menu.
- Right-Mouse Click on **Alarm Configurations** and select **New, Configuration**.
- Type a logical name for your configuration: **Default**

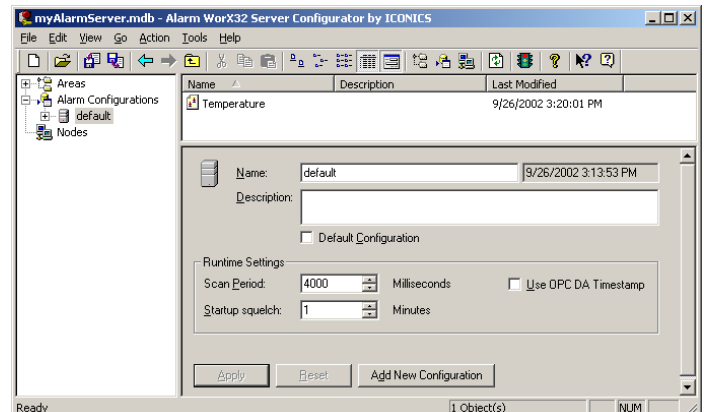


Fig.1 Alarm Server Configuration Settings

- Right-Mouse Click on **Areas** and select **New, Area**
- Type a logical name for your alarm area: **BOILER**

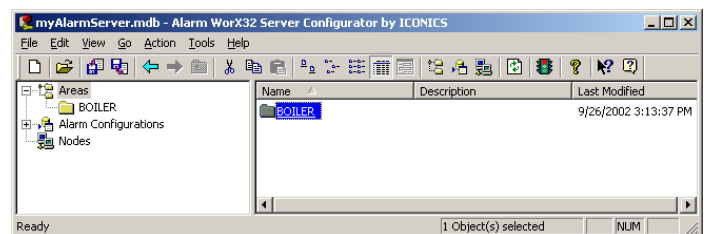


Fig.2 Alarm Area

In order to add a *Limit* alarm to the alarm tag:

- Right mouse click on **Default** in the left window, and select **New, Tag**
- Specify the Tag name **Temperature**
- Specify the OPC Input 1
- Select the **Alarms** tab and then the **Limit** tab and specify the setting as shown in Figure 3.
- Click the **Apply** button when finished.

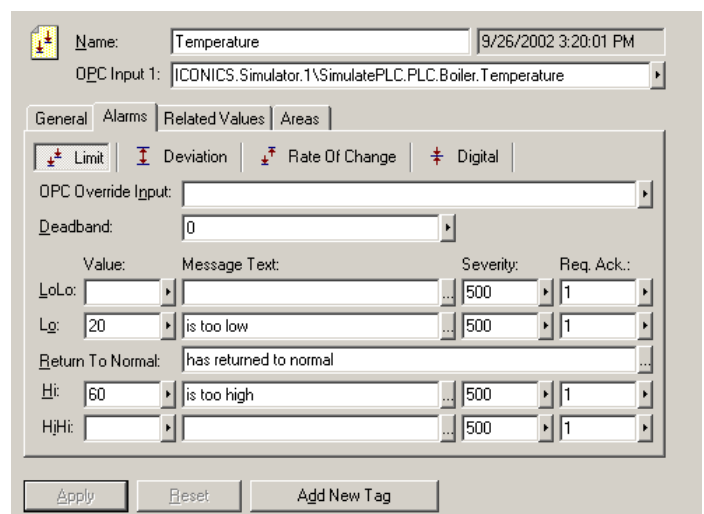


Fig.3 Alarm Tag with Limit Checking



In order to add a *Digital* alarm Tag:

13. Right mouse click on the **Default** configuration in the left window, and select **New, Tag**
14. Specify a name for the alarm tag, for instance **VALVE**
15. Select the **Alarms** tab and then the **Digital** tab and specify the setting as shown in Figure 4.
16. Click the **Apply** button when finished.

Fig.4 Alarm Tag with Digital Checking.

To setup the *General* alarm settings:

17. Select the **General** tab and setup the general settings as shown in Figure 5.
18. Click the **Apply** button when finished.

Fig.5 Alarm Tag General Settings

Your alarm server is now ready to be started.

Start the Alarm Server

To start the alarm server you can use the **GenTray** system tray icon

19. Click Start, Programs, ICONICS GENESIS-32, Tools, GenTray
20. Click the purple **GenTray** icon in the bottom of your screen, next to the windows time.
21. Select AlarmWorX32, Server, Start

View Alarms

You can now add an AlarmViewer ActiveX to your GraphWorX32 display and configure it to subscribe to the ICONICS Alarm Server.

Advanced Capabilities

You could explore some of the advanced capabilities of the Alarm Configurator as well. Select **File, Export CSV, Tags...** to export the tags to a CSV text file. You can open this file with Notepad and make changes after which you can import the CSV file again.

The **Related Values** tab in the alarm tag allows you to configure additional information to accompany the alarm. The **Areas** tab is a place where you can easily view and manage all of the areas to which an alarm belongs.

Also you can select Configurations in the left window and left mouse click on the **Default** configuration. You can set the scan period of the alarm server to 500 ms in order to scan your process data for alarms a little quicker.

Fig. 6 Alarm Configuration Properties