



Description: Guide to the new features of the ICONICS OPC Simulator version 3.1.

OS Requirement: Windows NT/2000/XP/2003 Server

General Requirement: Installation of OPC Simulator V 3.1 and GENESIS32 version 8.0.

ICONICS OPC Simulator version 3.1 can be found in the **Tools** folder on the GENESIS32 CD.

Features

1. Version 3.1 of the Simulator OPC Server supports XML DA tags. To view XML DA, you will need IIS 5.0 or higher installed on your machine. If IIS is not already installed, during installation, it will ask if you would like to install XML-DA.

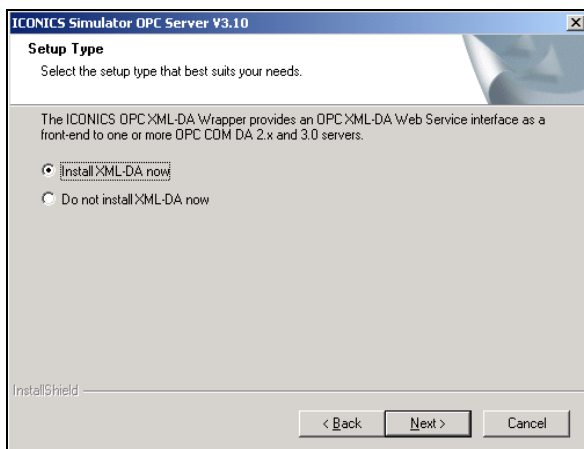


Fig. 1: Installation of XML DA with IIS installed

NOTE: To setup OPC XML-DA, please refer to the corresponding applications note.

2. There is an OPC Server diagnostic tool called **OPCAAdmin**, which provides information about the OPC Server.

Simulation Signals

1. To add a simulation signal, open the **Simulator OPC Server Configurator** and right click on the **Simulation Signals** folder and click on the desired signal.

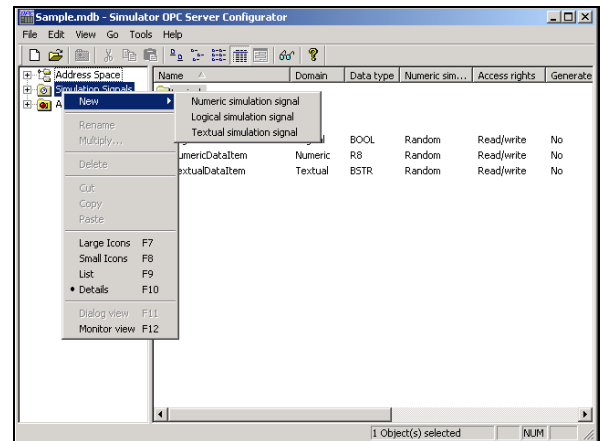


Fig. 2: Creating a new Simulation Signal

Numeric Simulation Signal

1. In a new **Numeric Simulation Signal**, you can choose from nine different types of signals.
2. Each type has eight parameters that can be set, shown in Fig. 3.

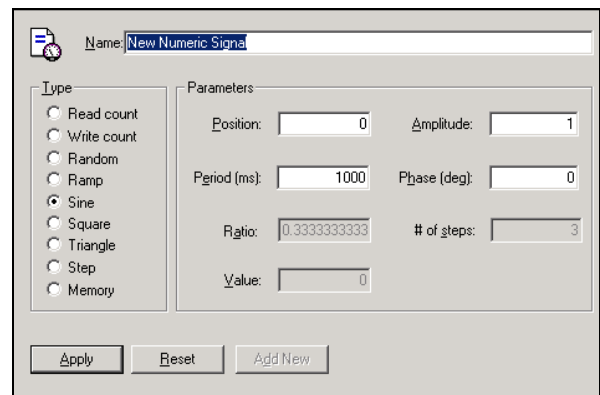


Fig. 3: Creating a new Numeric Simulation Signal

Logical Simulation Signal

1. In a new **Logical Simulation Signal**, there are three types of signals to choose from.
2. Each type has three parameters that can be set, shown in Fig. 4.

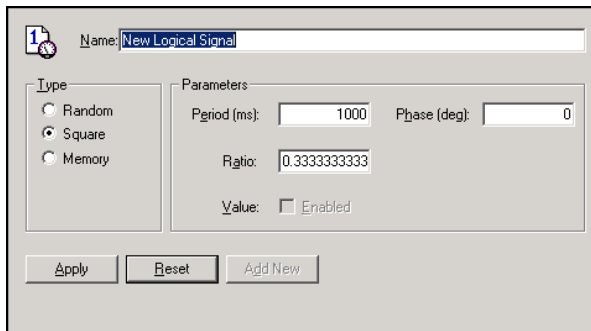


Fig. 4: Creating a new Logical Simulation Signal

Textual Simulation Signal

1. In a **Textual Simulation Signal**, there are three types of signals to choose from.
2. Each signal has six parameters that can be set, as shown in Fig. 5.

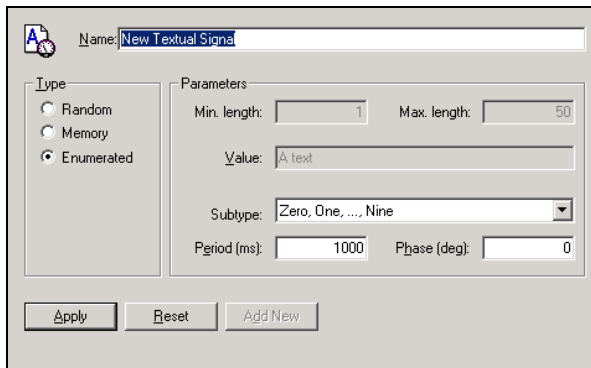


Fig. 5: Creating a new Textual Simulation Signal

Address Space

1. The **Address Space** is where you create new DA tags or to select existing ones.
2. Right click on the **Address Space** folder to create a new folder or data item.

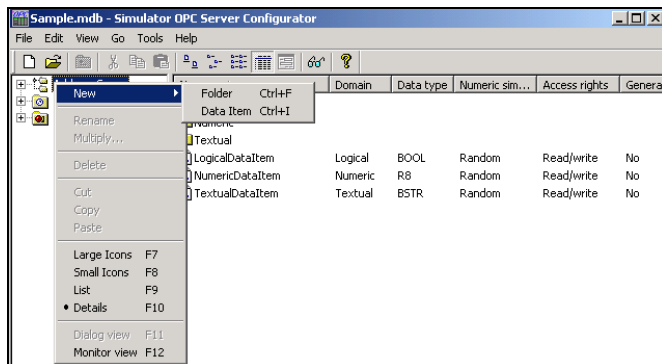


Fig. 6: Creating new folder or data item

New Data Item

1. When creating a new data item, you can select between three types of data signals. A Numeric data signal, a Logical data signal, or a Textual data signal.

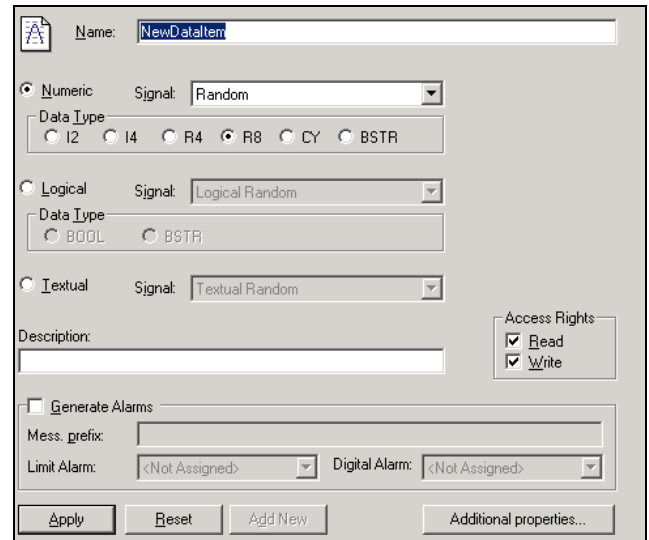


Fig. 7: Creating new Data Items

2. For each data signal, you can choose the type of simulation signal to associate it with.

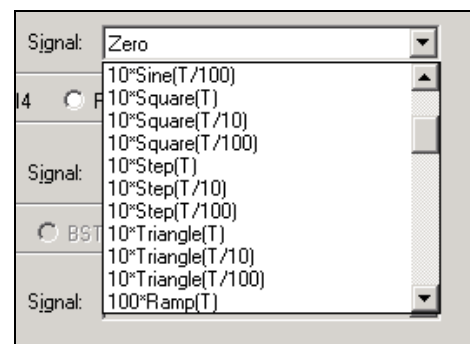


Fig. 8: Types of Simulation Signal

3. You can read and write from a process point in GraphWorX32 if **Read** and **Write** checkboxes are checked in **Access Rights**.
4. You can only read if only **Read** is checked, and only write if only **Write** is checked.

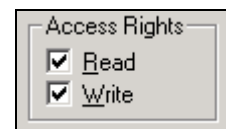


Fig. 9: Access Rights



5. You can choose to generate alarms by checking the **Generate Alarms** check box at the bottom and specifying the desired **Alarm Definition**.
6. You can view these alarms from Alarm Viewer by subscribing to this OPC Simulator Server.

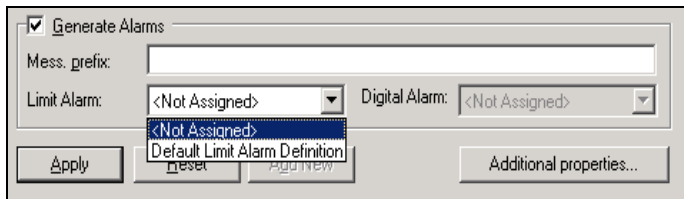


Fig. 10: Generating Alarms

Multiply Tags

1. To multiply tags, right click on any data items and choose **Multiply** from the pop-up menu.
2. In the dialog that opens, you can specify the starting number, the numerical places, the number of tags to create and the base text.

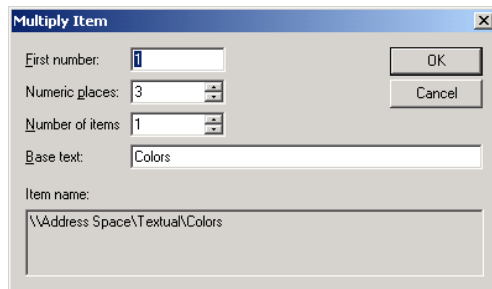


Fig. 11: Multiply Tags

Alarm Definitions

1. You can create new **Alarm Definitions** by right clicking on the **Alarm Definitions** folder.
2. You can choose to create a **Limit Alarm Definition** or a **Digital Alarm Definition**.

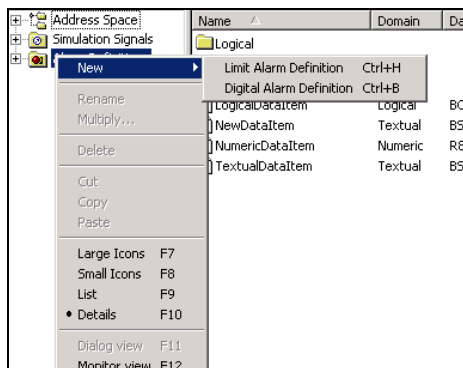


Fig. 11: Creating new Alarm Definitions

3. For a **Limit Alarm Definition**, specify the limits for the various alarms and corresponding messages and the alarms will go off when the criteria are met.

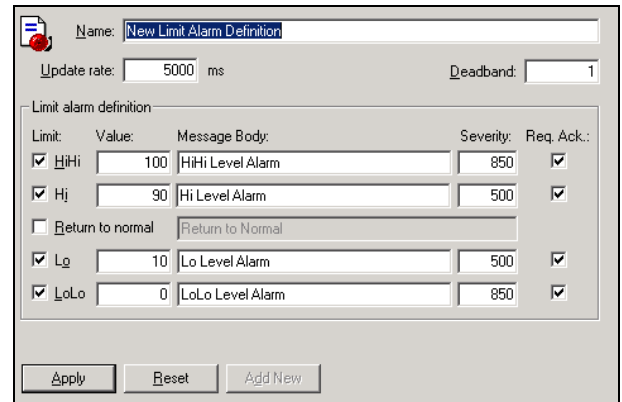


Fig. 12: Creating a Limit Alarm Definition

4. For a **Digital Alarm Definition**, specify when the alarm should go off and the corresponding message.

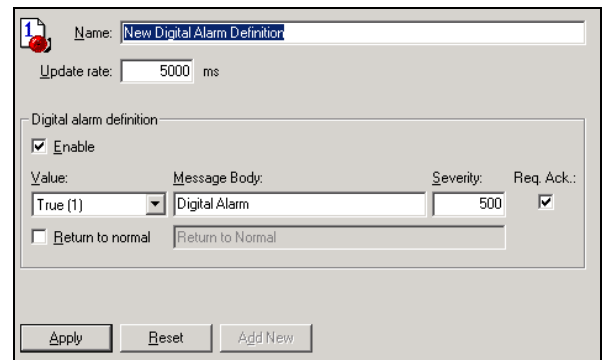


Fig. 13: Creating a Digital Alarm Definition

Monitoring Tags

1. Click on the  icon from the toolbar to open the monitor pane at the bottom to monitor tags. This allows you to see all tags with live data.