Unified Data Manager - Global Alarm Subscriptions and Filters

APPLICATIONS NOTE

October 2013

Description: Guide to configuring global alarm subscriptions and filters in the Unified Data Manager.
OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7
General Requirement: Installation of GENESIS32 v9.x; understanding of how to configure an alarm subscription in other alarm clients

Introduction

The Unified Data Manager (UDM) enables the centralized management of commonly used expressions, value sets, groups, alarm subscriptions, filters, recipes, and event triggers across GENESIS32 and BizViz products. This document will help you understand global alarm subscriptions and filters from the configuration point of view and will demonstrate how they are used.

For a global overview of all UDM functions, you can refer to other application notes about this tool or the complex UDM whitepaper.

Alarm Subscriptions

Subscriptions are used to connect to an OPC Alarms/Events (AE) Server, which will in turn give an AE client request alarm or event information. Alarm clients such as the AlarmWorX32 Viewer, AlarmWorX32 Logger, or AlarmWorX32 Multimedia can use the global subscriptions.

Creating a new Alarm Subscription

1. Launch the Unified Data Manager by going to **Start → Programs → ICONICS Tools → Unified Data Manager.**
2. In the tree-control on the left-hand pane, right-click on **Alarm Subscriptions** and select **New → Alarm Subscription Item**.

   NOTE: You can select to create a new Folder instead of a new Alarm Subscription Item. Folders are used to logically organize the Alarm Subscription Items.

Configuring an Alarm Subscription

The configuration of Alarm Subscription is the same in the UDM as in other AlarmWorX32 applications. Clicking on the "**Subscribe / Edit OPC Subscriptions"** button brings you to a Universal Configuration dialog as shown in Figure 1.

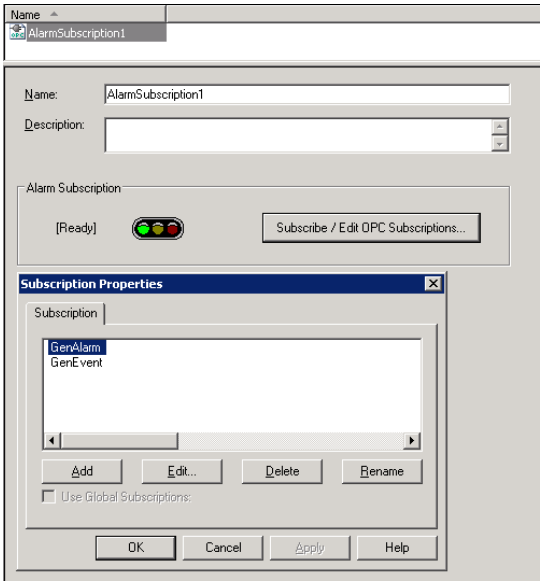

Figure 1 - Universal Configuration Dialog

Using Global Subscriptions

As mentioned above, the subscription stored in the Unified Data Manager is accessible across GENESIS32 and BizViz products. All modules use the same interface for configuring an alarm or event subscription.

1. Launch GraphWorX32 by going to **Start → Programs → ICONICS GENESIS32 → GraphWorX32 → GraphWorX32.**
2. Insert an AlarmWorX32 Viewer ActiveX by clicking the "ICONICS AWXView32" button.
3. Double-click on the ActiveX to bring up the properties dialog.
4. Under the Subscription tab, delete all existing subscriptions.
5. Check the "Use Global Subscriptions" checkbox. As shown in Figure 2.

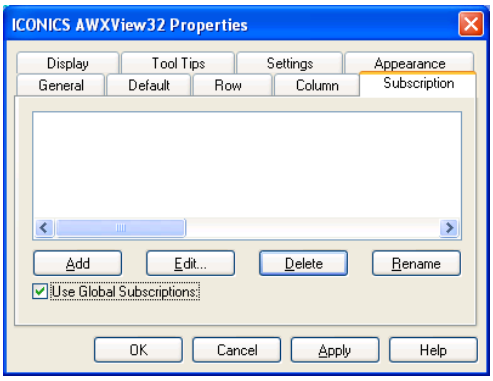

Figure 2 - The Use Global Subscription Checkbox

6. Click on the "Add" button and select your subscription in the Unified Data Browser as shown in figure 3.

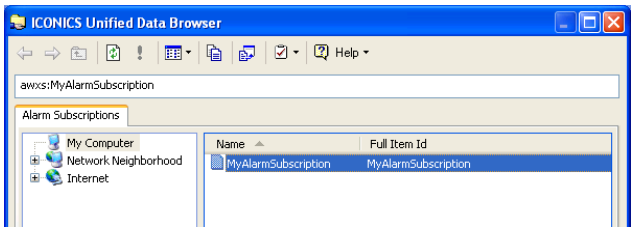

Figure 3 - Selecting a Global Alarm Subscription in the UDB

You do not need to configure anything else. You can now view your AlarmWorX32 Viewer in runtime mode to receive alarm notifications.

> **NOTE:** You can always recognize a global alarm subscription by the "awxs:" prefix in the subscription name.

Alarm Filters

Filters are used to present a subset of the alarms provided by the alarm server. The filters are used by alarm clients such as the AlarmWorX32 Viewer and AlarmWorX32 Multimedia. Note that the filter we are creating is a client filter. This means that the alarm client will still receive all alarms from the alarm server. However, you will not be notified about those alarms that did not pass through the filter.

Configuring a new Alarm Filter

1. In the UDM configurator tree-control on the left-hand pane, right-click **Alarm Filters** and select **New → Alarm Filter Item**.
2. Define the name and description (optional) of the new filter.
3. Modify the filter string either by direct input or using the "Edit" button. The "Edit" button will display the Expression Editor, shown in Figure 4, is where you can use various functions to customize your filter.

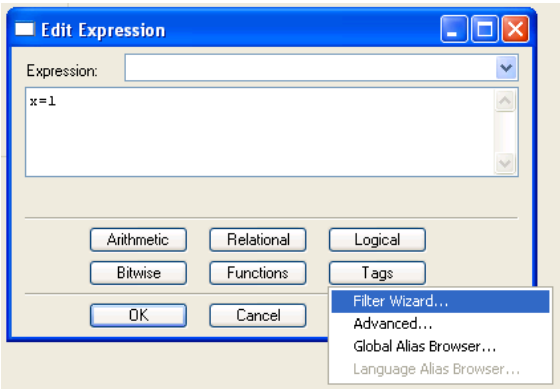

Figure 4 - Expression Editor

4. To simplify this process you can use the Filter Wizard, which can be accessed via the Tags button in the Expression Editor. To find out more about the Expression Editor or the Filter Wizard, please refer to the help files.

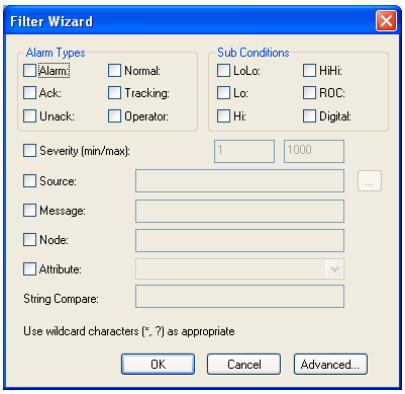

Figure 5 - Filter Wizard

Using the Alarm Filter

Alarm filters created in the UDM can be used in all AlarmWorX32 client applications. Wherever you can use Alarm Filters, you can use global alarm filters. However, depending on the alarm client you are using within the GENESIS32 suite, you may be presented with a different user interface.

For example, to add global alarm filters in the alarm viewer, you will need to check the "Use Global" option in the Client Filters dialog as shown in Figure 6.

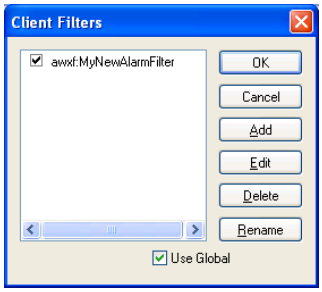

Figure 6 - Use Global Filter in Alarm Viewer

The interface to choose a Global Alarm Filter is slightly different for the Alarm Logger and AlarmWorX32 Multimedia, but they are intuitive.

Once you choose to use a Global Alarm Filter, the Unified Data Browser will open and you can choose the desire global filter similar to how you chose a Global Alarm Subscription as described previously..

> **NOTE:** You can always recognize a global alarm filter by the "awxf:" prefix in the filter name.