

Description: Guide to configuring groups and value sets in the Unified Data Manager.

OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7

General Requirement: N/A

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 groups and value sets from the configuration point of view and will demonstrate how they are used.

In order to get global overview of all UDM functions you can see other application notes about this tool or the UDM whitepaper.

Groups in the Unified Data Manager

Groups can be used to distribute a value written to one tag to a group of tags. Groups within groups are also allowed.

Creating a New Group

1. Launch the Unified Data Manager by going to Start → Programs → ICONICS Tools → Unified Data Manager.
2. Create a new configuration database by going to File → New.
3. Follow the configuration wizard to create an MS Access or MS SQL configuration database.
4. You should now have a new configuration database.
5. In the tree-control in the left-hand pane, right-click on Groups and select New → Group Item

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

Configuring a Simple Group

1. When creating a new Group, go to the **Grouped Tag** tab and add all **write enabled points** that you want to have grouped.

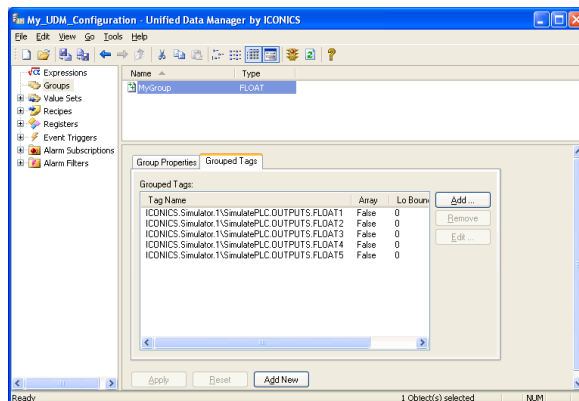


Figure 1 - Unified Data Manager: Group Tag

2. The group is now ready for use in your client.

Using the Group

1. Launch GraphWorX32 by going to Start → Programs → ICONICS GENESIS32 → GraphWorX32 → GraphWorX32.
2. Insert a Process point and open the Unified Data Browser via the **Data Tags...** button.
3. Under the **UDM Data** tab, browse for the name of your group.

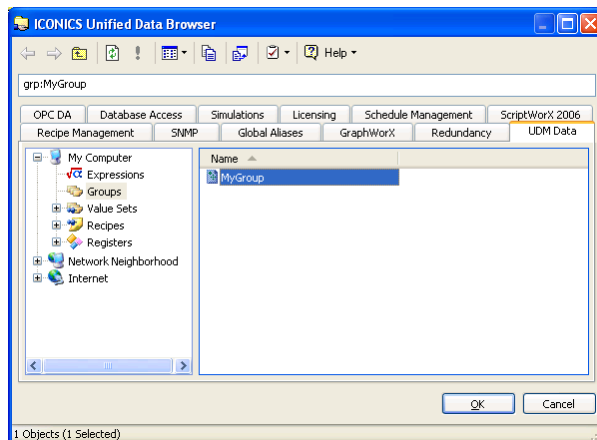


Figure 2 - Unified Data Manager: Browsing for Group Tags

4. You need to make the Process point **Data Entry** enabled by checking the appropriate checkbox in its properties.
5. Enter Runtime and you will see the point with a zero value.
6. Enter a value. This value will be downloaded to all grouped tags.

NOTE: You can always recognize a group tag by "grp:" prefix in the point name.

Group with a Parameter

Often you may want to have one group of tags that would control several sets of identical tags (e.g. different floors). In this case, it is advantageous to use a parameter in tag names.

1. Create a **new group** as described above.
2. Add a parameter under **Group Properties** tab
3. Modify your grouped tag names so that the parameter is in the right place. The parameter name must be enclosed by <<>> delimiters.

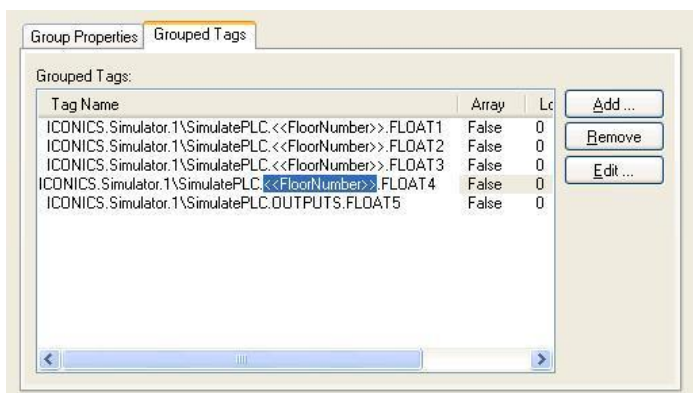


Figure 3 - Parameter in a Group Tag

4. The group is ready for use. But you should note that you need to **substitute the parameters** with point names in your client. You can substitute the parameters right after you have selected the group in UDB.

NOTE: When testing this group, it is useful to insert the group tag as well as the single grouped tags. As you can see, the values have changed in all the grouped points.

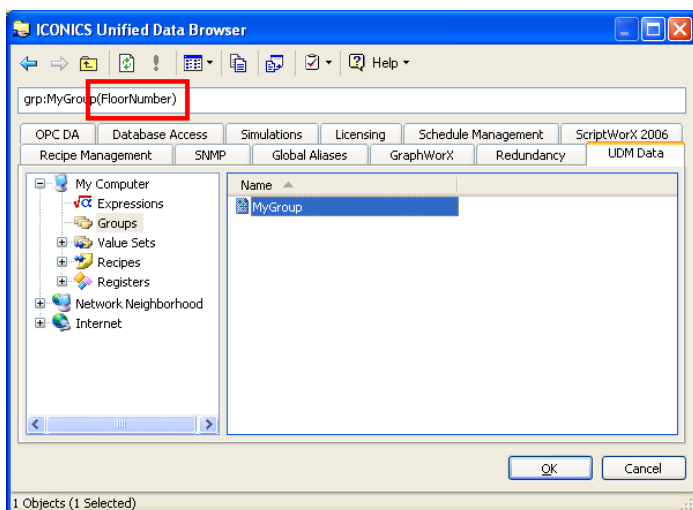


Figure 4 - Group Tag with a Parameter

Value Sets in the Unified Data Manager

Value sets allow you to write a set of values to a group of tags. This is similar to the concept of groups, but with more flexibility, because you can write different values to different tags at once.

Configuring a New Value Set

1. In the tree-control in the left-hand pane, right-click on Value Sets and select New → **Value Set Item**
2. Under the **ValueSet Tags** tab, you define your grouped tags and their aliases. You do not have to use aliases, but they will help you identify the tags under the ValueSet Values tab.

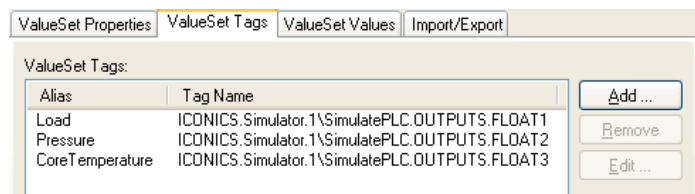


Figure 5 - Value Set Tags in UDM

3. Under the **ValueSet Values** tab, you define the values that will be written to the tags at the time you select a specific Value of the Value set item. Each Column represents one tag. The Value cell represents a unique identifier that will be used in your client to select the desired set of values.
4. For values, you can use constants as well as OPC points. In order to use a tag there is the **Set as Tag...** button, which opens Unified Data Browser.

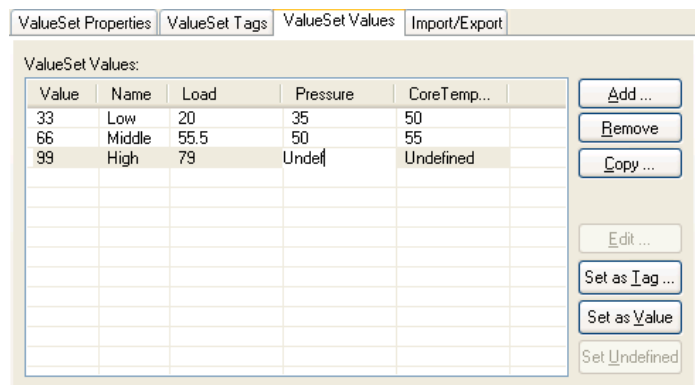


Figure 6 - Defining Values for Value Set Tags

NOTE: If you defined aliases in step 1, they will be used as identifiers in headers of appropriate columns otherwise there will be names of the tags you defined in previous step.

Using the Value Set

1. Launch GraphWorX32 by going to Start → Programs → ICONICS GENESIS32 → GraphWorX32 → GraphWorX32.
2. Insert a Process point and open a Unified Data Browser via **Data Tags...** button.
3. Under UDM tab browse for the name of your Value set.

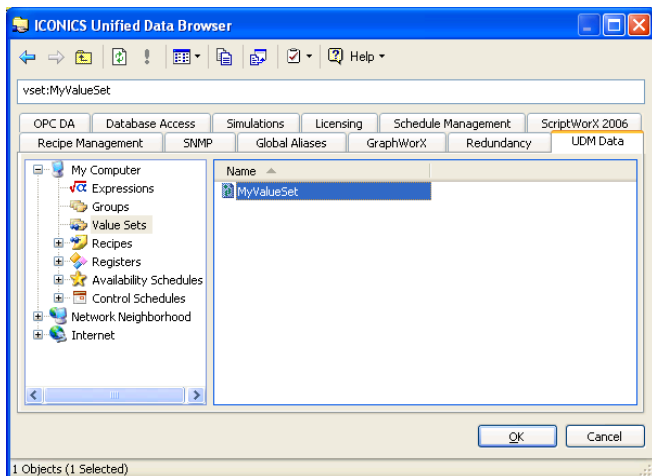


Figure 7 - Browsing for a Value Set Tag

4. You need to make the Process point **Data Entry** enabled by checking the appropriate checkbox in its properties so that you can specify the number of value set you want to download.
5. You should change **Text properties** of the Process point or use a **State field** with a default value otherwise you will not see the tag field in runtime. Using State field is very simple and you do not have to remember the unique ID of your value sets.

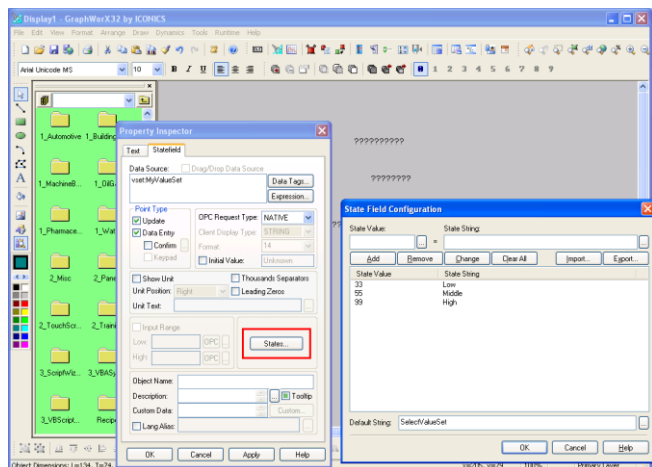


Figure 8 - Using State Fields

6. Enter Runtime.
7. Enter a value corresponding to one of your value sets (i.e. the Value assigned to the set in UDM). Values defined in UDM will be downloaded to all appropriate tags at once.

NOTE: You can always recognize a Value set tag by "vset:" prefix in the point name.