GraphWorX64
Setting Dynamic Local Aliases

APPLICATION NOTE

August 2014

Description: Guide to set Local Aliases to OPC tag values
General Requirement: General knowledge of ICONICS GENESIS64 and Local Aliasing.

Introduction

When using the system there may be instances where the end user wishes to set a Local Alias to an undefined value, so there needs to be a way for a value to be dynamically changed and then this value be applied to a Local Alias.

Setting the Value

For this example a GraphWorX64 display will need to be created with **two process points** on it. In this example we will be using the local simulation tags for the dynamic value, however it will work with other OPC Data Inputs.

When adding the **first process point** the **Simulation tab** in the Data Browser will need to be selected. From here a new variable will need to be defined by clicking on the **Define New Variable** button, with the following properties set, as displayed in Figure 1:

(Name)	**DynamicText**
Mode	None (Local Variable)
DataType	**String**
LowLimit	
HighLimit	
InitialValue	**Initial**

Figure 1 - Defining the Local Variable

After closing this dialog the Process Point will need to have the Data Entry property enabled.

A second process point will need to be added and this time the context will need to be changed to the **Local Aliases tab**, from here the text area will need to have the following text, as displayed in Figure 2:

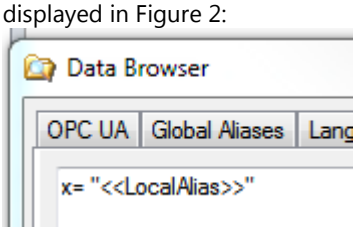

Figure 2 - Adding a Local Alias

Selecting the local alias from the list will not give the full syntax, so to view it as a string it will need to be preceded with **x= "** and superseded with **"**. When entering Runtime the display should appear as follows, see Figure 3:

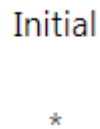

Figure 3 - GraphWorX64 in Runtime

To set the value of the created localsim tag to the Local Alias value, then a pick action will need to be created with the Set Local Alias Command and the LocalAliasCommandType of From Data will be selected, as shown in Figure 4.

InitialClick	False
Command	**Set Local Aliases**
CommandParameters	
LocalAliasComma	**From Data**
LocalAliasComma	
TargetType	Current Display
TargetName	
ObjectName	

Figure 4 - Local Alias

Instead of opening Local Alias editor, the LocalAliasCommandData string will need to be set to the following string:

```
{{x= "LocalAlias," +
{{localsim::InitialValue:String:::Initial}}}}
```

When entering Runtime clicking the button will update the Local Alias on the display so it now has the value of the localsim tag.

If the retrieved value is not a String datatype then the OPC tag will need wrapped in the tostring() function. Example: tostring({{localsim::DynamicInt:Int32}})

The pick action can be modified to set multiple Local Alias values in one command by utilising the following command syntax:

```
{{x= "LocalAlias," +
{{localsim::InitialValue:String:::Initial}} +
asciitochar(13) + asciitochar(10) + "LocalAlias2," +
{{localsim::LocalAlias2:String}}}}
```

Each new local alias will need to be preceded by the asciitochar(13) + asciitochar(10) to function correctly.

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