GraphWorX64 Scripting – Local and Global Aliases

APPLICATION NOTE

July 2011

Description: Guide to scripting of local and global aliases
OS Requirement: Windows Server 2003 x64/Vista x64/ Server 2008 x64/Windows 7 x64/ Server 2008 R2 x64
General Requirement: Knowledge of Global and Local Aliasing concept, GraphWorX64 and JScript.NET basics.

Introduction

GraphWorX64 gives its users the opportunity to use JScript.NET language to perform a large variety of tasks. Skillful designers can enhance their operator displays with their custom functionalities that are not included in the very extensive range of functions and features built into GraphWorX64. ICONICS, in general, advises to use scripting only when it is really necessary and the required function cannot be fulfilled by other means such as combination of standard GraphWorX64 features or independent custom components. To support this statement we can name just a few reasons that should be considered before using scripting in your display.

- Scripting is not supported in Silverlight displays
- Functions and methods in the scripting library may change over time and it may make future upgrade difficult
- GraphWorX64 Search and Replace feature does not search through the scripts
- Scripts are stored in a display and they are only linked to objects so you cannot move objects with script attached to Symbol library
- If there are multiple maintainers of a project, shared scripts might cause confusion

On the other hand scripting can sometimes ease your effort to create excellent operator screens and can also save your time. In this application note we will show you how to read and set local as well as global aliases within your user scripts.

Local Aliases

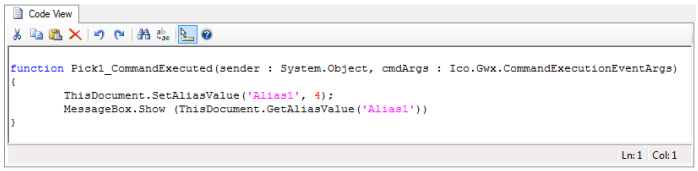
The following functions can be used to read and set local aliases in your script.

Reading Local Alias

ThisDocument.GetAliasValue('AliasName');

Setting Local Alias

ThisDocument.SetAliasValue('AliasName', 'AliasValue');



```
function Pick1_CommandExecuted(sender : System.Object, cmdArgs : Ico.Gwx.CommandExecutionEventArgs)
{
        ThisDocument.SetAliasValue('Alias1', 4);
        MessageBox.Show (ThisDocument.GetAliasValue('Alias1'))
}
```

Figure 1 - Set Local Alias and Read it in a Message Box

Global Aliases

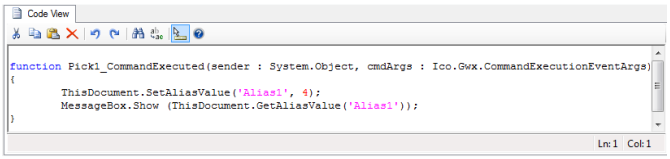
The following functions can be used to read and set global aliases in your script.

Reading Global Alias

ThisWindow.GetGlobalAliases();

Setting Global Alias

ThisWindow.SetGlobalAliases('GlobalAliasInTheFormatAsInSetGlobalAliasesPickAction');



```
function Pick1_CommandExecuted(sender : System.Object, cmdArgs : Ico.Gwx.CommandExecutionEventArgs)
{
        ThisDocument.SetAliasValue('Alias1', 4);
        MessageBox.Show (ThisDocument.GetAliasValue('Alias1'));
}
```

This display is wrong! It does not use the global alias method.

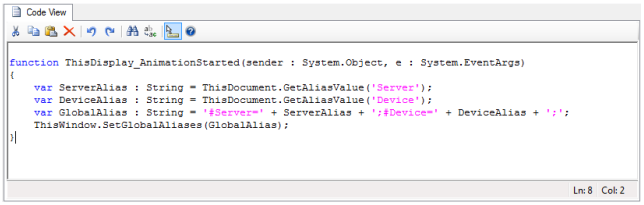
Figure 2 - Set Global Alias and Read it in a Message Box

Load Local Aliases to Global Aliases

Though there is a standard feature to achieve this goal we will show you how to do it via script as an additional example how to work with local and global aliases in a script. The script defines two variables that will contain the values of local aliases Server and Device. Third variable is their concatenation with necessary syntax for setting global alias. At the end we set the two global aliases Server and Device.

var ServerAlias : String = ThisDocument.GetAliasValue('Server');
var DeviceAlias : String = ThisDocument.GetAliasValue('Device');
var GlobalAlias : String = '#Server=' + ServerAlias + ';#Device=' + DeviceAlias + ';';

ThisWindow.SetGlobalAliases(GlobalAlias);



```
function ThisDisplay_AnimationStarted(sender : System.Object, e : System.EventArgs)
{
    var ServerAlias : String = ThisDocument.GetAliasValue('Server');
    var DeviceAlias : String = ThisDocument.GetAliasValue('Device');
    var GlobalAlias : String = '#Server=' + ServerAlias + ';#Device=' + DeviceAlias + ';';
    ThisWindow.SetGlobalAliases(GlobalAlias);
}
```

Figure 3 - Load Local Aliases to Global Aliases