

Description: A guide to start using the new asset tree control to navigate between your assets and their properties.

OS Requirement: Windows Server 2003 x64/Vista x64/ Server 2008 x64/Windows 7 x64/ Server 2008 R2 x64

General Requirement: Familiarity with the application note *GENESIS64 – Commanding Introduction* and *GENESIS64 – Commanding Configuration and Runtime*.

Introduction

AssetWorX is a convenient way to organize and access your data into real-world structures (assets). AssetWorX Navigator is a control which provides users with a view of the structure according to ICONICS security permissions in place. You can take advantage of AssetWorX Navigator control in various clients such as GraphWorX64, PortalWorX-SL or PortalWorX-SP.

In configuration mode AssetWorX Navigator comes with three predefined nodes at the highest level of the structure. These nodes are:

- **Assets**, which is where you configure your equipment and house your hierarchical asset tree.
- **Equipment Classes**, which are templates that you create for building the asset tree.
- **Product Configuration**, which is where you identify your preferences for AssetWorX settings.

This document will demonstrate the use of AssetWorX Navigator in PortalWorX-SL with different user contexts. We will build our example on the AssetWorX configuration created in the application note entitled *Commanding – Configuration and Runtime*, so you should follow that application note before proceeding with this one.

Asset Security

Let us create two users who are supposed to view other branches of our asset structure. If you are not familiar with configuring security, please see the application note entitled, *GENESIS64 Security - Quick Start*.

- 1) Go to Start → ICONICS → **Workbench-SL** to open Workbench-SL in Internet Explorer.
- 2) Select the Security Server provider and right-click on Users. From the menu select to **Add User**.
- 3) The first user will be an administrator who should be able to see every asset and should be allowed to perform all commands. Name this user “Admin” and leave the rest of the settings at their defaults and click **Apply**.
- 4) When prompted, give the user a password.

- 5) If this is your first user you will immediately be asked to log in. Log in with the username and password you just created.

NOTE: Your first user should be always an administrator with privileges to setup security otherwise you may lock yourself out.

- 6) Create another user called “**Foxboro Bakery South Supervisor**”. This user will have limited privileges. He should be allowed to view only Foxboro Bakery asset branch in AssetWorX Navigator. Also when he logs in the South area should be automatically selected. Lastly he should not be able to see assets that are under the South area in AssetWorX Navigator.
- 7) To limit him to the Foxboro bakery we can set his **Root Asset** to be Foxboro bakery. You can type in the point name manually or use the ellipsis button next to the Root Asset field. Find Foxboro bakery under the AssetWorX object in the browser that pop ups.
- 8) Fill the Default Asset field in the way we filled Root Asset but specify **South**. This will make the South asset automatically selected when the AssetWorX Navigator starts.
- 9) Next we want to prevent him from viewing assets below North, so select the **Assets** tab and add the following string into the **Deny these operations** field.

ac:Company/Foxboro bakery/North/Baking line*

- 10) Check the Visualize and Execute boxes. This means the user cannot see the assets below North area, and he cannot execute commands assigned to them.
- 11) Click Apply and enter password for the new user.

NOTE: AssetWorX security is further covered in the *AssetWorX – Security* application note.

Setting up PortalWorX-SL Environment

- 1) While in Workbench-SL, click the Runtime button in the top left corner. PortalWorX-SL will open.
- 2) Select a pre-defined layout with three areas in the Project tab.
- 3) A Specify layout properties dialog appears. Give the layout a name and click ok. From now on you will be able to see this layout in the Layout tab of the ribbon.
- 4) Prepare an AlarmWorX64 Viewer control and GridWorX64 Viewer control. Both controls should be configured in GraphWorX64 as described in the application note entitled, *Commanding – Configuration and Runtime*. Their configuration should be saved in Silverlight format and in a web accessible folder (like PubDisplay).

- 5) Click on the AlarmWorX64 Viewer link in one of the areas and type in the URL to your AlarmWorX64 Viewer configuration file.
- 6) Do the same for the GridWorX64 Viewer in a second area.
- 7) Next, copy any GraphWorX64 Silverlight display to a web accessible location. Insert a GridWorX64 Viewer into the third area and reference the display.
- 8) Make sure to save the project from the PortalWorX-SL File menu, otherwise your customization will be lost when you close the page.

For further information on PortalWorX-SL please read the application notes whose names start with "PortalWorX-SL".

Using the AssetWorX Navigator in PortalWorX-SL

The AssetWorX Navigator works very similarly in all clients. You should be already familiar with the behavior of the AssetWorX Navigator from the application note *Commanding – Configuration and Runtime*, which described how to use the AssetWorX Navigator in GraphWorX64.

It should be noted that a command can be configured using an empty target to allow the user to specify the target in runtime – see *GENESIS64 – Commanding Introduction* for more details. With this setting, AssetWorX Navigator will show a context menu with all available targets in the control's commanding scope.

For PortalWorX-SL the target can be any control open in the current layout. In addition, using this setup in PortalWorX-SL will also allow the user to create a new control for the selected command.

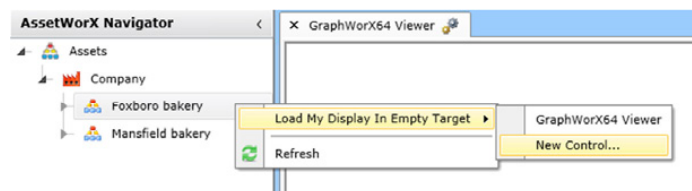


Figure 1: Blank Target in PortalWorX-SL

NOTE: If a command is configured with a specific target and the target control is not available in the commanding scope then the command will be hidden for the user runtime operations.

Let us have a look at the result of our security context customization.

- 1) Open PortalWorX-SL, if you had closed the page.
- 2) Log in as Admin and examine your asset structure. Note how you can see all branches and it starts the very top level. So you can view everything what has been configured in the AssetWorX provider.
- 3) Log out and login again but this time as **Foxboro Bakery South Supervisor**.
- 4) Note that now your Asset Navigator does not show the Company or Mansfield bakery assets. The root level is actually Foxboro bakery and initially selected asset is South area. Also note that you can select the North area but you cannot view any assets that are within.
- 5) The left and right mouse buttons clicks offer all allowed commands as usual.