AssetWorX
Equipment Classes

APPLICATION NOTE

September 2013

Description: Guide to create and use Equipment Classes
OS Requirement: Windows 8 x64 (Professional or Enterprise Edition), Windows 7 x64 (Professional or Enterprise Edition), Windows Server 2012 x64, Windows Server 2008 R2 x64, Windows Vista x64 SP2 (Business, Ultimate, or Enterprise Edition), Windows Server 2008 x64
General Requirement: Basic knowledge of AssetWorX and AssetWorX installed

Introduction

AssetWorX could be considered as an optional data mediator where you can organize your data from various sources into logical objects in your own address space. You can also group your real-time data points with historical data sources. On top of that, there is a couple of ICONICS applications such as Facility AnalytiX and Energy AnalytiX that uses AssetWorX as the main data manager with powerful capabilities. In order to do production, energy, facility, or any other type of analysis on equipment at your enterprise using ICONICS AnalytiX, you must build your equipment into an asset tree. There are a few ways you can do this:

- You can add equipment to the asset tree piece by piece
- You can create equipment classes (which are templates) for individual types of equipment, and then use those equipment classes as a basis for adding equipment
- You can build equipment classes into a tree structure that can be copied to the asset tree and used as a basis for building equipment into your asset tree

In this application note we will look at how to create an equipment class and the way it is used.

NOTE: Please consult other application notes to understand how AnalytiX suites work.

Create an Equipment Class

1. Open Workbench for Silverlight
2. Expand the AssetWorX tree so as to see **Equipment classes** node
3. Right-clicking on this item you can choose to create a folder to create a logical structure of your equipment or you can **add Equipment class**. Select the latter option for now.

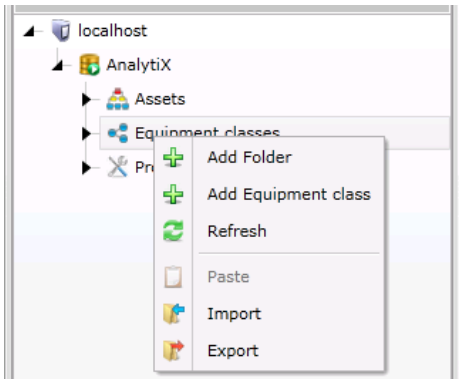

Figure 1 - Adding new Equiment class into AssetWorX

4. Fill in the name of the class, select **Icon** to identify the equipment level. If the option is set to default setting it will take the icon depending on the Level selection below.

NOTE: Parameters can be used in majority of text fields that specify your equipment class. The values for these parameters will be defined when the equipment class is instantiated in the main asset tree. Parameters are recognized by a special syntax /?ParameterName?/ as shown in Figure 2

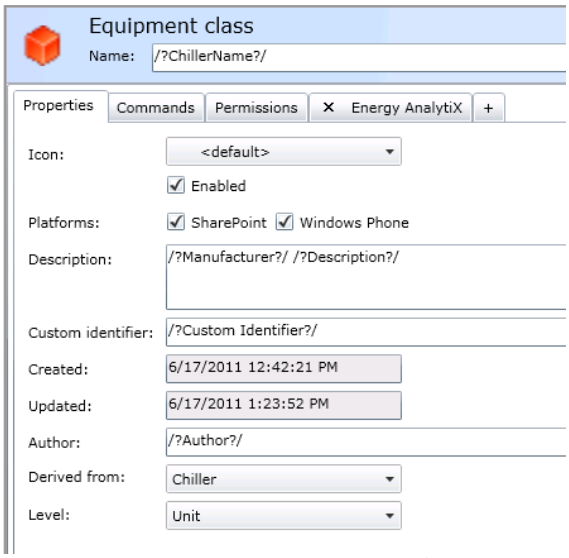

Figure 2 - Using parameters in text fields

5. Decide what properties should be predefined for your equipment such as client **platforms** used, **description**, and **author**
6. You may select whether the class is **derived from** another one or leave it empty (it will be filled automatically if you instantiate the object), and finally the **level** of this equipment. Click **apply** to create the class.
7. There are two more tabs in the equipment class that can be used to prepare your template:

- **Commands** tab can be used to predefine commands that will be available for the operator when clicking the asset in runtime view
- **Permissions** tab specifies which users will be allowed to run specified command types for the asset based on this template.

8. When you are happy with your Equipment class general settings you may add Energy or Facility AnalytiX propertied to the asset via **+ button** next to Permissions tab.

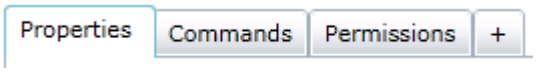

Figure 3 - + button to add AnalytiX to Equipment class

9. Specify the Facility AnalytiX or Energy AnalytiX properties as needed but bear in mind that you are creating a template.
10. With a right-click on the created class in the Project explorer you can **Add Equipment class property** or another Equipment class to it. Select the former one now.
11. Specify the values for the Equipment class property as if you were adding it to a single asset and hit Apply.

NOTE: You can repeat any of the steps described above to build up your complete structure of equipment classes, and assets respectively.

Instantiating Equipment Classes

When you have finished modification of your equipment class you may instantiate it in your Asset tree or in Equipment classes.

1. Right-click on your Equipment class and select **Copy**
2. Right-click on any of your existing Equipment, Equipment class, root of Assets or root of Equipment classes where you want your class to be instantiated. The menu will show you an option to **Instantiate equipment class** of the name you selected in the first step.

   NOTE: Please notice that you can also instantiate Equipment classes (EC) by using drag & drop. If you want to do that, drag your EC and drop it to object where you want to instantiate it.

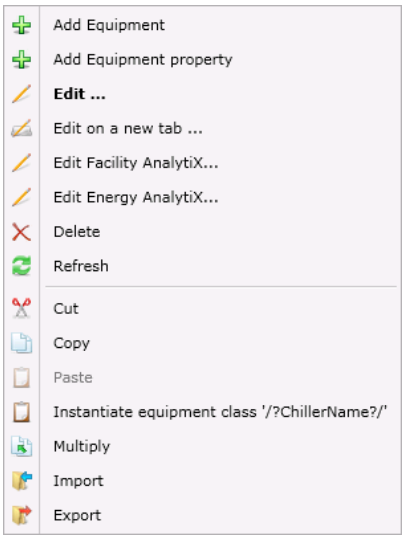

Figure 4 - Option to Instantiate equipment class named /?ChillerName?/

NOTE: It may happen that the option is there but grayed out, which means that the object cannot be instantiated at that hierarchy level due to its level set.

3. Select that option and an Instantiation Options dialog similar to Figure 5 will open up and you can fill the values for your parameters used in the class.

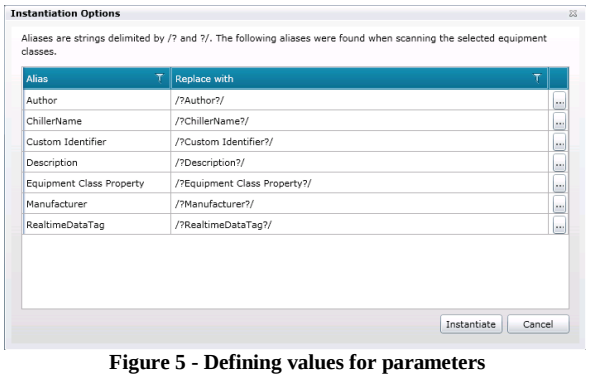

Figure 5 - Defining values for parameters

4. When finished you can hit Instantiate button and another dialog showing you progress will open. When the Batch operation ends click Close and you have successfully instantiated your Equipment class.
5. Now you can go and tweak your newly instantiated object.

NOTE: Keep in mind that you can instantiate the whole structure of Equipment classes in the same way.