Energy AnalytiX Viewer

APPLICATION NOTE

August 2014

Description: A guide on how to create the Energy AnalytiX Viewer in GraphWorX64, WebHMI and PortalWorX-SL.
General Requirement: The Energy AnalytiX sample configuration database must be active.

Introduction

This Application note will provide a guide on how to create the Energy AnalytiX Viewer in GraphWorX64, WebHMI and PortalWorX-SL, as well as configure the grid and the chart so you can view your energy consumption in visualized model. This guide requires you to already have AnalytiX installed and an active configuration for Energy AnalytiX in Workbench Silverlight. If you need information about installing AnalytiX, or setting up Energy AnalytiX configuration, please refer to the product documentation.

In this app note, we will guide you through the essential steps to setup your first EA viewer in GraphWorX64, WebHMI and PortalWorX-SL.

> **NOTE:** To ensure the quality of this guide, you have to have a sample database of Energy AnalytiX. You can also refer to documentation to setup an Energy AnalytiX database by yourself.

Adding Energy AnalytiX Viewer in GraphWorX64

1. Open up **GraphWorX64** by going to Start → All Programs → ICONICS → GENESIS64 → GraphWorX64 → GraphWorX64
2. In the GraphWorX64, click on Controls tab in the ribbon, and select **Energy AnalytiX Viewer**
3. Drop it on the canvas, you can resize it to a suitable size

> **NOTE:** If you see an error says "Energy Analytics Product is not enabled at the Asset Catalog 'ac: Root'. Please enable Energy Analytics extension or select a different Asset Catalog connection." when you drop the viewer, this indicates that your Energy AnalytiX extension is not enabled. To enable it, you need to open Workbench-SL and expand your target database in AssetWorX tree. Then expand Product configuration and click Available solutions. In the panel that shows up on the right side, select Energy AnalytiX and click install. Hit Apply after it is showing Enabled.

Configuring Energy AnalytiX Viewer

1. Click on the Energy AnalytiX Viewer. You will see a new tab appears on the ribbon which is called Energy Analytics Viewer Configuration

Figure 1 - Energy AnalytiX Ribbon

2. Click Configure to bring up the configuration dialog box

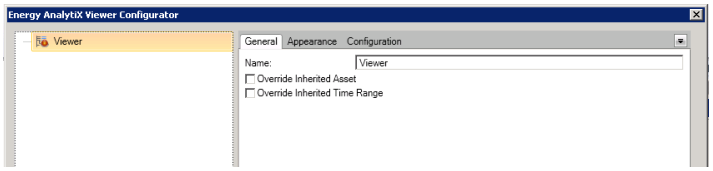

Figure 2 - Energy AnalytiX Viewer Configurator

3. There is a viewer tree on the left side and three tabs: General, Appearance, and Configuration on the left side.
   a. **Viewer tree**: your viewer components, including Chart, Grid, Tabs Container, Panel and Detail, can be added in this tree for you to navigate through different levels
   b. **General**: It will have the settings where you can configure your chart. You will also have a selection where you can set to override inherited asset and override inherited time range
   c. **Appearance**: Lets you customize the appearance of the viewer
   d. **Configuration**: Lets you name your configuration, specify author name, description and make it default.
4. We are going to use the Grid and Chart in this application note.

Creating Grid

1. Right click on the Viewer and select **Add Grid**.
2. In the **General Tab** of the Grid, check on the Override Inherited Assets and select from Specific Asset the asset that you want to use. You can also check to Override Inherited Time Range. For example: Enable auto update or reset start and end time to monitor value in different time range.
3. Go to Data tab of the Grid, and choose an appropriate **Data Query**. Items under **Consumption** are the most common data query when users use Energy AnalytiX viewer to gauge the energy consumption in specific plant.

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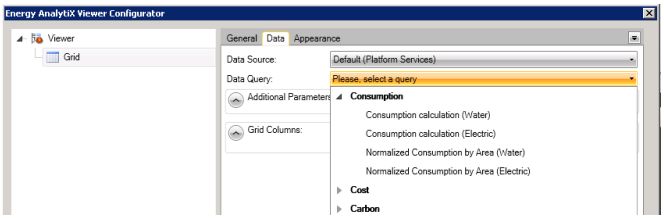

Figure 3 - Data Query

NOTE: You will have to configure the Energy AnalytiX database first in Workbench SL to see the items under Consumption.

4. You can modify the additional parameters and grid columns if you want.
5. Click **OK** and go to runtime, you will now be able to visualize plant's energy consumption in Energy AnalytiX Viewer.

Creating Chart

1. In the Energy AnalytiX Viewer configurator, right click on **Viewer** and select **Add Chart**.
2. Again we will specify our asset by checking Override Inherited Asset.
3. We will select the **Drill-Down** to be the **Asset** so that we can drill down based on the asset.
4. In this example, we will use Linear as the mode and select a type as you want.
5. Right click on the **Chart** and select **Add Series**. Go to the Data tab, and again we will select the items under **Consumption**.
6. You can always customize the parameters, settings and appearances.
7. Click **OK** and go to runtime. You will see your energy data in now showing in the linear chart.

Adding Energy AnalytiX Viewer in WebHMI

1. Open the following link in Internet Explorer to launch GraphWorX64 WebHMI:

http://localhost/Genesis64/Websites/Pubdisplay/GwxConfiguration.htm

2. The layout of the GraphWorX64 WebHMI is exactly the same as normal GraphWorX64. You just can follow the steps in previous sections to create your Energy AnalytiX Viewer in WebHMI.

Adding Energy AnalytiX Viewer in PortalWorX-SL

1. Launch **PortalWorX-SL** by going to Start → All Programs → ICONICS → PortalWorX-SL
2. Under Home tab, click Energy AnalytiX Viewer button in AnalytiX Controls section

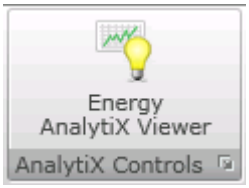

Figure 4 - Figure Energy AnalytiX Viewer Button

3. A dialog box will come up. It's OK to leave everything as default.

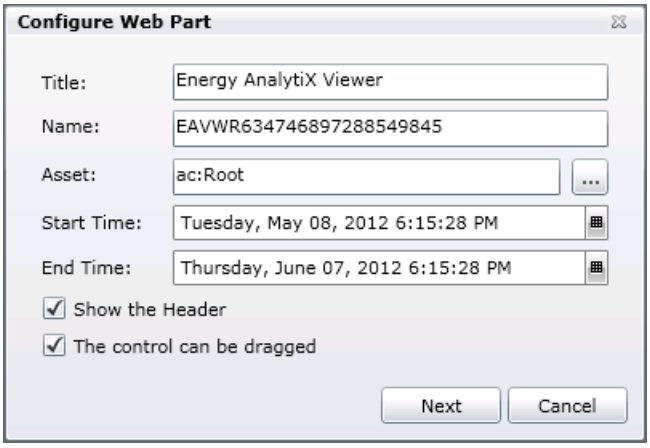

Figure 5 - Configure Web Part

4. After you click next, a same Energy AnalytiX Viewer Configurator form will be opened up. Again, you can just follow the steps in previous sections to configure your Energy AnalytiX Viewer.