EasyIO Guide - Trending in CPT
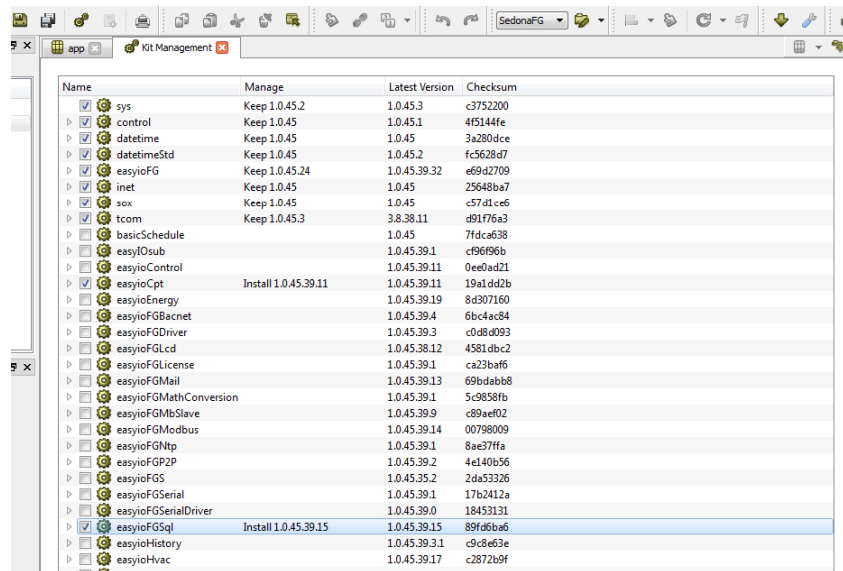
Step 1:
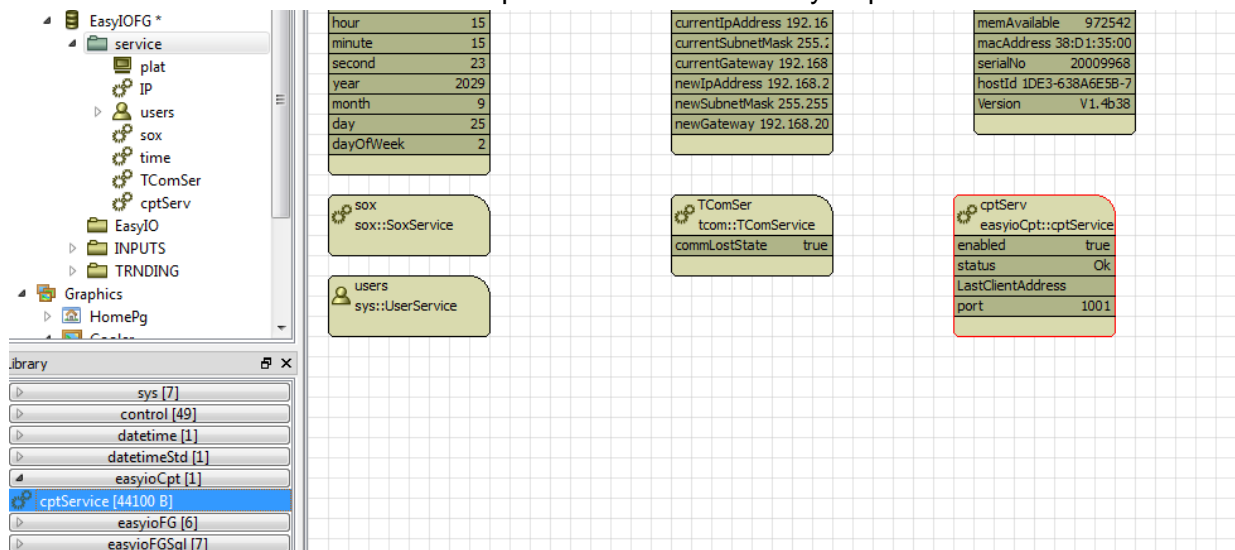
From the "Kit Management" page, ensure you have "easyioCpt" and "easyioFGSql" kits installed and up to date.

Step 2:

Go into the "service" folder and add "cptservice" from the "easyioCpt" kit.

Step 3:

In the "service" folder, go into the "Time" service. Under the "New DateTime" switch the "UTC Offset Mode:" to "Configuration", select "LocalTime" and hit save. Ensure the "DateTime:" under the "Sedona DateTime" has been updated with the correct time.
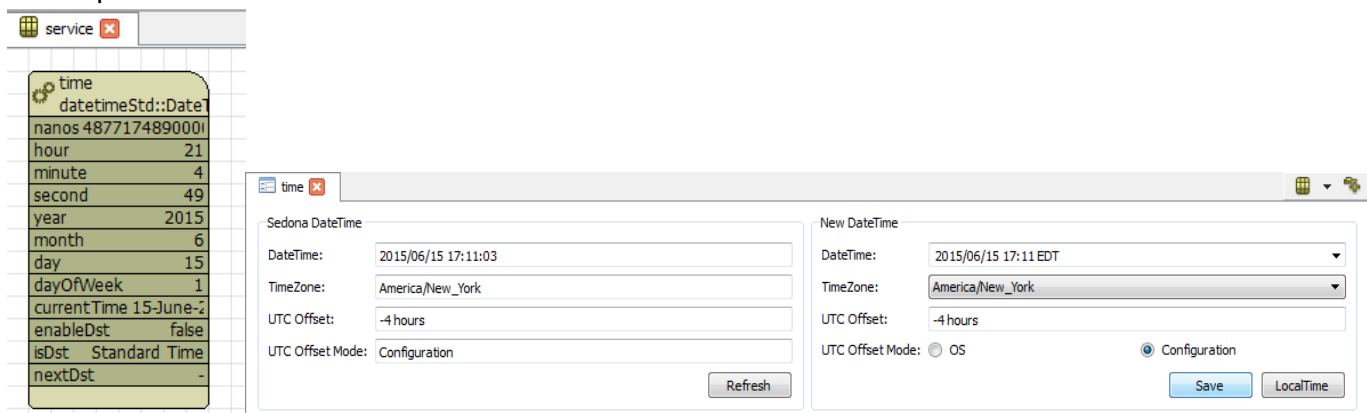
Step 4:

Add two folders under "EasyIOFG". Call the first one "INPUTS" and the second "TRNDNG".
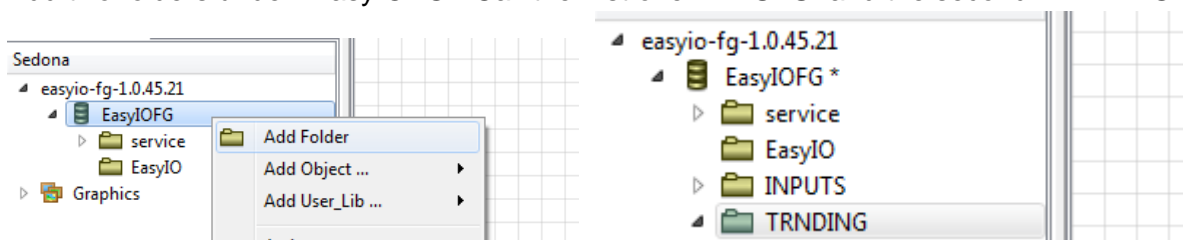
Step 5:

In the "INPUTS" folder, add a writable float input and a ramp. Connect the "out" of the ramp to the "in" of the writable float input (the ramp will be used to get some different values for the trend test). Configure the settings of the writable input and the ramp as shown below.
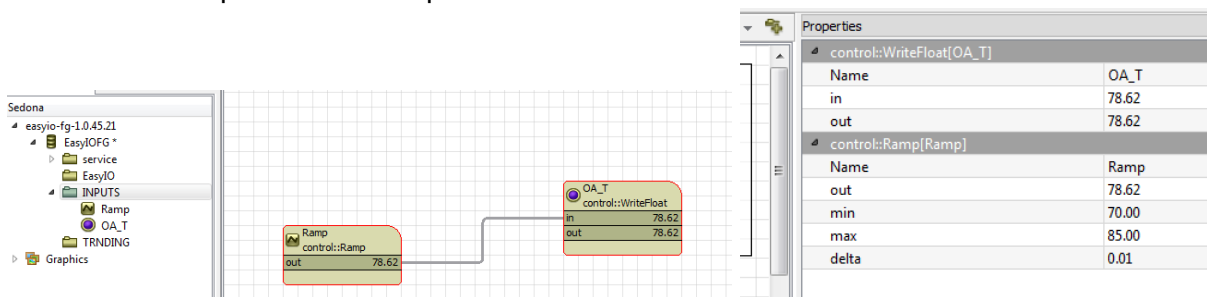
Step 6:

In the "TRNDING" folder, add a "sqlite3Service" From the "easyioFGsql" kit.

Step 7:

In the "sqlite3Service" add a "sqlTable" from the "easyioFGsql" kit.

Step 8:

In the "sqlTable", add a "sqlFloat" from the "easyioFGsql" kit. Go to the property sheet of the "sqlFloat" on the right hand side and change the "Name" field to "OatTrend" and change the "columnName" field to "OA_T".
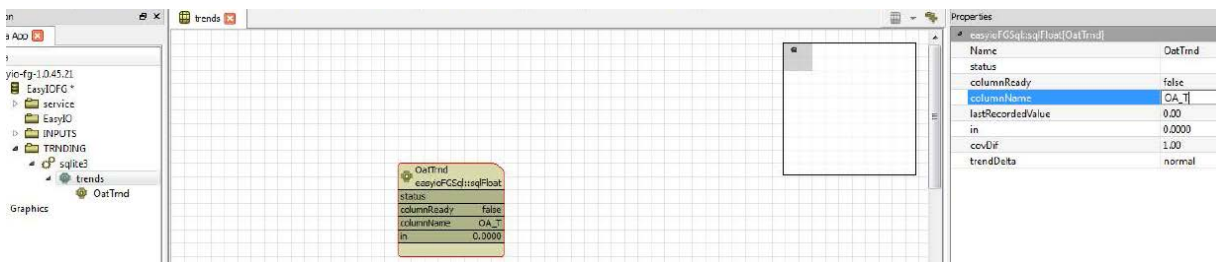
Step 9:

In the "sqlite3Service", select the "sqlTable" and go to the property sheet of the "sqlTable" on the right hand side and change the "N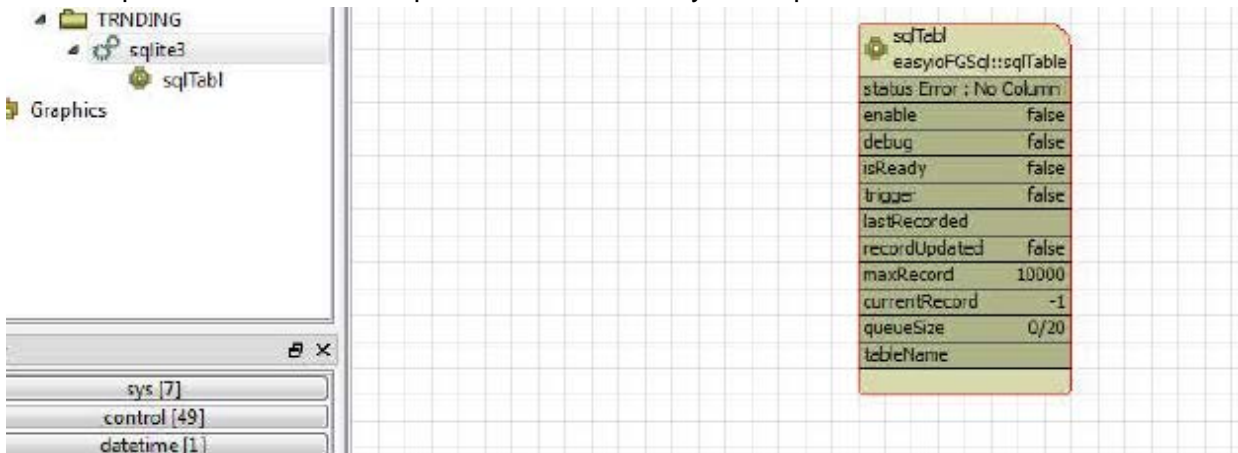ame" field to "trends", and change the "tableNameBuf" field to "TrndTBL". You must then select "trends" in the Sedona tree structure, right-click > Actions > updateStructure (This will take the "TrndTBL" from the "tableNameBuf" field and populate it into the "tableName" field).

Step 10:
Still in the "trends" table properties, set the "enable" field to "true".
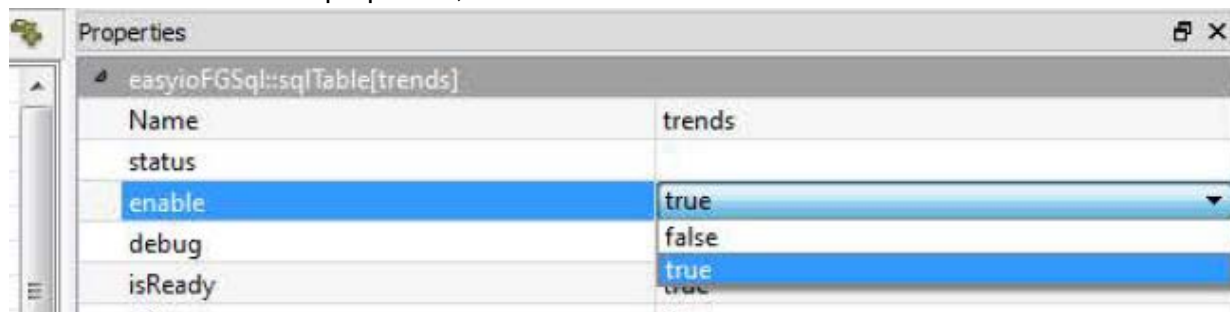
Step 11:
Still in the "trends" table properties, set the "recordType", "recordInterval" and "maxRecord" fields as shown below. Note that these properties need to be adjusted to match the requirements of your trending point (e.g. an analog point can use an interval trend set to 5 minutes, however a Boolean point could use a cov trend).

Step 12:

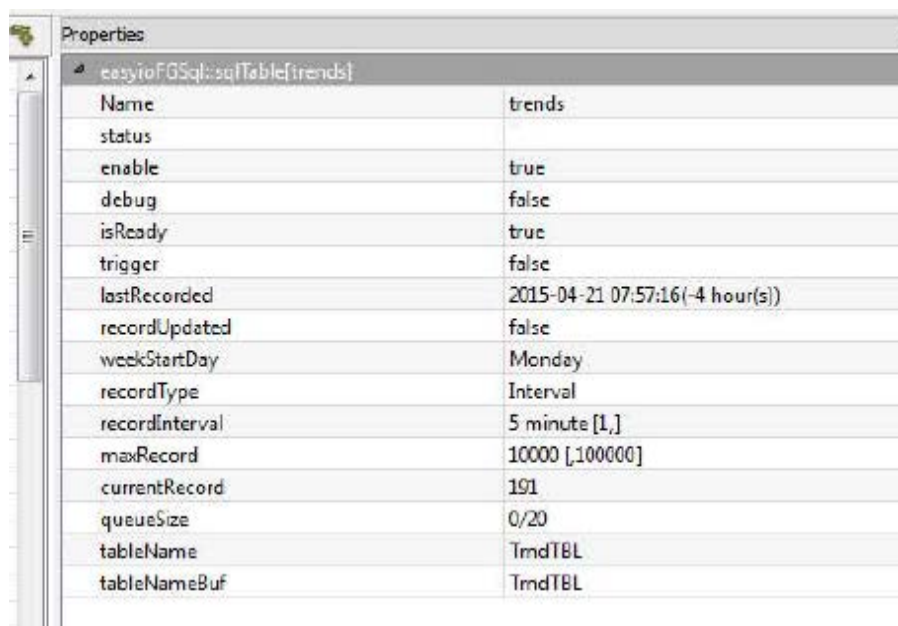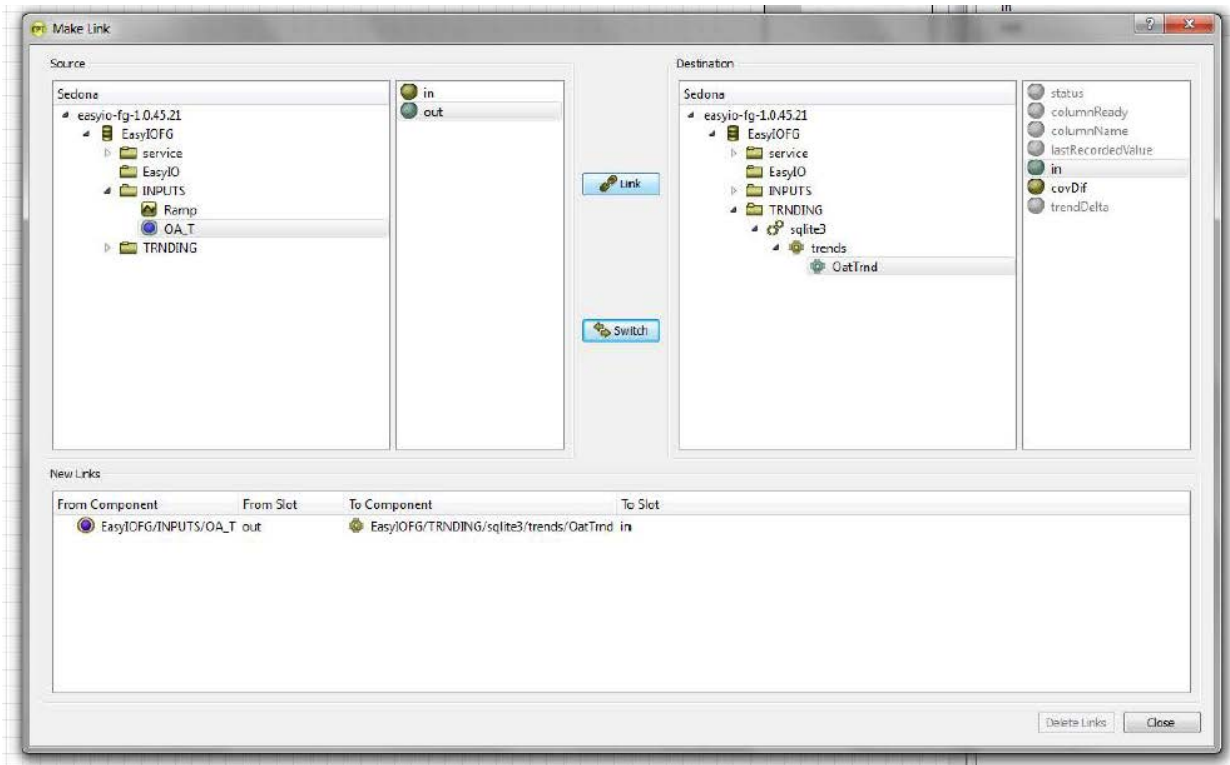In the "INPUTS" folder, right click on the "OA_T" point, and select Make Link. The "Make Link" page will come up. From this page select a source of OA_T > out, and a destination of OatTrend > in, and select the "Link" button (ensure link was created in the "New Links" field) and close the Make Link page.
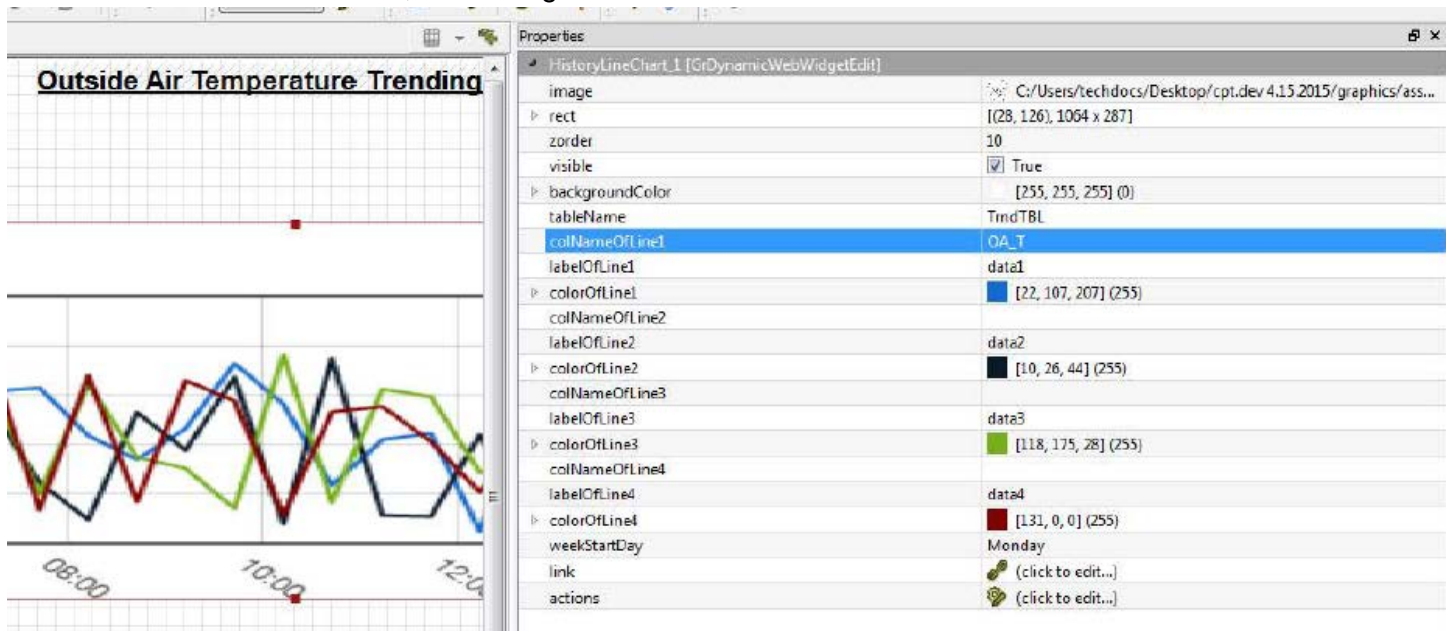

Step 13:

Create a new graphic page entitled "Outside Air Temperature Trending". Drag and drop the sqlFloat "OatTrnd" into the new "Outside Air Temperature Trending" graphic page. This will open the "Create Event Binding" page. From here select the "CovDif" output of the "OatTrnd" sqlFloat and connect it to a "HistoryLineChart" under the "chart" folder of the "Widgets" tab, and select ok.
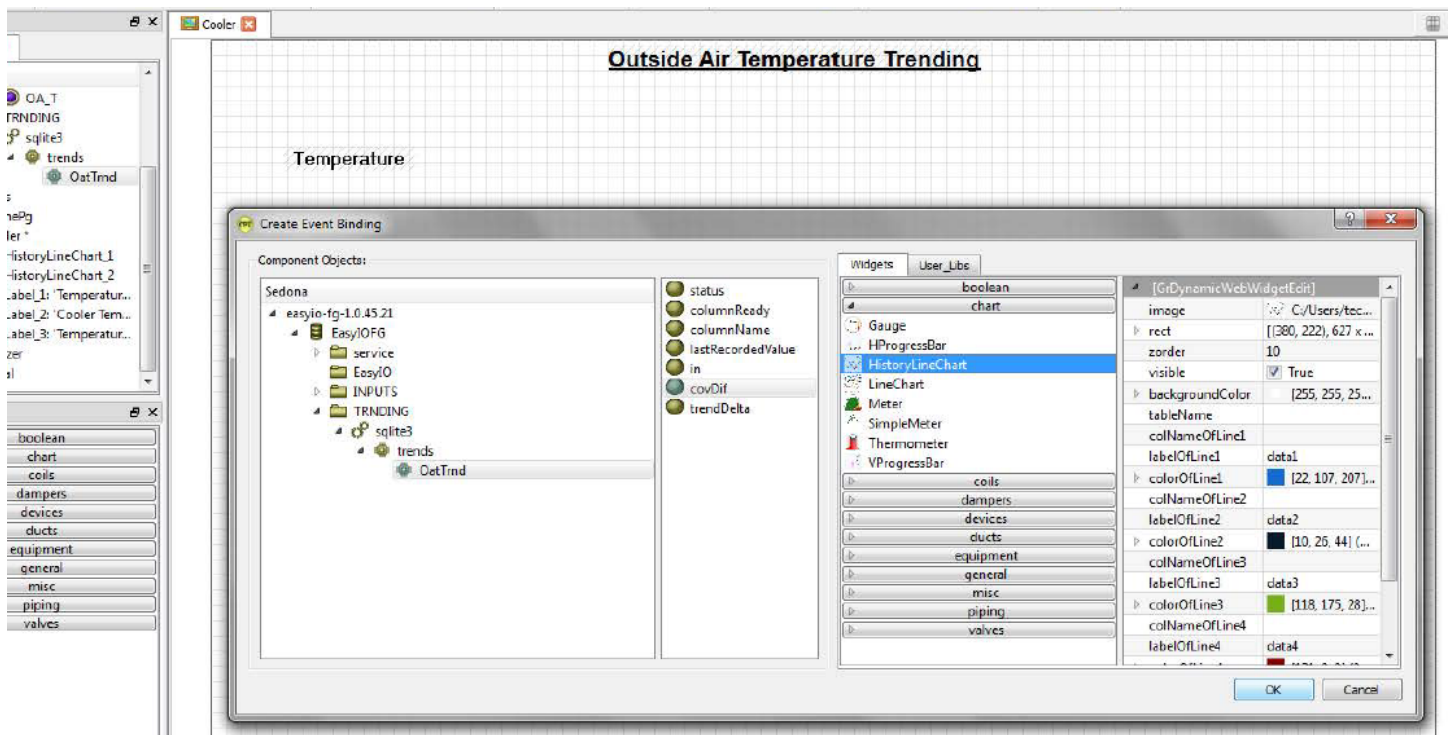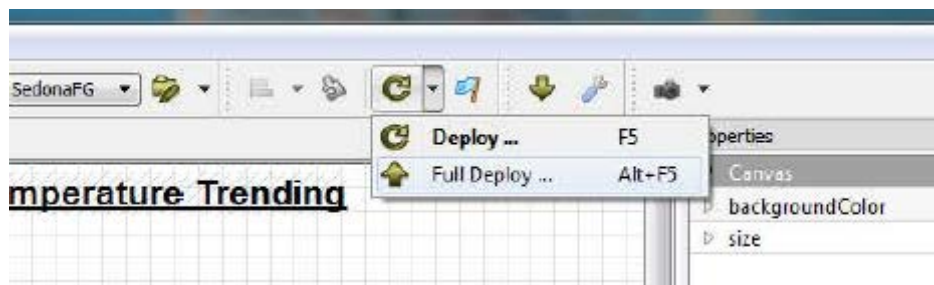
Step 14:

In the "Outside Air Temperature Trending" graphic page, select the "HistoryLineChart" and go to the property sheet of the "HistoryLineChart" on the right hand side (Note – the "tableName" and colNameofLine1" must match the names given to the "sqlFloat" point and the "sqlTable" that is being trended) and change the "tableName" field to "TrndTBL", and change the "colNameofLine1" field to "OA_T".


Step 15:

Use the save icon on the top tool bar to save the app. Then use the down arrow of the "Deploy" icon and select "Full Deploy" (Note – The EASYIO Controller must have an SD Card as the "Full Deploy" feature will save the graphic pages to the SD card of the controller).

Step 16:
Use the preview icon on the top tool bar this will launch your default browser and will display the graphic trend just created.
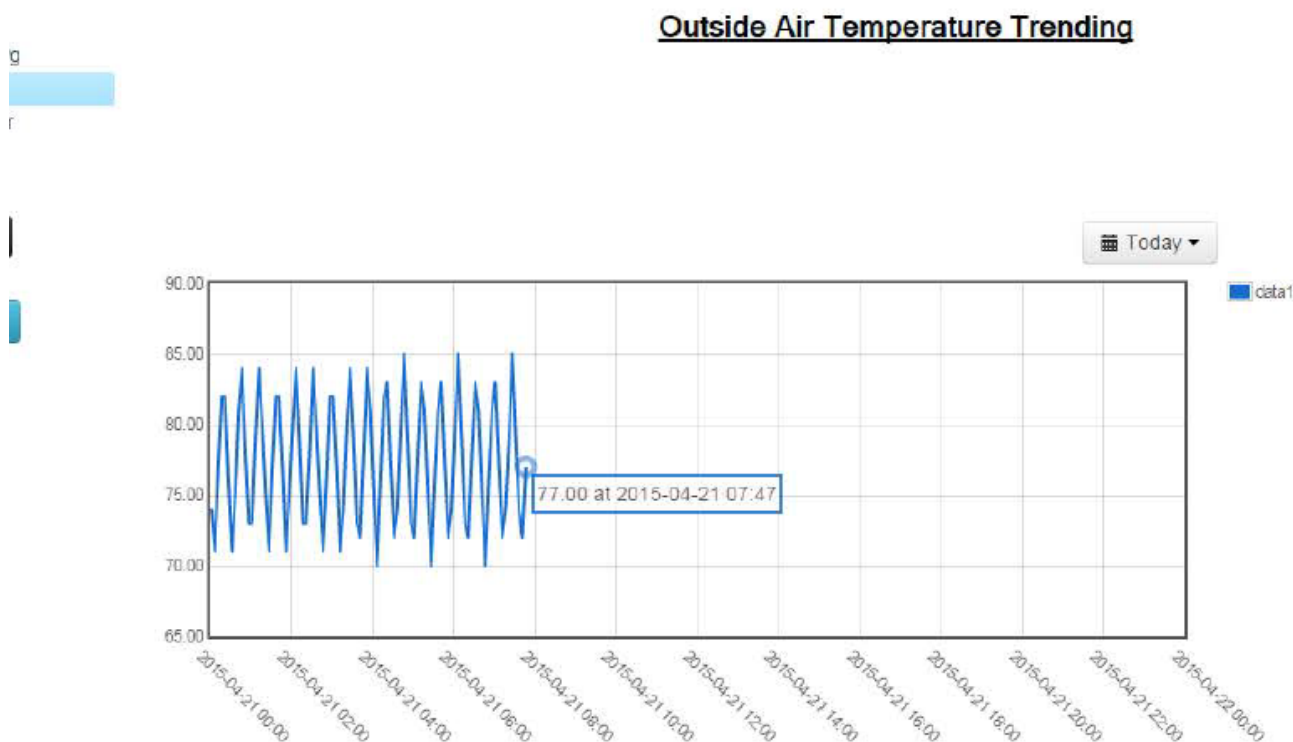
Common Issues:

Issue:
- Previewing the graphic after a full deploy the graph does not display any values (seems to be stuck on loading).

Probable Cause:
- The "tableName" field in the trending graph does not match the "tableName" field in the sqlTable.
- The "columnName" field in the trending graph does not match the "columnName" field in the sqlFloat.
- The "Sedona TimeDate" did not update with the current time.