FactoryCast

What is FactoryCast?

FactoryCast is a Web server included with the BME NOC 0311. It provides the following features:

Custom Web Pages to create a user defined interface to the module

Rack Viewer providing a graphical representation of the configured ePAC system including all modules and I/O status

ePAC Program Viewer giving a view of the ePAC program code with animated variable states

Trend Viewer for graphical visualisation of variables

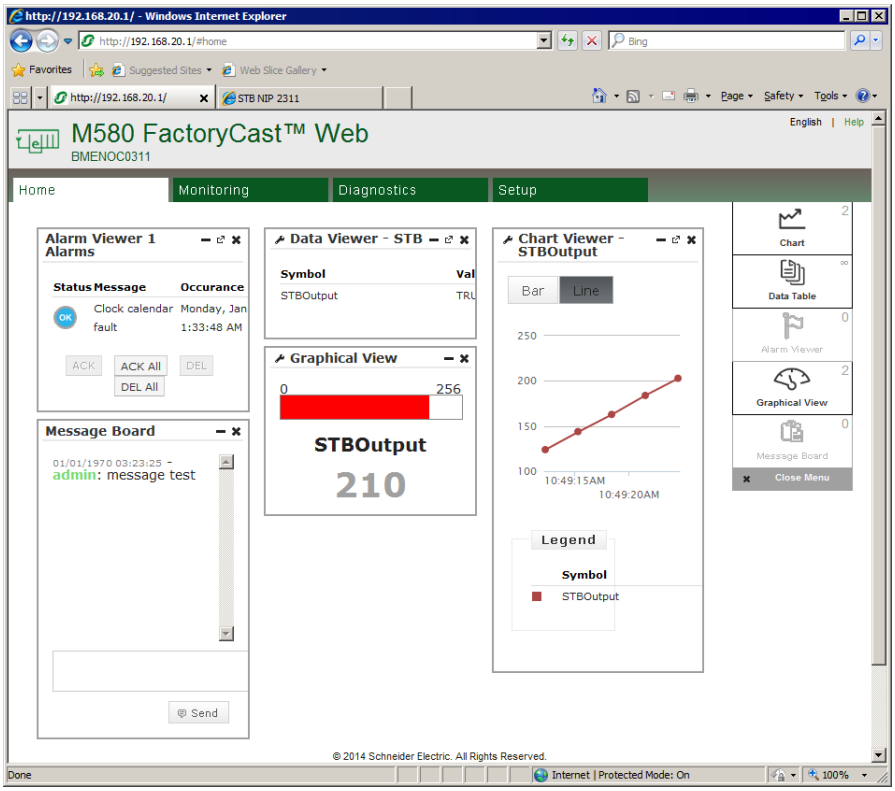
Customisable Dashboard with widgets to provide an efficient view of process data

Configuration is via a built-in designer which is part of the Web Interface. Logos and colours can be configured to provide easy brand labelling.

FactoryCast (cont.)

Graphic Viewer

The Graphic viewer allows data to be displayed on a page in a Web browser.



Several widgets are available to simplify configuration of the graphic display. These can be added to the page and the data point selected.

Tables and graphs must be configured in the monitoring section before they can be displayed in a widget.

Exercise - FactoryCast Graphic Display

Learning Outcomes

By the completion of this exercise you will:

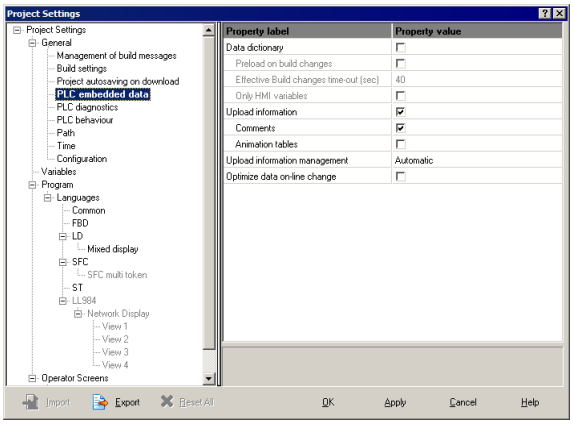
Access FactoryCast in the BME NOC

Explore the FactoryCast Data Display features

Prepare the application to use FactoryCast.

In Unity Pro, select **Tools » Project Settings** to open the project settings.

1 Select PLC embedded data from the left menu.



2 Select the **Data Dictionary** tickbox and click the **OK** button to save the changes.

3 Build the application and download it to the M580.

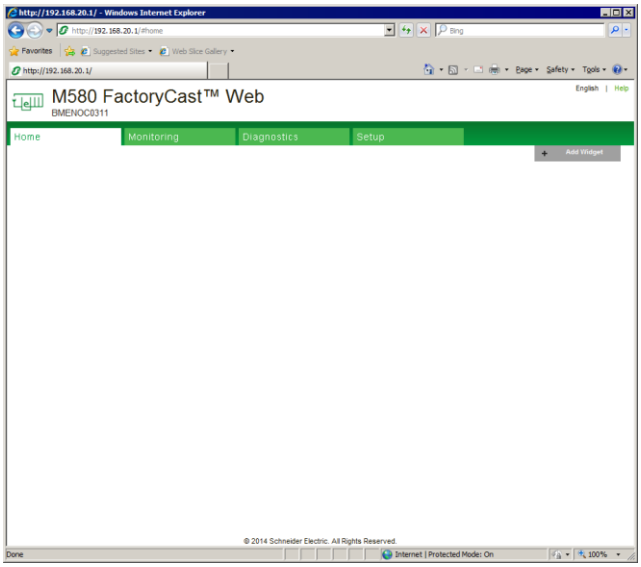
Connect to the FactoryCast Server.

1 Open the Web Browser and enter the address `http://192.168.14.1`.

2 If the login screen is displayed, enter the following:

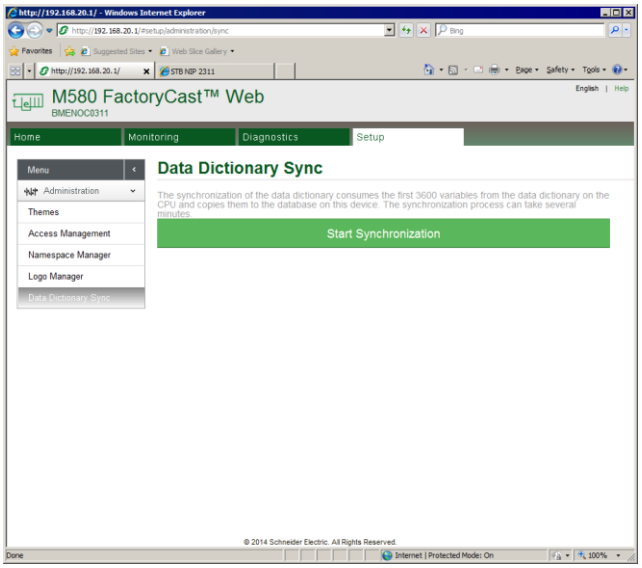
Username: `admin` Password: `schneider`

3 If anything is displayed on the Main screen, delete all the objects as these may be referencing variables that are not used in the application.



Configure data for the widget

1 Select the **Setup** tab and in the left menu select **Data Dictionary** Sync.



2 Click the **Start Synchronization** button.

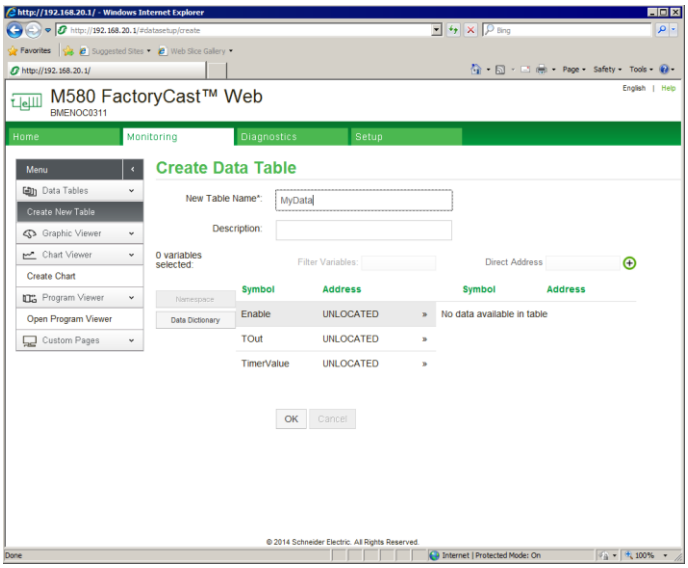
When the process has completed, a message will show Synchronisation Completed.

Exercise - FactoryCast Graphic Display (cont.)

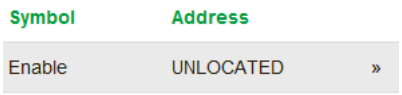
Create a new data table.

Select the **Monitoring** tab.

1. Create a new data Table with the name `MyData`.
2. Click the **Data Dictionary** button to show a list of all variables in the application.



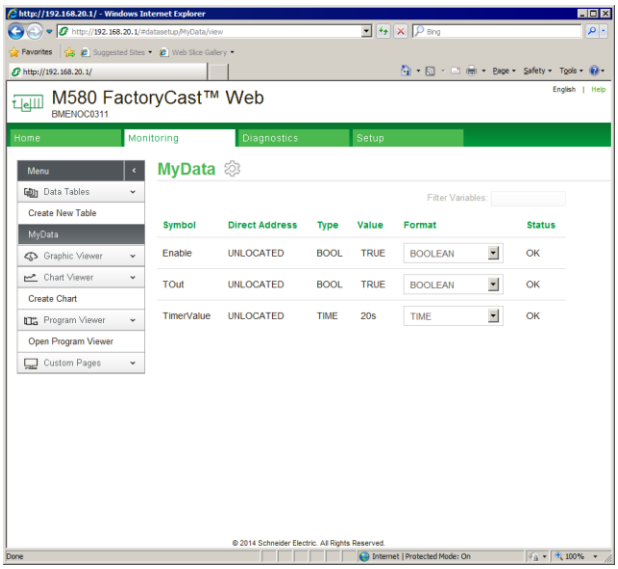
3. Click the small arrow to the right of each variable to add the variable to the table.



Note:

If there are no variables in the list, go back to Unity Pro and add some internal variables to the application and download it to the M580.

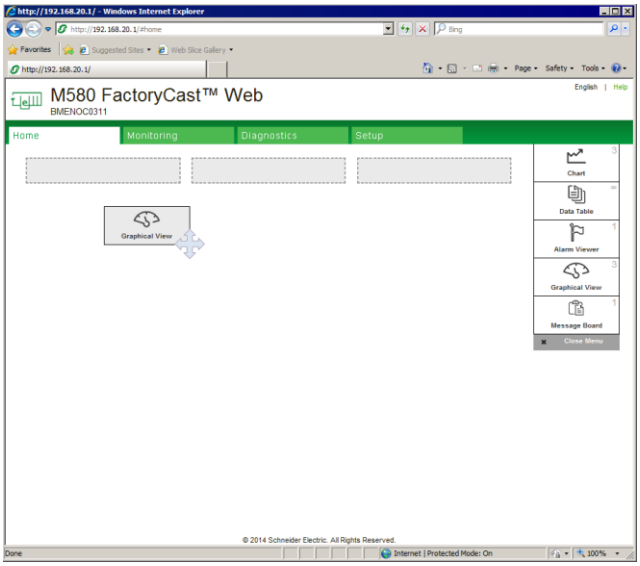
4 When the variables have been added, click the **OK** button to create the table.



Add a widget to the main screen

Select the **Home** tab.

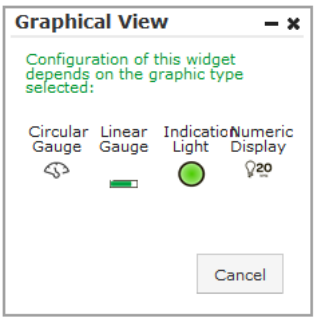
1 Click the **Add Widget** button to open the Widget menu. Select the **Graphical View** widget and drag it onto the main page. Three grey rectangular blocks will appear.



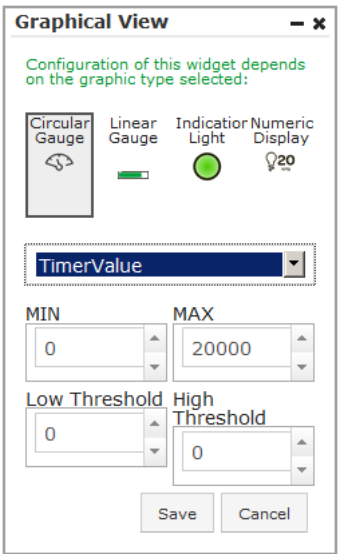
2 Drop the widget onto one of the blocks.

Exercise - FactoryCast Graphic Display (cont.)

Configure the widget



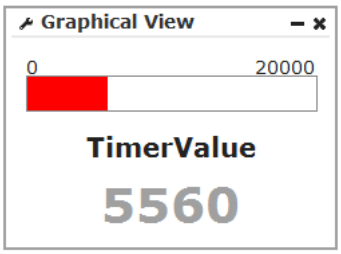
1 Click **Circular Gauge** to select it.



2 Drop down the list box to choose an analog variable.

3 Set the **Maximum Value** to match the maximum value of the variable.

4 Click the **Save** button to save the widget and display the data.



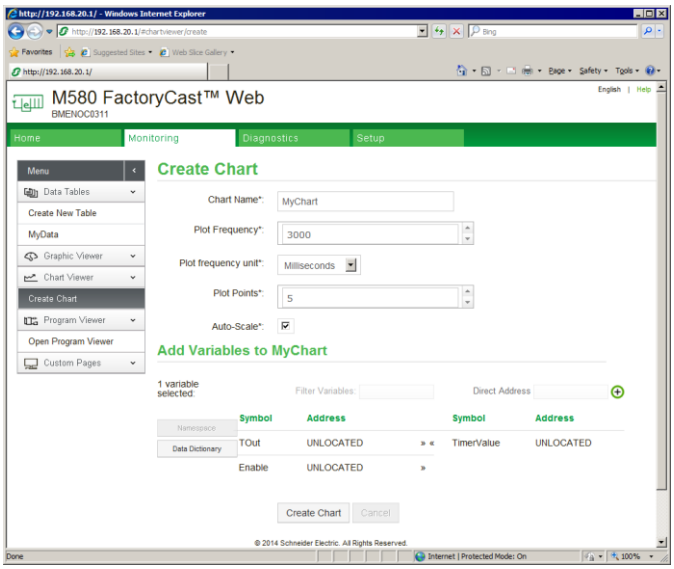
5 The configuration of the widget can be changed by clicking the spanner icon in the top left hand corner.

Exercise - FactoryCast Graphic Display (cont.)

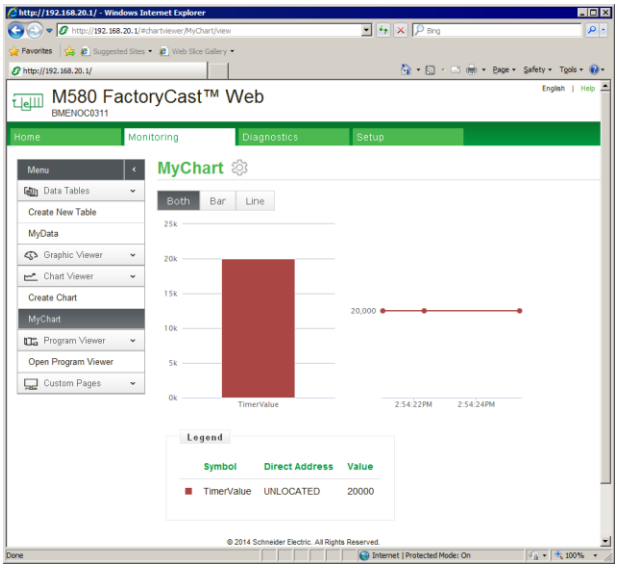
Create a chart.

Go to the monitoring tab and select Create Chart from the left menu.

1 Give the chart the name `MyChart` and add an **analog value** to the configuration (click the arrow as with the data table).



2 Click the **Create Chart** button to save the chart and display the data.



Exercise - FactoryCast Graphic Display (cont.)

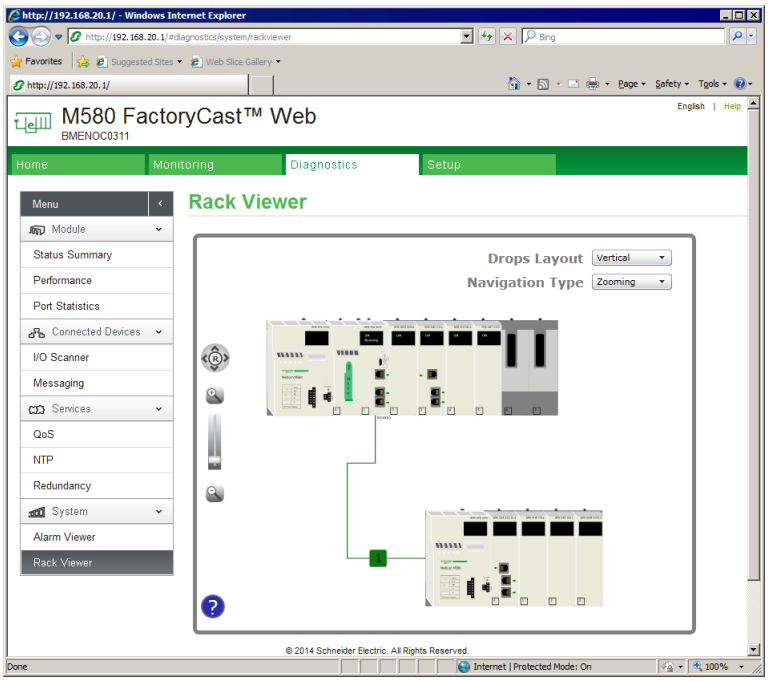
Add the chart to the home page.

1. Go to the **Home** tab and drag a **Chart** widget onto the page. Select **MyChart** and click the **Save** button to display the data.
2. Modify the analog value in Unity Pro and observe the changes on the Web page.

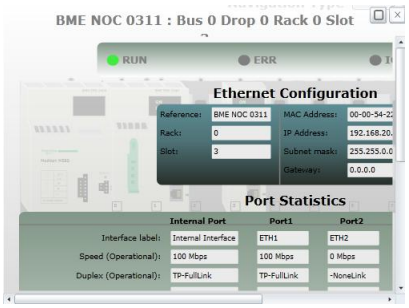
FactoryCast (cont.)

Rack Viewer

The rack viewer gives a graphical representation of the M580 architecture, showing racks, modules and some diagnostic information for the modules. The view can be zoomed and scrolled to explore the architecture.



Clicking a module will give detailed information for that module. For example, clicking a NOC module will show Ethernet configuration and port statistics.



Note:

The Rack Viewer requires Microsoft Silverlight installed on the computer.