SCADA Starter Example

Kickstart a new SCADA project quickly.

Download the sample solution: SCADA Starter Example.dbsln

This guide shows how to configure a basic implementation using the “TrendAndAlarmPages” template.

Configuration workflow

1. Create the solution using the **TrendAndAlarmPages** template.
2. **Create Tags** – Create tags to store values.
3. **Create alarms** - Define Alarms parameters.
4. **Edit UI** - Create main page.

Devices and the Historian included in the sample are provided to demonstrate the Trend and Alarms modules. Their implementation is documented on the Edge PLC–SQL Example page.

Step 1: Create the Solution

1. Open **SolutionCenter**.
2. Select **New… Template**.
3. Choose **TrendAndAlarmPages**.
4. Click **Create New Solution**.

Step 2: Create the Tags

- In **Unified Namespace UserTypes**, create a template named **PVs** with 10 members.
- In **Unified Namespace Tags**, create a tag named **PVs** using the **PVs** template.

> *Result: one tag (**PVs**) containing 10 members.*

Step 3: Create Alarms

- Define the alarm **conditions** and corresponding **messages** for when each alarm should be triggered.

TagName	Condition	Limit	Group	Message
Tag.PVs.Speed	Hi	3000	Alarm.Group.Warning	Overspeed condition detected
Tag.PVs.Vibration	Hi	80	Alarm.Group.Critical	High vibration detected
Tag.PVs.Valve_Open	Equal	0	Alarm.Group.Warning	Valve is closed
Tag.PVs.Torque	Hi	80	Alarm.Group.Warning	High torque warning
Tag.PVs.Temperature	Hi	100	Alarm.Group.Critical	High temperature alert
Tag.PVs.pH	Hi	8	Alarm.Group.Warning	High pH level detected
Tag.PVs.Level	Hi	25	Alarm.Group.Warning	High level warning
Tag.PVs.Humidity	Hi	80	Alarm.Group.Warning	High humidity detected
Tag.PVs.Flow_Rate	Hi	800	Alarm.Group.Critical	High flow rate detected
Tag.PVs.Current	Hi	40	Alarm.Group.Critical	High current warning

Step 4: Edit the UI

In **Displays List**, select the MainPage, there you can add two buttons that lead to the “AlarmPage” and “TrendPage“. You will also see a table that shows you all the tags and its values.



In **Displays List** you can go to the “AlarmPage” and “TrendPage“ to see its content.

Step 5: Test and Monitor

Go to Runtime / Startup and Run Startup

Communication Testing

1. Open **Property Watch**
2. Monitor tag values:
    - Check Quality (192 = Good)
    - Verify values update

UI Verification

1. Open the **Display** module.
2. On **MainPage**, confirm values change in the **DataGrid**.
3. Click **Alarms** or **Trend Page** to navigate and validate each screen.
4. You can also use the **top menu** to move between pages.

Trend Configuration (optional)

1. On **TrendPage**, select tags in the **Asset Tree**.
2. Click **Add Selected to Chart >>** to add them as pens for monitoring.

In this section...
