

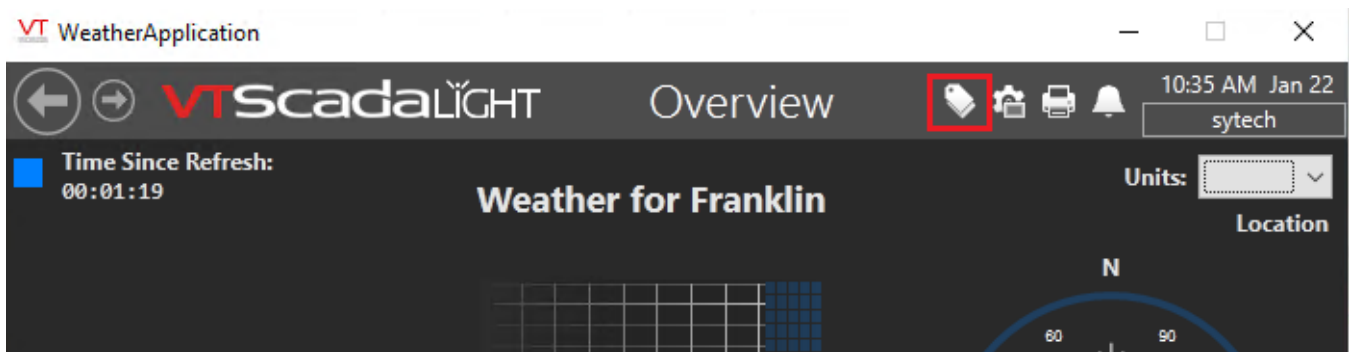
Using XLReporter with VTScada Real Time

Overview

XLReporter takes process values directly from a PLC to a report without requiring a historian or database. This is accomplished by “report-as-you-run” technology that automatically populates a workbook, periodically or on event, without needing Excel. Completed reports are produced in workbook, PDF and web formats.

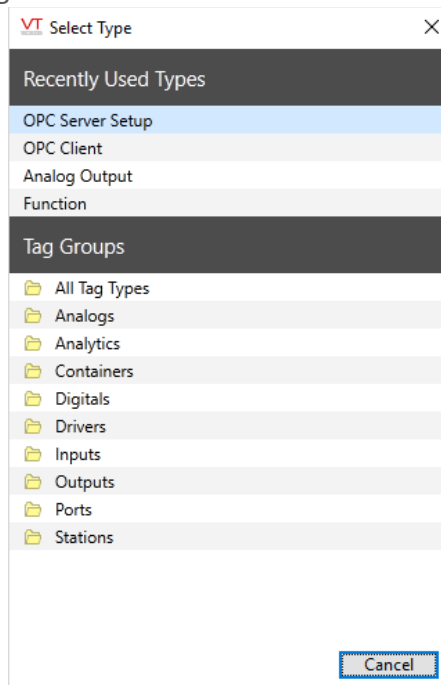
Set up VTScada

The VTScada OPC server must be configured in the VTScada application in order to connect and retrieve values from the application.



In the VTScada Application, open the **Tag Browser**

- Click **New** at the bottom of the Tag Browser.



- Set the **Type** to *OPC Server Setup*
- Click **OK**.
- Under the **ID** tab, enter *XLR* for the **Name**

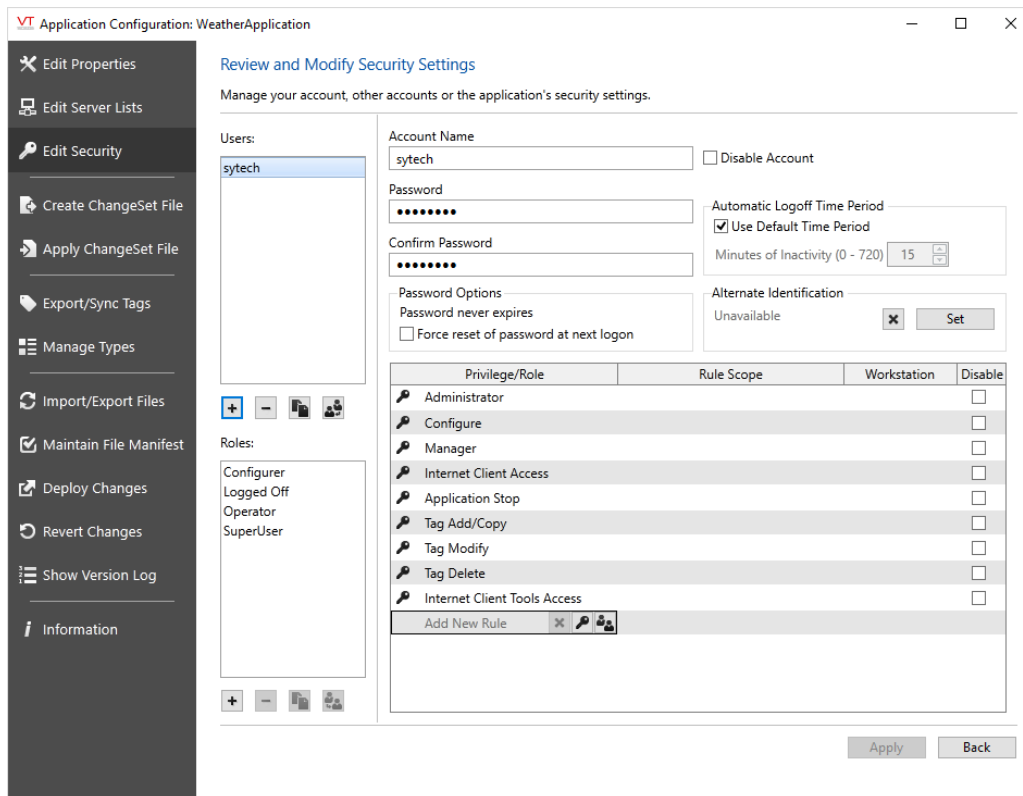
- Under the **Settings** tab enter *XLR* for the **Server Namespace**.
- Click **OK**.
- Restart the application to complete the setup.

Configure a User Account

The VTScada application must be secured with a user name that has internet client access privileges.



To access these settings, select the **Application Configuration**  button from the **VTScada Application Manager**



- In the **Application Configuration**, select **Edit Security** on the left.

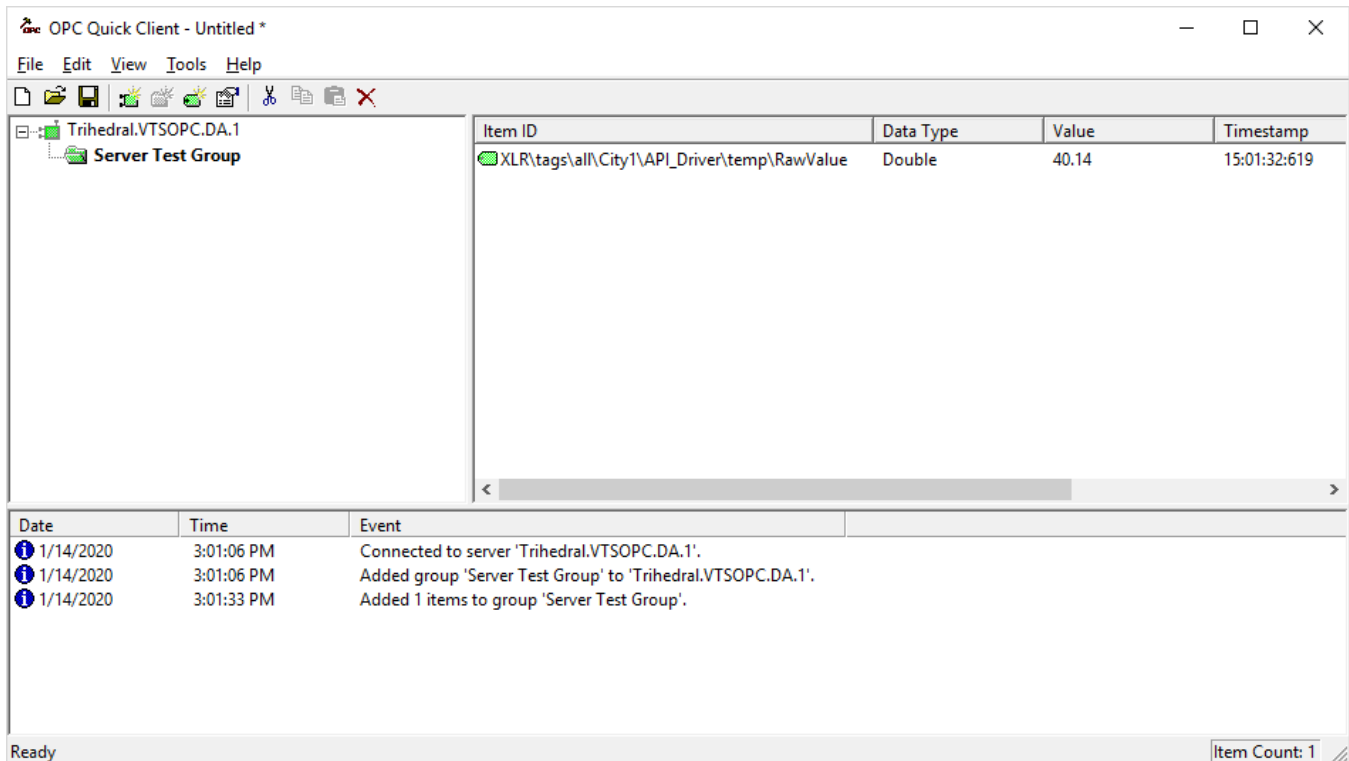
- Select the user to edit
- Highlight **Add New Rule**
- Click the key to choose the privilege to add
- Under **Account Control**, choose *Internet Client Access* and click **OK**.
- Click **Apply** to save the changes.

Prerequisites

A generic OPC test client is provided to test the VTS OPC Server.

This client is available from the Tools folder of the XLReporter installation disk and can be downloaded from www.SyTech.com.

To open, double-click **SampleClientDA.exe**. This opens the OPC Quick Client window.



To connect to an OPC server:

- Select **Edit, New Server Connection** to open the **Server Properties** window.
- Select *Trihedral.VTSOPC.DA* and click **OK**.
- Once the connection is made, select **Edit, New Group**.
- Specify **Name** and click **OK**.
- Select on the group name created.
- Select **Edit, New Item**. This opens the **Add Items** window.
- Browse for tags and double click any to select.
- Once tag selection is complete, click **OK** to return to the OPC Quick Client window.

All of the selected tags appear along with their real time values, type, quality, and timestamp.

If at any point you experience an issue with this client, contact VTScada technical support to troubleshoot and correct these issues.

Remote Connectivity

OPC Core Components

If **XLReporter** is not installed on the same machine as VTScada, the **XLReporter** machine must have the OPC Core Components installed.

To determine if the core components are installed verify the following file exists:

- 64 - bit OS C:\Windows\SysWow64\OPCEnum.exe
- 32 - bit OS C:\Windows\system32\OPCEnum.exe

If the components are not installed then they are provided in the XLReporter installation folder under `_repairtools\OPC`. Alternatively these can be downloaded from www.opcfoundation.org.

Server Settings

In order to connect to VTScada remotely both the machine where the server is running and the machine where the client is running must have matching Windows user accounts and the client must be logged in with a matching account.

In addition, on the machine with VTScada, certain DCOM settings must be enabled. For details on what DCOM settings to enable, see [OPC and DCOM 5 things you need to know](#).

Windows Firewall

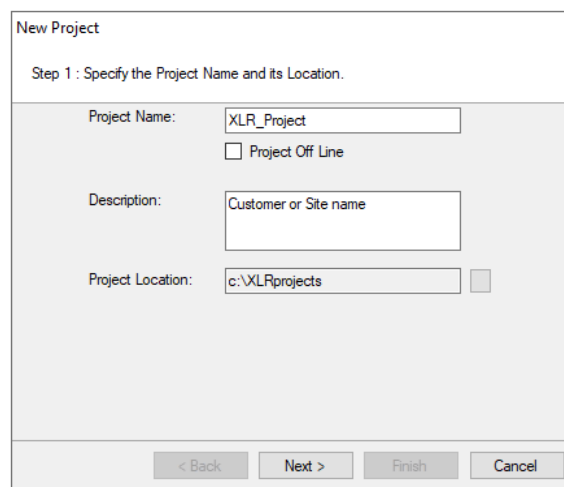
If the Windows Firewall is enabled on the machine where VTScada is running TCP Port 135 must be opened in order for remote clients to connect.

Create a Project

From the **XLReporter Project Explorer** select **File, New** to start the **Project Wizard**. This will give step-by-step instructions on creating a project

Step 1

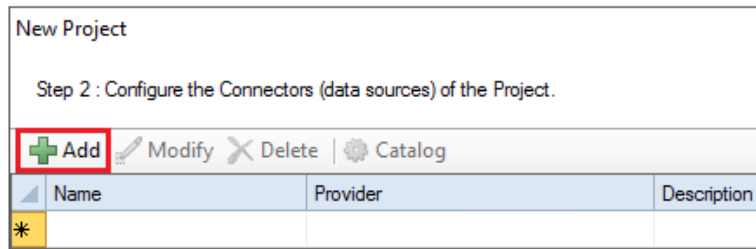
- Enter a **Project Name** and **Description** (optional).



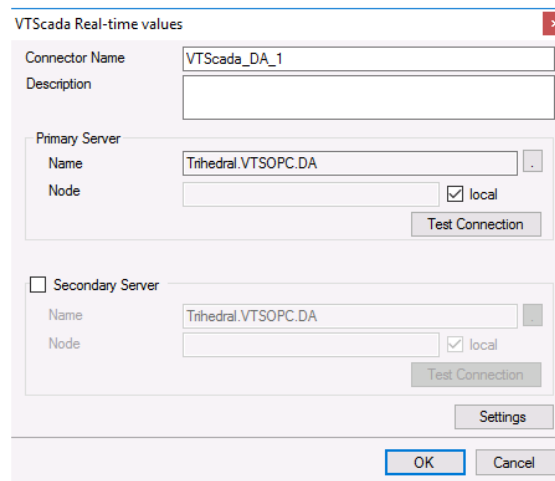
The screenshot shows a dialog box titled "New Project" with the subtitle "Step 1 : Specify the Project Name and its Location." The dialog contains three main input sections: "Project Name:" with a text box containing "XLR_Project" and a checkbox for "Project Off Line"; "Description:" with a text box containing "Customer or Site name"; and "Project Location:" with a text box containing "c:\XLRprojects" and a small square icon to its right. At the bottom of the dialog are four buttons: "< Back", "Next >", "Finish", and "Cancel".

Step 2

- Configure the data connector, click **Add**



Select Trihedral, VTScada Real-Time values

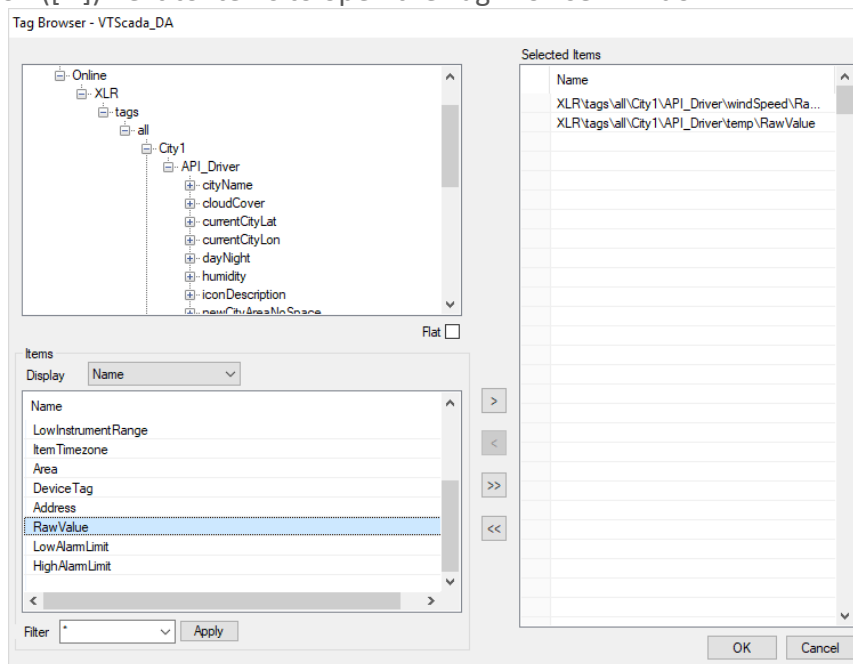


The connector requires a **Primary Server** which, by default has **Node** set to *local*.

Verify Data Communication

To verify communication to VTScada, open the **Project Explorer** and select the **Tools** tab. Launch the **System Check** application.

- Click **Add**
- Choose the *VTScada Connector* from the dropdown list.
- Click the pushbutton ([...]) next to Items to open the Tag Browser window.



- Select one or more tags, click **OK**

The screenshot shows the 'System Check' dialog box with the 'Start' button highlighted. The table below lists the connectors and their corresponding values.

Connector	Source	Description	Value
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\RawValue	XLR\tags\all\City1\API_Driver\t...	25.61
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\EUUnits	XLR\tags\all\City1\API_Driver\t...	F
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\ItemDescription	XLR\tags\all\City1\API_Driver\t...	Temperature in Requested Units
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\HighEU	XLR\tags\all\City1\API_Driver\t...	100
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\LowEU	XLR\tags\all\City1\API_Driver\t...	0
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\HighInstrumentR...	XLR\tags\all\City1\API_Driver\t...	100
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\LowInstrumentR...	XLR\tags\all\City1\API_Driver\t...	0
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\ItemTimezone	XLR\tags\all\City1\API_Driver\t...	300
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\Area	XLR\tags\all\City1\API_Driver\t...	City1
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\Device Tag	XLR\tags\all\City1\API_Driver\t...	City1\API_Driver
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\Address	XLR\tags\all\City1\API_Driver\t...	.main.temp
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\RawValue	XLR\tags\all\City1\API_Driver\t...	25.61
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\LowAlarmLimit	XLR\tags\all\City1\API_Driver\t...	0
VTScada_DA	XLR\tags\all\City1\API_Driver\temp\HighAlarmLimit	XLR\tags\all\City1\API_Driver\t...	100

Performance metrics at the bottom of the dialog:

- Initialise Server and Items (ms) : 6
- Open Server and items (ms) : 73
- Read Server items (ms) : 0
- Update display (ms) : 2

- Click **Start** to verify the communication