

## Using XLReporter with VTScada History

### Overview

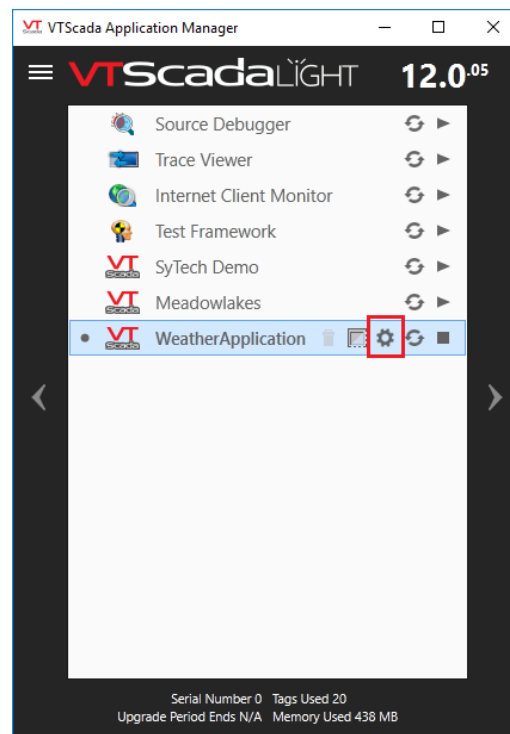
**XLReporter** takes historical values from VTScada to populate reports, periodically, on event or on-demand. The award-winning reporting software turns raw data into industrial metrics which are used for compliance, regulatory, improvements and operations.

Complete reports are distributed automatically by email, FTP, file server and printers. With the Web Portal, reports are viewed or produced on-demand from any device supporting a web browser such as a mobile phone, tablet or desktop.

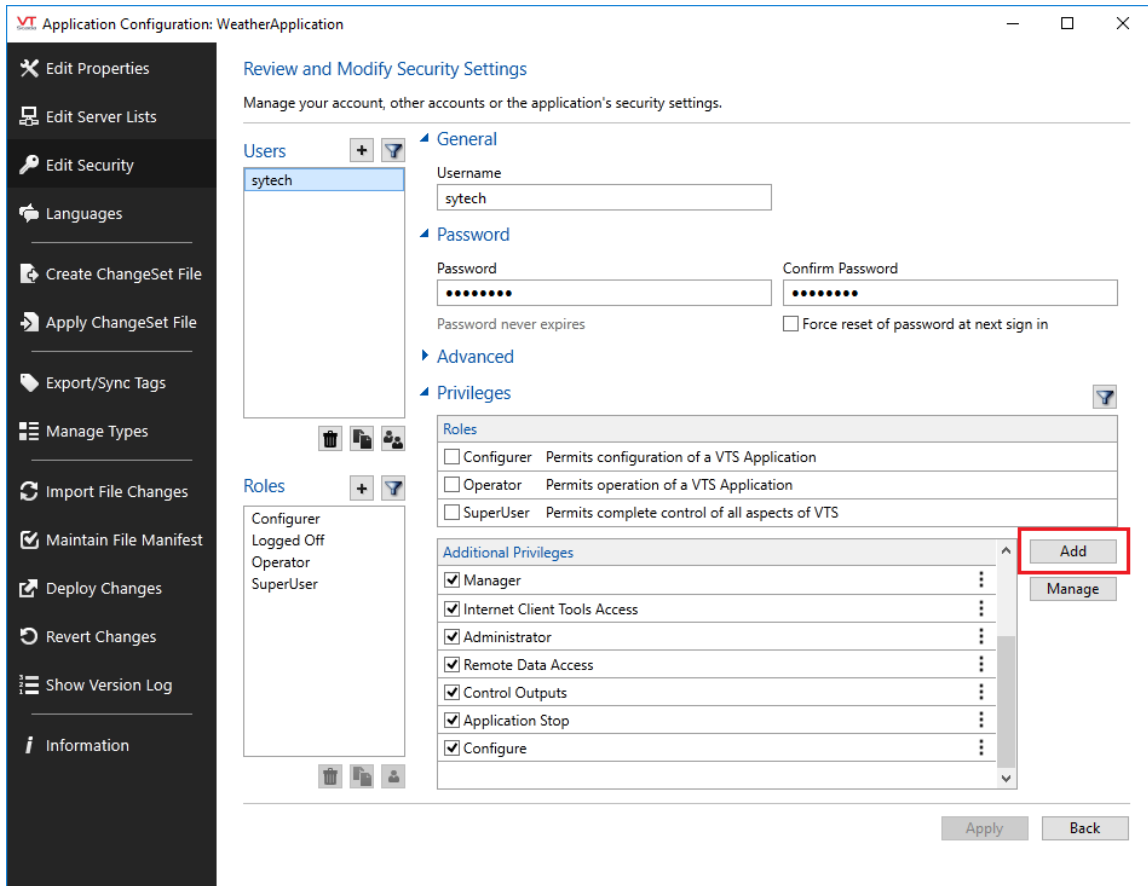
### Set up VTScada

#### Configure a User Account

The VTScada application must be secured with a user that has internet client access privileges. To access these settings, click the **Application Configuration** button from the **VTScada Application Manager**.



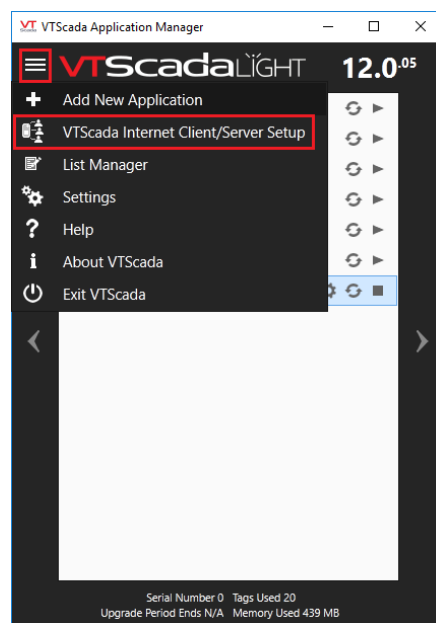
In the **Application Configuration**, select **Edit Security** on the left.



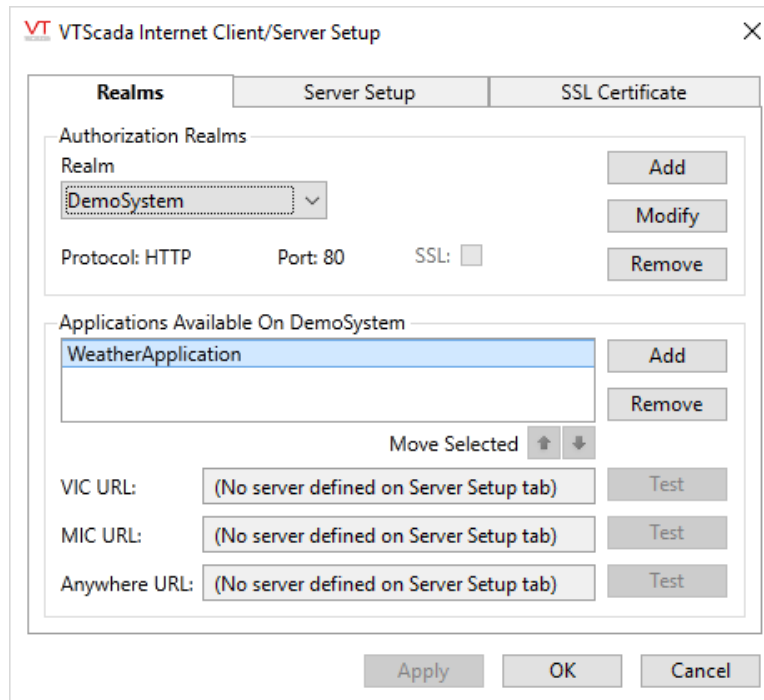
- Select **Accounts**
- Select the user to edit.
- Select **Add** on the right.
- Under **Page Access**, choose *Internet Client Monitor Access*.
- Click **OK**.
- Click **Apply** to save the changes.

## Configure the ODBC Server

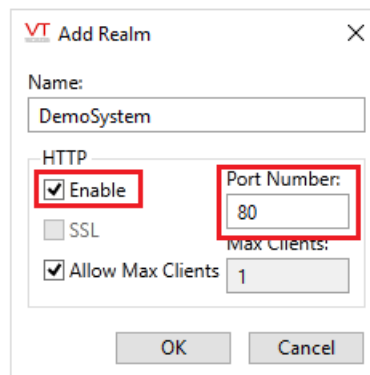
In order to retrieve historical data, the VTScada application must be configured as an ODBC server.



In the **VTS Application Manager (VAM)**, select the Hamburger list in the upper left and choose **VTScada Internet Client/Server Setup** option.



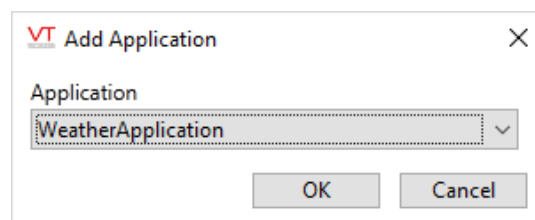
- Under the **Realms** tab, in the **Authorization Realms** section, click **Add** to open the **Add Realm** dialog.



- Specify a **Name**
- Under HTTP check Enable
- Set Port Number to 80.
- Click **OK**.

In the **Internet Client/Server Setup**,

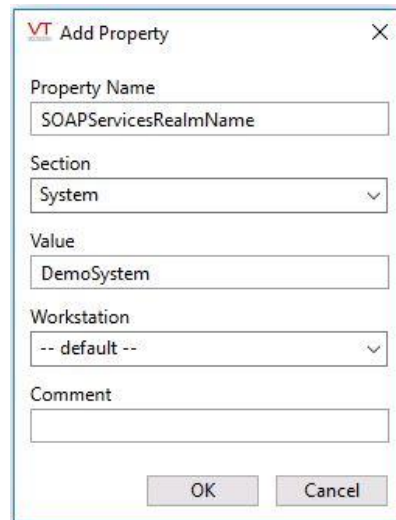
- Under the **Applications Available On ODBCRealm** section click **Add** to add the application to the **ODBC Realm**.



- Select the **Application** to add.
- Click **OK**.

Open the **Application Configuration** from the **VTScada Application Manager** Hamburger menu.

- Click **Edit Properties**.
- Click **Advanced Mode**.
- To add a property, click **Insert**.



- Set the **Property Name** to *SOAPServicesRealmName*
- Set **Value** to the name specified for your **ODBC Realm**.

Restart the application after adding this property in order for the changes to take effect.

## ODBC Setup

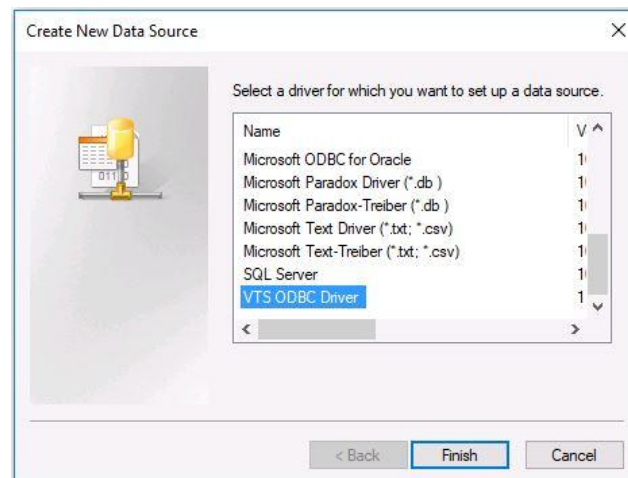
To access VTScada history data, the VTScada ODBC driver must be installed.

On the machine where access is required, run **VTSODBCDriverInstall.exe** to install the ODBC driver. This is distributed with VTScada.

## DSN

After installing the driver, an ODBC data source (DSN) can be created.

- From the **Windows Start Menu**, search *ODBC*
- Select the top option to open the **Microsoft ODBC Data Sources Administrator** utility
- Select the **System DSN** tab
- Select **Add**



- Under **Name**, select **VTS ODBC Driver** and click **Finish**. This opens the **VTS ODBC Setup** dialog.

The screenshot shows the 'VTScada ODBC Setup' dialog box with the following fields and values:

- DSN: xlreporter
- Description: (empty)
- VTScada Server: 127.0.0.1
- Port: 80
- SSL:
- Use backup servers:
- VTScada Realm: DemoSystem
- User ID: sytech
- Password: (masked with 10 dots)
- Connection timeout (sec): 10
- Max. concurrent connections: 0

Buttons at the bottom: Test Connection, OK, Cancel.

- For **DSN** enter a name that does NOT match the name of the VTS application.
- For **VTS Server**, enter the fully qualified domain name of the machine running the VTS application or the IP address.
- The **Port** and **SSL** settings should match that was entered when configuring the ODBC Realm described in a previous section.
- Enter that **User ID** and **Password** of a user having internet client access privileges.
- Click **Test Connection** to test the validity of the setup. The application must be running for this to succeed.
- If user groups are enabled, the **User ID** specified must be a member of the user group that matches the **VTS Realm** specified in order to connect.

## Historical Data Limitations

The number of rows returned from VTScada is limited to *10,000* by default. If necessary, the *SQLQueryMaxResultRows* property can be changed to return more rows. In the **Application Configuration**, click **Edit Properties**. If the property does not exist, it can be added by clicking **Insert**.

Set the **Property Name** to *SQLQueryMaxResultRows* and set **Value** to the desired maximum.

The screenshot shows the 'VT Add Property' dialog box with the following fields and values:

- Property Name: SQLQueryMaxResultRows
- Section: System
- Value: 25,000
- Workstation: -- default --
- Comment: (empty)

Buttons at the bottom: OK, Cancel.

# 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 the 'New Project' dialog box with the following fields and options:

- Project Name:** XLR\_Project
- Project Off Line
- Description:** Customer or Site name
- Project Location:** c:\XLRprojects

Buttons at the bottom: < Back, Next >, Finish, Cancel

## Step 2

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

The screenshot shows the 'New Project' dialog box with the following options and table:

- + Add** (highlighted in red)
- Modify (pencil icon)
- Delete (X icon)
- Catalog (gear icon)

| Name | Provider | Description |
|------|----------|-------------|
| *    |          |             |

- Select **Trihedral, VTScada Historical** values.

The screenshot shows the 'VTScada Historical values' dialog box with the following fields and options:

- Connector Name:** VTScada\_History
- Description:** (empty)
- Connection:**
  - DSN
    - Name:** (empty)
  - Manual
    - VTScada Server:** 127.0.0.1
    - Port:** 80  SSL
    - VTScada Realm:** DemoSystem
    - User ID:** sytech
    - Password:** (masked with asterisks)

Buttons at the bottom: OK, Cancel

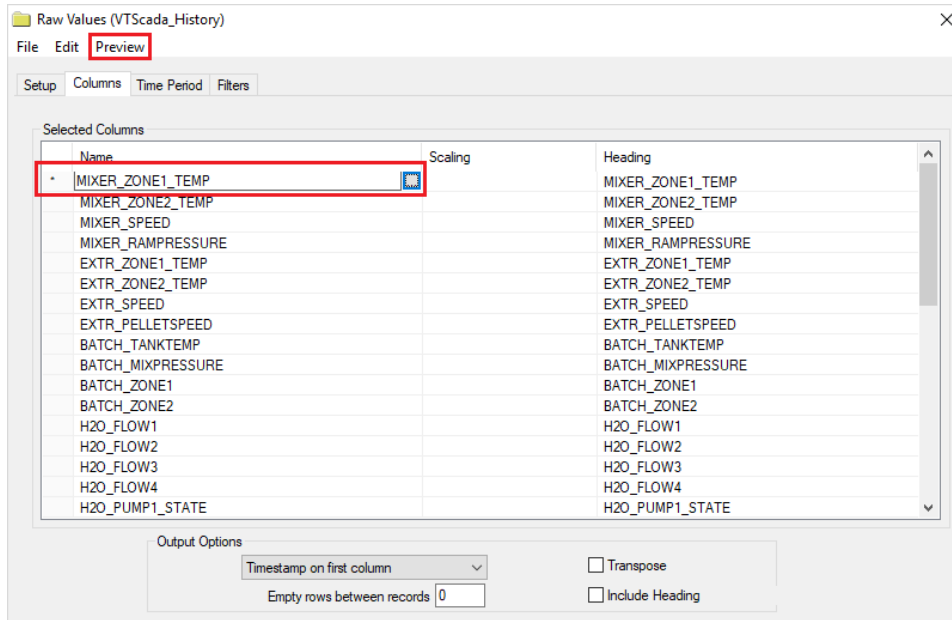
If a DSN has already been configured to VTScada history, select **DSN** and set **Name** to the DSN name available. Otherwise, select **Manual** and specify the settings required.

# Verify the Data Connector

**XLReporter** retrieves data for a report using a **History Group**. A quick way to create a History Group is from the **XLReporter Project Explorer**.

- Select, **Tools, Connector Groups**
- Select the connector
- Select **Add**.
- Set the Type *Raw Values* and click OK.

On the **Columns** tab of the group, select the tag **Name(s)**.



From the menu bar

- Click **Preview**
- Enter a *Start* date
- Click **Refresh**.

