

## Using XLReporter with Wonderware Historian

### Overview

**XLReporter** takes historical values from Wonderware Historian to populate workbooks, periodically or on event, without needing Excel. The award-winning reporting software turns raw data into industrial metrics which are used for compliance, regulatory, improvements and operations.

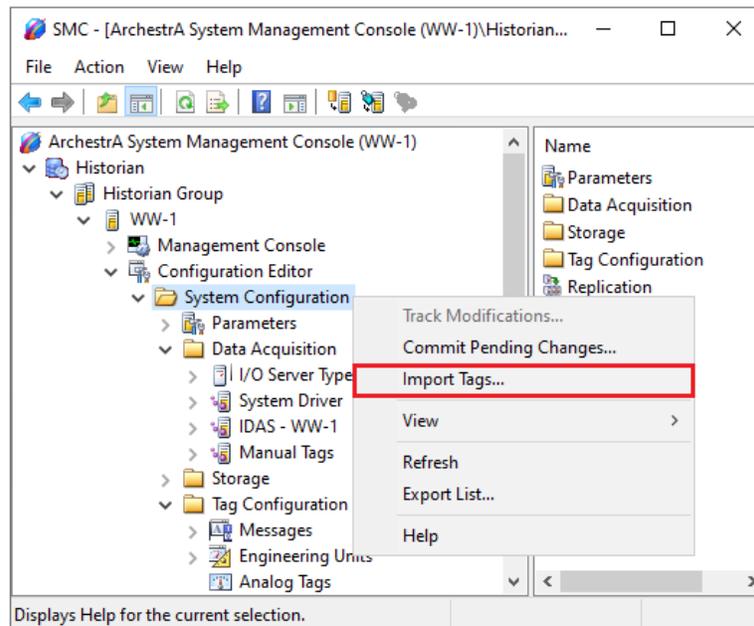
Complete reports are distributed automatically by email, FTP, file server and printers. With the Web Portal, reports are viewed or produced on-demand from any device supporting a web browser such as a mobile phone or tablet.

### Set up Wonderware Historian

Wonderware Historian stores data in a Microsoft SQL Server database. Tag data collection into the historian is configured in the Wonderware System Platform Management Console.

This is opened from the **Wonderware** program group by selecting **Wonderware Utilities, System Platform Management Console**.

Any tag in the InTouch Tag Dictionary can be logged by the Wonderware Historian by importing the tag. To import,



- Expand **Historian, Historian Group**, the Historian machine name, **Configuration Editor**.
- Select **System Configuration** right-click and select **Import Tags**.
- Follow the **Tag Import Wizard**.

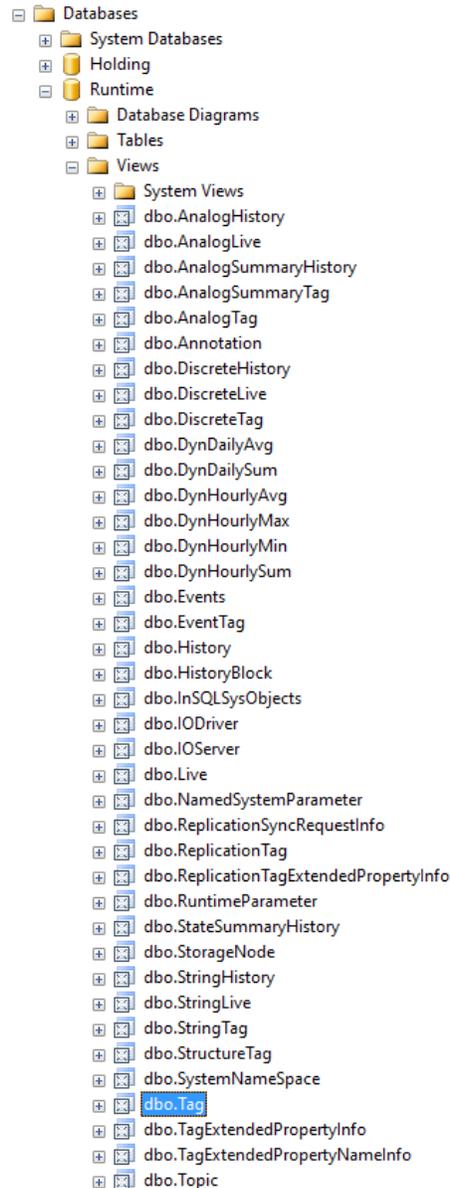
# SQL Server Prerequisites

## Verify Database

To verify, open **Microsoft SQL Server Management Studio** and connect to the SQL Server instance where the Wonderware Historian database is configured.

Once connected,

- Expand the **Runtime** database.
- Expand **Tables**.
- Select the **Tag** table.



Right click the **Tag** table and choose *SELECT TOP 1000 Rows*. This should display data from the table representing the tags configured in the historian.

If the database or table does not exist or no data is displayed, contact Wonderware technical support to troubleshoot and correct these issues.

## SQL Server Considerations

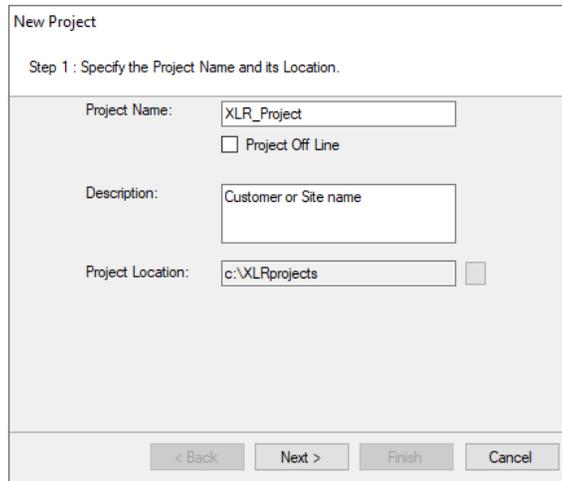
When using SQL Server there are some things to take into consideration including remote connectivity and user authentication. For information on what to consider, see the technical note: How to Configure Microsoft SQL Server.

## 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).



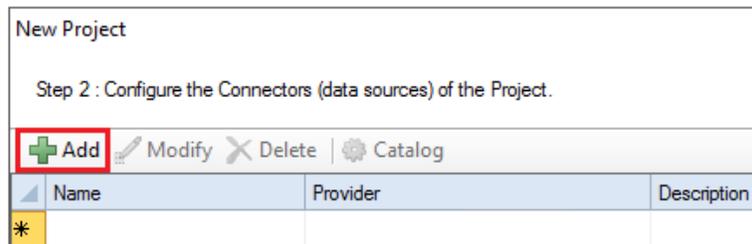
The screenshot shows the 'New Project' dialog box with the following fields and options:

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

At the bottom, there are four buttons: < Back, Next >, Finish, and Cancel.

### Step 2

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



The screenshot shows the 'New Project' dialog box with the following elements:

- Step 2 : Configure the Connectors (data sources) of the Project.**
- Buttons: **+ Add** (highlighted with a red box), Modify, Delete, and Catalog.
- Table with columns: Name, Provider, and Description.
- Table content: A single row with an asterisk (\*) in the Name column.

Select **Wonderware, Wonderware Historian**.

- Under **Primary Server** click the browse pushbutton ([...]) for **Name**.

Database Connect

Wonderware Historian

Connection name: Microsoft SQL Server

Server name: WW-1 Refresh...

Port number: Use Default

Log on to the server

Use Windows Authentication

Use SQL Server Authentication

User Name: sa

Password: \*\*

Database: Runtime Refresh...

Test Connection

Cancel

- Select the **Server Name** as the machine name for the Historian.
- For **Log on to the server**, specify the proper authentication.
- Leave Database as *Runtime*.
- Click **Test Connection** to verify connectivity and return to the connector setup.

Verify the Data Connector

**XLReporter** retrieves data from the **Data Connector** using a **History Group**.

From the **XLReporter Project Explorer** select, **Tools, Connector Groups**

Select the *Wonderware Historian* connector and then select **Add**.

- Set the **Type Raw Values** and click **OK**.

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

Raw Values (Wonderware\_Historian)

File Edit Preview

Setup Columns Time Period Retrieval Filters

Selected Columns

Name	Scaling	Heading
Analog001		Analog001
Analog002		Analog002
Analog003		Analog003
Analog004		Analog004
Analog005		Analog005
Analog006		Analog006
Analog007		Analog007
Analog008		Analog008
Analog009		Analog009
Analog010		Analog010

Output Options

Timestamp on first column: 0

Empty rows between records: 0

Transpose

Include Heading

Select **Preview**, pick a *Start* date and click **Refresh**.

Preview

Refresh Stop

Date

Start 17 Jan 2020

End 18 Jan 2020

Date	Analog001	Analog002	Analog003	Analog004	Analog005	Analog006	Analog007	Analog008
1/17/2020	50	50	50	50	50	50	50	50
1/17/2020 12:01:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:02:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:03:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:04:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:05:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:06:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:07:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:08:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:09:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:10:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:11:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:12:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:13:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:14:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:15:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:16:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:17:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:18:00 AM	50	50	50	50	50	50	50	50
1/17/2020 12:19:00 AM	50	50	50	50	50	50	50	50

Rows 1440