

Using XLReporter with Wonderware Historian Summaries

Overview

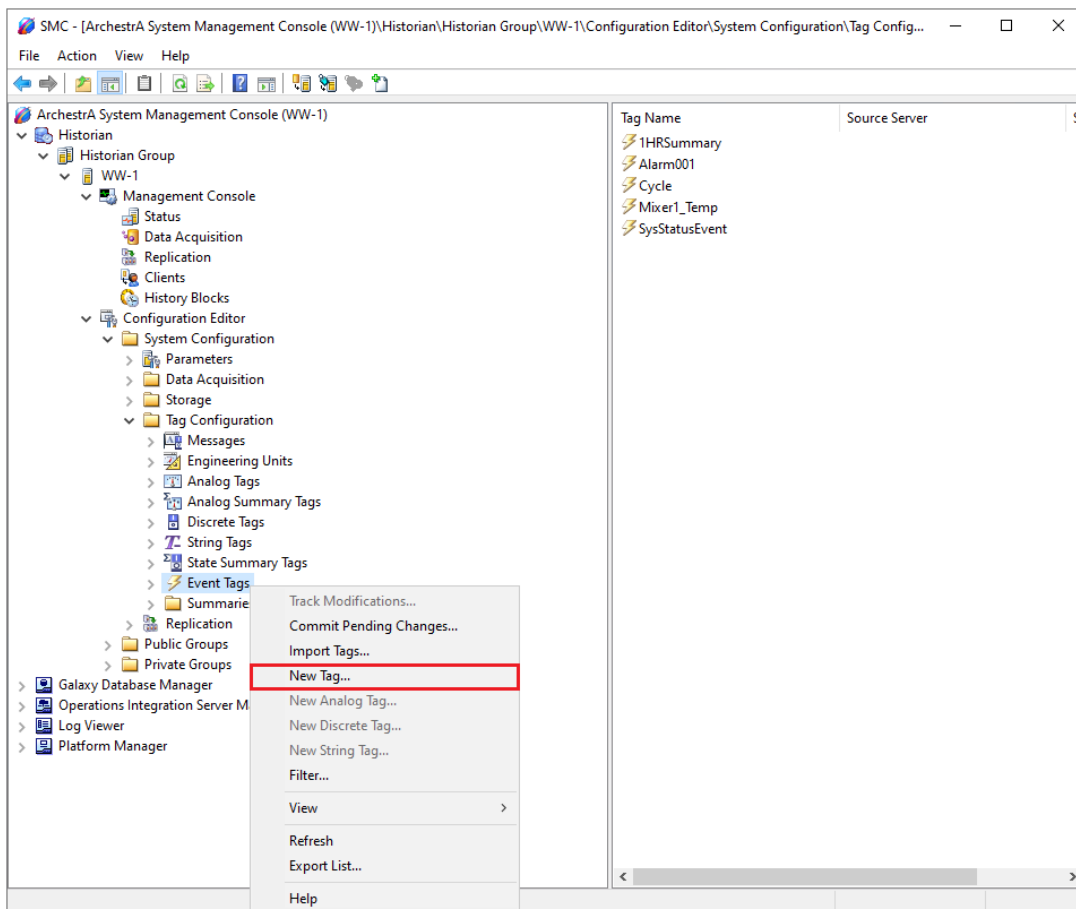
XLReporter takes historical values from Wonderware Historian Event Tag Summaries to populate workbooks, periodically or on event, without needing Excel. The award-winning reporting software turns raw data into industrial metrics which are used for compliance, regulatory, improvements and operations.

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.

Wonderware Historian Configuration

Wonderware Historian Event Tags are used to trigger actions in the historian application based on a timed schedule (among other conditions). Event Tag configuration is performed in the **Wonderware System Platform Management Console**.

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



- Expand **Historian, Historian Group**, the Historian machine name, **Configuration Editor, System Configuration, Tag Configuration**.
- Select **Event Tags** right-click and select **New**.
- In **New Event Tag** assign a **Unique Tag Name**.
- On the **General** wizard page assign a **Description** and **Priority**.

New Event Tag - Detector

Detector Type:

Frequency: Hourly, Daily, Weekly, Monthly, Periodic

Specify the starting time within the fixed-length frequency period.

Day: Hour: Minute:

Start Date/Time:

< Back Next > Cancel Help

- On the **Detector** page, set **Detector Type** to *Schedule*.
- On the **Action** page, set **Action Type** to *Summary*.

The **Action** wizard is used to select the tags to summarize.

New Event Tag - Action

Action Type: Post Detector Delay: ms

Type	Duration (s)	Resolution (ms)	Timestamp	Description
MAX	3600	1000	Beginning	

Add Properties Delete Clear All Tags

< Back Finish Cancel Help

- Click **Add** configure summary calculations.
- Click **Tags** to assign the tags to be summarized.

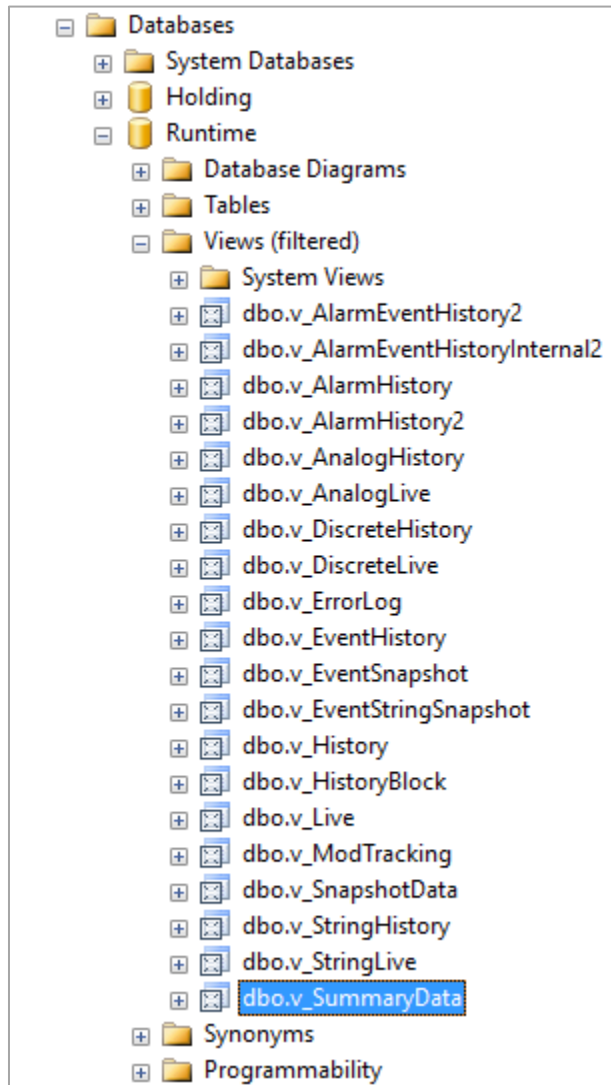
SQL Server Prerequisites

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 **Views**.
- Select the **v_SummaryData** view.



Right click the **v_SummaryData** view and choose *SELECT TOP 1000 Rows*. This should display data from the table representing the summary calculations generated by 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

Navigation 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 elements:

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

Select **Wonderware, Wonderware Historian**.

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

The screenshot shows the 'Database Connect' dialog box with the following fields and options:

- Connection name:** Microsoft SQL Server
- Server name:** WW-1 (with a Refresh... button)
- Port number:** (with a Use Default checkbox)
- Log on to the server:**
 - Use Windows Authentication
 - Use SQL Server Authentication
- User Name:** sa
- Password:** **
- Database:** Runtime (with a Refresh... button)
- Test Connection** button
- Cancel** button

- 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

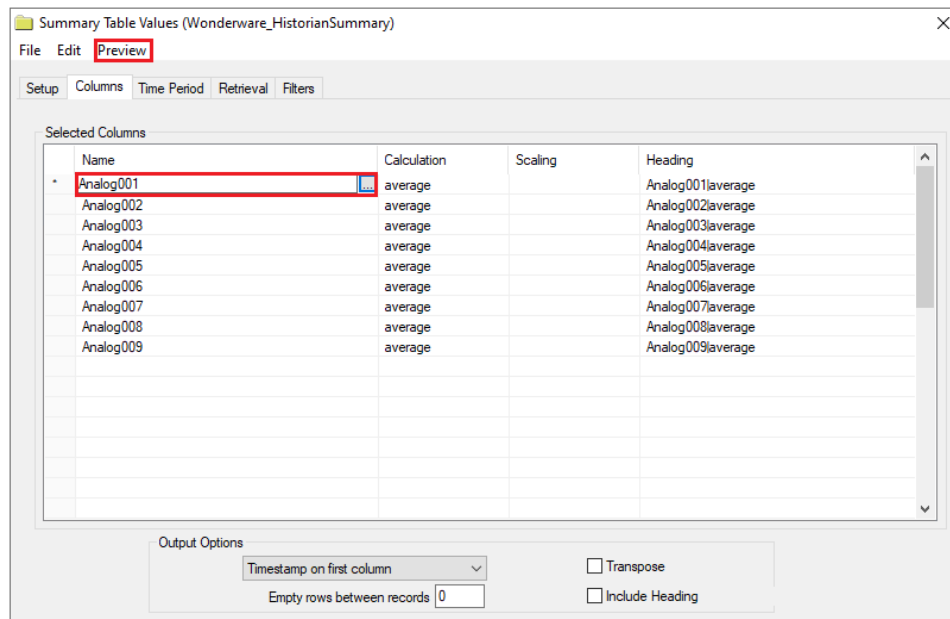
XLReporter retrieves data from the **Data Connector** using a **History Group**.

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

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

- Set the **Type Summary Values from Server** and click **OK**.

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



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

Date	Analog001	Analog002	Analog003	Analog004	Analog005	Analog006	Analog007
1/20/2020	71.2565575917562	76.9335652669271	35.2923432985942	60.4329112370809	56.1615735371908	79.6285486857096	78.6127400...
1/20/2020 1:00:00 AM	77.9279656728109	78.3411591847738	39.281490389506	59.5793739318848	58.728964360555	79.8644593556722	83.4893273...
1/20/2020 2:00:00 AM	60.0651746114095	80.6539992014567	42.1867413838704	64.1127047886649	56.9550493876139	82.1772993723551	73.0477713...
1/20/2020 3:00:00 AM	77.5225802103678	82.5539779663086	43.2159718195597	72.4492804209391	57.8256671905518	84.077278137207	80.1556940...
1/20/2020 4:00:00 AM	78.7296023050944	78.7756571451823	49.8003941853841	81.6768962860107	58.0570704778035	81.7419392903646	74.1670136...
1/20/2020 5:00:00 AM	60.0950351715088	79.3458937327067	58.8615875244141	88.5720797220866	57.2080399195353	82.513641611735	80.2362487...
1/20/2020 6:00:00 AM	54.2090490976969	79.2663794199626	59.2841454188029	90.7261463165283	55.3715852101644	83.3426199595133	80.6587989...
1/20/2020 7:00:00 AM	76.8370248158773	84.5309673309326	65.3625969750977	87.3866163889567	52.7000534057617	76.9719868977865	73.8565860...
1/20/2020 8:00:00 AM	78.0422557830811	91.4947639465332	74.1151916503906	79.7200862884522	54.1941908518473	78.4007469177246	73.6248584...
1/20/2020 9:00:00 AM	54.772340520223	86.60368080678304	75.8060601552327	70.4046941121419	54.9551807403964	78.0257104237874	74.4400246...
1/20/2020 10:00:00 AM	77.0393291473389	84.8745990753174	73.2199073791504	62.6945734659831	56.5867635726929	78.7284580230713	74.7815269...
1/20/2020 11:00:00 AM	78.5647525787354	78.75470606486	69.9339093526204	59.2830931345622	58.5014525731405	81.5246982574463	75.8870114...
1/20/2020 12:00:00 PM	54.9038331349691	79.0760946909587	70.514098739624	61.3619797388713	56.3604206085205	82.7843804677327	76.4672008...
1/20/2020 1:00:00 PM	71.4336929321289	78.235859063721	68.0241949717204	68.2050193786621	55.4470646540324	79.4907489776611	73.9772970...
1/20/2020 2:00:00 PM	78.7176825205485	82.6440312703451	64.0622376759847	77.4217408498128	52.3508627573649	83.8989293416341	73.3403321...
1/20/2020 3:00:00 PM	71.5011512756348	88.0887514750163	63.2653067270915	85.7924786885579	56.1816880544027	89.3436495463053	77.1983884...
1/20/2020 4:00:00 PM	66.3546499888102	62.3302477518717	65.9177104949551	90.393093363444	56.9092434565226	76.2521811671399	79.8507981...
1/20/2020 5:00:00 PM	79.0250194549561	76.9343719482422	76.855678431193	89.6164578755697	57.6610809326172	77.178839111328	74.2930750...
1/20/2020 6:00:00 PM	70.9382246653239	85.2237122853597	67.8652631759644	83.7338733673096	54.5804382960002	85.3606522878011	80.6597539...