

**Description:** This application note shows you how to set up a ReportWorX report to retrieve data from Wonderware's IndustrialSQL (InSQL) Server historian.

**OS Requirement:** Win XP/Server 2003/ Server 2008/Vista/Windows 7

**General Requirement:** ReportWorX must be installed, and you must have a connection to a valid IndustrialSQL database server.

## Creating a New Report

1. The first thing you have to do is create a report. You can do this by right-clicking on any of your Report folders and selecting **New → Report**.
2. After naming your report, create a new template object by clicking the New Report Template icon next to the Report Template field.



Figure 1 - New Report Template

3. The Report Template Wizard will appear. Click Next.
4. After naming your template, click Next.
5. Select Create blank Excel workbook and click Next.
6. Click Finish to launch MS Excel.

## Configuring the Template

1. You should now have a blank Excel Workbook showing on your screen. Right click on a cell and select Connect to new Data Source → Open Database. This will open the Database Connection Configuration Wizard.
2. Click on Browse.
3. Right-click on the SQL Server Connections folder and select Insert New Connection.
4. In the Data Link Properties dialog, select or enter your server name (or leave blank for the local server), choose your authentication method, and select the Runtime database. When you are finished, hit OK.
5. Select your new Runtime connection in the Database Connections Browser and hit OK, then Next.

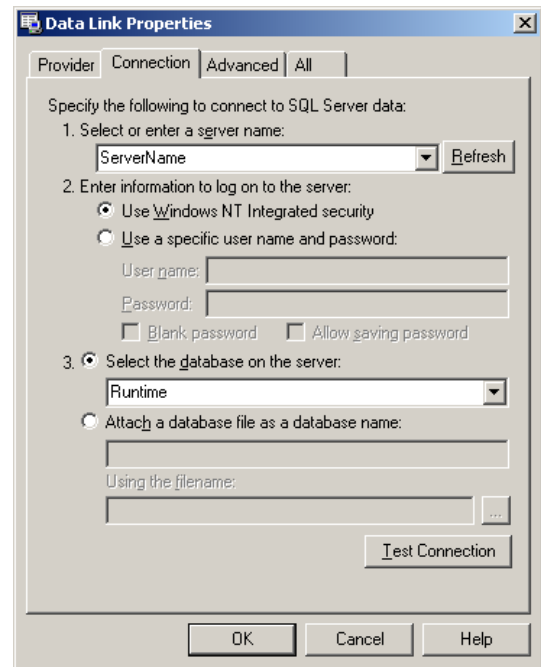


Figure 2 - Data Link Properties

6. Select Edit → Simple Query. This will bring up the SQL Query Builder.
7. Select the '...' button in the upper right corner of the dialog.
8. Under 'Views' select the v\_AnalogHistory view and the following columns: DateTime, TagName, Value, and Quality. If both analog and digital data are needed, InSQL 9.0 also exposes the History table to retrieve both discrete and analog data.

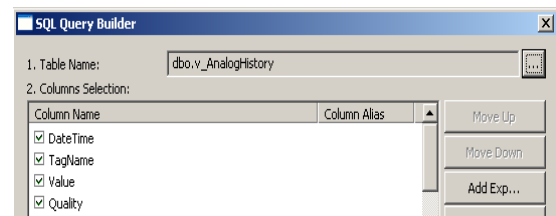
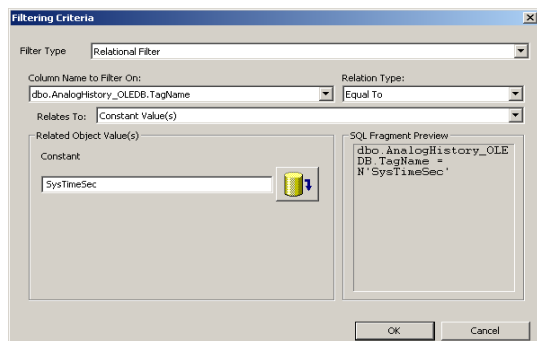


Figure 3 - Simple Mode Data Selection Table Columns

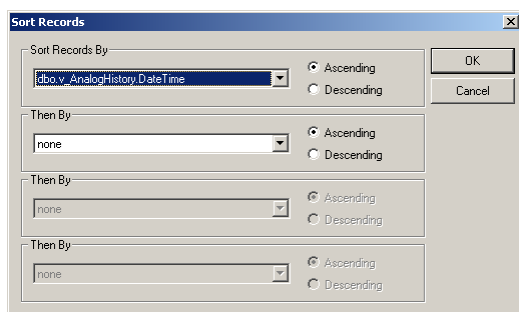
9. Click the Add Filtering ... button and add a filter as shown below for the TagName column. The filter value should equal the name of the InSQL tag you want to retrieve data for. In this case the system tag SysTimeSec is used.

**NOTE:** A filter is required to establish a where clause to successfully retrieve data from the InSQL OLEDB provider.



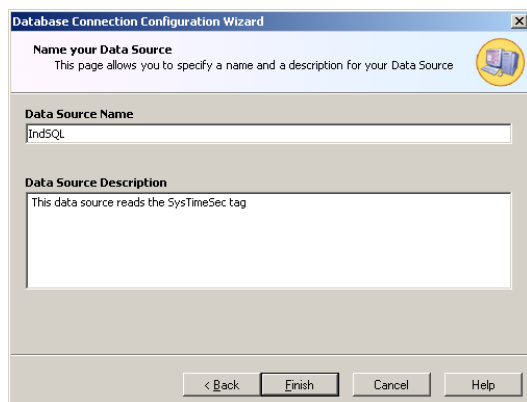
**Figure 4 - Filter Selection**

10. Add a sort order if desired. Click OK.



**Figure 5 - Sort Order**

11. Click Next. At this point the “Name your Data Source” dialog appears. After naming the data source select Finish.



**Figure 6 - Name your Data Source**

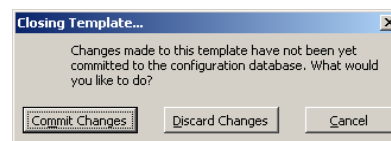
12. Now the Layout Manager will appear to allow the data mapping to take place. The data mapping can be easily set by just selecting the “\*” just above the columns.
13. To add headers to the columns simply select the “Show Header” icon in the upper toolbar.
14. It may also be necessary to go to the “Fill Options” tab in order to select the “Auto Expand” option.

15. Once the data mapping has been completed select OK. The spreadsheet will appear as in Figure 7.

	A	B	C	D	E	F	G
1	DateTime	TagName	Value	Quality			
2							
3							
4							

**Figure 7 - Configured Cells for Open Database Connection**

16. Close Microsoft Excel and select “Commit Changes” to save changes. There it will be necessary to add a comment about the changes that were made.



**Figure 8 - Close Excel and Commit Changes**

17. Back at the ReportWorX Configurator window, click the Execute Report Now button.
18. Click the “Monitor View” button at the top of the ReportWorX Configurator to view the status of the report.
19. The monitor pane will appear as shown below. Click the icon next to the report name to view the report. The report should be similar to the workbook shown in Figure 10.

Execution Time	Report User	Report File	Report Status
09/06/2006 03:31:33 PM	T36VA.dmanistrator	IndSQL	Completed

**Figure 9 - Monitor View Pane**

	A	B	C	D
1	DateTime	TagName	Value	Quality
2	9/6/2006 15:31	SysTimeSec	34	0
3	9/6/2006 15:30	SysTimeSec	58	0
4	9/6/2006 15:30	SysTimeSec	22	0
5	9/6/2006 15:29	SysTimeSec	45	0
6	9/6/2006 15:29	SysTimeSec	9	0
7	9/6/2006 15:28	SysTimeSec	33	0
8	9/6/2006 15:27	SysTimeSec	56	0
9	9/6/2006 15:27	SysTimeSec	20	0
10	9/6/2006 15:26	SysTimeSec	43	0
11	9/6/2006 15:26	SysTimeSec	7	0
12	9/6/2006 15:25	SysTimeSec	31	0
13	9/6/2006 15:24	SysTimeSec	54	0
14	9/6/2006 15:24	SysTimeSec	18	0
15	9/6/2006 15:23	SysTimeSec	42	0
16	9/6/2006 15:23	SysTimeSec	5	0
17	9/6/2006 15:22	SysTimeSec	29	0
18	9/6/2006 15:21	SysTimeSec	53	0
19	9/6/2006 15:21	SysTimeSec	16	0
20	9/6/2006 15:20	SysTimeSec	40	0
21	9/6/2006 15:20	SysTimeSec	3	0
22	9/6/2006 15:19	SysTimeSec	27	0
23	9/6/2006 15:18	SysTimeSec	51	0
24	9/6/2006 15:18	SysTimeSec	14	0
25	9/6/2006 15:17	SysTimeSec	38	0
26	9/6/2006 15:17	SysTimeSec	2	0
27	9/6/2006 15:16	SysTimeSec	25	0
28	9/6/2006 15:15	SysTimeSec	49	0
29	9/6/2006 15:15	SysTimeSec	13	0
30	9/6/2006 15:14	SysTimeSec	36	0

**Figure 10 - Resulting Report with Data**