# <u>Tech Note 704</u> Configuring ActiveFactory Reporting from Wonderware Information Server (WIS)

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## Introduction

All external data sources configured for Wonderware Information Server (WIS) use a common definition and configuration, called a shared data source. Shared Data Sources are shared by WIS components such as ActiveFactory reports, TableWeaver, Factory Alarms, and ArchestrA reporting. This allows the user to have a single data source and use it in multiple components.

This *Tech Note* shows you step-by-step procedure to configure a **Historian** data source so that you can use ActiveFactory Reporting Website (AFRWS) components such as Reports, Trend and Query in WIS to access data from the Historian Server.

## **Application Versions**

- Wonderware Historian Client v10.0
- Wonderware Information Server (WIS) 4.0
- Wonderware Historian 9.0 P02 or 10.0
- Microsoft Office Excel 2003 SP2 (or later), or 2007 SP2 (or later)
- Microsoft SQL Server 2005 or Microsoft SQL Server 2008

## Acronyms

- AFRWS: ActiveFactory Reporting Website.
- WIS 4.0: Wonderware Information Server 4.0 (used together with AFRWS).
- InSQL: Wonderware Historian version 9.0 or 10.0.

## Assumptions

This Tech Note assumes that you are familiar with the following products:

- Historian (or InSQL Server) v9.0 or later.
- Historian Client v10.0 or later.
- Wonderware Information Server (WIS) version 4.0 or later.

• MS SQL Server version 2005 or later.

# Configuration Tasks

## **Review Your Configuration**

Use the WIS Configurator to set the connection properties and acquire the server license. Configuration must be completed before you can begin configuring the **Historian** data source. Figure 1 (below) shows the successful Information Server configuration.

**Note:** A strong **sa** User Name and Password is highly recommended for SQL Authentication. The sa login shown in Figure 1 is used in a secure lab environment.

🚰 Configurator		
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Wonderware Information Server     Wonderware Information Server     ActiveFactory Reporting     ArchestrA Reporting     MultiViews	Web Configuration ── ⊻irtual Folder Name ─ Database Configuration ──	Wonderware
Sample Content	<u>S</u> erver	HISTORIANTIER1
	Authentication Mode	C Windows © SQL
	<u>U</u> ser Name	\$a
	Password	ж
	Application Account	
	User <u>N</u> ame	MAGELLANDEV2000\www.ser
	P <u>a</u> ssword	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	Confirm Password	SCHORDCHORK
	License Status	
	Server License	ACQUIRED
	Write Enable License	ACQUIRED
	Double-click Message for Detail Authentication flags of "Wonde	ls erware'' virtual directory are properly set.
	Authentication flags of "SvSQL	Provider" virtual directory are properly set.

	Authentication flags of "SDSManager" virtual directory are properly set. Authentication flags of "AADataSvc" virtual directory are properly set. Authentication flags of "Scripts" virtual directory are properly set. "SVAppPool" Application Pool properties are properly set. Configuration State of ASP .NET is enabled. Configuration state of Web Server Extensions is properly set. Validation of feature configuration is complete. Validating license status for "SVoyager_Portal" feature. License acquired for feature "SVoyager_Portal". Validating license status for "SVoyager_WriteEnable" feature. License acquired for feature "SVoyager_WriteEnable" feature. ArchestrA License Server has been detected on this computer.	•
Refresh All Messages	C <u>o</u> nfigure Dose	

FIGURE 1: SUCCESSFUL WIS CONFIGURATION

**Note:** If the License Status does not show ACQUIRED as shown in above figure, click the **License Manager** button to open the ArchestrA License Manager and make sure to install the proper license for WIS v4.0.

- 1. Click the ActiveFactory Reporting item.
- 2. You will see a dialog box similar to Figure 2 (below).

Note that because the items in this box are disabled, you cannot modify anything. This is because the Historian data source has not been configured. Clicking the **Configure** button will generate the **Historian data source details are invalid** message.

🚰 Configurator			_ 🗆 🗵
Eile Help			
Wonderware Information Server     Wonderware Information Server     ActiveFactory Reporting     ArchestrA Reporting     MultiViews	Web Configuration ⊻irtual Folder Name	AFWeb	
Sample Content	Historian Data Source		
	Select Data Source		
	Or	Define <u>N</u> ew Historian Data Source	
	Historian Configuration		
	S <u>e</u> rver	Historiantier1	
	SQL Admin <u>U</u> ser Name	\$ð	
	SQL Admin User Password		

	Double-click Message for Details Check of ActiveFactory Reporting Prerequisite has started. Check of the Excel version has started. Check of the Excel version is complete. Prerequisite check succeeded. Check of ActiveFactory Reporting Prerequisite is complete.
Refresh   All Messages	C <u>o</u> nfigure   <u>C</u> lose

FIGURE 2: HISTORIAN DATA SOURCE NOT CONFIGURED YET

### To Configure the Historian Data Source

- 1. Click on Windows Start > Programs > Wonderware > Information Server > Home Page to start up the Wonderware Information Server.
- 2. Click Launch Pad > System, and expand the Administration node.
- 3. Click Data Source Manager. The Data Source Manager panel appears:

🖉 W O N D E R W A R E - Windows Inte	ernet Explorer			_O×
COO v le http://historiantier1/W	Live Search	P •		
Eile Edit View Favorites Iools	Help			
🙀 Favorites 🛛 🙀 🏈 Suggested Sites	• 😰 Web Slice Gallery •			
<b>WONDERWARE</b>		👌 • 📾	- 🖃 🖶 - Bage - Safety -	Tools • 🔞 • 🏾 »
Customize	FORMATION SERVER		Home   🎧 Help   🖗 Abc	but   🖨 Log off
Launch Pad	× Data Source Manager			
System  Administration Application Manager	The Data Source Manager lists all th Data Source" button. To modify the "Modify" button. To delete a data s data source details, just click on the	e configured shared data sou e properties of existing data s ource select the correspondin data source	rces. To create a new shared d ource select the corresponding g check box and click on "Del	lata source click or check box and cl ete" button. To vi
User Manager	Configured Shared Data Sources	•		
Portal Configuration	Data Source Name Data Source Type			
Data Source Manager     Factory Alarm Manager	New Data Source	Modify	Delete	
Panel Manager  Win-XML Exporter				
Documentation				•
		© 2000-2	Trusted stee	Inghts reserved.
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FIGURE 3: DATA SOURCE MANAGER PANEL

- 4. Click New Data Source then select Historian from the list. You see the Add New Shared Data Source dialog box.
- 5. Type the Data Source name, Descriptions, ServeName, and Database name (Figure 4 below).

Note that the **ServerName** is the name of the computer on which the **Historian** is installed, and the Database name for the Historian is **Runtime**.

- 6. You can either use the SQL Server or the Windows Integrated Security authentication mode. SQL Server authentication mode is being used in this example.
- 7. Check the Default for this Data Source Type option.
- Because you will use the ActiveFactory Web reporting feature, set the connection timeout for the data source to some value other than O (the default). Doing so will ensure Internet Explorer doesn't time out when Wonderware Information Server tries to connect to the Wonderware Historian database.
- 9. In the **Provider** field, type the name of the provider based on the SQL Server version installed according to the following:
  - If SQL Server 2005 is installed, type SQLNCLI.

- If SQL Server 2008 is installed, type SQLNCLI10.
- 10. Check the **Has HTTP Mode** box if you want to access the database with HTTP. Enter the associated URL in the URL Connection box (see **Technote 498 Installing SQLXML on Wonderware Information Server 3.0**).
- 11. Click the **Test Connection** button to verify that the Add New Shared Data Source is configured correctly. The connection test should return with **Connection succeeded** as shown in Figure 4 (below).
- 12. Click Save to save the data source configuration.

Data Source Manager save the details.	
Modify Shared data sources	
Data Source Type :	Historian 💌
Data Source Name :	Historian1
Description :	Enter the InSQL data source description her
ServerName :	HistorianTier1
Database :	Runtime
Integrated Security :	
User Name :	sa
Password :	
Default for this Data Source Type :	
Connection Timeout(in Sec) :	0
Query Timeout(in Sec) :	0
Provider :	(SQLNCLI10)
Has HTTP Mode :	
URL Connection :	
Save	Cancel Test Connection
Connection succeeded	
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FIGURE 4: DATA SOURCE CONFIGURATION IN DATA SOURCE MANAGER

- 13. Now, go back to the Configurator and select the **ActiveFactory Reporting** item. The Historian configuration you made for the Historian data source should now be active on this window.
- 14. Since the Historian data source was configured to use SQL authentication mode, type the corresponding password and click the **Configure** button.

🖥 Configurator		
Eile Help		
Wonderware Information Server     Monderware Information Server     ActiveFactory Reporting     ArchestrA Reporting     MultiViews     Sample Content	Web Configuration ⊻irtual Folder Name AFWeb	
	Historian Data Source	
	Select Data Source Historian1	<b>_</b>
	Or Define <u>N</u> ew Historian	Data Source
	Historian Configuration	
	Server HistorianTier1	
	SQL Admin User Name sa	
	SQL Admin User <u>P</u> assword	
	Double-click Message for Details	
	Check of ActiveFactory Reporting Prerequisite has started. Check of the Excel version has started. Check of the Excel version is complete. Prerequisite check succeeded. Check of ActiveFactory Reporting Prerequisite is complete.	
Refresh   All Messages	Confi	gure   <u>C</u> lose

### FIGURE 5: HISTORIAN DATA SOURCE CONFIGURATION IN WIS CONFIGURATOR

15. When it is done successfully, the Configurator should show the **Configuration of ActiveFactory Reporting has successfully completed** message in the Message Panel (Figure 6 below).

🖥 Config	gurator				_ 🗆 🗵
Eile	Help				
	Wonderware Informatio Information Server ActiveFactory Rep	on Server oorting	Web Configuration	AFWeb	
E	Archesta Report MultiViews     Sample Content	ig	Historian Data Source		
			Select Data Source	Historian1	✓
			Or	Define <u>N</u> ew Historian Data Source	
			Historian Configuration		
			Server	HistorianTier1	
			SQL Admin <u>U</u> ser Name	sa	
			SQL Admin User Password	10t	
			Double-click Message for Details		
	Check of the Excel version has sta Check of the Excel version is com Prerequisite check succeeded. Check of ActiveFactory Reporting Configuration of ActiveFactory Re Generation of the configuration fill Creating the "AFWeb" virtual dire Configuration of the Historian data Update of the SuiteVoyager datal Upgrading the ActiveFactory Rep Upgrade of the ActiveFactory Rep Upgrade of the language files Update of the language file is corr Configuration of ActiveFactory Rep	arted. plete. g Prerequisite is complete. eporting has started. e is complete. ctory is complete. a source is complete. pase is complete. orting schema porting schema is complete. plete. eporting has successfully completed.	*		
Be	efresh	essages		Configure	Close

#### FIGURE 6: SUCCESSFULLY CONFIGURED MESSAGE

#### B. Nguyen

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