

Reporting from ArchestrA FSGateway

XLReporter generates Excel based reports from Wonderware's ArchestrA FS Gateway using current process values.

The purpose of this document is to describe how to setup ArchestrA FSGateway for **XLReporter**.

Process Values

XLReporter can take snapshots of the process values and add them to an existing report worksheet, periodically or on event. To prevent excessive build-up of information in a single worksheet, new workbooks and worksheets can be created automatically.

Process values can be retrieved from ArchestrA by **XLReporter** via the ArchestrA FSGateway OPC Server. This interface is available both locally and remotely.

Before you Begin

In order for **XLReporter** to communicate with ArchestrA FSGateway, the machine where **XLReporter** is installed must also have the OPC core components installed. The OPC core components are provided in the tools folder of the **XLReporter** install CD or from www.OPCFoundation.org.

If **XLReporter** is installed on a PC that is remote to ArchestrA FSGateway then a number of settings need to be configured on both the server and client machines. This includes having matching Windows user accounts on both machines and enabling DCOM on the machine where ArchestrA FSGateway is installed.

For a detailed explanation of what is needed, please read the OPC Training Institute document *OPC_and_DCOM_5_things_you_need_to_know* that is provided in the Tools folder of the **XLReporter** install CD or from www.SyTech.com.

Setting up the OPC Server

To configure the ArchestrA FSGateway OPC server to serve up data, open the Wonderware **System Management Console**.

Expand **DA Server Manager, Default Group, Local** and select **ArchestrA.FSGateway.3**. If the server is not active, right-click and select **Activate Server**.

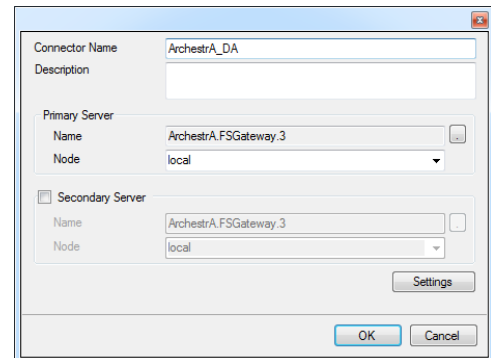
To add items to the server, expand **ArchestrA.FSGateway.3** and select **Configuration**. Right-click to add the type of object you wish to add. For example, to add items from InTouch, select **Add InTouch Object**.

Then, based on the type of object, add items. For example, for **InTouch**, set the **Item Browse Path** to the folder of the current InTouch project. To add tags from your project so they are available through the OPC server, click the **Tag Browser** button and select each tag you want.

Creating a Real Time Data Connector

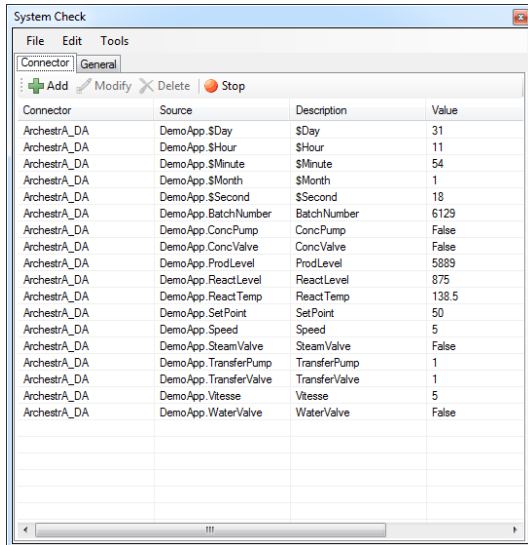
To connect **XLReporter** to ArchestrA FSGateway for real time data, you will need to create a **Connector**. To do this, open **XLReporter's Project Explorer**, and open **Connectors** from the **Data** tab. In **Connectors**, select **Add**.

Select **Wonderware, ArchestrA FSGateway Real-time values**. Under **Primary Server**, if the server is on a remote machine, set **Node** to the name of that machine, otherwise leave it set to *local*.



Verifying the Data Connector

To verify the ArchestrA FSGateway real time interface, open **XLReporter's Project Explorer**, from the **Tools** tab. Start the **System Check** application and select the **Connector** tab. Select **Add**, choose your ArchestrA FSGateway connector from the dropdown list, and click the browse pushbutton [...] to open the **Tag Browser** window.



Connector	Source	Description	Value
ArchestrA_DA	DemoApp.\$Day	\$Day	31
ArchestrA_DA	DemoApp.\$Hour	\$Hour	11
ArchestrA_DA	DemoApp.\$Minute	\$Minute	54
ArchestrA_DA	DemoApp.\$Month	\$Month	1
ArchestrA_DA	DemoApp.\$Second	\$Second	18
ArchestrA_DA	DemoApp.BatchNumber	BatchNumber	6129
ArchestrA_DA	DemoApp.ConcPump	ConcPump	False
ArchestrA_DA	DemoApp.ConcValve	ConcValve	False
ArchestrA_DA	DemoApp.ProdLevel	ProdLevel	5889
ArchestrA_DA	DemoApp.ReactLevel	ReactLevel	875
ArchestrA_DA	DemoApp.ReactTemp	ReactTemp	138.5
ArchestrA_DA	DemoApp.SetPoint	SetPoint	50
ArchestrA_DA	DemoApp.Speed	Speed	5
ArchestrA_DA	DemoApp.SteamValve	SteamValve	False
ArchestrA_DA	DemoApp.TransferPump	TransferPump	1
ArchestrA_DA	DemoApp.TransferValve	TransferValve	1
ArchestrA_DA	DemoApp.Vitesse	Vitesse	5
ArchestrA_DA	DemoApp.WaterValve	WaterValve	False

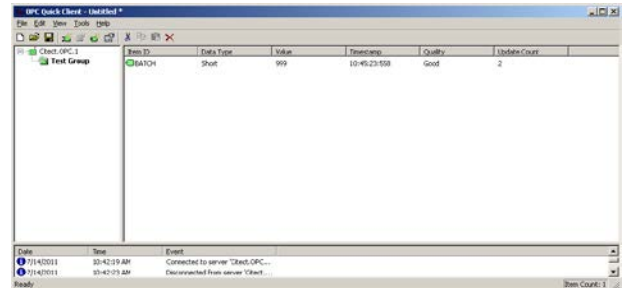
Select one or more tags and verify that they update with the current value using **Start** in the **System Check** window.

Troubleshooting - Real Time Data

If you are experiencing issues connecting to or retrieving data from ArchestrA Gateway with **XLReporter**, a generic OPC test client is provided to test the OPC Server.

This client is available from the Tools folder of the **XLReporter** installation disk and can be downloaded from www.SyTech.com.

To open, double-click **SampleClientDA.exe**. This opens the **OPC Quick Client** window.



Item ID	Data Type	Value	Timestamp	Quality	Update Count
Batch	Short	999	10-16-23-558	Good	2

OPC Quick Client

To connect to an OPC server, select **Edit, New Server Connection** to open the **Server Properties** window. Select *ArchestrA.FSGateway.3* and click **OK**.

Once the connection is made, select **Edit, New Group**. Specify **Name** and click **OK**.

Click on the group name created, and select **Edit, New Item**. This opens the **Add Items** window. Browse for tags and double click any to select. Once tag selection is complete click **OK** to return to the **OPC Quick Client** window.

All of the selected tags appear along with their real time values, type, quality, and timestamp.

If at any point you experience an issue with this client, it is an indication that there is something wrong with the ArchestrA FSGateway OPC server, since now two OPC clients have demonstrated issues.

At this point, contact Wonderware technical support to troubleshoot and correct these issues.