Description: Guide to setting up alarm logging to MS SQL Server 2005 database.

OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7

General Requirement: GENESIS32, Microsoft SQL Server 2005 and SQL Server Management Studio 2005 or SQL Server Management Studio 2005 Express installed on the machine.

Introduction

This Application Note will guide you through the steps to setup alarm logging to a SQL Server 2005 database.

We will assume that both Microsoft SQL Server 2005 and Microsoft SQL Server Management Studio 2005 are already installed on your system. If not, please do that now.

> **NOTE:** If you have not installed SQL Server 2005 products on this machine, you should be able to find the installation files for SQL Server Express on your ICONICS CD, or you could download them from the Microsoft website.

The features of SQL Server Management Studio that we will use in this application note are common to full Management Studio 2005 and Management Studio 2005 Express, so it should not matter which version you have installed.

Database Setup

To perform logging on a Microsoft SQL Server 2005 database, we first need to create and prepare it for use.

1. Open Microsoft SQL Server Management Studio 2005 from the Start Menu: Start → Programs → Microsoft SQL Server 2005 → SQL Server Management Studio
2. You will be asked for credentials to log into the server. Note that the server could be either remote or local. If you don't know which credentials to use, you should talk to your system administrator. In most cases simply selecting "Windows Authentication" will be sufficient.

Figure 1 – Logging into the SQL Server

3. In the Object Explorer right-click on the Databases node and select New Database. A wizard dialog will appear. Specify a name for the database and then click Ok.
4. You should now see your new database in the Object Explorer under the Databases tree. (You may need to hit the refresh button.) We will use this database to save our logged data.

Logging to a MS SQL Server 2005 Database

1. Open the AlarmWorX32 Logger configurator by going to Start → Programs → ICONICS GENESIS32 → AlarmWorx32 → Alarm Logger Configurator
2. Create a new configuration database by going to File → New. Follow the instructions in the Database Creation Wizard, making sure to check the Make Active Box on the last step.
3. Once you are done creating a new configuration database, right-click on the Configurations node and select to create a new configuration.
4. Choose any name you like for it and click on Apply.
5. With the new configuration selected in the tree, locate the Database Logging tab to the right and go to the Database Connection tab of it.
6. Make sure the "Enable Database Logging" checkbox is enabled.
7. In Click on the ⋯ button under Primary Data Source, the Select Data Source window will come up.
8. Select the Machine Data Source tab and click "New…" to create a new machine data source.
9. In the Create New Data Source window, select to create a System Data Source and click "Next"
10. Select "SQL Native Client" in the driver menu and click "Next", and then click "Finish".

> **NOTE:** Make sure you pick "SQL Native Client", not "SQL Server". "SQL Server" should only be used for SQL 2000 or earlier.
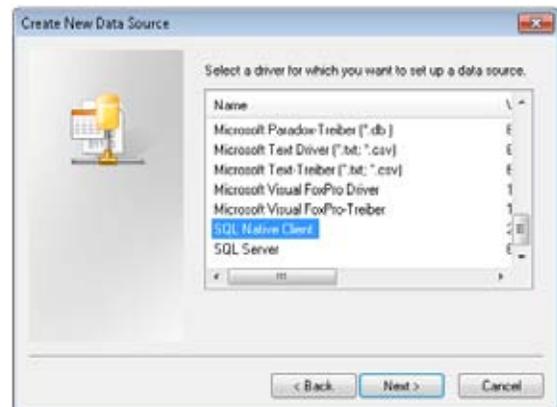

Figure 2 - Select Driver of Data Source

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11. In the Create a New Data Source to SQL Server window, enter a name for this ODBC connection and enter a description if desired.

12. In the Server drop down list, select the server you want to connect to. Click Next when done.

NOTE: A SQL Server Express instance might not show up in this list. In this case you would have to manually type in its name. The name of a SQL Server Express instance is often ServerName\SQLEXPRESS.

Figure 3 - Naming New ODBC Data Source

13. Click "Next" again, then check "Change the default database to:" and select the database you have created in the previous section from the drop down list.

Figure 4 - Changing the Default Database

14. Click "Next" and "Finish". A confirmation window will open. Test the data source connection if you wish to by clicking on the "Test Data Source" button. Click "OK" when you are done testing.

15. You should now be back in the Select Data Source window. Make sure that the data source that you have just created is selected, and click "OK".

16. You will see a SQL Server Login window, click "OK" in this window and you should be returned to the AlarmWorX32 Logger Configurator.

17. Click on Apply at the bottom of the Database Logging tab.

18. Now you are connected to the database that you are going to log data to. The table that you have defined in the "Table(s) Management" tab before will be created in this database once you start the logger.

19. Click on the "Edit Subscription" button to subscribe to an alarm server.

NOTE: For more information on configuring the AlarmWorX32 Logger, please refer to the help documentation.

20. In the configurator, click on the traffic light to start alarm logging.

Viewing the Database

1. Open Microsoft SQL Server Management Studio 2005 from the Start Menu: Start → Programs → Microsoft SQL Server 2005 → SQL Server Management Studio

2. Connect to your database server

3. Expand the tree until you see your Database. Click on it and you should see the database that you have created to log alarms to

4. Double-click on your database, and then double-click Tables.

5. You should see the tables used by AlarmWorx32 Logger to log your alarms in the right-hand pane.

6. Right-click on a table in the right-hand pane and select Open Table. This will open up a window with all data returned.