

Description: Guide to configuring TrendWorX32 Logger to log data into MySQL.

OS Requirement: Windows 2000, XP Pro, Server 2003

General Requirement: Knowledge of the MySQL database client and server, MySQL Server version 5.0.11, MySQL ODBC Driver 3.51.09.

Introduction

GENESIS32 version 9.x supports communication to MySQL databases. ICONICS has tested **MySQL Server version 5.0.11 (32-bit)** and **MySQL ODBC Driver 3.51.09** with TrendWorX32 Logger v 9.2.

You can download these MySQL components for the Windows platform from <http://dev.mysql.com/downloads>.

This document will guide you through the steps required to create a data source to connect to your MySQL database. It assumes that you have MySQL Query Browser installed. MySQL Query Browser is a graphical user interface for MySQL. It is not required for TrendWorX32 logging, but it will make it easier to configure MySQL.

Installing and Configuring MySQL

If this is your first time installing MySQL, ICONICS recommends a “Typical” installation of MySQL. When configuring MySQL, pick Standard Configuration if you do not have any other MySQL instances on this machine.

ICONICS recommends setting a root password. Enabling root access from remote machines is not recommended for secure sites, but if you are not concerned with security then enabling root access from remote machines can make your MySQL setup simpler. The rest of this document assumes that you are allowing root access from remote machines. If you would prefer a more secure setup please refer to the MySQL documentation.

All other MySQL installation options can be left at their defaults or changed as necessary for your project.

It is highly recommended to install MySQL Administrator as well. It is an easy way to configure many settings for MySQL. Once MySQL Administrator is installed, run it from the start menu, then go to Service Control → Configure Service and check “Support for InnoDB”. Also, go to Startup Variables → Security and check “Use old passwords”. You may also want to go to User Administration and reset the password for your users to ensure they are using the old password method.

Restart MySQL after making these changes by going to Service Control → Start/Stop Service.

Create a Database for TrendWorX32 in MySQL

You will need to create a database or “schema” inside of your MySQL. Open up MySQL Query Browser from the start menu. Use “localhost” for the Server Host, “root” for the username, and the password you chose during the installation. You can leave the Schema field blank. (You may need to ignore a warning message about connecting with no default schema.)

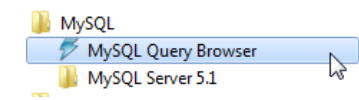


Figure 1 - Open MySQL Query Browser over the Start Menu

On the right hand you will see all schemas. Right-click in this section and select “Create new Schema”.

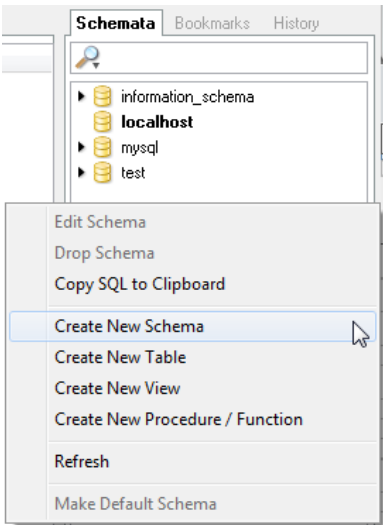


Figure 2 - Create New Schema

Give this schema a name. It is recommended to give a name similar to the one you will use for the ODBC connection.

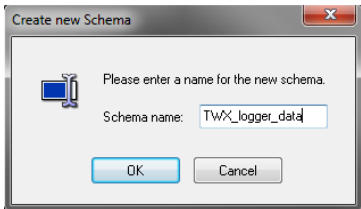


Figure 3 - Schema name

We have now created a new empty database (“schema”) for the TrendWorX32 Logger to store its data. You can close the MySQL Query Browser at this time.

MySQL Database Client Side Setup

Since there are various MySQL database server versions available, the level and type of connectivity may vary depending on the version of MySQL database server you are using.

GENESIS32 does not require any MySQL client applications to connect to the MySQL Server.

Connecting TrendWorX32 Logger with MySQL

This section describes how to create a TrendWorX32 Logger configuration that logs to MySQL.

1. Open the TrendWorX32 configurator by going to Start → Programs → ICONICS GENESIS32 → TrendWorX32 → TrendWorX32 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 Configurations folder and select New → Configuration.
4. Right-click on new configuration and select New → Database Group.
5. Click on the  button under Primary Data Source. The Select Data Source window will appear.
6. Select the Machine Data Source tab and click “New...” to create a new machine data source.
7. In the Create New Data Source window, select to create a System Data Source and click “Next”
8. Select the “MySQL ODBC 3.51 Driver” and click on “Next” and “Finish”.

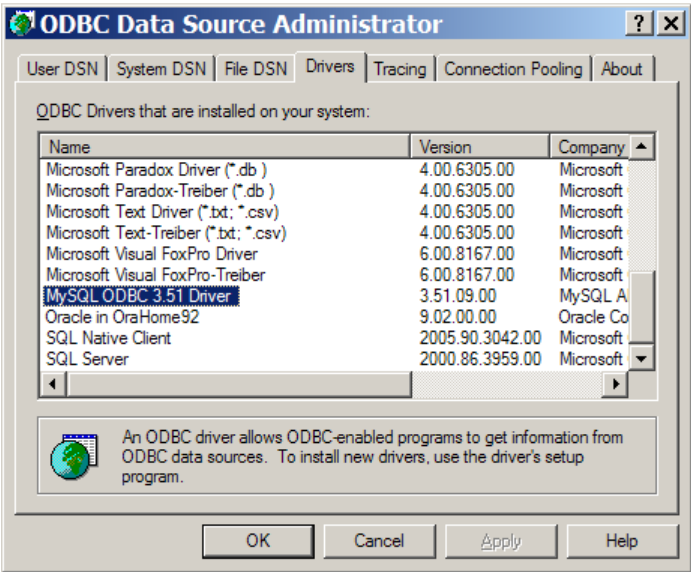


Figure 1 - MySQL ODBC Driver

9. Give the data source a name and an optional description of your choosing. The server name should be the name of the machine where MySQL is installed (you can use “localhost” if MySQL is installed on the same machine as TrendWorX32 Logger). The database name is the name of the schema you created earlier. If you are allowing remote root access you can enter the username and password of root in those fields. An example is shown in Figure 2.

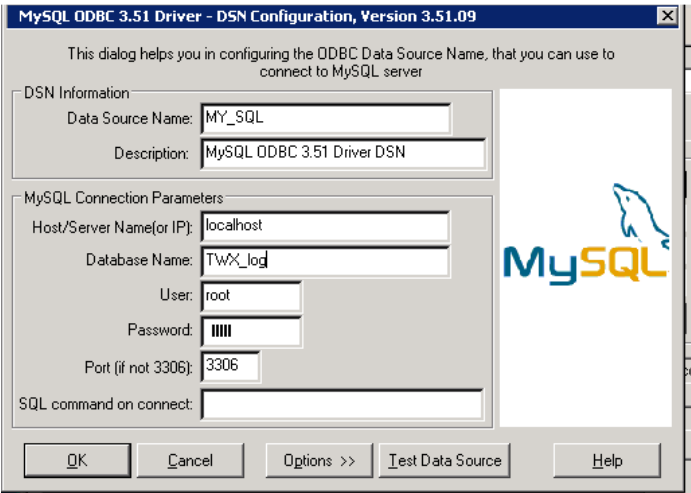


Figure 2 - MySQL ODBC Driver Configuration

10. Click on the “Test Data Source” button; you should get a successful message. Click “OK” to acknowledge the message.

NOTE: If you receive a failure message saying that the client does not support the authentication protocol, you can follow the instructions at <http://dev.mysql.com/doc/refman/5.0/en/old-client.html> to correct the problem.

11. If the test succeeded, click “OK” to finish configuring the ODBC connection.
12. 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”.
13. Click on Apply at the bottom of the Database Group configuration on the right-hand pane.
14. In the tree-control on the left-hand pane, right click on the Database Group that you created and select New → Logging Group.

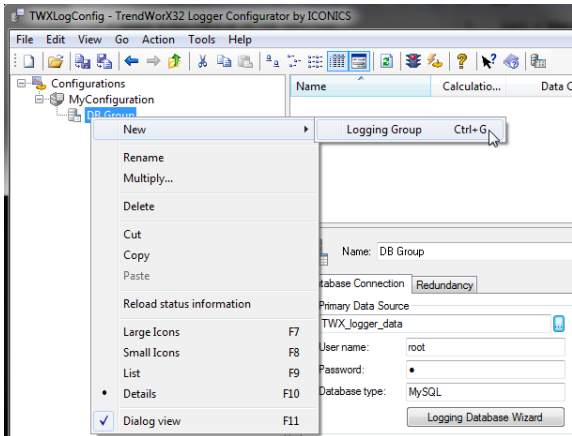


Figure 3 - Creating a New Logging Group

15. Give the logging group a name and click “Apply”.

NOTE: You may want to change the data collection rate, logging rate, and logging table name according to your preferences.

16. In the tree-control on the left-hand side, right-click on the logging group that you have just created and select New → OPC Tags.
17. The Unified Data Browser will open, select that tags you want to log data for in the browser. You can select multiple tags in the same folder by holding down the ctrl key. Click “OK” when you are done selecting the tags
18. In the configurator, go to your configuration, click on Make Active and then click Start Datalogging

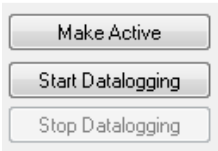


Figure 12 – Start Datalogging