TrendWorX32 Logger – Using the TrendWorX32 Tuning Wizard

APPLICATIONS NOTE

October 2013

Description: Guide to Using the TrendWorX32 Tuning Wizard
OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7
General Requirement: Active TrendWorX32 Logging configuration.

Introduction

The TrendWorX32 Database Tuning Wizard will parse your active TrendWorX32 configuration and output important information about the databases you are logging to currently. It will also allow you to take action on specific recommendations about the destination databases, such as compact/repair, growth parameters, and the Microsoft SQL recovery model, all of which are important for properly tuning your databases.

> **NOTE:** Logging does not need to be started in order to run this analysis.

Using the TrendWorX32 Database Tuning Wizard

1. Launch the Tuning Wizard by going to **Start → Programs → ICONICS Tools → TrendWorX32 Database Tuning Wizard.**
2. This launches the **TrendWorX32 Database Tuning Wizard** dialog box, as shown in Figure 1.

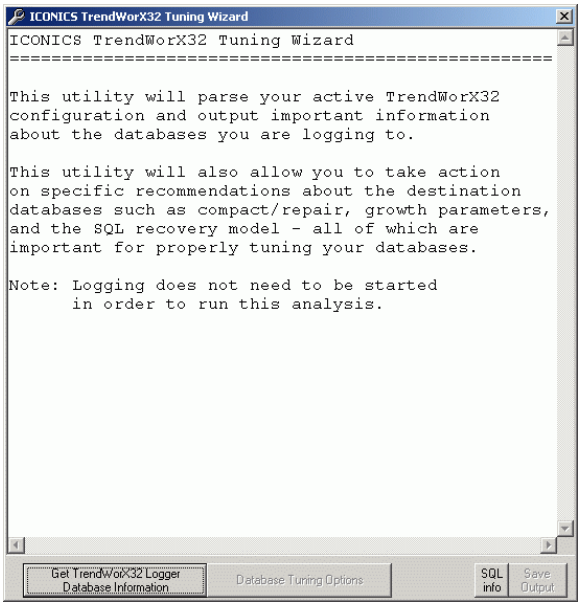

Figure 1 - TrendWorX32 Database Tuning Wizard

3. Click the **Get TrendWorX32 Logger Database Information** button. The database properties (e.g. group name, database name, size, logging groups, and tags) are displayed in the Tuning Wizard dialog box, as shown in Figure 2.

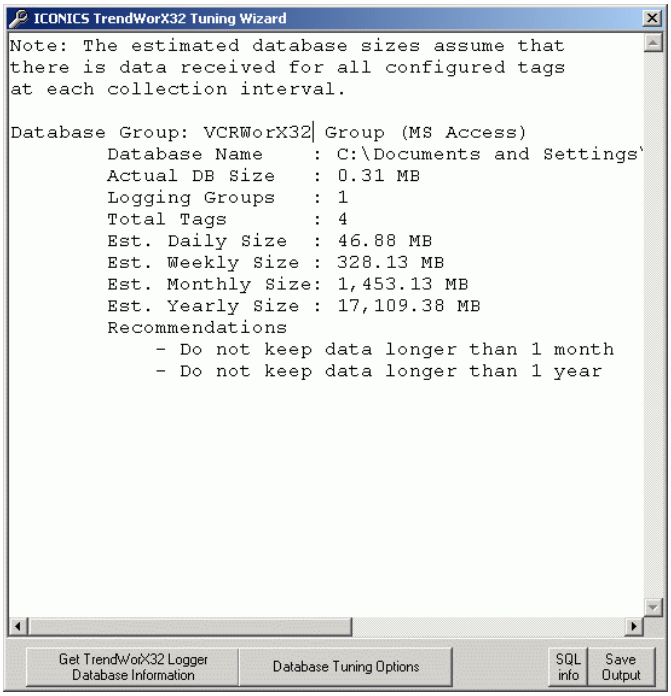

Figure 2 - TrendWorX32 Logger Database Information

> **NOTE:** The estimated database sizes assume that data are received for all configured tags at each collection interval.

Database Tuning Options for Microsoft Access Databases

In the **Database Tuning Options,** the Tuning Wizard dialog displays all databases that are currently configured for logging. If you are logging to Microsoft Access databases, the only option you have is to compact and repair the databases.

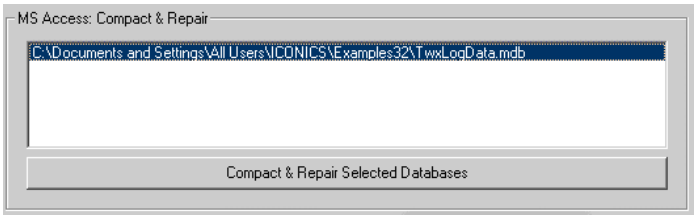

Figure 3 - Database Tuning Options

To start the compact/repair operation, click the **Compact and Repair Selected Databases** button. It is critical that no users or client applications are connected to the database(s) at the time of compacting. Click the **Yes** button to start compacting and repairing for the selected databases.

Database Tuning Options for Microsoft SQL Server Databases

In the **Database Tuning Options,** the Tuning Wizard dialog displays all databases that are currently configured for logging, as shown in Figure 4. If you are logging to Microsoft SQL databases, you may have the following options:

- **Turn Off AutoShrink:** If AutoShrink is turned on for your database, ICONICS recommends that you turn off AutoShrink to make data logging more efficient. Shrinking the database will consume unnecessary processing power. Select the database(s) for which you want to turn off AutoShrink, and then click the **Turn Off AutoShrink** button.

- **Turn Off AutoClose:** When you are logging data to the database, there is no need to close the connection when the database is idle. Select the database(s) for which you want to turn off AutoClose, and then click the **Turn Off AutoClose** button.

- **Set Recovery Model to Simple:** ICONICS highly recommends that your database recovery model be set to simple, as full and bulk-logged recovery models will consume much unnecessary processing power and disk space. Select the database(s) for which you want to set the recovery model to simple, and then click the **Set Recovery Model to Simple** button.

- **Set Growth Parameters:** The growth parameters for a TrendWorX32 SQL logging database should not be set by percentage because if the database gets too large, the allocated size to grow may be too much for the server to handle while it is still actively logging data. ICONICS highly recommends that you set the growth rate to grow by a fixed size (in megabytes). The Tuning Wizard will suggest an appropriate growth size parameter for your database. To set this, choose your database from the drop-down list, and click the **Set Growth To** button to implement the recommended growth parameter.

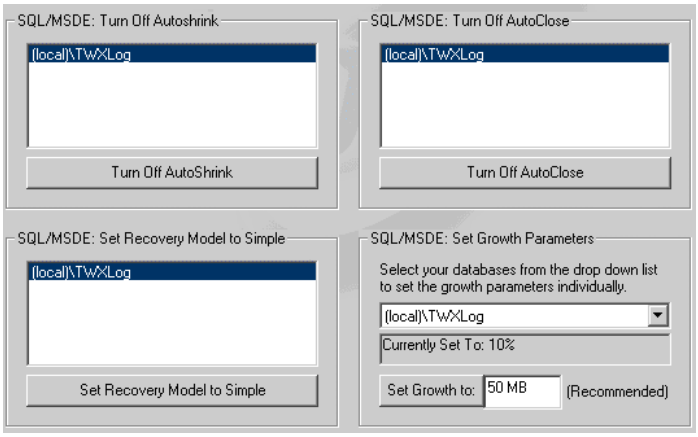

Figure 4 - Database tuning Options for MS SQL Database

When your SQL database tuning is completed, click the **Get TrendWorX32 Logger Database Information** button to return to the database information dialog. All operations are listed in the database information log. You can save the log information to a text file by clicking the **Save Output** button.

SQL Database Information Export

Clicking the **SQL info** button allows you to export key SQL information from the database to a CSV file. Click the **OK** button in the **SQL Database Information Export** message, as shown in Figure 5.

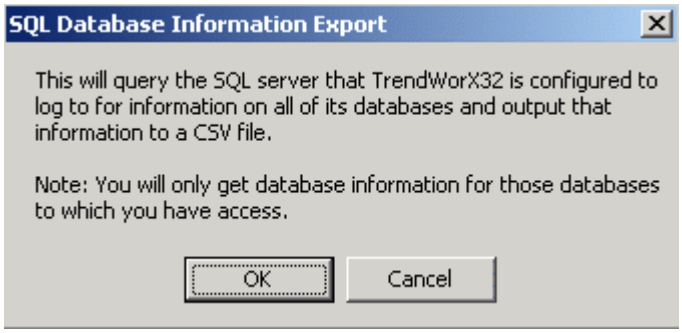

Figure 5 - SQL Database Information Export