

APPLICATIONS NOTE

January 2003

**Description:** Guideline to tuning MSDE for best performance **OS Requirement:** Windows NT/XP/2000/9X/Me **General Requirement:** This app note requires installation of MSDE 7.x or MSDE 2000.

## MSDE Database Settings

1. Open the MSDE Manager from Start, Programs, ICONICS GENESIS-32, Tools.



Fig.1 ICONICS MSDE Manager

- 2. Double click on the server that you wish to configure (in this example we will use the local MSDE server).
- 3. You will then see the message shown below. If you are sure that the server is running then press OK.

MSDE Manager 🛛 🔀			
⚠	It is not known if the server you have selected is now running. Are you sure you want to connect to this server ?		
	Cancel		

Fig.2 Connect to server message

4. Highlight the server that you connected to and press the "Server Mem Settings" button to adjust the minimum and maximum memory usage of the MSDE Server. Set a small Max value to ensure that the AlarmWorX32 and TrendWorX32 loggers do not use up too much memory. For example, if your computer has 256MB of RAM, then you could set the Max Memory usage as 128MB and leave the Min as 0. If this computer is running many other tasks, then you may wish to use

less memory, and leave more memory available for other processes. For systems that are logging a large amount of data to MSDE you should use a computer with more RAM.

Server Memory Settings	Server Memory Settings
Set the minimum and maximum amout of memory to give to current selected server :	Set the minimum and maximum amout of memory to give to current selected server :
Maximum (MB) Minimum (MB) 2147483647 0	Maximum (MB) Minimum (MB)
OK Cancel	OK Cancel

Fig.3 MSDE Memory Settings

- 5. After pressing OK you will be notified that you should STOP and START the MSDE Server before the settings will be applied.
- 6. Create a new MSDE database by pressing the "Create New Database" button. Give it a name and select a path to store the database. Try to anticipate how large the database will be and make the initial size that large. Do not make the database too small and grow by small increments or it will cause your system to slow down significantly.

9	iet Database Options
	DataBase LogFile
	Database name MyLoggingDB
	Database path C:\
	Database Properties Initial Size (Mb) 5
	Database Grow     The second sec
	C By percent 10 Act. (Mb) Free (Mb) 5 5
	Auto Shrink
	OK Cancel

Fig.4 Database Options

7. The Logfile Properties tab allows you to configure the size of the log file. The MSDE database logfile will record information that pertains to each database transaction so it could also grow to be large. However, you do not need to worry as much about slowing down



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your computer because of the format of the logfile, which allows for convenient file growth.

Set Database Options	×
DataBase LogFile	
Logfile Properties	
Logfile name	MyLoggingDB
Initial Size (Mb)	2
In Megabytes	1
C By percent	10
	OK Cancel

Fig.5 LogFile Properties

8. The MSDE database is now ready for logging. When configuring your ODBC Data Source you must select the database that you just created.

Create a New Data Sour	ce to SQL Server	×
Select a divertor	Change the default database to:  MyLoggingDB  Attach database filename:	
Marson Fowfur Marson Fowfur Data Obst Cash Pare Filmson Tex Etti Servi	Create temporary stored procedures for prepared SQL statements and drop the stored procedures:     Only when you disconnect.     When you disconnect and as appropriate while you are	
	Connected.     Use ANSI quoted identifiers.     Use ANSI nulls, paddings and warnings.     Use ANSI nulls, paddings and warnings.     Use the failover SQL Server if the primary SQL Server is not.	
	L available. < <u>B</u> ack <u>N</u> ext≻ Cancel Help	_

Fig.6 ODBC Data Source configuration

 Start your AlarmWorX32 Logger or TrendWorX32 SQL Data Logger. Then close and re-open MSDE Manager. You will see the configured table in the database that you created.

ICONICS MSDE Manager		×
<u>M</u> anager <u>V</u> iew <u>H</u> elp		
E-R (Local Server)	Server <u>M</u> em Settings	
EventLog	Create <u>N</u> ew Database	
⊕ 🗐 Remote Servers	<u>E</u> dit Database	
	$\rightarrow$	
	Server Start	Server Stop
	<u>R</u> emove	Database
	Shrink E	)atabase
	Tabl	e Info
	E <u>x</u> it	

Fig.7 Log table in configured database

10. You can highlight the new table and press the "Table Info" button to get useful information about this table.

Table Informatio	n	×
Actual Size (Kb) Number of rows	264 1146	
	OK	

Fig.8 Table Information

If you find that SQL or your logging utility is still using up too much memory then try decreasing the Maximum Memory setting for the server. If you have plenty of memory available but it is not running very fast, then try increasing the Maximum Memory for the MSDE Server.

\*Note: When logging to MSDE you must have a local license on the same computer. Logging to MSDE will not work if you are using a remote license.