

Description: Guide to tuning MS Access for the best performance.

OS Requirement: Win 2000 Pro/Server, XP Pro, Server 2003 **General Requirement:** GENESIS32 version 9.x

Background

MS Access has many limitations as a database. For TrendWorX32 data logging this may become an issue, especially when TrendWorX32 is logging many data tags. In this case, we may need to tune Access so that it performs optimally.

There is an entry in the IcoSetup.ini file called "**MaxBufferSize**" that we could set to change the amount of memory that TrendWorX32 is allowed to use when writing data to MS Access. The default memory size is 1 MB (1024 KB). However, when you are logging many data tags, this amount of memory may not be enough, causing delays, retries, and sometimes event error messages. Below are some suggestions of what the value should be set to based on data collection rates and logging rates.

Table 1: MaxBufferSize

Number of Tags	Logging Rate	MaxBufferSize
100	1 min	1024 * 4
100	1 sec	1024 * 8
500	1 min	1024 * 16

NOTE: The size of MaxBufferSize should set based on your needs. The above table is just a general guideline.

Setting the MaxBufferSize

Below are steps you should follow to set the value for MaxBufferSize.

- 1. Find the file IcoSetup.ini in C:\Documents and Settings\All Users\Application Data\ICONICS (if your local drive is C:)
- Open the file and add the lines below. [JET] MaxBufferSize=
- 3. You can set the size to whatever you want to the left of the equal sign. Make sure there are no spaces around the equal sign.



Figure 1 - MaxBufferSize in IcoSetup.ini

- 4. Safe the file and exit.
- 5. You can verify that the size has been changed after you have started TrendWorX32 again by going to the registry.
- 6. Go to Start → Run and type in "regedit" (without the quotes)
- 7. Browse to
 $$\label{eq:hkey_local_machine} \begin{split} \text{HKey_local_machine} & \text{Software} \\ \text{Microsoft} \\ \text{Jet} \\ \text{4.0} \end{split}$$
- 8. You will find a value in there called MaxBufferSize. The value of it should be the same as the MaxBufferSize you have set in the IcoSetup.ini file.

Note: ICONICS highly recommends the use of MSDE or SQL Express 2005 for a free database to log to when cost is an issue. We highly discourage logging to MS Access because of its inherent scaling and connection limitations.