



# TrendWorX32 Logger – Optimal Performance for MS Access



## APPLICATIONS NOTE

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

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

**General Requirement:** GENESIS32 version 9.2

## 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

Follow the following steps to set the value for MaxBufferSize.

- Find the “IcoSetup.ini” file:
  - In Windows Server 2003 and earlier: C:\Documents and Settings\All Users\Application Data\ICONICS
  - In Windows Vista and later: C:\ProgramData\ICONICS Data\ICONICS

**NOTE:** This is a system file and some type is hidden. You can uncheck un-hide system files under Folder Options /View

- Open the file and add the lines below.  
[JET]  
MaxBufferSize=
- 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.

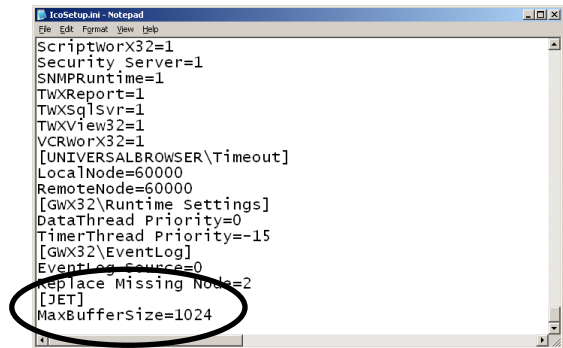


Figure 1 - MaxBufferSize in IcoSetup.ini

- Save the file and Exit.
- You can verify that the size has been changed after you have started TrendWorX32 again by going to the registry.
- Go to Start → Run and type in “regedit” (without the quotes)
- Browse to

HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Jet\4.0\Engines\Jet 4.0

**NOTE:** For Windows Vista, Server 2008 and Windows 7 Browse to HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server\MSSQL10.MSSQLSERVER\Providers\Microsoft.Jet.OLEDB.4.0

- 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 / SQL 2008 as the logging database. You can find the SQL 2005 Express edition on the GENESIS32 installation disk.