

## **THE REASON FOR THIS WIZZARD:**

This tool was developed to aid an individual in migrating from a MS Access database to a SQL Anywhere database.

“MIGRATE.EXE” will take individual MS Access Tables, Indexes, Primary and Foreign keys and migrate these objects to a SQL Anywhere DB. In Addition, this tool provides an option to link the newly created tables back to the MS Access DB. Thus, if you have an Application inside your MS Access DB, and you would like to continue using it through the ODBC (Open DataBase Connectivity) interface you may do so.

## During the Migration Process:

During the course the migration a series of files are created in the location where the MS Access Database is located. They are the following:

- Reload1.sql
- Reload2.sql
- Reload.sql
- Reload.bat
- Migrate.bat
- Sp.sql
- <SybaseDBFile>.db
- <SybaseDBLogFile>.log

All the files, but the <SybaseDBFile>.db and <SybaseDBLogFile>.log, are deleted at the end of the migration process. If the “*Cancel*” button is hit at any time during the process the files should be deleted and cleaned up.

The last two files in the list, that get created, are Sybase SQL Anywhere files that get created on the second last window. These files do not get deleted if you finish prematurely.

The \*.bat files are used to automate the process that execute the \*.sql files through a SQL Anywhere Executable called **ISQL.EXE**

## **THINGS TO REMEMBER DURING YOUR MIGRATION PROCESS:**

1. *Table Creation:* Any tables in your Access DB where the name contains a space will be altered. The space will be replaced with an underscore '\_' in the new SQL Anywhere DB. However, if you choose to link the tables back to your MS Access DB (Application), the link names will point to the appropriate tables with the underscore.
1. *Hyperlink:* If you have any fields of type hyperlink in your Access DB, then they will be of type long var char in the SQL Anywhere DB. The data will also have the symbol '#' preceding and following it. This is the way Access stores the data. Here is an example of a statement that will get rid of the '#' identifier:

```
update table_name set col2 = (select substr( trim( (select field_name from table_name where col1 = 1)), 2, length( (select col2 from table_name where col1 = 1)) - 1 ))
```

You simply have to adjust it to fit your table and field names.

1. *Create Database:* Once you click on Create DB, you must wait for the process to finish before proceeding any further.
1. *ODBC Data Source* entry requirements:

The screenshot shows the 'SQL Anywhere ODBC Configuration' dialog box. It has a title bar with a close button (X). The dialog is divided into several sections:

- Data Source Name:** 'MigrateAccToSSA'
- Description:** 'Sample Migration ODBC DB source'
- Connection Information:**
  - User ID:** 'dba'
  - Password:** '\*\*\*'
  - Server Name:** '<default>'
  - Database Name:** 'Northwin'
- Database Startup:**
  - Database File:** 'E:\migrationwiz\Northwin.db'
  - Radio buttons for **Local** (selected), **Network**, and **Custom**.
- Additional Connection Options:**
  - Translator Name:** '<No Translator>'
  - Checkboxes for **Microsoft Applications (Keys in SQLStatistics)** (checked), **Prevent Driver not Capable errors** (checked), and **Delay AutoCommit until statement close** (unchecked).

On the right side of the dialog, there are buttons for 'OK', 'Cancel', 'Help', 'Browse...', 'Options...', and 'Select'.

1. PLEASE NOTE THAT THIS IS NOT A SUPPORTED TOOL. IT IS A GOOD IDEA TO USE THIS TOOL ON A COPY OF YOUR ACCESS DB FOR RECOVERY PURPOSES.
6. *Versions:* You should be on version of Sybase SQL Anywhere 5.5.0.1 and higher.

### **Option Window “Migration Options”:**

If you click on the radio button titled, “*Transfer and Link SQL Anywhere Tables*”, then you are selecting the option to link the tables to the newly created SQL Anywhere database back to the MS Access Application (stored in the MS Access database). These option buttons are then enabled below it:

- “ *Precede MS Access table names with ‘Old\_’* ”

**OR**

- “ *Other: “ (in the text box enter up to 6 characters to precede the MS Access tables)* ”

If you do not select the radio button titled, “*Transfer and Link SQL Anywhere Tables*”, the SQL Anywhere database will be created but will not be linked back to the MS Access database.

After choosing the appropriate options proceed to the next wizard window.

### **Choose MS Access Database:**

Select a MS Access Database that you would like to migrate to a Sybase SQL Anywhere Database.

The Sybase SQL Anywhere product being used must be version 5.5.0.1 or greater. Otherwise the results could be unpredictable.

The MS Access Database could be version 5.0 or greater.

## The Location of Sybase SQL Anywhere's ISQL.EXE:

This program requires that you select ISQL.EXE or ISQLW.EXE.

- **ISQL.EXE** (32-bit version)
- **ISQLW.EXE** (16-bit version)

The main reason for this is so the wizard does not have to rely on the users PATH being correct and then unpredictable results taking place. The other is so you have an option to use the 16-bit or 32-bit version. Finally, if you have a version of SQL Server (Microsoft or Sybase), then if either of these products are before Sybase SQL Anywhere in the PATH, you would be using an incorrect version of ISQL and the process would fail.

Through the process of selection the wizard uses an absolute path to ISQL.EXE or ISQLW.EXE.

## Create the Sybase SQL Anywhere Database:

For now the Sybase SQL Anywhere database is created in the default directory where the MS Access database is located.

This process also checks to see if a Sybase SQL Anywhere database already exists with the same name in the current MS Access DB directory. If it does, you will be prompted,

"The SQL Anywhere file already exists. If you want to overwrite the file click **'YES'** or if you would like to move or rename the file click **'NO'**."

**NO:** proceed to move the file, then click on **CREATE DB** again.

**YES:** this will delete the current file and log and create the new Sybase SQL Anywhere DB.

*When the Database creation begins the "Command Window" (Win NT) or "DOS Window" (Win 95) will come up and show the process. Under Windows NT the "Command Window" will disappear once the process has finished. However, under Windows 95 the "DOS Window" will proceed to go through the process just like under Windows NT but will not disappear once it has completed creating the database. Therefore to get rid of the "DOS Window", under Windows 95, you must close it your self.*

***It is important to note that you should not proceed with the wizard until the CREATION OF THE DATABASE HAS FINISHED.***

Both the \*.db file and the \*.log file are located in the same location. If you wish to move these files to another location after the process is complete, you may do so. However, the two files must remain together in the same directory.

If you wish to change the location of the \*.log file with respect to the \*.db file you may do so but you must use the **DBLOG.EXE** utility provided with Sybase SQL Anywhere. To get more information on this utility and others, refer to the Sybase SQL Anywhere Help.



### **Select an Sybase SQL Anywhere ODBC Data Source:**

The final window will show you the path of the Sybase SQL Anywhere Database in the first text box. The second text box will be empty because you must choose a Sybase SQL Anywhere ODBC Data Source that references the newly created database.

Once you click on the “*Migrate*” button, you will be asked to select an ODBC Data Source. If you do not have one then you can click on the “*New*” button and proceed to select the Sybase SQL Anywhere ODBC driver and finally making the necessary ODBC entries as shown in the Requirements section of this help file.

Once you make your selection the second text field will be filled in and the process will continue to transfer the tables, create indexes, create primary and foreign keys (with their respective relationships), and finally the table links back to the MS Access Database (if this option was selected).

**NOTE:** Do not click on the “*Finish*” button until the ISQL.EXE window has disappeared and completed the migration process. Once the ISQL.EXE window is finished and has disappeared from your desktop, click on the “*Finish*” button and this will clean up the created files.

