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Opening a Database in Avery® DesignPro® 4.0 using ODBC

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What is ODBC?

ODBC stands for Open DataBase Connectivity. It is a tool that takes databases from different programs and puts them in a standard format. This is accomplished by selecting a driver associated with a particular file type. An appropriate ODBC filter must be installed on your computer for the DesignPro® **Open an External Database via ODBC** feature to work.

Important Note: Installation of an ODBC filter usually occurs as part of the normal Microsoft Office installation. Consult your Microsoft® Office manual or contact your System Administrator for additional information.

Why should you Open an External Database using ODBC?

When using the **Database** > **Open** feature of DesignPro, two options are present - **Open a dBASE III Database** or **Open an External Database via ODBC**. Consumers should select the ODBC option to link their database to a DesignPro® 4.0 project when:

- Their database was created in a program that does not provide a "Save As" dBASE III option.
- They wish to update their database in the original application which automatically updates the linked database information in DesignPro®. When a database is opened in DesignPro® 4.0, using the ODBC option, the data content and field names are directly linked with the original application, such as Excel or Access. Therefore, changes made in the original database are updated in the DesignPro® project which is linked to that database.

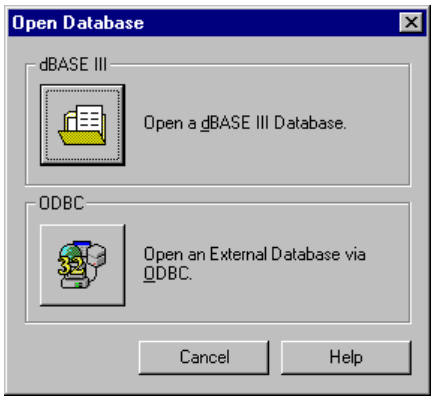
The following two sections are provided in this document:

- How to Open and Link a Database to a DesignPro® 4.0 Project using ODBC
- Troubleshooting

How to Open and Link a Database to a DesignPro® 4.0 Project using ODBC

The following illustrates the steps for opening and linking a database from within DesignPro® using the ODBC filter on your computer. In this example a Microsoft® Access database is opened.

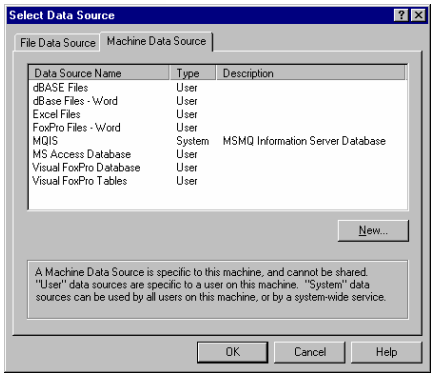
Note: Microsoft® Excel databases can also be opened using the ODBC feature following the same steps.



1. Select **Database** > **Open**.

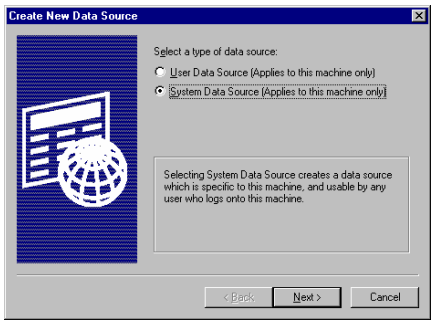
2. The **Open Database** dialog box appears. Click **Open an External Database via ODBC**.

Note: These steps are required only once for each data file when using this merge feature in DesignPro® 4.0.

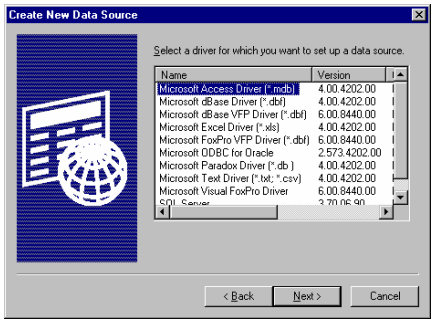


3. Select the **Machine Data Source** tab. If you previously created a **Data Source Name** listed here, select it and click **OK**. **Then proceed to step 13**.

   If you never created a **Data Source Name**, click **New**. Continue with step 4.

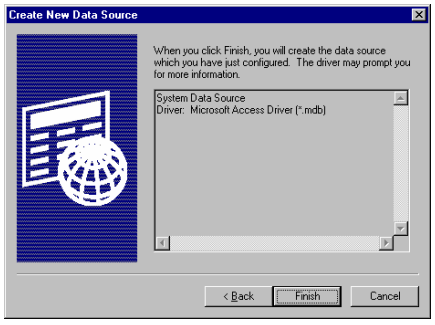


4. Select **System Data Source**. Click **Next**.

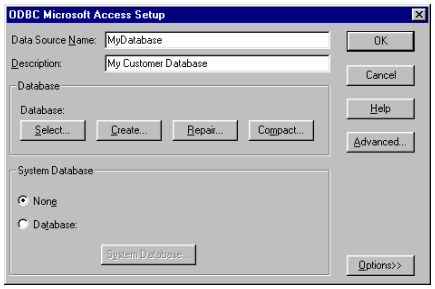


5. Select an ODBC driver for the file type to be merged. In this example, to connect a Microsoft® Access database, select **Microsoft Access Driver (*.mdb)**. Click **Next**.

Note: For additional assistance, consult your Microsoft® Office manual or contact your System Administrator for additional information.



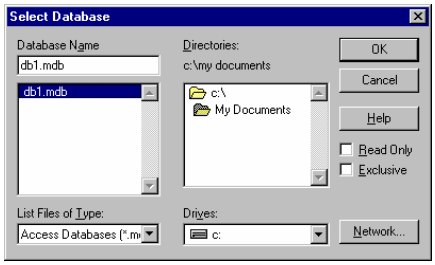
6. The ODBC system confirms the selection. Click **Finish** to create the data source. In the next step, you will define the details for the data source.



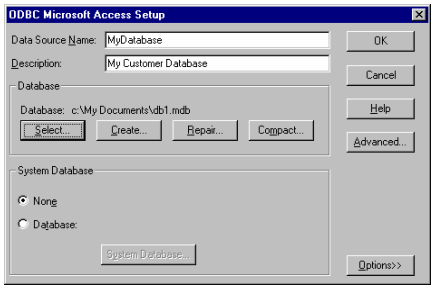
7. Enter a name for your database in the **Data Source Name** field. For future use with other DesignPro® 4.0 designs or other applications, ODBC will list this database in the **Select Data Source** dialog box.

8. Enter a description for your database in the **Description** field.

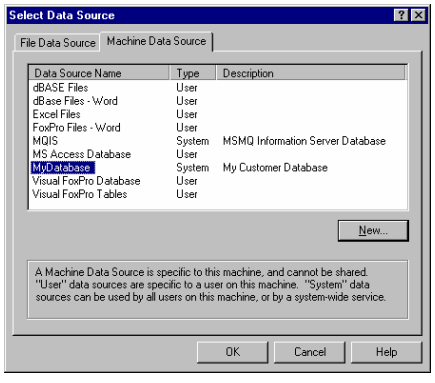
9. Click **Select** to connect the physical database file to the data source.



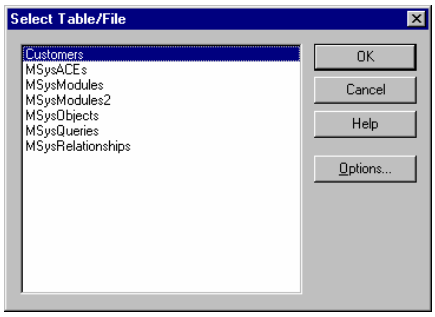
10. Navigate to your Microsoft® Access ***.mdb** file and select it. Click **OK**.



11. Click **OK** to confirm your data source definition. The data source definition is now complete.



12. Select your database and click **OK**.

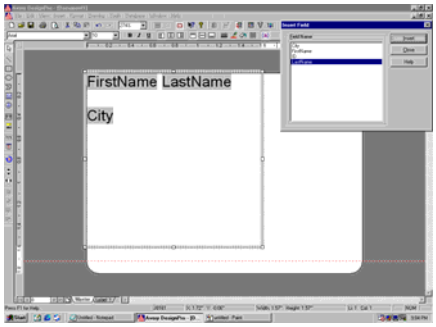


In the **Select Table/File** dialog box, a Microsoft® Access database has one or more data tables and a number of internal system tables.

Note: If working with a Microsoft® Excel spreadsheet, one or more worksheets are listed.

13. Select a table from the dialog box. The database is now connected to your current DesignPro® 4.0 design file.

*Note: Click **Options** and uncheck all check boxes except **Tables** to display only the data tables in this dialog box.*



14. Click **OK**.
15. To insert one or more fields into the design, select **Database** > **Insert Field**.
16. Highlight a field name and click **Insert**. The field name is inserted in a text box on your design. You can add line breaks and apply formatting to the design as usual.
17. To view the merged database with the design, select **Database** > **Display Field Contents**. Use the **Next Record** button on the tool bar to view the individual records.

*Note: If you want to disconnect the database from your design, select **Database** > **Deactivate**.*

Troubleshooting

When working with database files and importing information from databases, certain settings have to be exact in order for the merge to work correctly. The following are examples of incorrect settings or invalid data errors and the solutions to correct them.

Problem 1 - Error message: No columns found in data file

Important note: In case of unusual error messages, it is very important to first verify that the filename of your data merge file does not contain:

- Additional dot (.) characters except for the separator to the filename extension. For example, **mergefile.txt** is acceptable, but **merge.file.txt** will fail.
- Accented or extended characters.

These are issues with the Microsoft® ODBC drivers that may be experienced with some ODBC and Microsoft® Windows® versions. They cannot be fixed by making any changes to DesignPro® 4.0.

Problem 2 - Merging a .CSV or .TXT data file does not work. An error message is displayed, saying that no columns could be identified in the file.

This message is caused by the ODBC driver which interprets the merge file. DesignPro® 4.0 receives the error condition and is unable to understand the file format. This must be solved by setting up the **ODBC Text Driver** with appropriate options for the data source.

The ODBC driver cannot detect **fields** (columns) in the data merge file. There are conditions where ODBC does not use a default field separator symbol (in Windows® named **List Separator Symbol**), which is normally either the comma (,) for the U.S., Canada, the UK, Australia, or the semicolon (;), for Continental Europe. The list separator symbol depends on the Microsoft® Windows® International Settings in the Windows® **Control Panel**.

A second reason for this problem may be incorrect data type recognition. The ODBC driver may detect data to be numeric and assigns a numeric data type to a field, while the actual data needs to be read as a **text string** (character) type.

Solution: To solve the first problem, set the needed options in the ODBC configuration as follows:

In the **ODBC Text Setup** dialog box, where you enter the data source name and description, do the following:

Note: Please note that some operating systems and ODBC versions may not have the same options or the options listed below may have slightly different names. In these cases review the dialog box for options with similar meaning.

1. Click **Options**.
2. Deselect **Use current directory**.
3. Click **Browse Directory** and navigate to the directory where your merge file is located.

4. Click **Define Format**.
5. Select your file from the **Table** list.
6. Select **Format** > **User defined** and enter the list separator symbol (e.g. type the comma) into the field.
7. Click **OK** to confirm.

Should you receive an error message, such as **Error saving attributes from (nul) to (nul),** you can safely ignore this. Click **OK** and proceed.

The ODBC text driver now understands the file structure.

For the fix for incorrect data type recognition, please refer to the next topic. Please note that incorrect data detection can cause various error messages, so it is always a good idea to verify the data types for all fields.

Bar Codes or Postal Codes from a Text Data Merge File are Displayed Incorrectly

Problem 3 - The numeric bar code data is in a .CSV or .TXT file as a field. This numeric data appears in decimal or scientific notation and, therefore, generates errors for the bar codes.

Solution: Please follow the steps from the previous topic. In addition to the field separator symbol, you can define the **data type** of any field in your list. This is important, for example, if you have numeric bar code data or postal codes, which the ODBC driver would normally interpret as **numeric**, but must use this as **text**. Set the field format in ODBC to type **Char** (Character) for correct results. After you changed settings for a field (type, length) be sure to confirm the changes by clicking **Update/Modify**, otherwise your changes will be lost.

Error Messages when Merging Microsoft® Excel and Microsoft® Access Files

Problem 4 - When trying to merge a data file in DesignPro® 4.0 error messages are received about invalid data in columns or fields.

Solution: Some applications allow the definition of field names, which don't meet the standards required by the Microsoft® ODBC driver. This is even true for Microsoft® applications, such as Microsoft® Excel and Microsoft® Access.

Typical problems are spaces or special characters in field names.

Microsoft® Excel spreadsheet field names need to have no spaces or special characters. (Field names are in the first row of the spreadsheet.) In some cases it is better to **Save As** a **CSV** comma separated file (in some countries the semicolon is used as a separator) and then open with the **Text Files** option (instead of the Microsoft® **Excel Files** option) on the **Machine Data Source** tab.

A work around for non-standard Microsoft® Access field names is to create a Microsoft® Access query to redefine the field names, and then merge the query. Example: You have two fields in a Microsoft® Access database, and they are:

- First Name
- Last Name

Microsoft® Access accepts these as valid field names, but they cause trouble for the Microsoft® ODBC driver.

Define a query in Microsoft® Access Design Mode and define the two fields in the **Field** row as follows:

FirstName:[First Name]	LastName:[Last Name]

*Note: You can create field names without spaces or use the underscore (_) character to create field names, such as **First_Name**.*

Zip Code Fields Merging Incorrectly

Problem 5 – When merging a Microsoft® Excel spreadsheet into DesignPro® 4.0 using ODBC, a decimal and a zero is added to the zip code numbers or leading zeros are dropped for zip codes beginning with zero.

Solution: A possible solution would be to add an apostrophe prior to each zip code number in each cell within Microsoft® Excel. This would treat each cell as text. Unfortunately, you cannot simply reformat the cells as text fields. Each cell must individually contain an apostrophe prior to the zip code number. To automate the addition of the apostrophes, a macro could be written in Microsoft® Excel. Consult the Microsoft® Excel User Manual for more information on macros.

Important Note: If you plan on using bar codes the above solution will not work. Because the zip code fields are now treated as text, they cannot be interpreted as numbers which is required for the bar code feature in DesignPro®. We recommend that you save the Microsoft® Excel spreadsheet as a dBase III file and use the **Open a dBase III Database** option in DesignPro®.

If you need further assistance, please call Avery Software Support at: 888.835.8379