EASYCATALOG
FOR ADOBE® INDESIGN®

ODBC DATA PROVIDER
USER GUIDE

65bit Software Ltd

Revision History

Version	Date	Remarks
2.0.0	13 July 2005	First draft for InDesign CS2 modifications.
2.1.0	13 March 2006	Modifications for the release of EasyCatalog 2.1
3.0.0	16 August 2007	Updated Macintosh platform-specific notes

CONTENTS

CHAPTER 1

OVERVIEW

WELCOME

Thank you for downloading the ODBC Data Provider for EasyCatalog.

65bit Software are committed to providing high quality software for Adobe InDesign, and appreciate the time you take to evaluate our products. All feedback is welcome, good or bad. Please email `feedback@65bit.com`. If you have any questions relating to this or any other product, or need any help, please use the support form on our website.

WHAT IS ODBC?

ODBC, Open Database Connectivity, is an industry standard for database access. Using drivers supplied by your database vendor, or a third-party driver manufacturer, the ODBC Data Provider can connect directly to hundreds of SQL database systems including MySQL, Microsoft SQL Server, Sybase and FileMaker.

BENEFITS

Connecting directly to a database improves both the speed at which you can start working with your data and allows you to target specific data you wish to work with. The power of your database can also be utilised to selectively retrieve, filter, sort and even perform calculations on your data which is imported directly into EasyCatalog without the need to generate export text files.

The ODBC Data Provider is also bidirectional, so any changes made to data on the document can be optionally updated on the database.

INSTALLATION

The ODBC Data Provider is an optional module for EasyCatalog, and should be installed using the supplied installer.

Macintosh users: If the ODBC Data Provider module is not available after installation, please follow the instructions in the '*Platform Specific Issues*' chapter at the end of this manual.

ASSUMPTIONS

This manual assumes that:

- You have a working knowledge of EasyCatalog
- Have installed suitable database drivers from your database vendor, or a third-party driver vendor
- Have a basic knowledge of SQL

If you are in any doubt, please contact us using the support form on the web-site.

CHAPTER 2

CONNECTING TO THE DATABASE

INTRODUCTION

The ODBC Data Provider enables EasyCatalog to directly connect to your database, provided you have a suitable ODBC driver installed. Creating and working with an ODBC Data Source works in the same way as working from a flat-file, although requires slightly more configuration.

BEFORE STARTING

Before a data source can be configured in EasyCatalog, you must first use either:

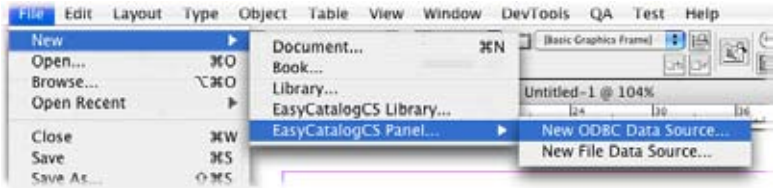
Platform	Application
Macintosh	The '*ODBC Administrator*' application, which is usually located in the '*Applications:Utilities*' folder.
Windows	The '*Data Sources (ODBC)*' control panel which, on Windows XP, is located in 'Control Panel:Administrative Tools'.

Using either of these, a new 'Data Source' must be configured - this Data Source contains information on how to connect to your database, the type of database being used, etc.

This configuration should be performed prior to configuring your new data source in EasyCatalog.

CREATING AN ODBC DATA SOURCE

The ODBC Data Provider adds an additional menu within InDesign to allow the configuration of a new ODBC data source.

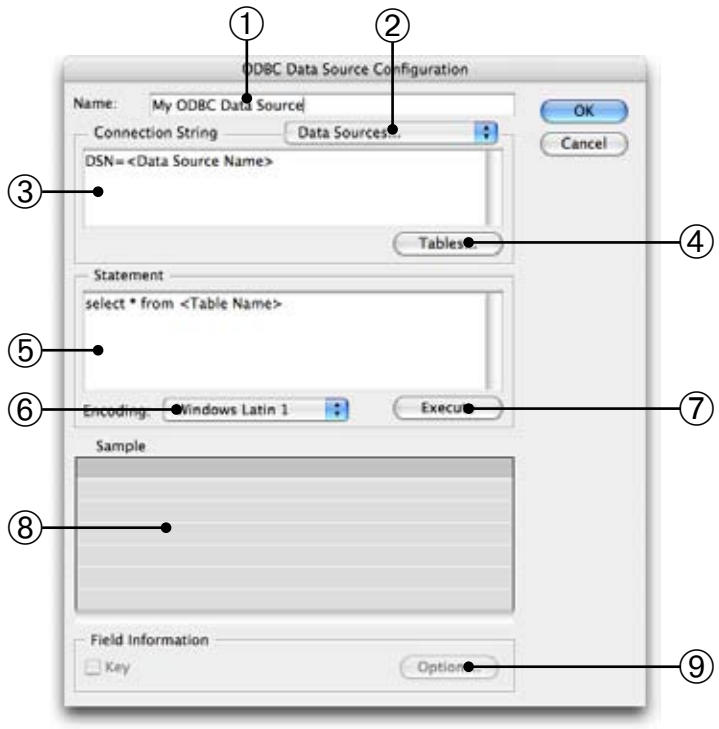


Use the '*New→EasyCatalog Panel→New ODBC Data Source*' menu to create a new ODBC data source

CONFIGURING AN ODBC DATA SOURCE

Configuring a data source is a relatively simple task and principally involves specifying two values within the *ODBC Data Source Configuration* dialog, the '*Connection String*' and the '*Statement*'. Once these have been configured, you can test the settings using the *Execute* button, which will present the results in the '*Sample*' area of the dialog.

CONFIGURING AN ODBC DATA SOURCE
(CONTINUED)



①	The name of the data source - this will be used to refer to the data source by EasyCatalog.
②	A list of the configured ODBC Data Sources in the ODBC Administrator application or control panel is shown here. Select the data source you are connecting to to pre-fill the Connection String.
③	The connection string: this contains parameters that determine how EasyCatalog connects to your database.
④	Click this button to see a full list of tables available in your database. This dialog can also be used to build the SQL statement (see ⑤ below).
⑤	The SQL statement used to retrieve data from your database. Please contact your database administrator if you are unsure what to enter here, or use the '*Tables*' button to help to configure the statement
⑥	Change this pop-up if you are using a unicode-compliant database. Depending on the ODBC driver being used, select either '*Unicode*' or '*UTF-8*'. **Macintosh Only:** For non-unicode databases, select '*Windows Latin 1*' if the text in the database originated from a Windows machine.
⑦	Hit the '*Execute*' button to test the Connection String and SQL statement settings. The results returned by the query will be shown in the sample window (see ⑧ below)
⑧	The results of the database query will be shown here. Use this area to ensure the results are as expected, and to configure Field Options.
⑨	Select one of the columns returned by the query in the Sample pane and hit the '*Options*' button to configure its Field Options. See the EasyCatalog manual for further details on the available Field Options.

CONFIGURING AN ODBC DATA SOURCE (CONTINUED)

Once successfully configured and tested, at least one field must be configured as the 'key field' — a field which can be used to uniquely identify each record from the database.

> The choice of key field is critical to the operation of EasyCatalog. The key field is used to uniquely identify each record from the data source and must never change.

The data source also needs a unique name, which will be used to identify it later by EasyCatalog. The data source will be added to your workspace folder within EasyCatalog and subsequently available from the *File→New→EasyCatalog Panel* menu.

③ CONNECTION STRING

The Connection String is a series of parameters that contain information on how to connect to your database. The format of the connection string is based on the ODBC Connection String standard, and consists of a series of keyword/value pairs separated by semicolons. The equal sign (=) connects each keyword and its value.

Example:

```
keyword1=value; keyword2=value
```

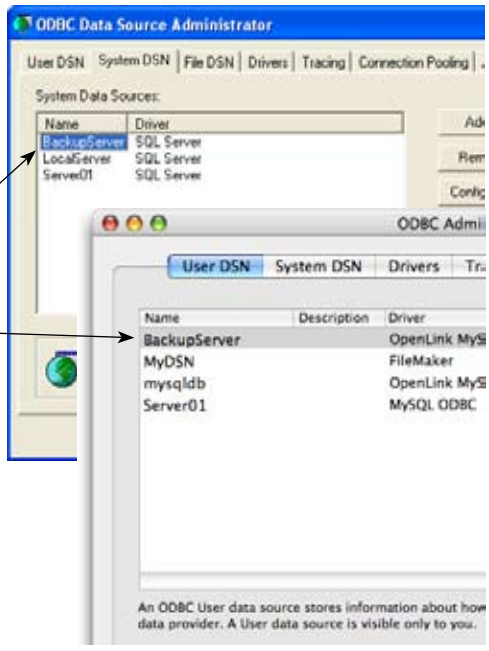
In it's simplest form a connection string needs only to specify a data source name, which is configured separately in the *ODBC Control Panel* (on Windows) or the *ODBC Administrator* application (on the Macintosh).

Example

The data source name specified here equates to the name given to the DSN in the ODBC Control Panel (Windows) or ODBC Administrator application (Macintosh).

```
DSN=BackupServer
```

The names of all available data sources are shown in the Data Sources pop-up ② in the 'New ODBC Data Source' dialog within EasyCatalog.



③ CONNECTION STRING (CONTINUED)

A list of the typical connection string keywords and values is shown below. **Note** that whether they are supported depends on the ODBC driver you are using.

The options specified by the connection string override any settings made in the Data Source configuration in the *ODBC Control Panel* (Windows) or *ODBC Administrator* (Macintosh).

Keyword	Value
DSN	Data source name
HOST	Server host name
SVT	Database server type
DATABASE	The name of the database to connect to
OPTIONS	Database-specific options
UID	User Name
PWD	Password
READONLY	N/Y/I
FBS	Fetch-buffer size
STMT	Specify a statement that will be executed after connection to the database.

Example:

```
DSN=BackupServer;UID=jdoe;PWD=letmein;
```

⑤ STATEMENT

The statement is used to specify the exact data to retrieve from the database, and takes the form of a standard SQL-compliant request.

"*Structured Query Language*" allows you to specify exactly what to retrieve from the database. By using SQL, your database can be interrogated in an almost infinite number of ways.

The exact syntax and use of SQL is beyond the scope of this manual, and there are many SQL tutorials available. This manual assumes that you have a working knowledge of your database and are able to retrieve your data using SQL.

Examples:

```
SELECT * FROM stock_list
```

This simple example will return every record from the `stock_list` table in the database.

```
SELECT * FROM stock_list where department = 'electrical'
```

Here, only the records whose department field is equal to '`electrical`' will be returned from the database. This kind of query is useful for limiting the number of rows returned to make the data more manageable. Alternatively, you could return every record from

⑤ STATEMENT (CONTINUED)

the database and use EasyCatalog's sorting, grouping and filtering options to organize the data.

```
SELECT id,description,price,picture_ref FROM stock_list
```

Instead of selecting every field (*), only the `id`, `description`, `price` and `picture_ref` fields will be returned.

RE-CONFIGURING A DATA SOURCE

The configuration for a data source can be modified later using the '*Information*' dialog. Hit the '*Info*' button at the bottom of the EasyCatalog panel, then use the '*Configure...*' button to change the settings for the data source.

When modifying the SQL statement, you must ensure that the field(s) used as the key field(s) are still returned in the result-set. The key fields used cannot be modified when reconfiguring a data source.

If you have used multiple fields/columns as the key, the order of the fields **must not** change when modifying the query.

SPECIFYING DATABASE USER NAME AND PASSWORD

When connecting to your database, the user name and password information **must** be specified either in the connection string itself, or when configuring the data source in the *ODBC Administrator* control panel (Windows) or the *ODBC Administrator* application (Macintosh).

Using the Connection String:

```
DSN=mydatabasedsn; UID=jdoe; PWD=letmein;
```

Failure to specify the user name and password in either the connection string or the ODBC Control Panel/Administrator application will result in an error when attempting to connect to the database.

CHAPTER 3

UPDATING THE DATABASE

INTRODUCTION

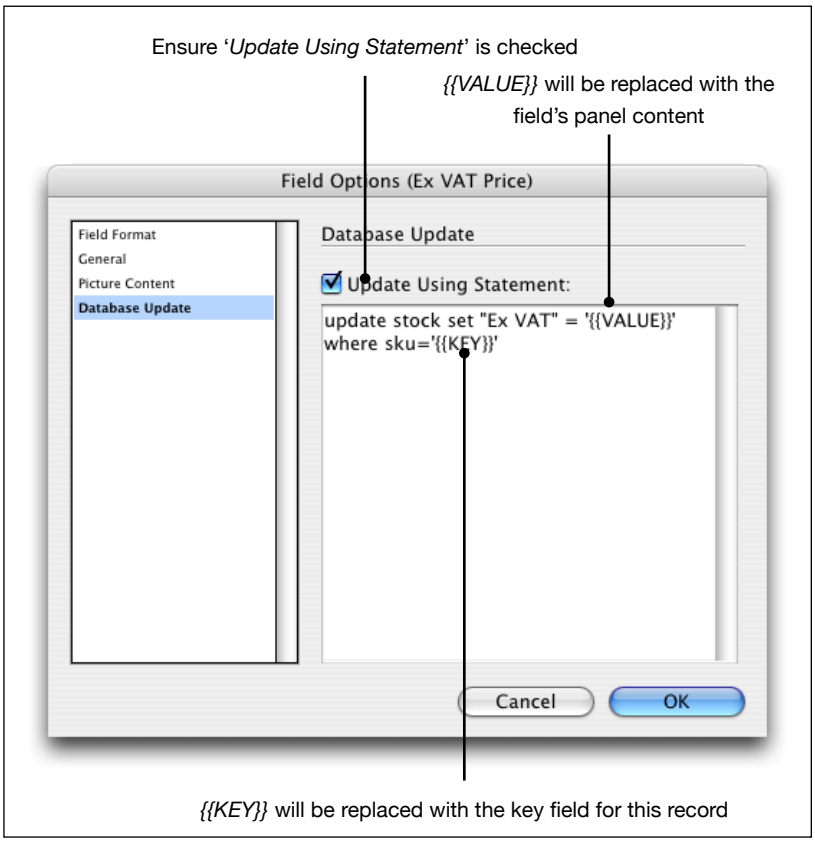
Because EasyCatalog understands when the content of individual fields needs to be updated, the ODBC Data Provider supports updating of the database at a field level.

Each field has an associated SQL statement which is used to update new content to the database. This functionality is optional, and is configured using EasyCatalog's *Field Options* dialog.

FIELD OPTIONS DIALOG

SQL statements must be configured for **each field** that will be updated on the database. Keywords can be included in the statement which are replaced with field content, key field value, etc.

Only fields with the '*Update Using Statement*' check-box set will be updated to the database, regardless of whether the update statement has been entered.



UPDATE USING STATEMENT

The ODBC Data Provider substitutes keywords contained in the statement immediately prior to execution to construct an SQL statement. These keywords are:

Keyword	Value
{{VALUE}}	Replaced with the current value of the field
{{KEY}}	Replaced with the unique key for the *record*
{{FIELDNAME}}	The content of other fields for this record can be referenced by including the field name **in upper case**. e.g. {{PART_NO}}

The Use of Quotes within the statement

When building your 'update' statements, it is important to ensure that quotes are used to enclose alphanumeric data.

Typically, around table and column names **double** quotes should be used. Field content should be enclosed in **single** quotes:

The use of quotes in the 'update' statement

Table and column names should be enclosed within double quotes (")

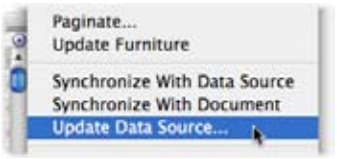
```
update "Stock" set "myfield" = '{{VALUE}}' where "key" = '{{KEY}}'
```

Field content should be enclosed within single quotes (')

The usage shown here is typical, and depends on the type of database being connected to.

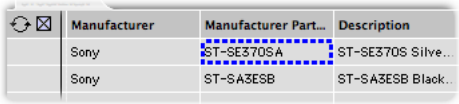
UPDATING THE DATABASE

The database will be updated with the contents of the panel, so first use the '*Update Panel*' menu option to update the panel with the latest information from the document.



To update the *database* with the latest data, use the '*Update Data Source...*' menu option from the EasyCatalog data panel.

Only data that has changed in the panel will be updated to the database. A blue dotted outline shows the data that needs updating to the database.



CHAPTER 4

PLATFORM SPECIFIC ISSUES

MACINTOSH

ODBC Drivers on the Macintosh are normally supplied by third-party vendors which may be available at extra cost.

EasyCatalog works with drivers available from:

Vendor	Website
OpenLink	http://www.openlinksw.com
Actual Technologies	http://www.actualtechnologies.com/

MYSQL

ODBC Drivers are now available for the Macintosh from the MySQL website:

http://dev.mysql.com/downloads/connector/odbc/3.51.html

Note that this is an open-source driver and as such support is limited.

MySQL drivers are also available from the vendors shown above.

FILEMAKER

Connecting to FileMaker 7 and 8 is supported via ODBC - although not all versions of FileMaker support ODBC connections. Please check with FileMaker that you have a version that supports ODBC.

ODBC drivers are available for download from the FileMaker website:

http://www.filemaker.com

Installation instructions are provided with the drivers.

FileMaker 7 Users

If you do not see the 'ODBC/JDBC' sharing menu in FileMaker, the following patch from FileMaker is required:

http://fmdl.filemaker.com/MISC/MacOSX/fms_70v2_osx_xdbc.sit

FILEMAKER (CONTINUED)

Example Configuration

In this example, we'll configure a new ODBC Data Source to connect to the "*Asset Management*" sample database supplied with FileMaker 7.

- Launch the ODBC Administrator application (found in '*Applications:Utilities*').

  You may need to click the padlock icon shown at the bottom of the dialog to enable you to make changes to the configuration.

- Click the '*Drivers*' tab - if the '*FileMaker*' driver is not shown in the list of available drivers, you'll need to install this by following the instructions that accompanied the client driver download.

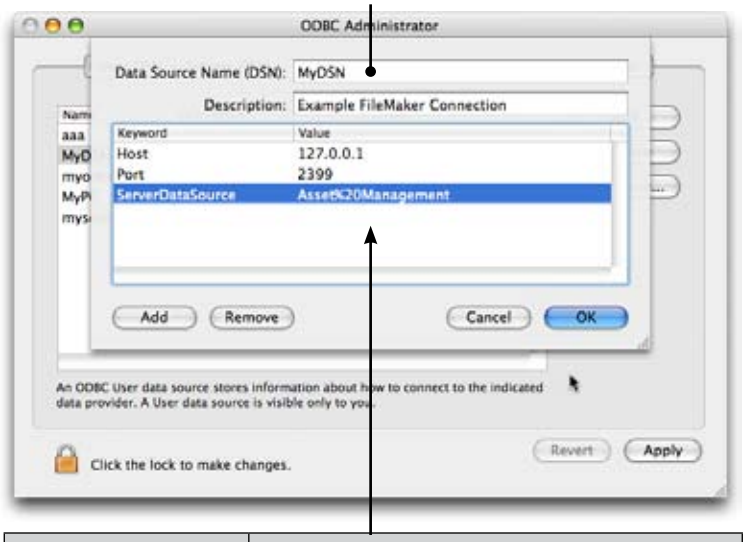
- Now, create a new ODBC Data Source to connect to your FileMaker database. Click either the '*User DSN*' or the '*System DSN*' tab to shown the list of configured data sources. '*User DSN*'s are only available to the logged-on user; '*System DSNs*' are available for all users of the machine.

  Hit the '*Add*' button to create a new data source. Select the 'FileMaker' driver and enter the settings shown below:

FILEMAKER
(CONTINUED)

Configuring a new ODBC Data Source

The name of the data source - this will be used in the Connection String within EasyCatalog



Keyword	Value
Host	Enter the IP address or host name of your database server. In this example, the database is running locally.
Port	This will usually be 2399
ServerDataSource	Enter the name of your database here, without the .fp7 or .fp8 suffix. **NOTE:** If your database name contains spaces, replace them with %20 as shown in the example here.

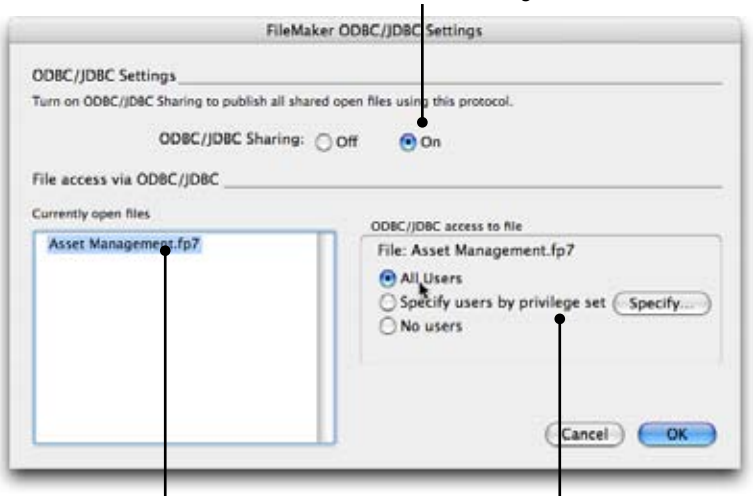
FILEMAKER (CONTINUED)

- Open the database in FileMaker and enable sharing:

Sharing the Data in FileMaker

Open your database in FileMaker, and select '*Sharing→ODBC/JDBC*' from the application menu.

Ensure '*ODBC/JDBC Sharing*' is on



Select the FileMaker database you want to share

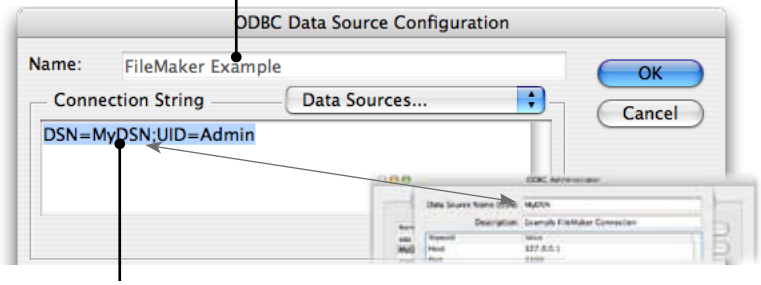
Specify the users who can access this database remotely. In this example, all users can access the database.

- Now the database is shared in FileMaker and we have an ODBC Data Source configured, the final stage is to create a new Data Source in EasyCatalog using the '*File→New→ODBC Data Source*' menu option using the settings shown on the following page.

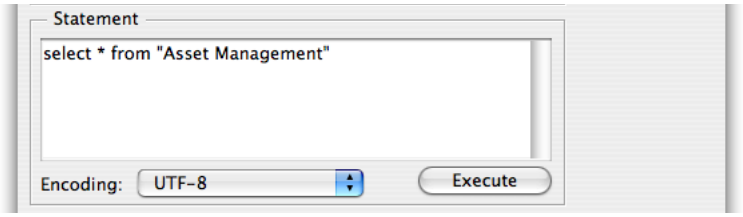
UNICODE DATA (CONTINUED)

Configuring EasyCatalog

The name of the data source in EasyCatalog



The name of the data source we created in the ODBC Administrator application. The user name (UID) entered here is a user-name that has been configured in FileMaker for the database.



Enter an SQL query here that can be used to retrieve data from the FileMaker database. In the majority of cases, this will be in a format similar to that shown in this example.

UNICODE DATA

A unicode-compatible ODBC driver is required to retrieve unicode data from your database. Most modern drivers are compatible, but you should check with your driver vendor if you are unsure. Unicode support is relatively new, so always ensure you are running the latest version of the driver supplied by your driver vendor.

Certain drivers require special configuration in order to retrieve unicode data: these are outlined below.

FileMaker

The ODBC Drivers supplied by FileMaker are Unicode-compatible, although you need to ensure that 'UTF-8' is selected as the encoding type when configuring your data source in EasyCatalog.

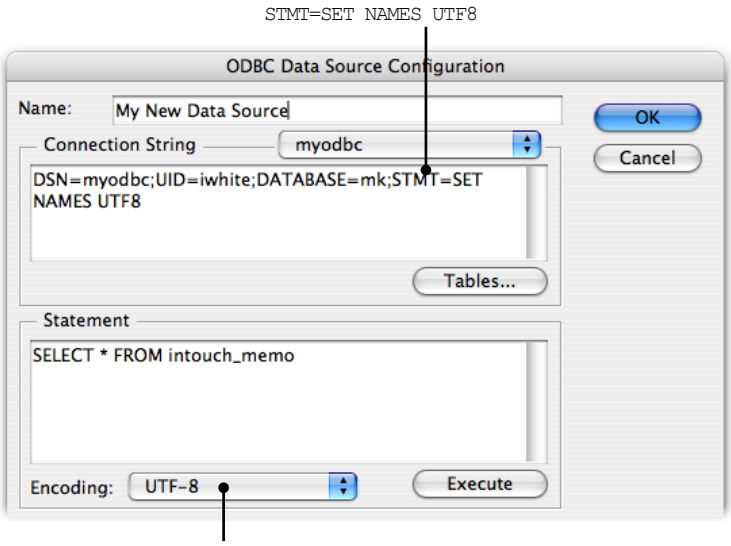
MySQL

Using the ODBC Drivers supplied by MySQL (MySQL ODBC 3.51 Driver).

An extra parameter is required in the connection string when configuring the data source in EasyCatalog. Also, ensure '*UTF-8*' is selected as the encoding type.

MySQL Drivers and Unicode

This parameter must be included in the connection string to ensure data is returned in UTF-8 (Unicode) format.



Ensure the *Encoding* pop-up is set to 'UTF-8'

ODBC DATA PROVIDER PLUG-IN NOT LOADING

If the ODBC Data Provider plug-in is not visible in the '*File→New →ODBC Data Source*' menu, please check the following:

• Check that the '*ODBC Data Provider*' plug-in was selected during the installation of EasyCatalog. If not, please run the installer again and select all of the modules you require.

• Ensure that you have installed version 3.52.1 of the iODBC Framework. The EasyCatalog disk image you downloaded also contains an 'ODBC Pre-requisites' folder: inside of this folder there are two installers that need to be run to install the correct system frameworks. After installing, start InDesign with the Shift, Alt, Ctrl, Apple keys held down. Answer 'yes' when asked if you would like to delete your InDesign preferences - this will force InDesign to reload the plug-ins.

• Check for any other errors using the '*Configure Plug-ins*' dialog, which can be found on the 'InDesign' application menu.

- Double-click on the ODBC Data Provider plug-in in the list: make a note of any error message shown and contact us using the support form for more advice.

- If the ODBC Data Provider plug-in is not listed at all, ensure that the '*Enabled*', '*Third Party*' and '*Optional*' check-boxes are checked. If the plug-in is still not shown, it has not been installed. Please use the support form for more advice.

WINDOWS

The ODBC Data Provider is compatible with the standard Windows installation of ODBC. ODBC drivers are usually supplied free-of-charge with your database, although some vendors may charge. If you are in any doubt, please contact your database vendor for more information.

UNICODE DATA

A unicode-compatible ODBC driver is required to retrieve unicode data from your database. Most modern drivers are compatible, but you should check with your driver vendor if you are unsure. Unicode support is relatively new, so always ensure you are running the latest version of the driver supplied by your driver vendor.

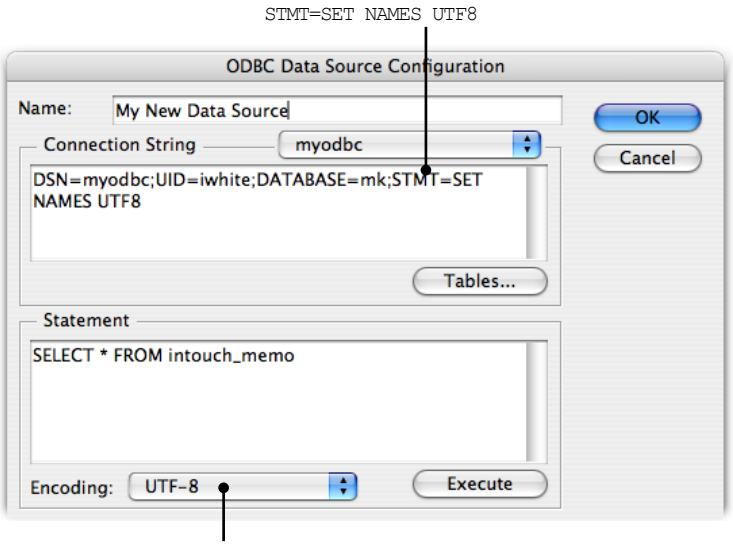
Certain drivers require special configuration in order to retrieve unicode data: these are outlined below.

MySQL

An extra parameter is required in the connection string when configuring the data source in EasyCatalog. Also, ensure '*UTF-8*' is selected as the encoding type.

MySQL Drivers and Unicode

This parameter must be included in the connection string to ensure data is returned in UTF-8 (Unicode) format.



Ensure the *Encoding* pop-up is set to 'UTF-8'