





### Import an external data source to use for development

- Select the "Data" workspace
- create a new database e.g. sakila for MySQL
- Click the "gear" icon of the "Databases" panel
- Select "Import..."
- Choose an ODBC data source and all tables and data will be imported into your new database.

You can then build apps against the imported MySQL data.

### Using the "CursorAdapter" framework class

Here is a simple example using the "CursorAdapter" class in your scripting code.

```
ca = CreateObject("CursorAdapter")
ca.DataSourceType="ODBC"
ca.DataSource="DRIVER=SQL
Server;Network=DBMSSOCN;SERVER=w2kas;database=(local);uid=sa;pwd="
ca.alias = "foo"
ca.SelectCommand="select * from foo"
ca.CursorFill()
ca.DataSource = "lianja_mysqltest"
ca.alias = "actor"
ca.SelectCommand = "select * from actor"
ca.cursorFill()
```

Notice how you can specify a complete connection string or alternatively an ODBC data source in the **datasource** property.

You can find full details of the methods and properties of CursorAdapter class [here](#) .

### Using the Visual FoxPro SQLXXX() functions

The following Visual FoxPro compatible functions work against ODBC data sources in Lianja.

- SQLCONNECT()
- SQLSTRINGCONNECT()
- SQLDISCONNECT()
- SQLEXEC()
- SQLTRANSACTION()
- SQLCOMMIT()
- SQLCANCEL()
- SQLROLLBACK()
- SQLTABLES()
- SQLCOLUMNS()

### Simplified data access using an explicit connection string

You can gain easy access to external data sources by specifying the "CONNSTR" clause on the "USE" command which will create a local cursor against the ODBC data source.

```
use customers connstr "odbc_data_source_name"
```

You can restrict the data that is selected into the local cursor by specifying a "WHERE" condition.

```
use customers connstr "odbc_data_source_name" where amountdue > 1000
```

You can also order the data in the local cursor by specifying the "ORDER BY" clause.

```
use customers connstr "odbc_data_source_name" where amountdue > 1000 order by  
customername
```

On completion of the USE command, the data from the external data source is now available in a local cursor. You can update records in the external data source using the REPLACE command. e.g.

```
use customers connstr "odbc_data_source_name" where amountdue > 1000 order by  
customername  
goto reccount()  
replace amountdue with amountdue - 100
```

You can also create temporary indexes against the data which now resides in the local cursor and use the SEEK command to lookup keys.

```
use customers connstr "odbc_data_source_name" where amountdue > 1000 order by  
customername  
index on custid tag custid  
seek "HA567"
```

The CURSORADAPTER() function returns a reference to the internal **CursorAdapter** for the ODBC connection. You can then call methods and get/set properties on this.

```
use customers connstr "odbc_data_source_name" where amountdue > 1000 order by  
customername  
ca = cursoradaptor("customers")  
ca.cursorRefresh()  
ca.selectcmd = "select * from customers where amountdue > 2000"  
ca.cursorRefresh()
```

to close the ODBC connection, simply execute a USE command on its own against the local cursor.

```
use customers connstr "odbc_data_source_name" where amountdue > 1000 order by  
customername  
use
```