### **Connect MS Access to SQL Server**

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## **Open SQL Database**

We will open our food ordering database on the SQL server and check the chef information table.

Make sure the chef ID is the primary key otherwise we will not be able to write to the SQL database from the Access front end.



### Run as Administrator

We then right click on the MS Access program on the Start menu and we choose Properties. On the Compatibility tab, we annotate the Run this program as an administrator checkbox. We press the OK button and open the program.

Security	Details	Previous Versions		
General	Shortcut	Compatibility		
you have problem n earlier version of atches that earlier	s with this program an Windows, select the version.	d it worked correctly on compatibility mode that		
Compatibility mod	the settings			
Windows XP (S	Gervice Pack 3)			
Settings				
Run in 256 colors				
Run in 640 x 480 screen resolution				
🔲 Disable visua	al themes			
Disable desk	top composition			
Disable display scaling on high DPI settings				
Privilege Level				
🔽 Run this prog	gram as an administrati	or		
😗 Change setti	ngs for all users			

### **Open a New Database**

We select a new database filename and create it.



### External Data – ODBC Database

We then will select External data on the ribbon menu. We will choose the ODBC Database icon.

A	A	Table Tools	food_ordering : Database (Access	s 2007 - 2010) - Microsoft Acc	
File Home Create Ext	ernal Data Database Tools	Fields Table			۵ 🕜
Saved Linked Table Imports Manager Import & Manager	ODBC Database	Excel Text XML File File Exc	PDF or XPS port	Create Manage E-mail Replies Collect Data	
All Access Objects 💿 «	Table1			×	Field List X
Tables *	* (New)				No fields available to be added to the current view.
Datasheet View	Record: 14 1 of 1 → H	▶¤ 🖹 🕅 K No Filter Se	arch		Num Lock 间 🔽 🎾

## Get External Data

We opt for the link to the data source by creating a linked table.

Get External Data - ODBC Database
Select the source and destination of the data
Specify how and where you want to store the data in the current database.
Import the source data into a new table in the current database.
If the specified object does not exist, Access will create it. If the specified object already exists, Access will append a number to the name of the imported object. Changes made to source objects (including data in tables) will not be reflected in the current database.
Link to the data source by creating a linked table. Access will create a table that will maintain a link to the source data. Changes made to the data in Access will be reflected in the source and vice versa.
OK Cancel

## Select Machine Data Source

On the Machine Data Source tab, we will select the New button to locate the database on the SQL server.

Select Data Source				×	
File Data Source Machine Data	Source				
Data Source Name dBASE Files Excel Files MS Access Database TaskScheduler	Type User User User System	Description	1		
				<u>N</u> ew	
A Machine Data Source is specific to this machine, and cannot be shared. "User" data sources are specific to a user on this machine. "System" data sources can be used by all users on this machine, or by a system-wide service.					
		ОК	Cancel	Help	

### System Data Source

Then we opt for the system data source.



## Select the SQL Server

We then select our SQL server driver. We will highlight the SQL Server Native Client 11.0 and press the Next button.

Create New Data Source	a familia de la constitución de la constitu	×
	Select a driver for which you want to set up a da Name Microsoft Paradox Driver (*.db.) Microsoft Paradox-Treiber (*.db.) Microsoft Text Driver (*.bt; *.csv) Microsoft Text-Treiber (*.bt; *.csv) Microsoft Visual FoxPro Driver Microsoft Visual FoxPro Driver Microsoft Visual FoxPro-Treiber SQL Server SQL Server SQL Server Native Client 10.0 SQL Server Native Client 11.0	ta source.
	< <u>B</u> ack <u>N</u> ext >	Cancel

### Create the Data Source

When we click the Finish button, we will go to the next step which will identify the database on the SQL server.



#### Create a New Data Source to SQL Server

On the Create a New Data Source to SQL Server, we will input the name of the database to which we will connect. Following that will be a good description and then the name of the SQL server.

Create a New Data Source	e to SQL Server
	This wizard will help you create an ODBC data source that you can use to connect to SQL Server.         What name do you want to use to refer to the data source?         Name:       Food ordering         How do you want to describe the data source?         Description:       Food ordering database         Which SQL Server do you want to connect to?         Server:       DONNA-PC
	Finish     Next >     Cancel     Help

## Authentication

We will default to our Windows authentication. However, we could opt to use a specified login and password.

Create a New Data Sour	ce to SQL Server			
	How should SQL Server verify the authenticity of the login ID?			
	Client Configuration			
Connect to SQL Server to obtain default settings for the additional configuration options.				
Password:				
< <u>Back Next</u> > Cancel Help				

## Change to the Desired Database

The ensuing window will have us select the database to which we will connect. By default, we will have the master database in the SQL server. We will annotate the change the default database checkbox and highlight the desired one from the list box.

The rest of the settings we keep the same.

	✓ Change the default database to: food, ordering
SQL Server 2012	Mirror server:
	S <u>P</u> N for mirror server (Optional):
	│ │ Attac <u>h</u> database filename:
	J I <u>U</u> se ANSI quoted identifiers.
	Vise <u>A</u> NSI nulls, paddings and warnings. Application intent:
	READWRITE
	Multi-subnet <u>f</u> ailover.

### Finish Identifying the SQL Connection

We will maintain the settings on this page and push the Finish button.

	Change the language of SQL Server system messages to: (Default)
SQL Server 2012	Use strong encryption for data
	Perform translation for character data
	$\hfill \underline{U}$ se regional settings when outputting currency, numbers, dates and times.
	Save long running queries to the log file:
	C:\Users\Charles\AppData\Local\Temp\QUERY.LC Browse
	Long query time (milliseconds): 30000
	□ Log <u>O</u> DBC driver statistics to the log file:
	C:\Users\Charles\AppData\Local\Temp\STATS.LO Browse
	C:\Users\Charles\AppData\Local\Temp\STATS.LO Browse

### Test the Data Source

Next, we will click on the Test Data Source button and the test should be completed successfully.



ODBC Microsoft SQL Server Setup	X
A new ODBC data source will be created with the following configuration:	
Microsoft SQL Server Native Client Version 11.00.2100	*
Data Source Name: Food ordering Data Source Description: Food ordering database Server: DONNA-PC Use Integrated Security: Yes Database: food_ordering Language: (Default) Data Encryption: No Trust Server Certificate: No Multiple Active Result Sets(MARS): No Mirror Server: Translate Character Data: Yes Log Long Running Queries: No Log Driver Statistics: No Use Regional Settings: No Use ANSI Quoted Identifiers: Yes Use ANSI Null, Paddings and Warnings: Yes	-
Test Data Source         OK         Cancel	

## **ODBC** Date Source Created

We now have the database connection to the SQL server showing on the System DSN tab.

Highlight the database and press the OK button.

Select Data Source		×			
File Data Source Machine Data	Source		1		
Data Source Name	Туре	Description			
dBASE Files Excel Files	User User				
Food ordering System Food ordering database MS Access Database User Task Scheduler System					
	oyacam				
,		<u>N</u> ew			
A Machine Data Source is specific to this machine, and cannot be shared. "User" data sources are specific to a user on this machine. "System" data sources can be used by all users on this machine, or by a system-wide service.					
		OK Cancel Help			

# Link Table



## Access Linked to the SQL Database

We can see the dbo table in the list of tables and we can add records to that table.

🛕 🛛 🗸 🖓 🗸 🖓 🗸 🔤	) : Database (Access 2007 - 2	0 Table Tools	B	
File Home Create Exte	ernal Data Database To	ls Fields Table		۵ ()
Saved Linked Table Excel Access Imports Manager Import & Link	DBC atabase → More → Expe	ed Excel Text XML rts File File c	PDF F-mail TXPS  A Access Word Merge More * More *	Create Manage E-mail Replies Collect Data
All Access Objects 💿 «	dbo_chefInfo			×
Search P	🔟 chefID 👻 na	meLast 👻 nameFirst	🔹 email 👻	
Tables	1 Rok	bins Charles	test@email.co	
🕴 🗞 dbo_chefInfo	2 Sm	th John	test3@email.co	
	3 Jon	es Jane	test4@email.c	
	*			
	Record: I 4 4 of 4	N 🛤 🦹 No Filter Sea	rch	
Datasheet View			Nu	im Lock 🔲 🖽 🕮 🕍 🦼

## Verify the Changes in the SQL Database

We can see the records show up on the table on the SQL database.

