

# From The Edge:

by

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## Converting Microsoft® Access 2000 to R:BASE 7.0 for Windows

(R:BASE 7.0 for Windows)

November 29, 2002

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From the Edge:           Converting Microsoft® Access 2000 Database to R:BASE 7.0 for Windows  
Section:                 File Gateway (Import)  
Chapter:                 Running R:BASE Your Way!  
Platform:                R:BASE 7.0 for Windows  
Build:                   1.855xRT04 and higher

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**Objectives:**    To convert MS Access 2000 Database to R:BASE 7.0 for Windows

MS Access Database Name: **Northwind**

Tables:

Categories  
Customers  
Employees  
Order Details  
Orders  
Products  
Shippers  
Suppliers

R:BASE Database Name: **Northwnd**

Tables:

Categories  
Customers  
Employees  
OrderDetails  
Orders  
Products  
Shippers  
Suppliers

**Preparations:**

1.    Create a directory Northwind under your normal R:BASE 7.0 database directory, such as: D:\RB70Data\Northwind
2.    Copy Northwind.mdb database in D:\RB70Data\Northwind directory
3.    Create a blank Northwnd R:BASE database to import all tables from MS Access Northwind database as follows:

Start R:BASE 7.0 for Windows

Change Current Folder to D:\RB70Data\Northwind

At the R> prompt, type:

**CREATE SCHEMA AUTHOR Northwnd**

that would create a blank Northwnd R:BASE database with no tables.

Type **EXIT** to close and exit R:BASE

**Methods:**

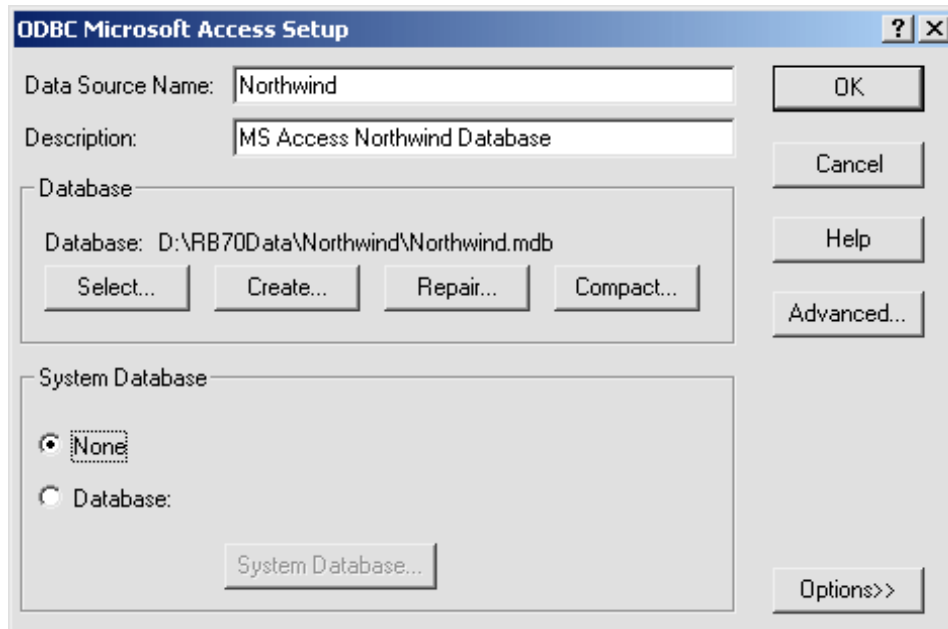
There are at least two methods to convert MS Access 2000 Database to R:BASE 7.0 for Windows:

1.    Using ODBC Method
2.    Using File Gateway Import Option in R:BASE 7.0 for Window

## Converting MS Access Database to R:BASE 7.0 for Windows Using ODBC Method:

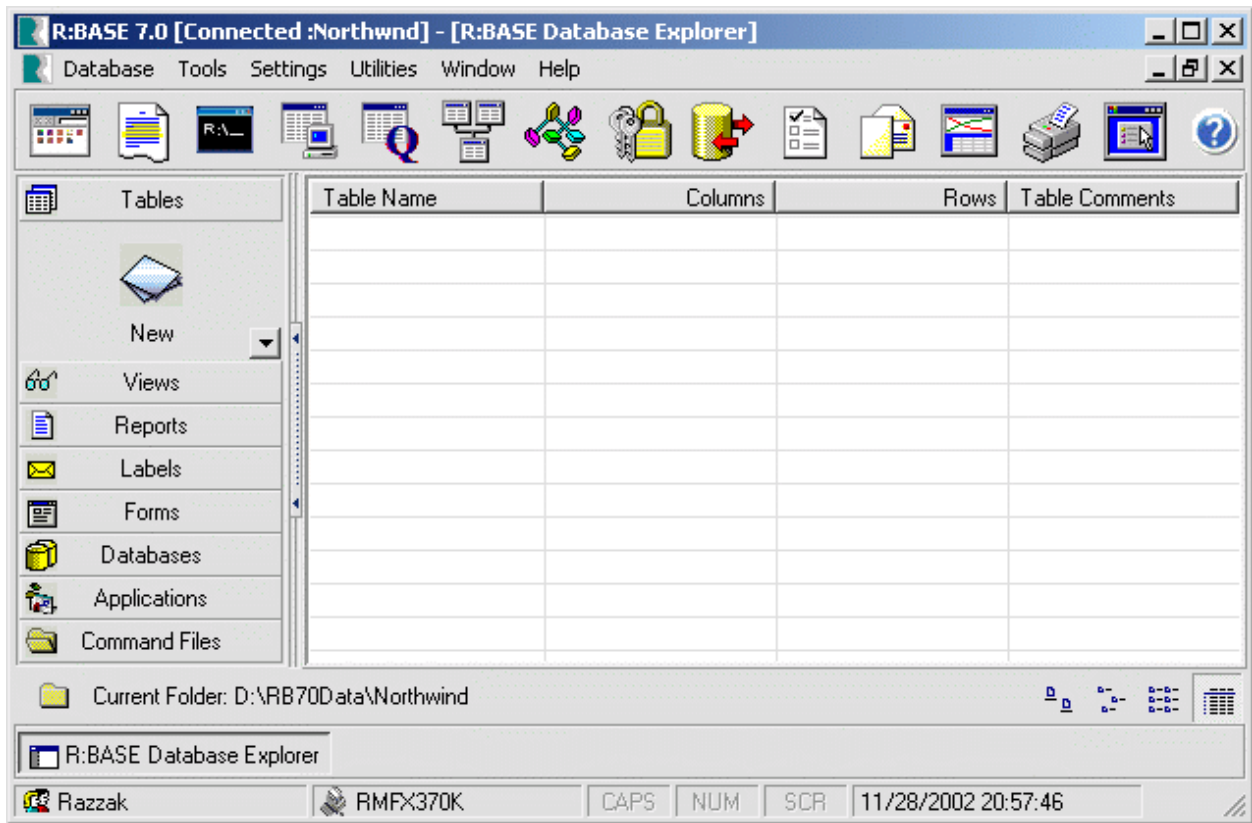
### Steps:

1. Start ODBC Data Source Administrator
2. Select System DSN Tab
3. Click on [Add] button
4. Select Driver for Microsoft Access (\*.mdb)
5. Click on [Finish] button
6. Under ODBC Microsoft Access Setup
  - Type Northwind in Data Source Name Box
  - Type MS Access Northwind Database in Description Box
  - Click on [Select...] button to locate Northwind Data



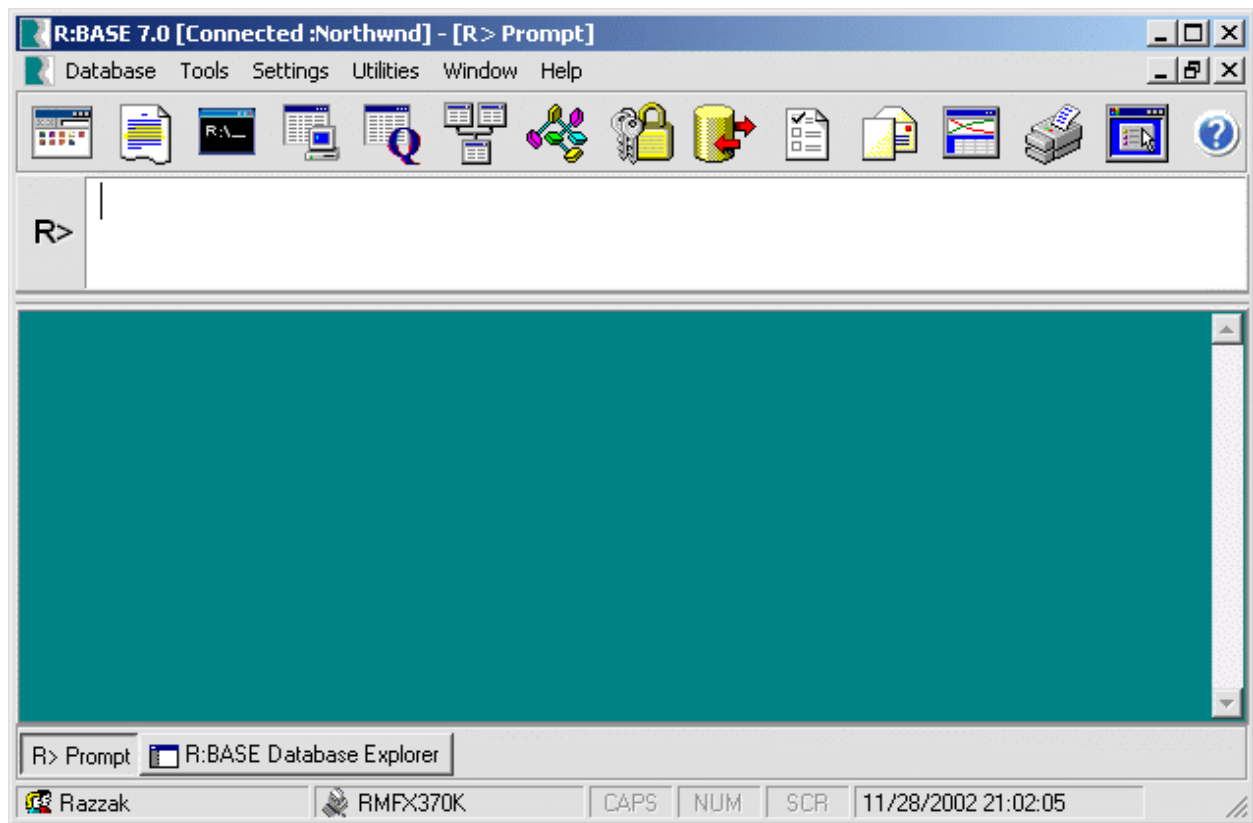
- Click on [OK] button
  - Northwind System Data Source will be listed under System DSN tab of ODBC Data Source Administrator
  - Click on [OK] button again to close ODBC Data Source Administrator
7. Start R:BASE 7.0 for Window
  8. Change Current Folder to D:\RB70Data\Northwind

9. Using Database Explorer, CONNECT to Northwnd database. As you can see there are no tables created at this point



10. Click on R> prompt icon on the Toolbar

11. Type LIST and press [Enter]

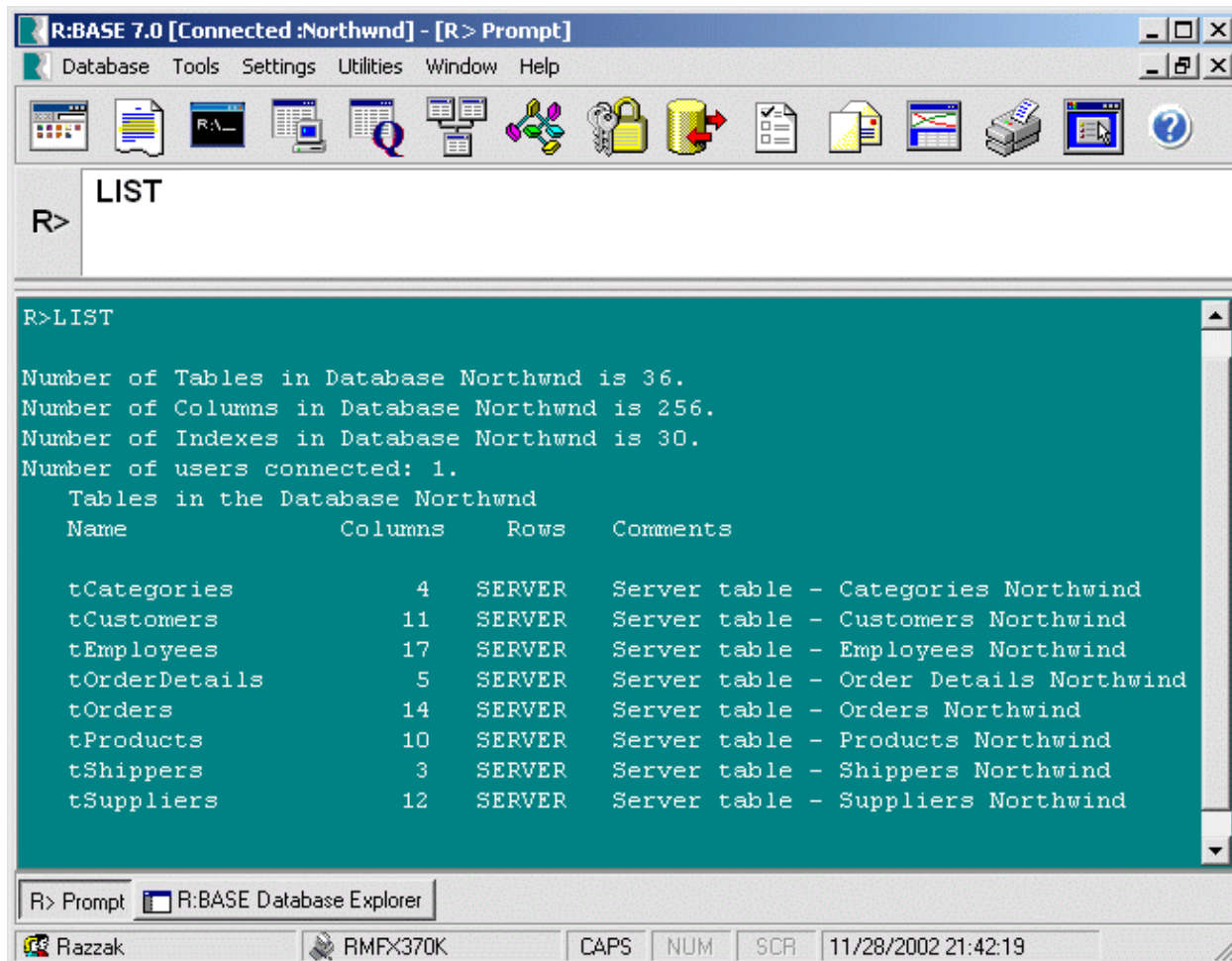


Notice that there are no tables at this stage.

12. Now, at the R> prompt, type the following in **blue and bold** and press [Enter] after each command:

**SCONNECT Northwind** to connect to MS Access ODBC Data Source  
**SATTACH Categories AS tCategories USING ALL** to attach Categories table  
**SATTACH Customers AS tCustomers USING ALL** to attach Customers table  
**SATTACH Employees AS tEmployees USING ALL** to attach Employees table  
**SATTACH 'Order Details' AS tOrderDetails USING ALL** to attach Order Details table  
**SATTACH Orders AS tOrders USING ALL** to attach Orders table  
**SATTACH Products AS tProducts USING ALL** to attach Products table  
**SATTACH Shippers AS tShippers USING ALL** to attach Shippers table  
**SATTACH Suppliers AS tSuppliers USING ALL** to attach Suppliers table

13. Type **LIST** and press [Enter] to list all attached tables from MS Access NorthWind database in R:BASE .



The screenshot shows the R:BASE 7.0 interface with the following content:

```
R> LIST
```

```
R>LIST

Number of Tables in Database Northwnd is 36.
Number of Columns in Database Northwnd is 256.
Number of Indexes in Database Northwnd is 30.
Number of users connected: 1.
  Tables in the Database Northwnd
  Name                Columns  Rows  Comments
  -----
  tCategories          4    SERVER  Server table - Categories Northwind
  tCustomers           11    SERVER  Server table - Customers Northwind
  tEmployees           17    SERVER  Server table - Employees Northwind
  tOrderDetails        5    SERVER  Server table - Order Details Northwind
  tOrders              14    SERVER  Server table - Orders Northwind
  tProducts            10    SERVER  Server table - Products Northwind
  tShippers             3    SERVER  Server table - Shippers Northwind
  tSuppliers           12    SERVER  Server table - Suppliers Northwind
```

Notice that all we have at this point, are the attached tables.

14. Now, let's project these temporarily attached ODBC tables as permanent R:BASE tables. At the R> prompt, type the following in **blue and bold** and press [Enter] after each command:

**PROJECT Categories FROM tCategories USING ALL**  
**PROJECT Customers FROM tCustomers USING ALL**  
**PROJECT Employees FROM tEmployees USING ALL**  
**PROJECT OrderDetails FROM tOrderDetails USING ALL**  
**PROJECT Orders FROM tOrders USING ALL**  
**PROJECT Products FROM tProducts USING ALL**  
**PROJECT Shippers FROM tShippers USING ALL**  
**PROJECT Suppliers FROM tSuppliers USING ALL**

15. Type LIST TABLES to see the real tables

```
R>LIST TABLES

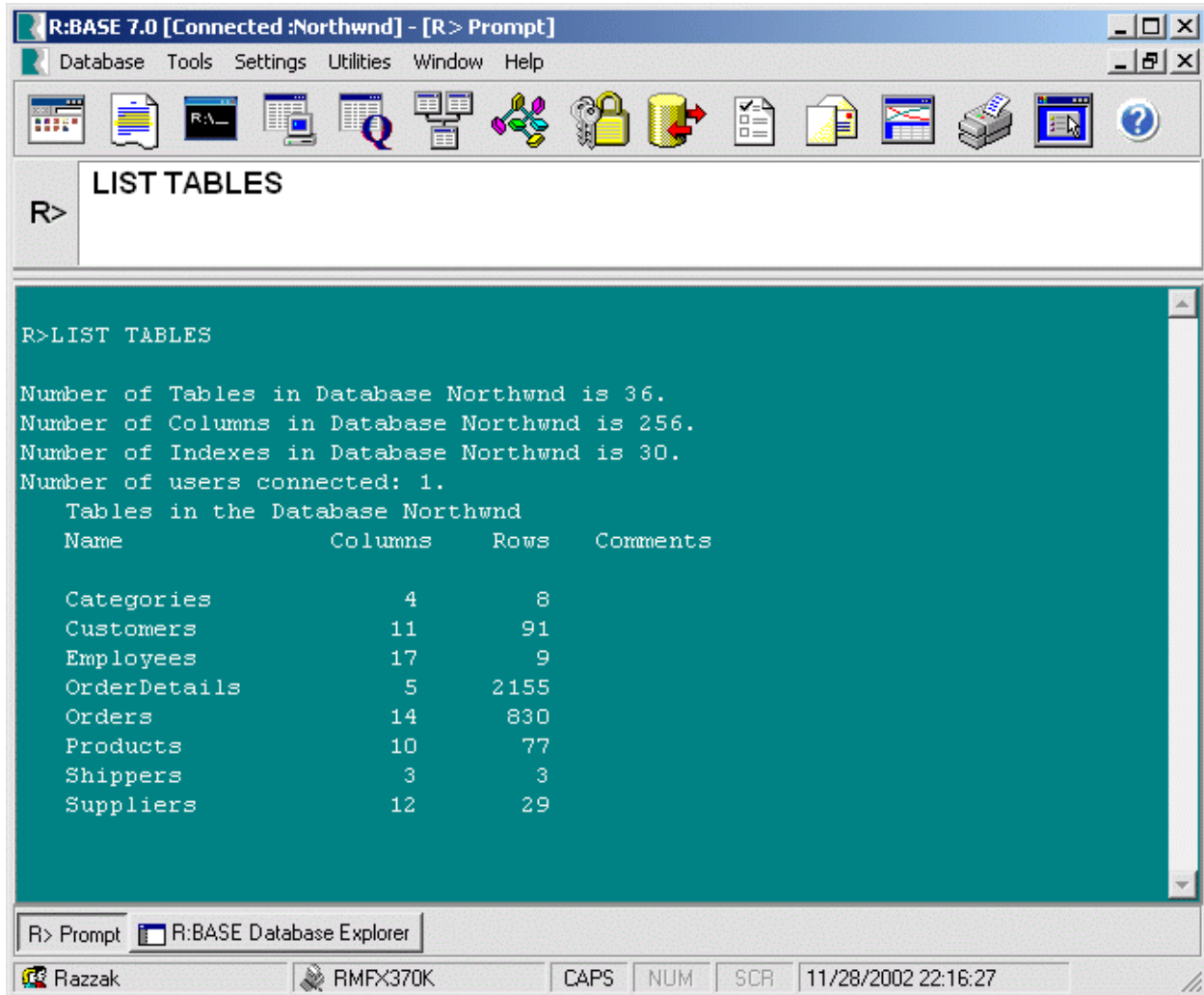
Number of Tables in Database Northwnd is 44.
Number of Columns in Database Northwnd is 332.
Number of Indexes in Database Northwnd is 30.
Number of users connected: 1.
Tables in the Database Northwnd
Name                Columns  Rows  Comments
-----
Categories           4        8
Customers            11       91
Employees            17        9
OrderDetails         5      2155
Orders               14       830
Products             10        77
Shippers              3         3
Suppliers            12        29
tCategories           4  SERVER  Server table - Categories Northwind
tCustomers            11  SERVER  Server table - Customers Northwind
tEmployees            17  SERVER  Server table - Employees Northwind
tOrderDetails         5  SERVER  Server table - Order Details Northwind
tOrders               14  SERVER  Server table - Orders Northwind
tProducts             10  SERVER  Server table - Products Northwind
tShippers              3  SERVER  Server table - Shippers Northwind
tSuppliers            12  SERVER  Server table - Suppliers Northwind
```

Tables with Columns and Rows represent R:BASE native tables. The SERVER tables are the attached ODBC tables.

16. The last step is to detach those server tables and the data source. At the R> prompt:

Type **SDETACH ALL NOCHECK** and press [Enter]  
Type **SDISCONNECT Northwind** and press [Enter]

17. Type **LIST TABLES** and press [Enter]



Wow .. now we have the native R:BASE tables converted from MS Access Northwind database, using the ODBC method.

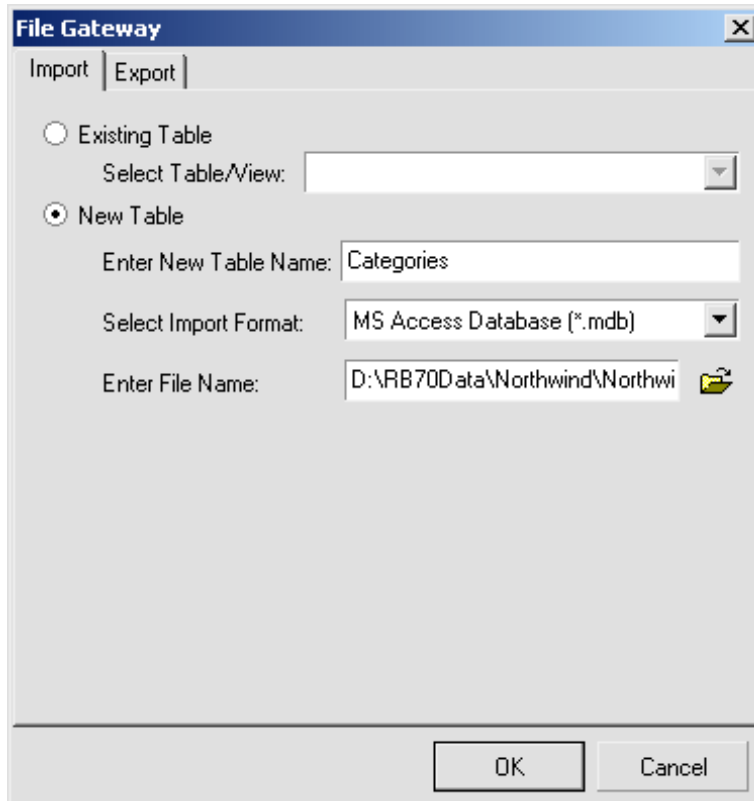
You can BROWSE or EDIT any table, create Queries/Views, Forms, Report, Labels and Applications to manage your database in a true-relational, industrial-strength and multi-user database, R:BASE 7.0 for Windows!

## Converting MS Access Database to R:BASE 7.0 for Windows Using File Gateway Import

Follow **Preparations** section above to create blank Northwnd R:BASE database with no tables.

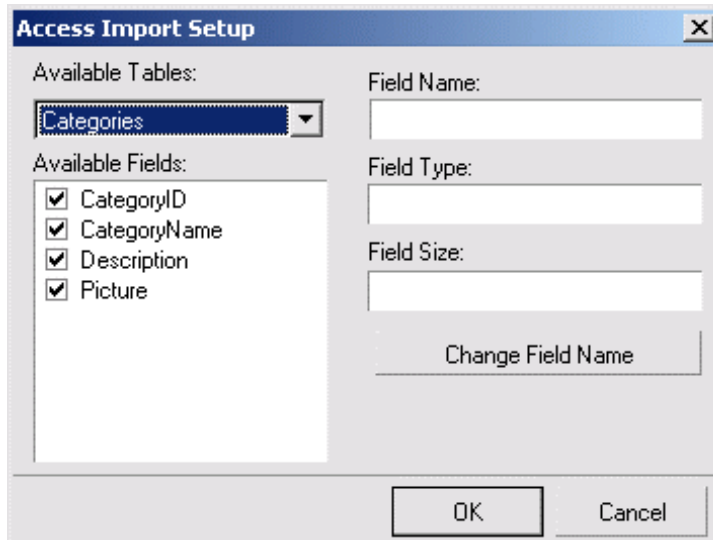
### Steps:

1. Start R:BASE 7.0 for Windows
2. Using Database Explorer, CONNECT Northwnd database
3. Click on Open File Gateway Import/Export Data icon on Tool Bar
4. Under File Gateway Import section:
  - Click on **New Table** radio button
  - Type **Categories** in Enter New Table Name:
  - Select **MS Access Database (\*.mdb)** under Select Import Format: choose box
  - Using File Explorer icon, locate the Northwind.mdb database for Enter File Name:

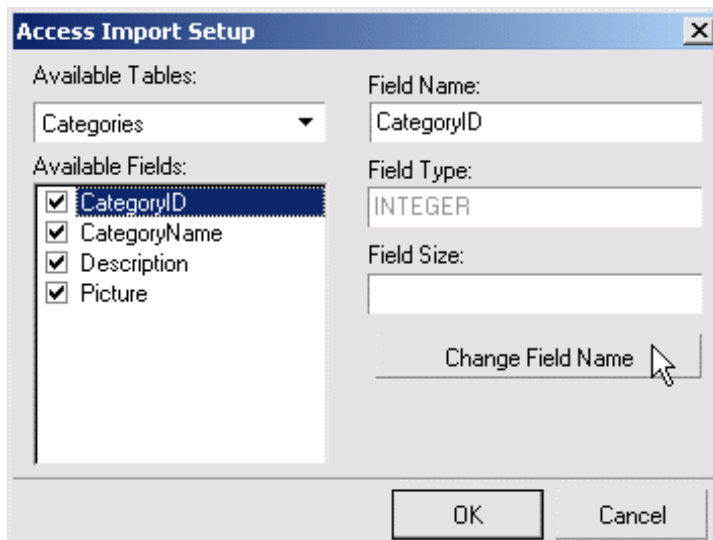


Click on **[OK]**

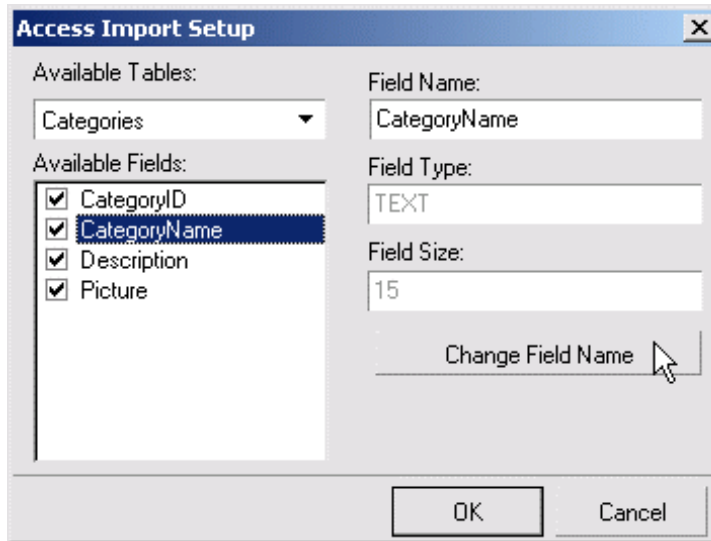
5. Select **Categories** from the list of Available Tables: choose box



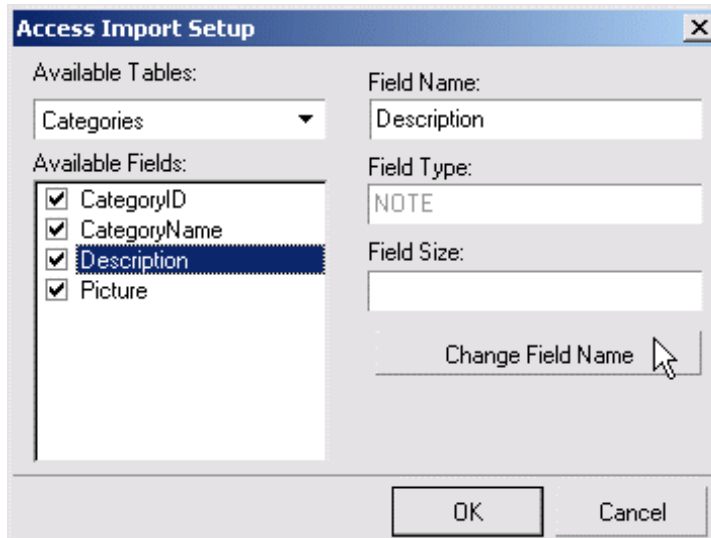
6. Click on **CategoryID** column under Available Fields: and then click on **Change Field Name** to map the Field Name, Field Type and Field Size to R:BASE compliant Column Name, Data Type and Size, accordingly.



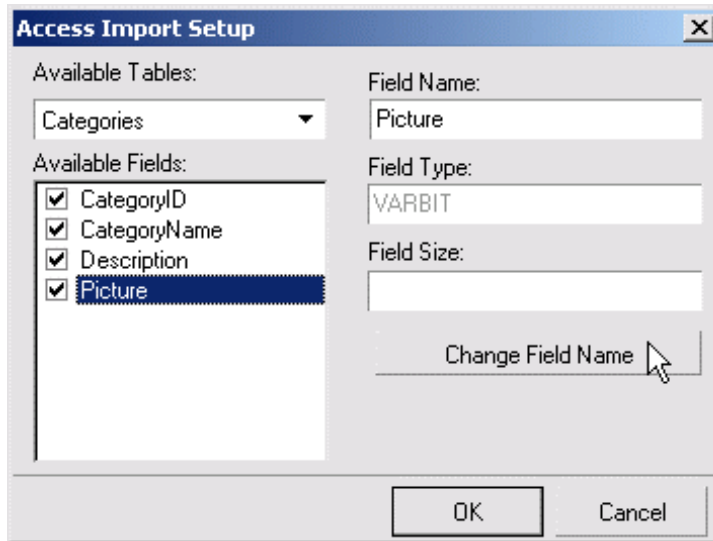
7. Click on **CategoryName** column under Available Fields: and then click on **Change Field Name** to map the Field Name, Field Type and Field Size to R:BASE compliant Column Name, Data Type and Size, accordingly.



8. Click on **Description** column under Available Fields: and then click on **Change Field Name** to map the Field Name, Field Type and Field Size to R:BASE compliant Column Name, Data Type and Size, accordingly.

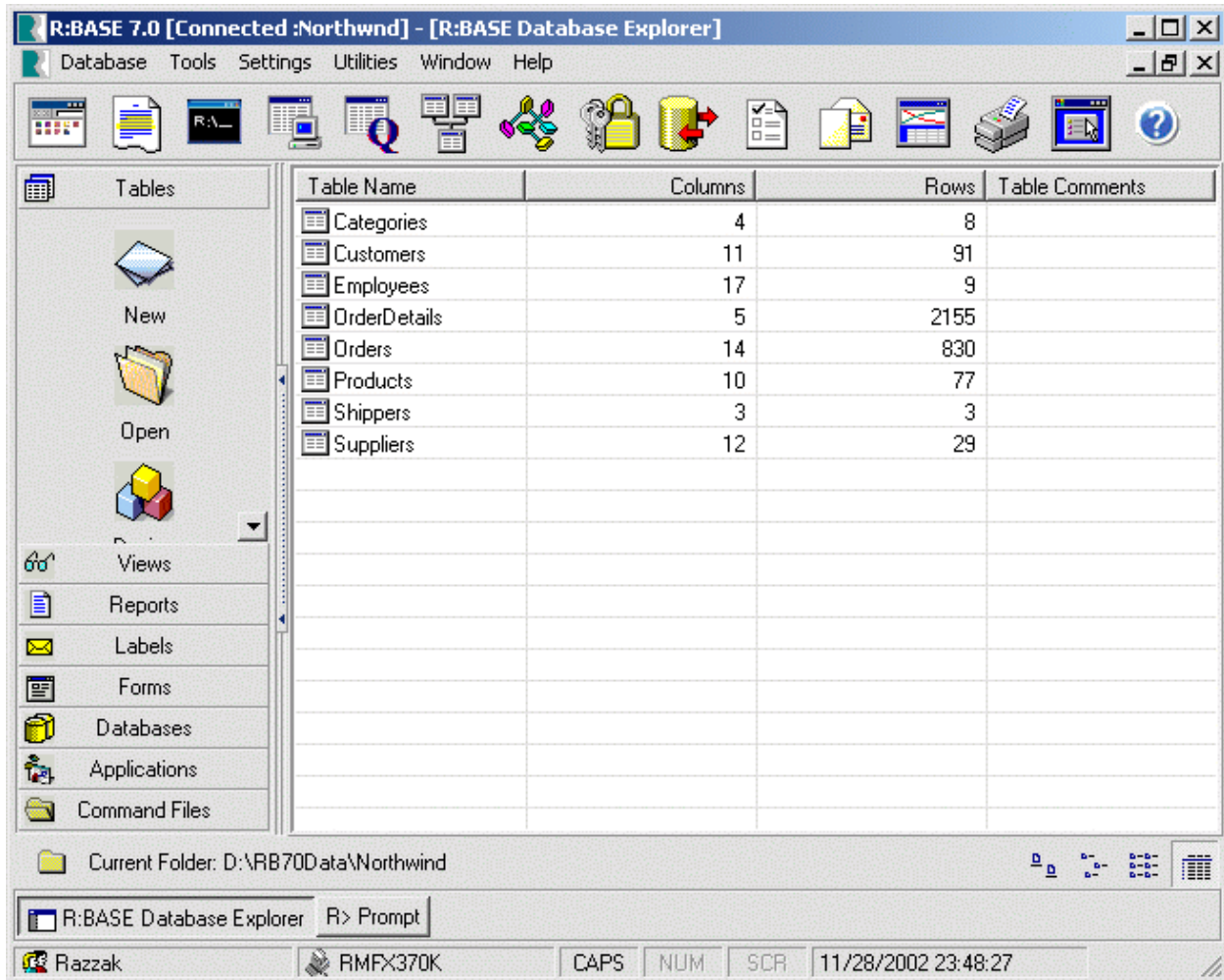


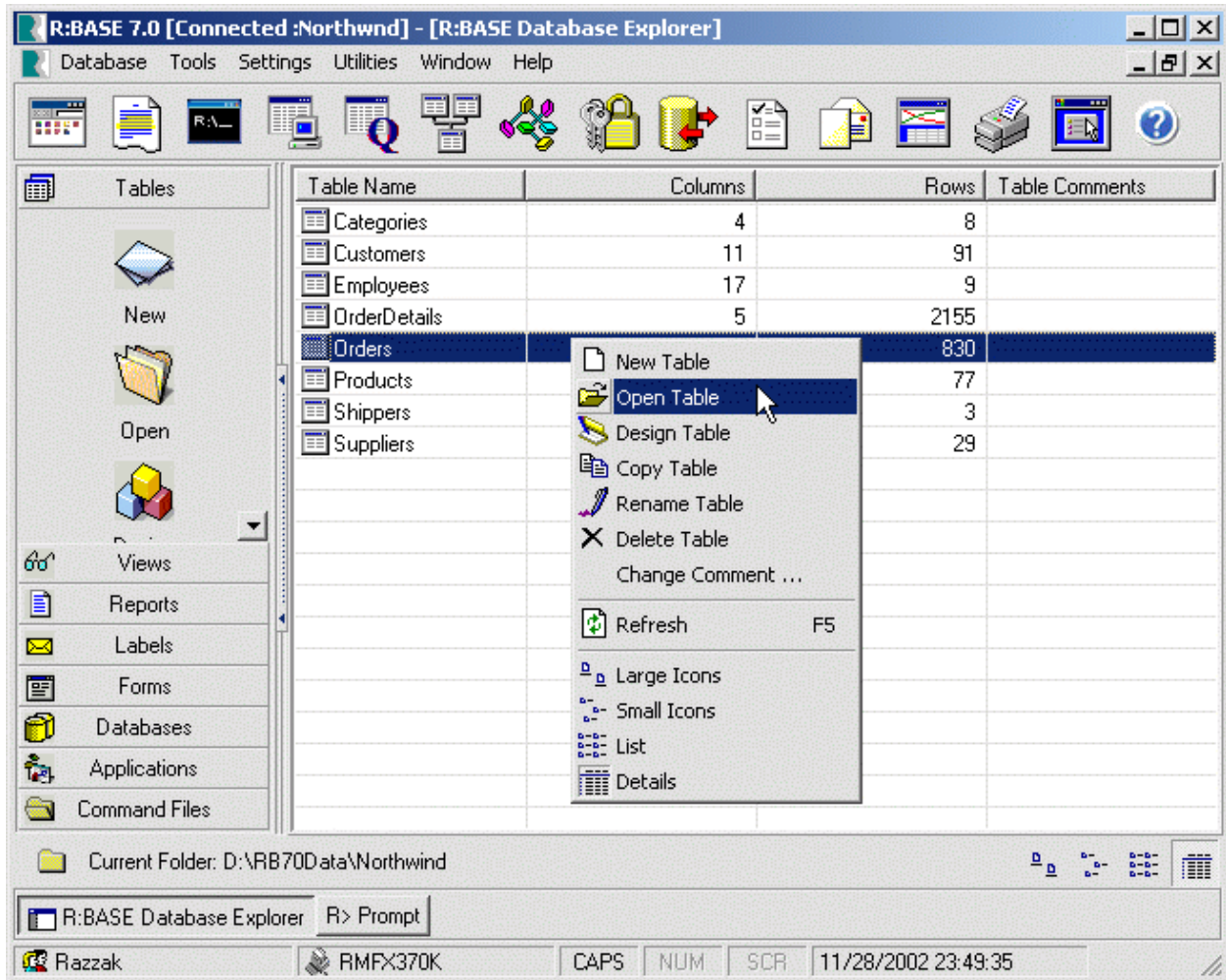
9. Click on **Picture** column under Available Fields: and then click on **Change Field Name** to map the Field Name, Field Type and Field Size to R:BASE compliant Column Name, Data Type and Size, accordingly.



10. Now, click on **[OK]** to import MS Access Database Categories table into R:BASE 7.0. A progress bar will be displayed to verify the records are being imported.
11. Repeat step 4 through 10 for the remaining Customers, Employees, OrderDetails, Orders, Products, Shippers and Suppliers tables. Notice that 'Order Details' table name with spaces, will be imported as OrderDetails table name, i.e, without spaces. R:BASE does not allow table or column names with spaces.

12. When all done successfully, you should be able to BROWSE/EDIT any table, create Queries/Views, Forms, Report, Labels and Applications to manage your database in a true-relational, industrial-strength and multi-user database, R:BASE 7.0 for Windows!





R:BASE 7.0 [Connected :Northwnd] - [Data Browser. . [Orders]]

Database Edit Sort Calculate Layout Tools Settings Utilities Window Help

OrderID	CustomerID	EmployeeID	OrderDate	RequiredDate	ShippedDate	ShipVia	Freight	ShipName
10248								
10259	CENTC	4	07/18/1996	08/15/1996	07/25/1996	3	\$3.25	Centro comercial Mocte
10260	OTTIK	4	07/19/1996	08/16/1996	07/29/1996	1	\$55.09	Ottilies Käseladen
10261	QUEDE	4	07/19/1996	08/16/1996	07/30/1996	2	\$3.05	Que Delícia
10262	RATTC	8	07/22/1996	08/19/1996	07/25/1996	3	\$48.29	Rattlesnake Canyon Gro

Record 1 of 830

Table Name : Orders    Browse Mode    Field Name : OrderID    Datatype : INTEGER

Data Browser. . [Orders]    R:BASE Database Explorer    R> Prompt

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R:BASE 7.0 [Connected :Northwnd] - [Data Browser . . [Orders]]

Database Edit Sort Calculate Layout Tools Settings Utilities Window Help

OrderID	CustomerID	EmployeeID	OrderDate	RequiredDate	ShippedDate	ShipVia	Freight	ShipName
10248	VINET	5	07/04/1996	08/01/1996	07/16/1996	3	\$32.38	Vins et alcools Che
10249	TOMSP	6	07/05/1996	08/16/1996	07/10/1996	1	\$11.61	Toms Spezialitäten
10250	HANAR	4	07/08/1996	08/05/1996	07/12/1996	2	\$65.83	Hanari Carnes
10251	VICTE	3	07/08/1996	08/05/1996	07/15/1996	1	\$41.34	Victuailles en stock
10252	SUPRD	4	07/09/1996	08/06/1996	07/11/1996	2	\$51.30	Suprêmes délices
10253	HANAR	3	07/10/1996	07/24/1996	07/16/1996	2	\$58.17	Hanari Carnes
10254	CHOPS	5	07/11/1996	08/08/1996	07/23/1996	2	\$22.98	Chop-suey Chinese
10255	RICSU	9	07/12/1996	08/09/1996	07/15/1996	3	\$148.33	Richter Supermark
10256	WELLI	3	07/15/1996	08/12/1996	07/17/1996	2	\$13.97	Wellington Importa
10257	HILAA	4	07/16/1996	08/13/1996	07/22/1996	3	\$81.91	HILARIÓN-Abastos
10258	ERNSH	1	07/17/1996	08/14/1996	07/23/1996	1	\$140.51	Ernst Handel
10259	CENTC	4	07/18/1996	08/15/1996	07/25/1996	3	\$3.25	Centro comercial M
10260	OTTIK	4	07/19/1996	08/16/1996	07/29/1996	1	\$55.09	Ottilies Käseladen
10261	QUEDE	4	07/19/1996	08/16/1996	07/30/1996	2	\$3.05	Que Delícia
10262	RATTC	8	07/22/1996	08/19/1996	07/25/1996	3	\$48.29	Rattlesnake Canyo

Record 1 of 830

Table Name : Orders    Browse Mode    Field Name : OrderID    Datatype : INTEGER

Data Browser . . [Orders]    R:BASE Database Explorer

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Send your comments and/or suggestions to A. Razzak Memon, R:BASE Technologies, Inc. 3935 Old William Penn Highway, Murrysville, Pennsylvania, USA. [razzak@rbase.com](mailto:razzak@rbase.com)