

Preparing a Microsoft Access Database for Migration

Using SQLyog's ODBC Import Tool, user can migrate Access database (2003/07/10) along with table indexes by simply following the wizard.

But in order to import Foreign Keys, SQLyog's Import External Data requires access to the system tables of the Microsoft Access database for the purpose of reverse-engineering. By default, read access to the system tables of an Access database is restricted for external applications. The procedure to enable the read access depends on the MS-Office/Access version. But in every case you must first unhide the system tables and next change some of their properties. This procedure can be broken down into the following three steps:

STEP 1: Unhiding system tables for all Access versions

This step enables SQLyog's ODBC Import tool to access the system tables of the Access database.

a) Unhiding system tables for Access 2003:

For Microsoft Access 2003, select tools and go to options and select the view tab.

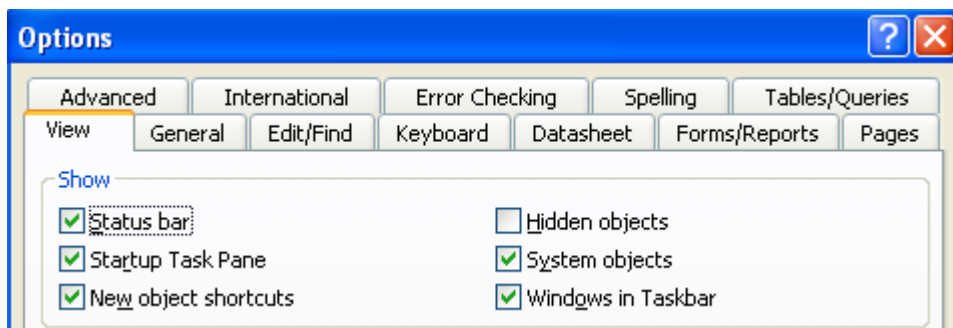


Figure 1: The show section in Access2003

Check the box next to the System objects option and close the options dialog. System tables for the database should now be present:

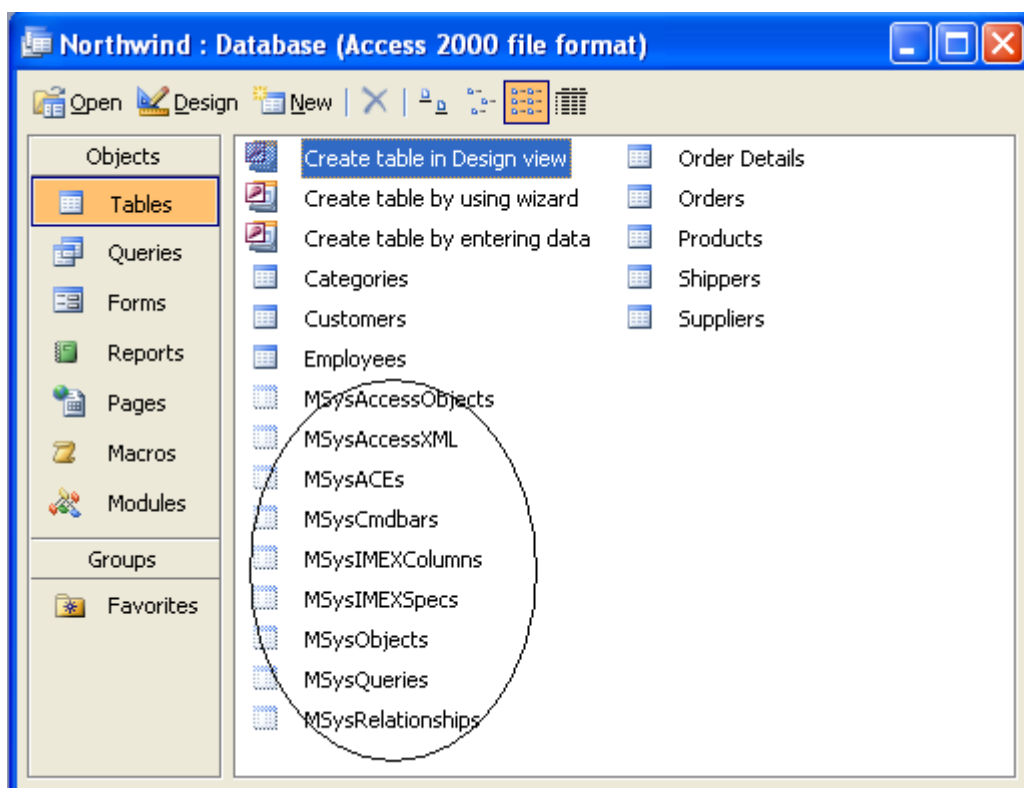


Figure 2: The system objects
Note the presence of the various **MSys** tables.

b) Unhiding system tables for Access 2007:

For Microsoft Access 2007, choose the **Access Options** for the selected database after you click the Microsoft Office Button.

Select Navigation Options in the Current Database category. Within the **Navigation Options** dialog, look for the **Display** section:

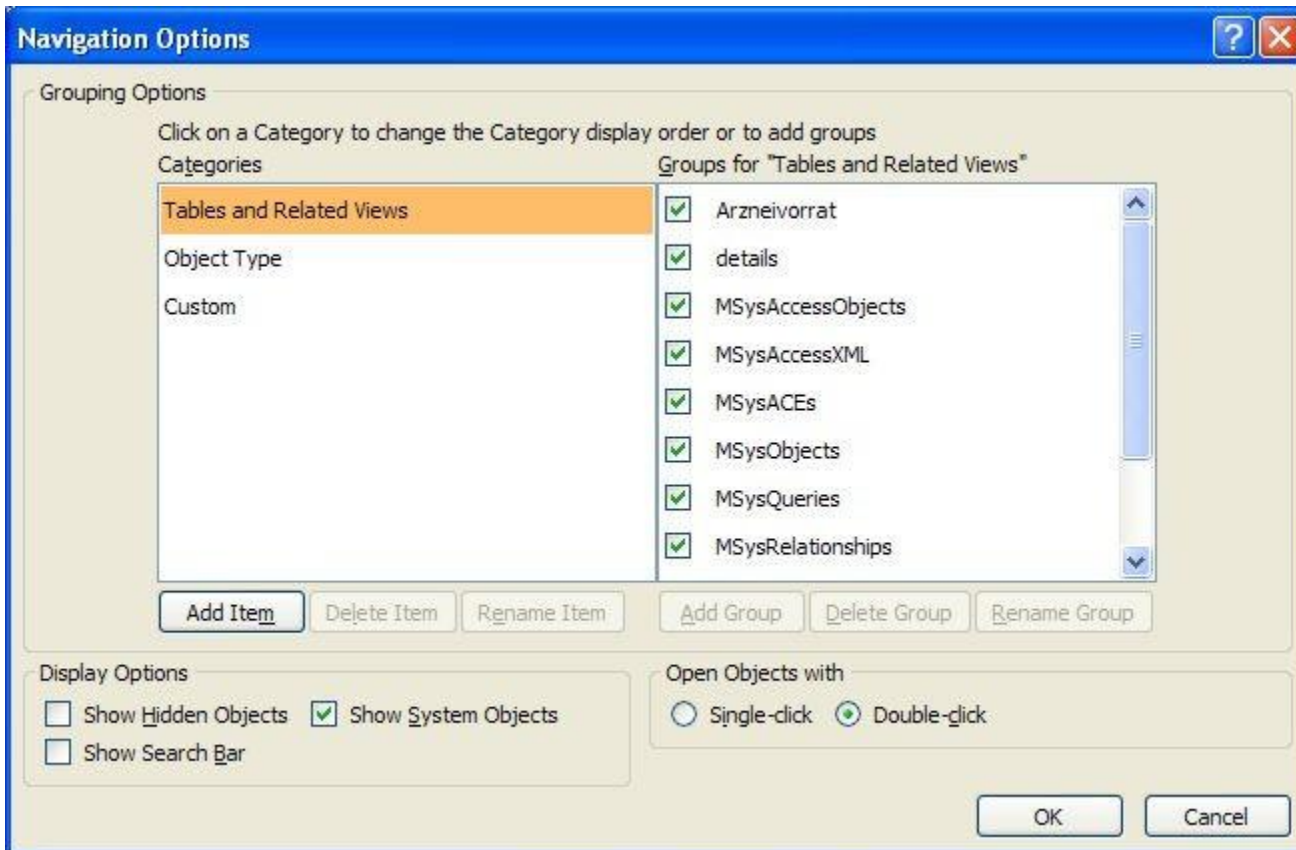


Figure 3: The Display section on Access2007

The System tables for the database are displayed after selecting the **Show System objects** option in the Navigation options dialog.

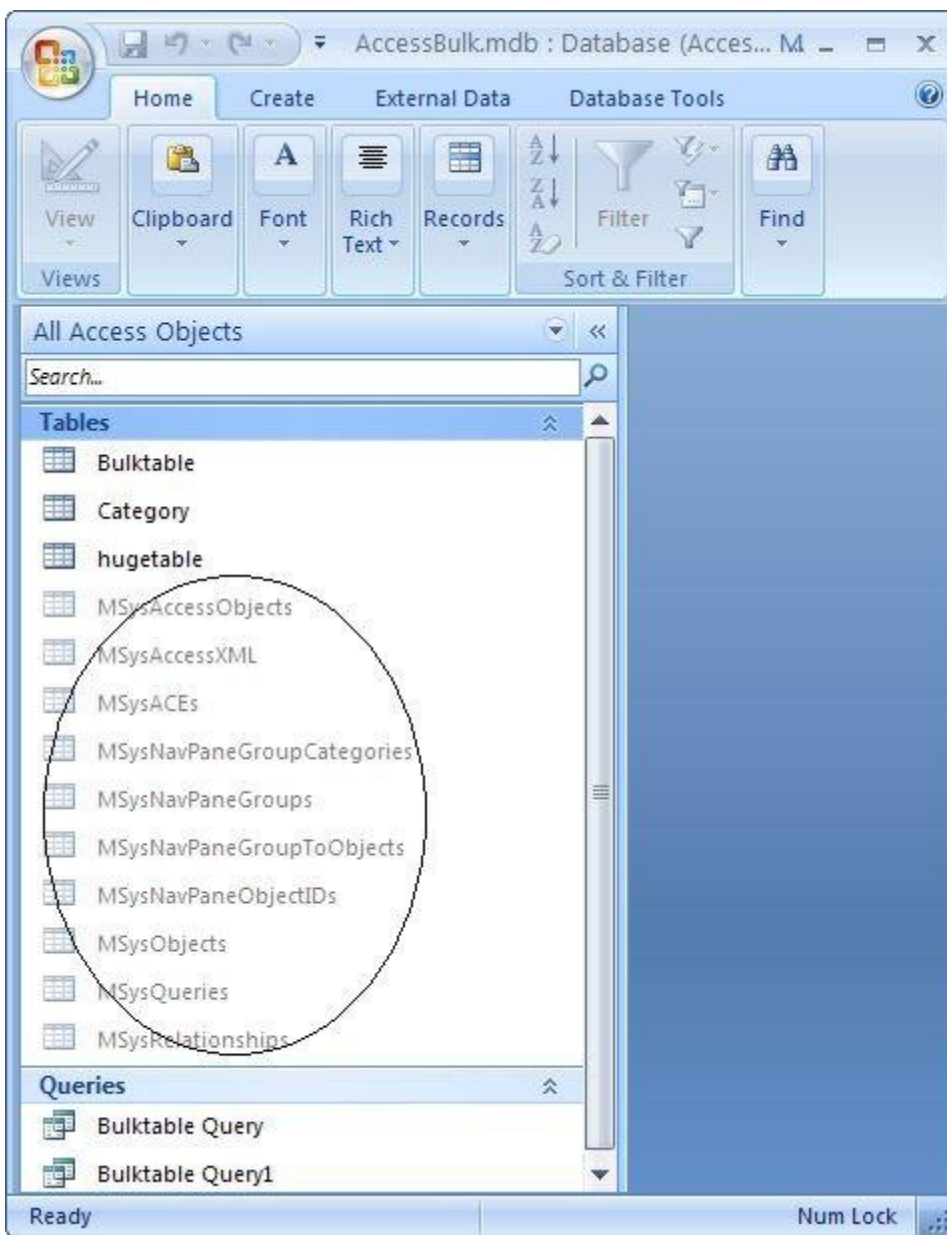


Figure 4: The system objects for Access 2007

Note the presence of the various **MSys** tables.

c) Unhiding system tables for access 2010.

For Microsoft Access 2010, go to file and options. Select Navigation Options in the Current Database category. Within the Navigation Options dialog, look for the Display options.

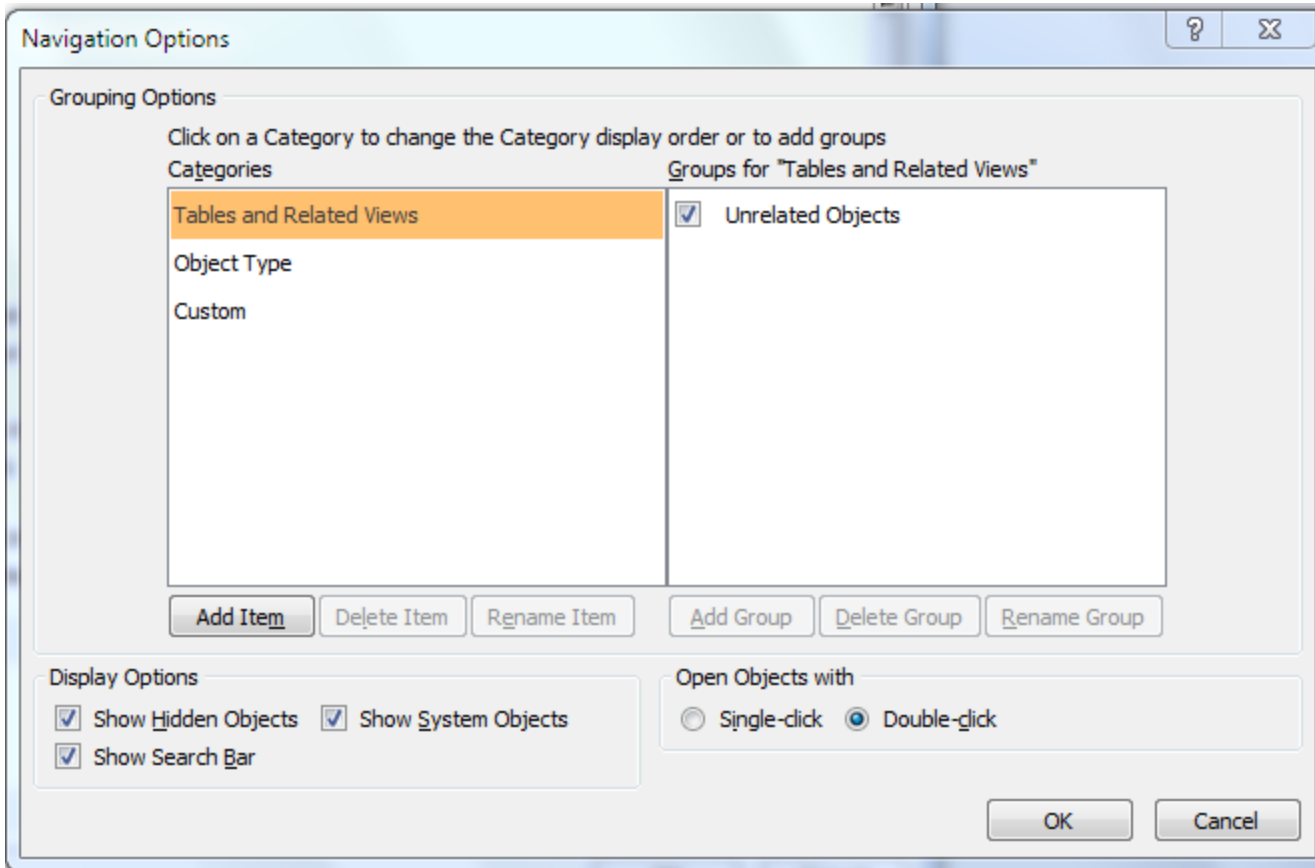


Figure 5: The Display section on Access2010.

The System tables for the database are displayed after selecting the Show System objects option in the Navigation options dialog.

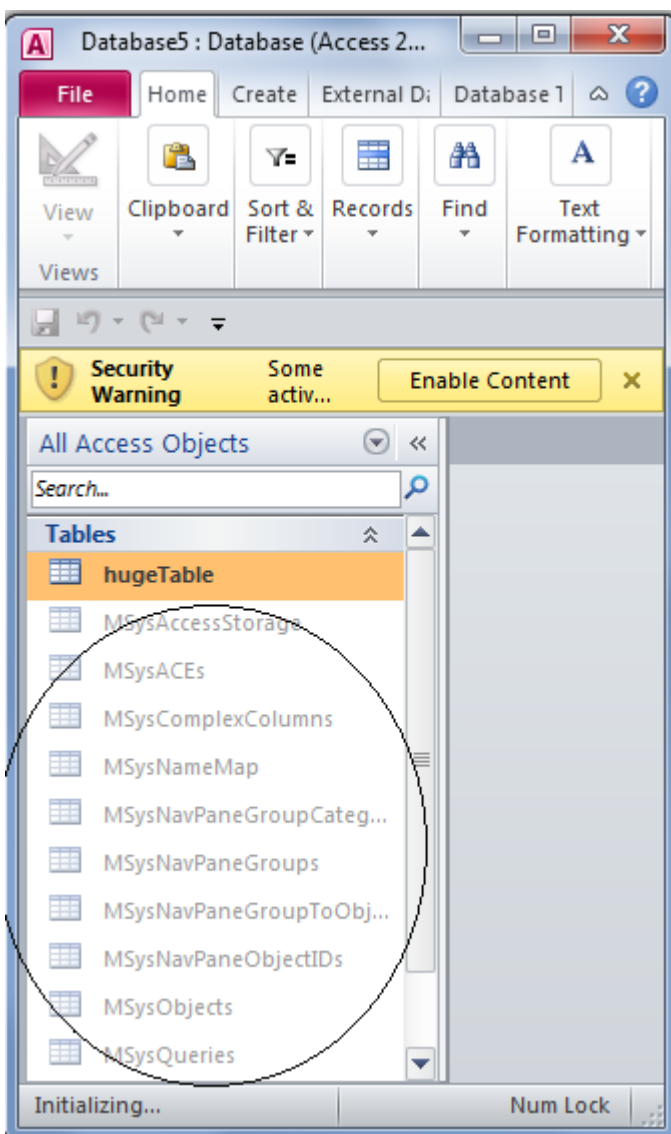


Figure 6: The system objects for Access 2010

Note the presence of the various **MSys** tables.

STEP 2: Change the database file format to .mdb format.

Microsoft Access 2007/ 2010, User-level security features (user and group permission) is available only if the database has a .mdb file format. It is not available in databases that use one of the new file formats like .accdb, .accde, .accdc, .accdr.

Please refer to the link below for details:

<http://office.microsoft.com/en-us/access-help/what-happened-to-user-level-security-HA010234561.aspx?pid=CH100621891033>

a) Save as .mdb format in Access 2007

Select the newly created .accdb file, click on the Microsoft Office Button and then go to the save as option. Either save it in the **2003-2000** or the **2000** format.

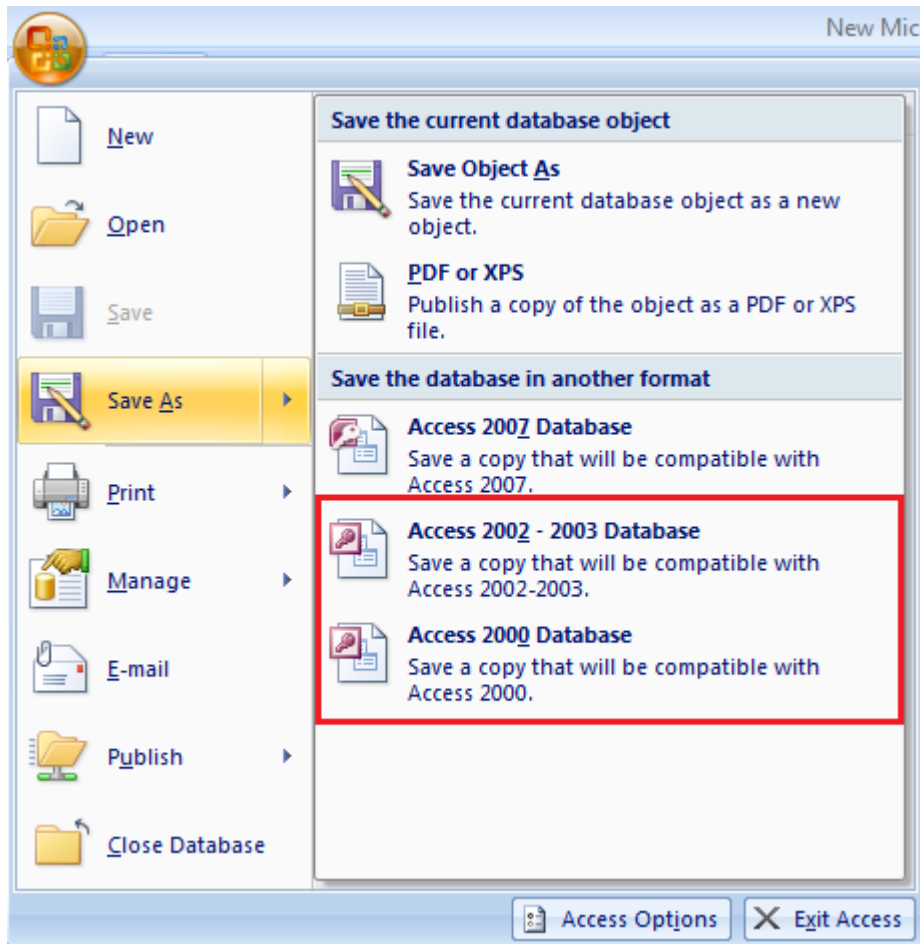


Figure 7: Save As option in Access 2007

b) Save as .mdb format in Access 2010

Select the newly created .accdb file and then click on the option that reads **save and publish**. Once you click on that option you will see save database as option onto the right hand side.

Save the database as either **Access 2000** or **Access 2002-2003** database option.

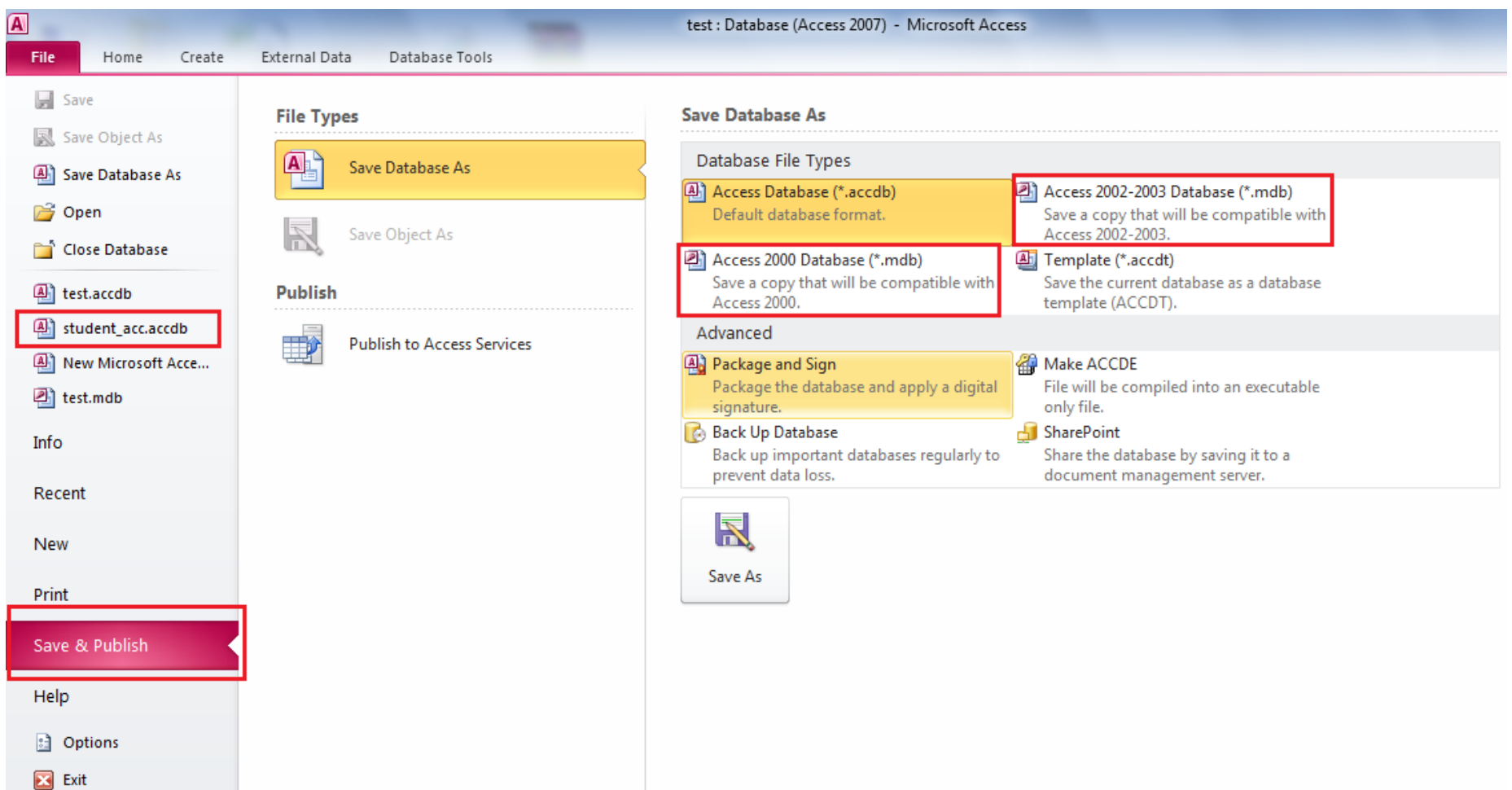


Figure 8: Save As option in Access 2010

STEP 3: Give Users and group permission on Access system tables.

a) Changing table properties for all Access versions up to and including Access 2003:

After you expose the system objects to the ODBC Import Tool, you must also grant permission to access the objects. Choose the User and Group Permissions entry from the Security section of the Tools menu:

Enable the **Administrator** permission for both the **MSysObjects**, **MSysQueries** & **MSysRelationships** tables. You will need to click the Apply button after enabling each table and before moving to the next table.



Figure 9: Selecting user and group permissions in Access 2003

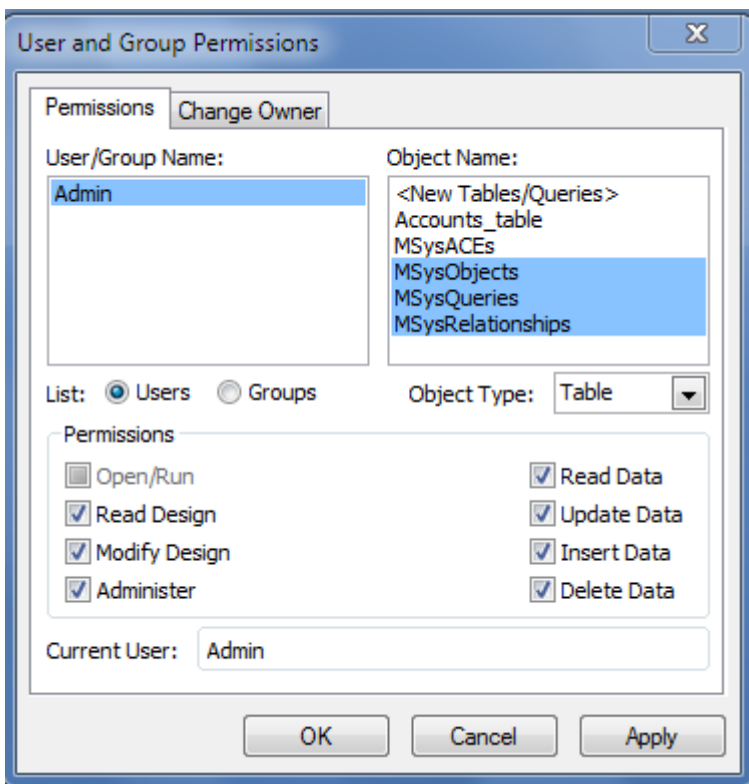


Figure 10: Enabling Administrator Permissions in Access 2003

b) Changing table properties for Access 2007:

After you expose the system objects to the ODBC Import Tool, you must also grant permission to access the objects. Choose the **User and Group Permissions** entry from the **Database Tools** menu.

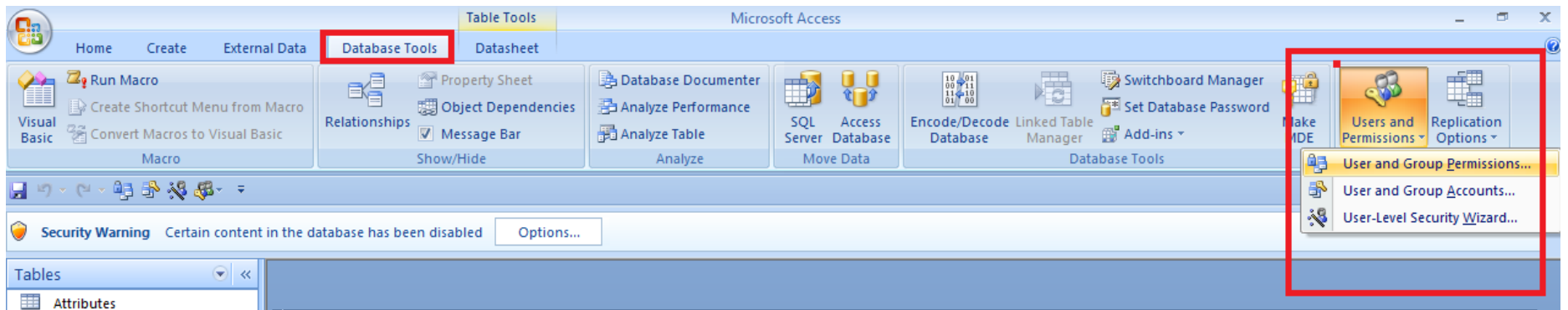


Figure 11: Selecting user and group permissions in Access 2007

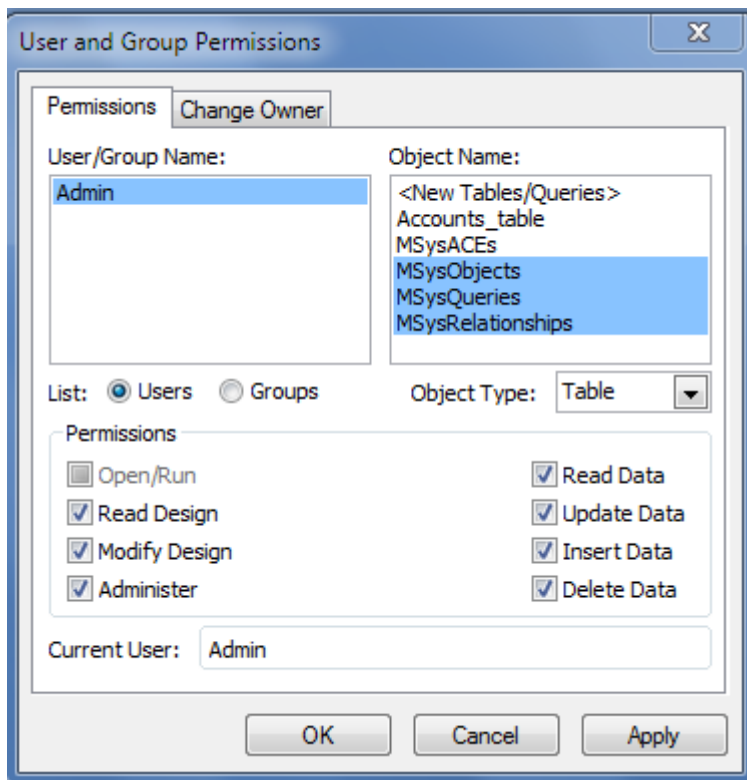


Figure 12: Enabling Administrator Permissions in Access 2007

Enable the **Administrator** permission for both the **MSysObjects**, **MSysQueries** & **MSysRelationships** tables. You will need to click the Apply button after enabling each table and before moving to the next table.

After completing these steps, you can reverse-engineer the schema in your Access database using the SQLyog's ODBC Import Tool.

c) Changing table properties for Access 2010:

After you expose the system objects to the ODBC Import Tool, you must also grant permission to access the objects.

Once the data base is converted into .mdb format select the **Manage users and permission option**.

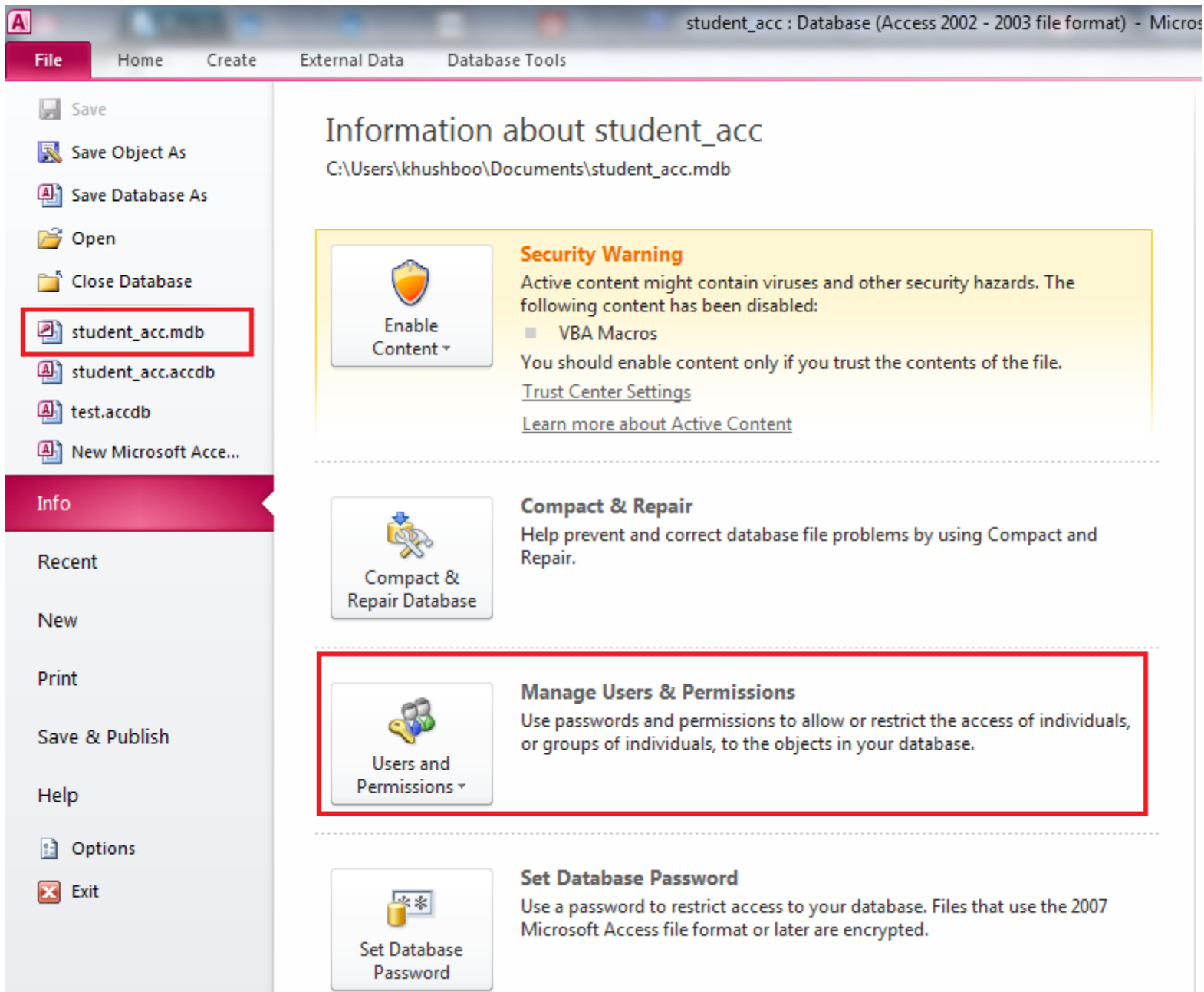


Figure 13: Selecting Manage users and permissions in Access 2010

After selecting this option select the first option that reads **Users and Group Permissions**.

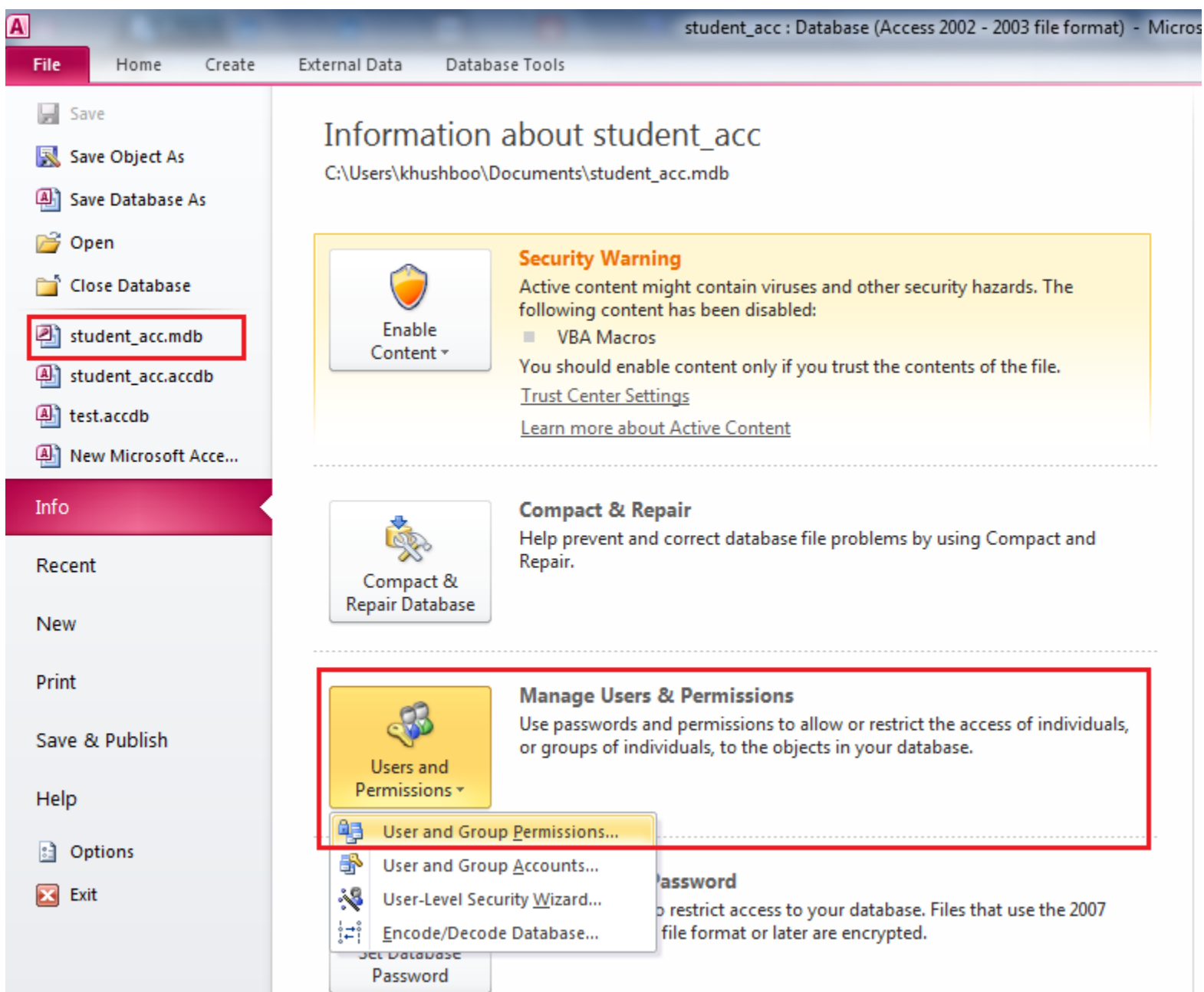


Figure 14: Selecting user and group permissions in Access 2010

Enable the **Administrator** permission for both the **MSysObjects**, **MSysQueries** & **MSysRelationships** tables. You will need to click the ok button after enabling each table and before moving to the next table.

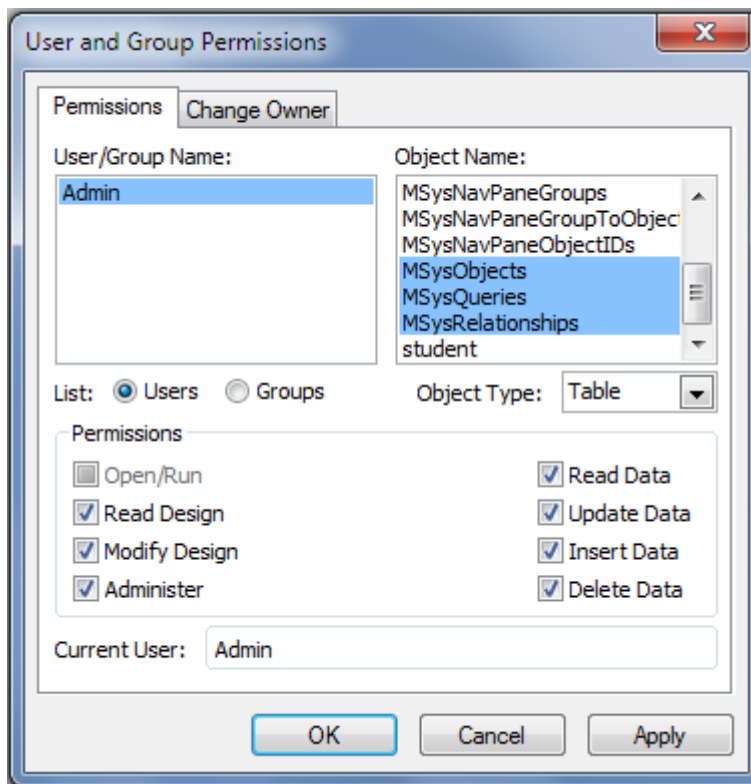


Figure 15: Enabling Administrator Permissions in Access 2007