

CGS 2545: Database Concepts Fall 2010

LAB #4

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Lab #4 – The User Interface

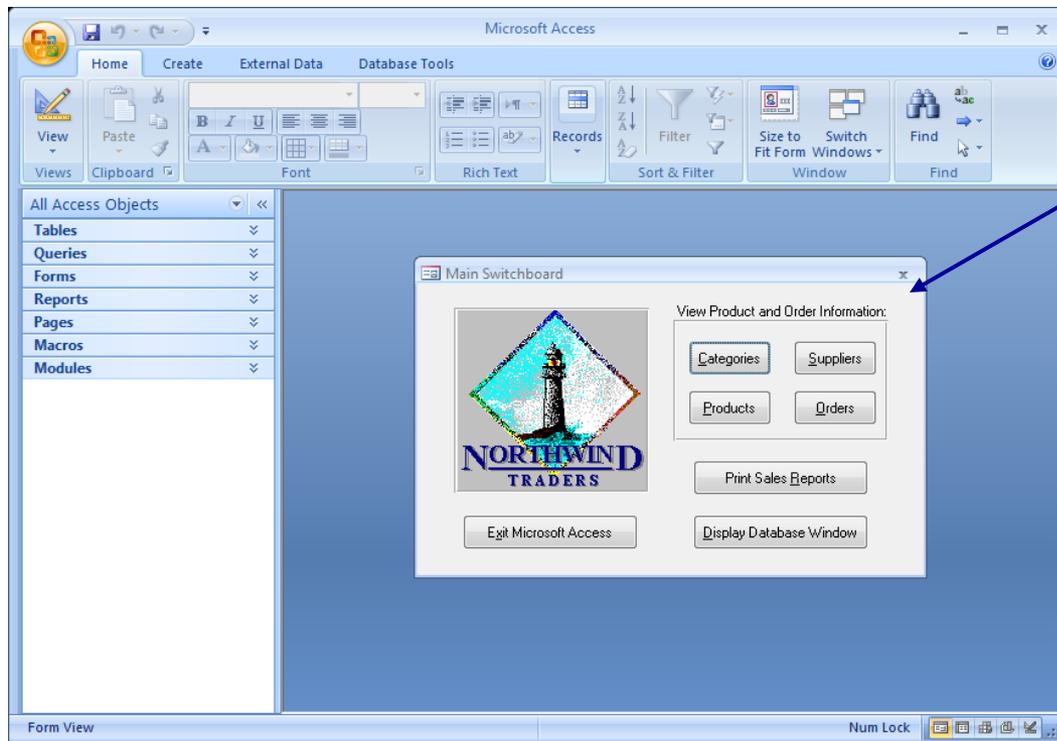
- The objective of this lab is to introduce you to the switchboards in Access.
- The switchboard manager is the component of Access which deals with the user interface, i.e., the design of a switchboard.
- While you are becoming a proficient user of/and knowledgeable in the organization of Access, many potential users of the databases that you will develop are not.
- The user interface ties the various database objects together in such a manner that the database is easy to use for even a non-skilled user.

NOTE: In the slides that follow, if the call-out symbol is outlined in red, it means that there is something for you to try, if the call-out is outlined in blue, I am simply giving you some information about what is displayed on that page.



Lab #4 – The User Interface

- The switchboard manager is an Access utility that prompts you for information about each menu that you will include in your switchboard design.
- To remember what a basic switchboard looks like, start the Northwind sample database and you will see the switchboard as shown below.



The Northwind sample database switchboard



Creating A Switchboard

- Since the switchboard provides a user with the ability to manipulate various objects in the database from a high-level perspective, it is required that you create a switchboard on an already created database. Preferably one with queries, forms, reports, and possibly other objects defined.
- I would suggest that you look at the definitions for the switchboard that is defined in the Northwind sample database first, before you continue with this lab.

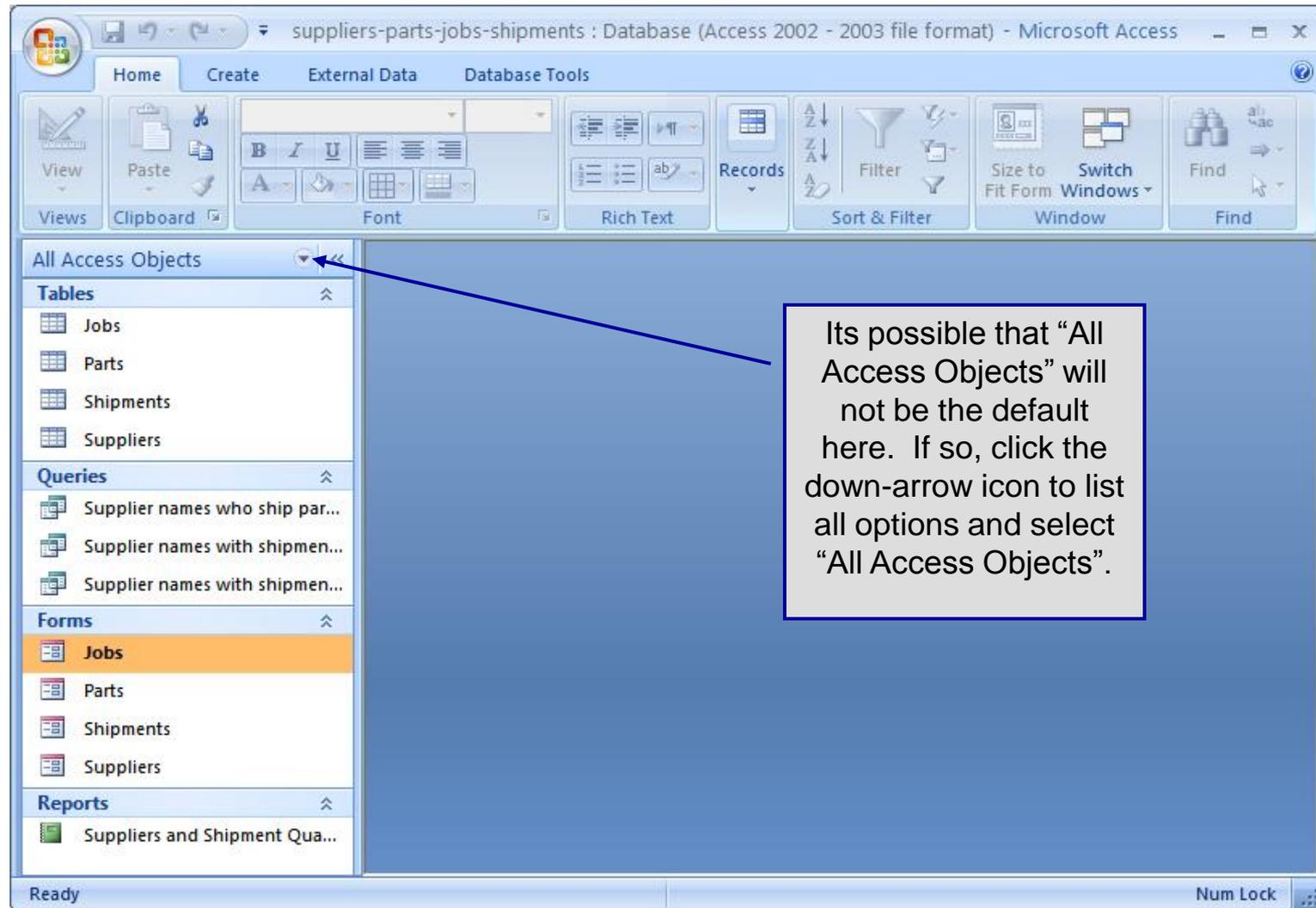


Creating A Switchboard

- Having looked at the Northwind switchboard, lets now move on and create our own switchboard.
- To do this, download the `suppliers-parts-jobs-shipments` database from either the course website or the lab section (Lab 4) on WebCourses.
- This fairly simple database has been created with a couple of queries, forms and reports already set-up so that we have something to put on our switchboard.
- Once you download this database, open it in Access and you should see the following screen.



The Suppliers-Parts-Jobs-Shipments Database

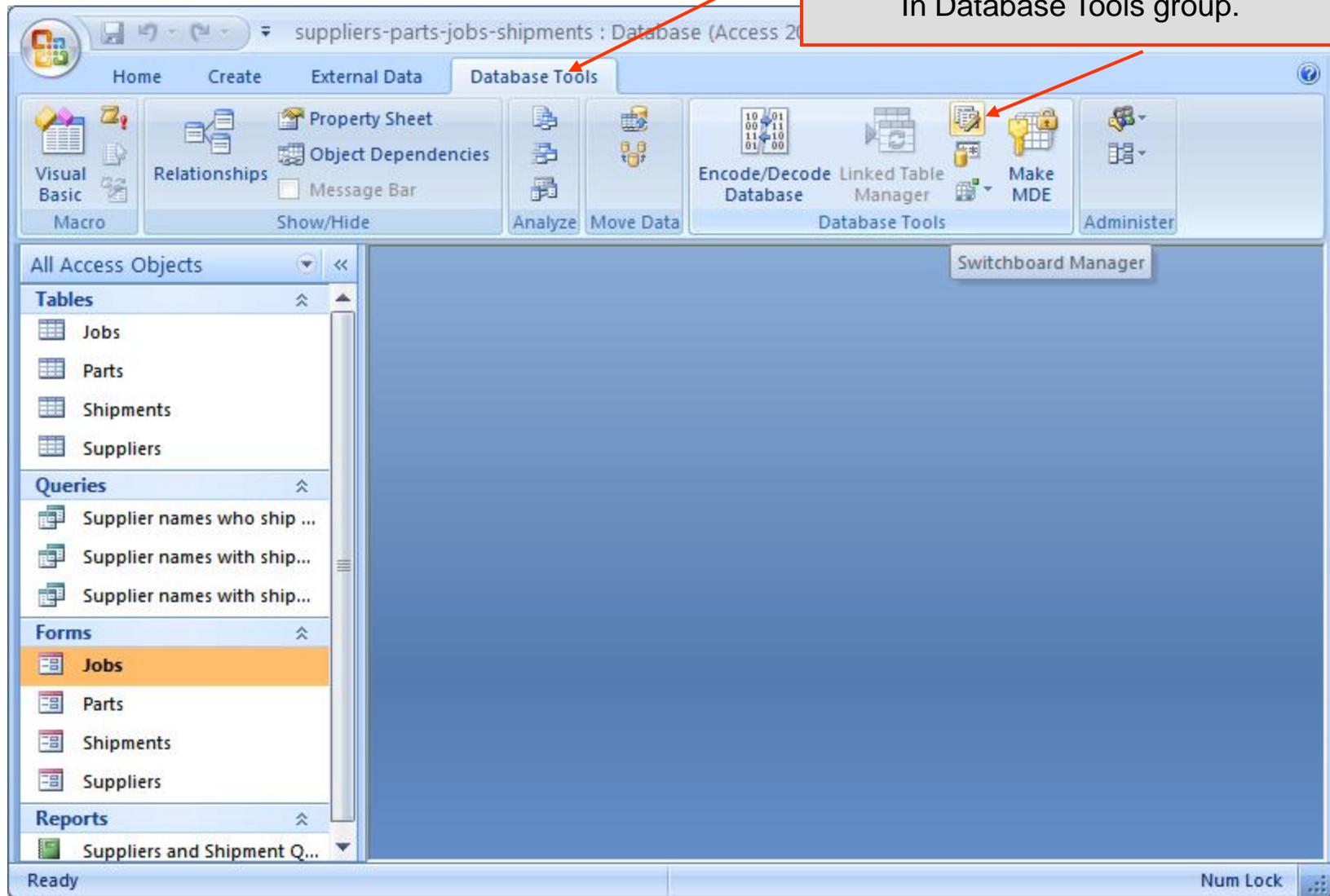


Starting The Switchboard Manager

- Click the **Database Tools** tab.
- In the **Database Tools** group, click **Switchboard Manager**.
- Click Yes if you see a message indicating that there is no valid switchboard and asking if you want to create one.
- You should then see the Switchboard Manager dialog box (See page 10).
- The sequence of slides on the next few pages illustrates this sequence of operations.



Click the Database Tools tab.
Then click Switchboard Manager
In Database Tools group.



Starting The Switchboard Manager

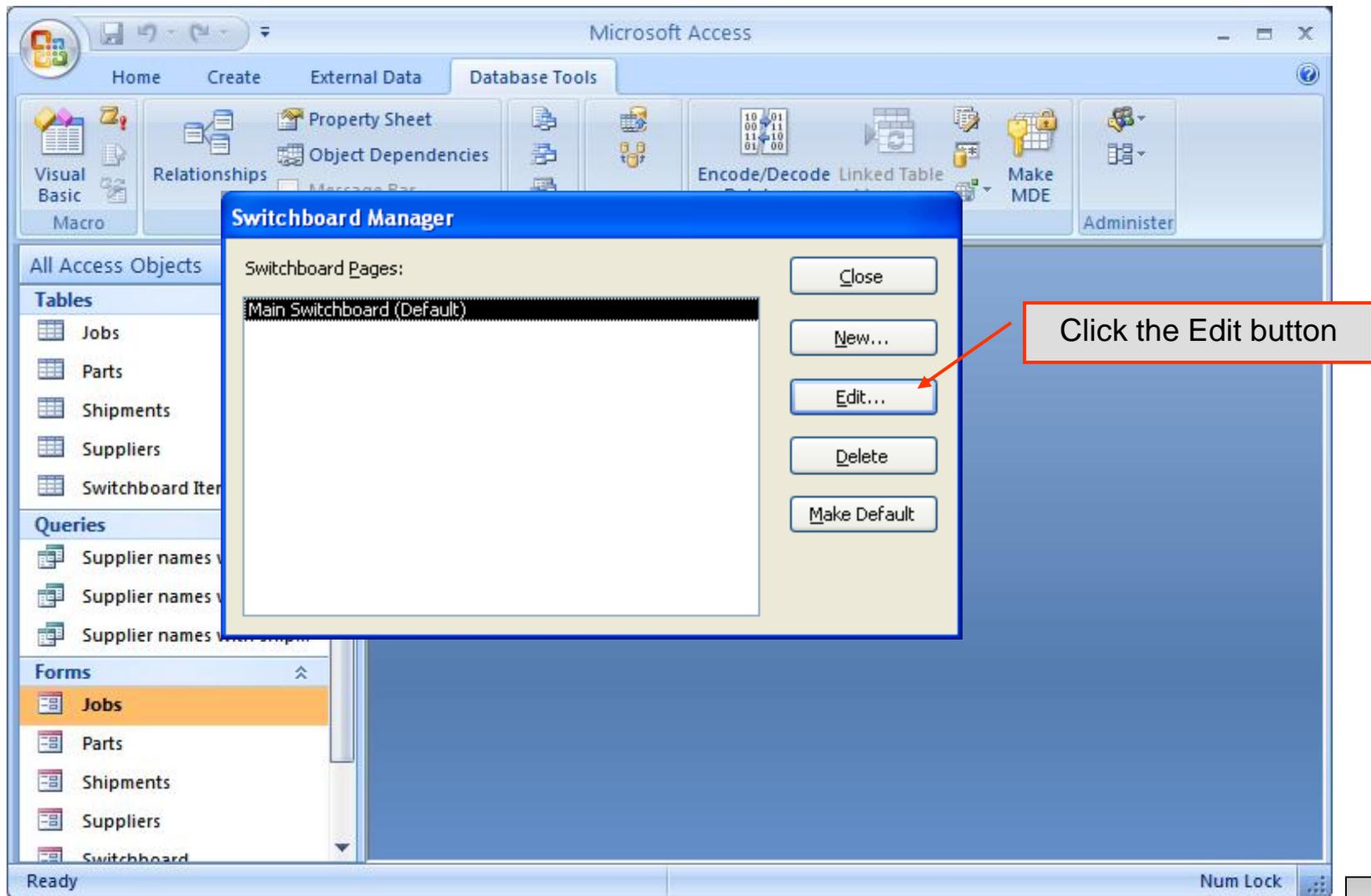
The screenshot shows the Microsoft Access 2003 interface. The title bar reads "suppliers-parts-jobs-shipments : Database (Access 2002 - 2003 file format) - Microsoft Acc...". The ribbon includes "Home", "Create", "External Data", and "Database Tools". The "Database Tools" ribbon is active, showing options like "Visual Basic", "Relationships", "Property Sheet", "Object Dependencies", "Message Bar", "Analyze", "Move Data", "Encode/Decode Database", "Linked Table Manager", "Make MDE", and "Administer".

On the left, the "All Access Objects" pane is visible, with categories for Tables, Queries, Forms, and Reports. Under "Forms", "Jobs" is selected. Under "Reports", "Suppliers and Shipment Q..." is visible.

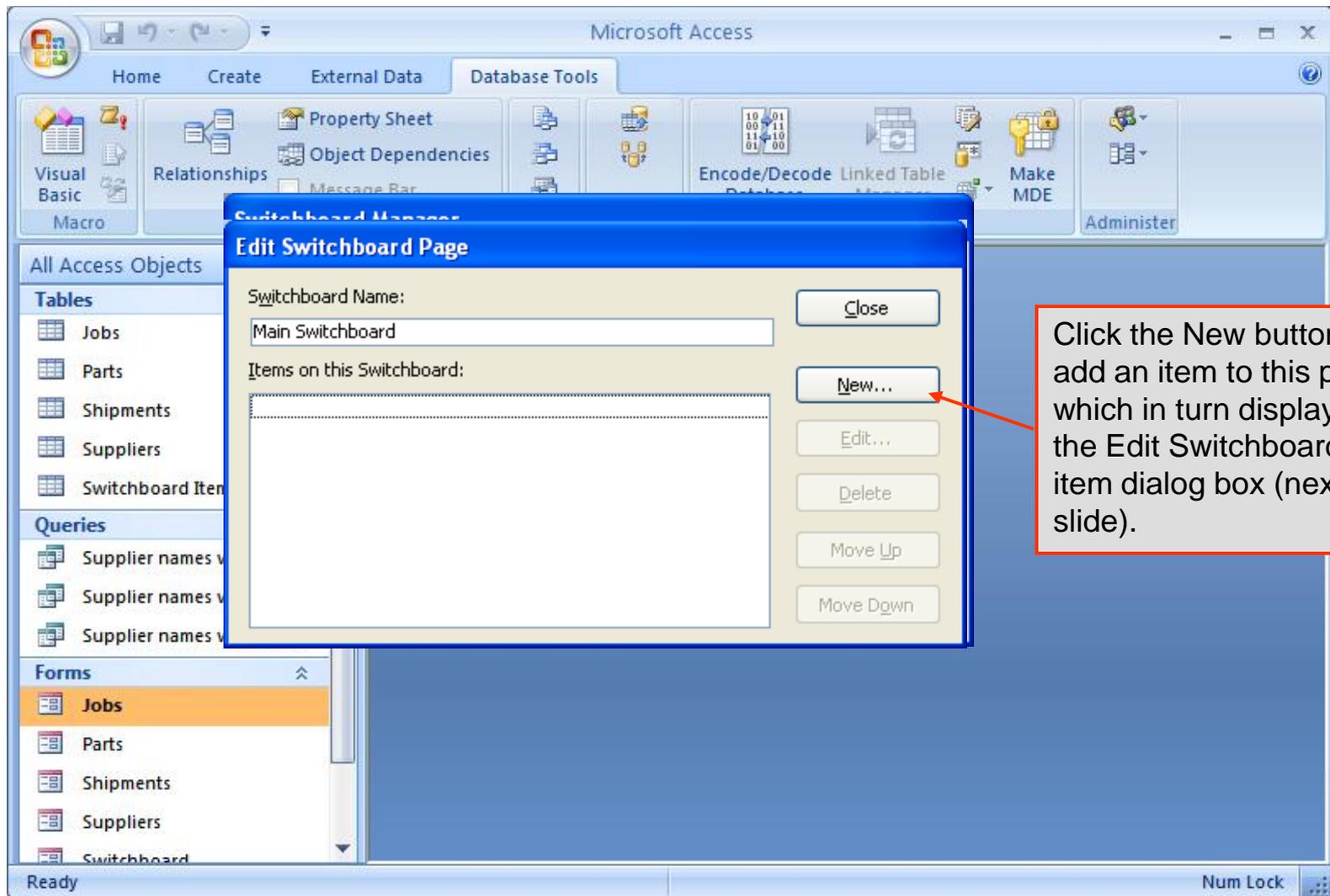
The main window area displays the "Switchboard Manager" dialog box. The dialog box has a blue title bar and a yellow warning icon. The text inside reads: "The Switchboard Manager was unable to find a valid switchboard in this database. Would you like to create one?". There are two buttons: "Yes" and "No". A red box with an arrow points to the "Yes" button, with the text "Click Yes." next to it.



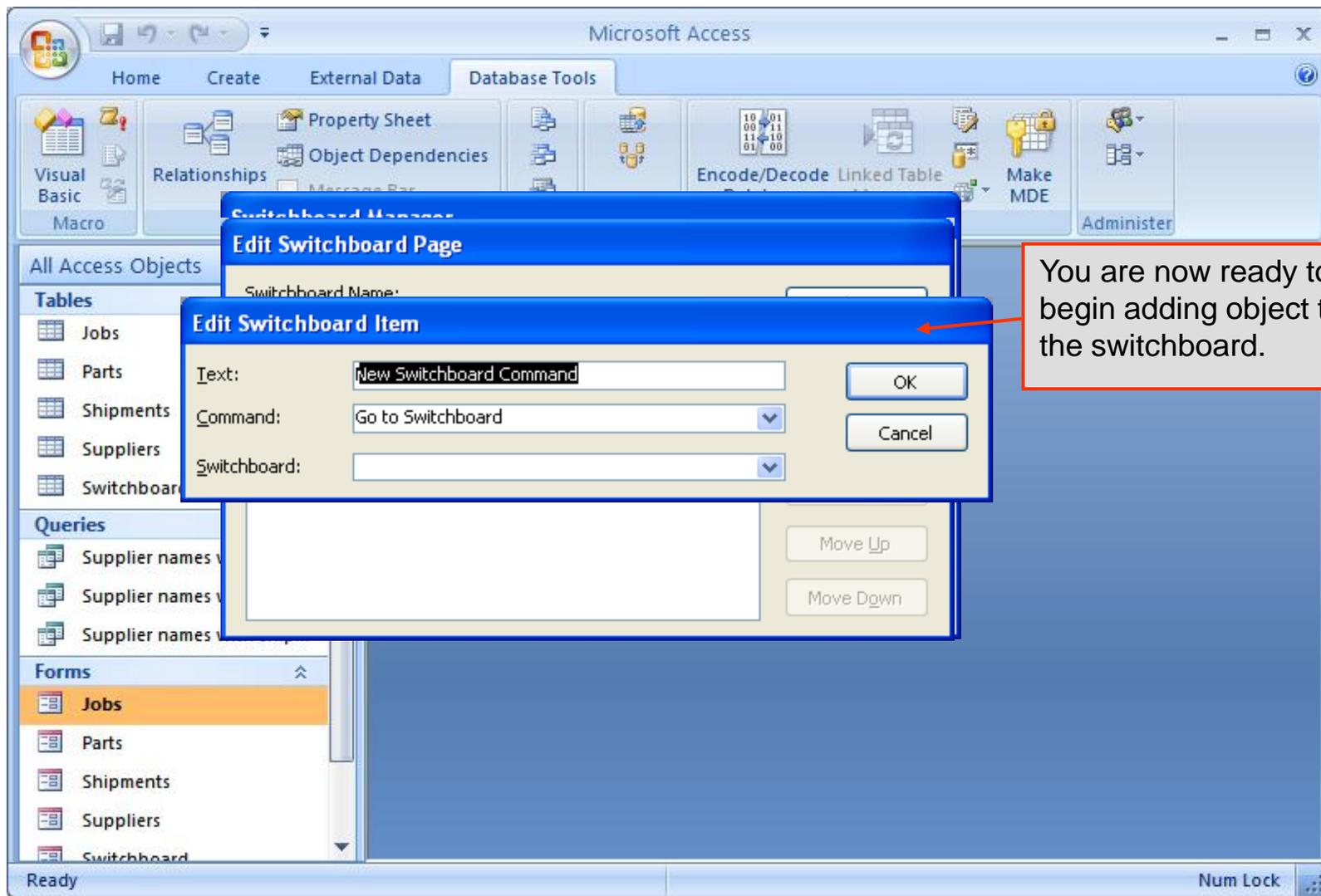
The Switchboard Manager Dialog Box



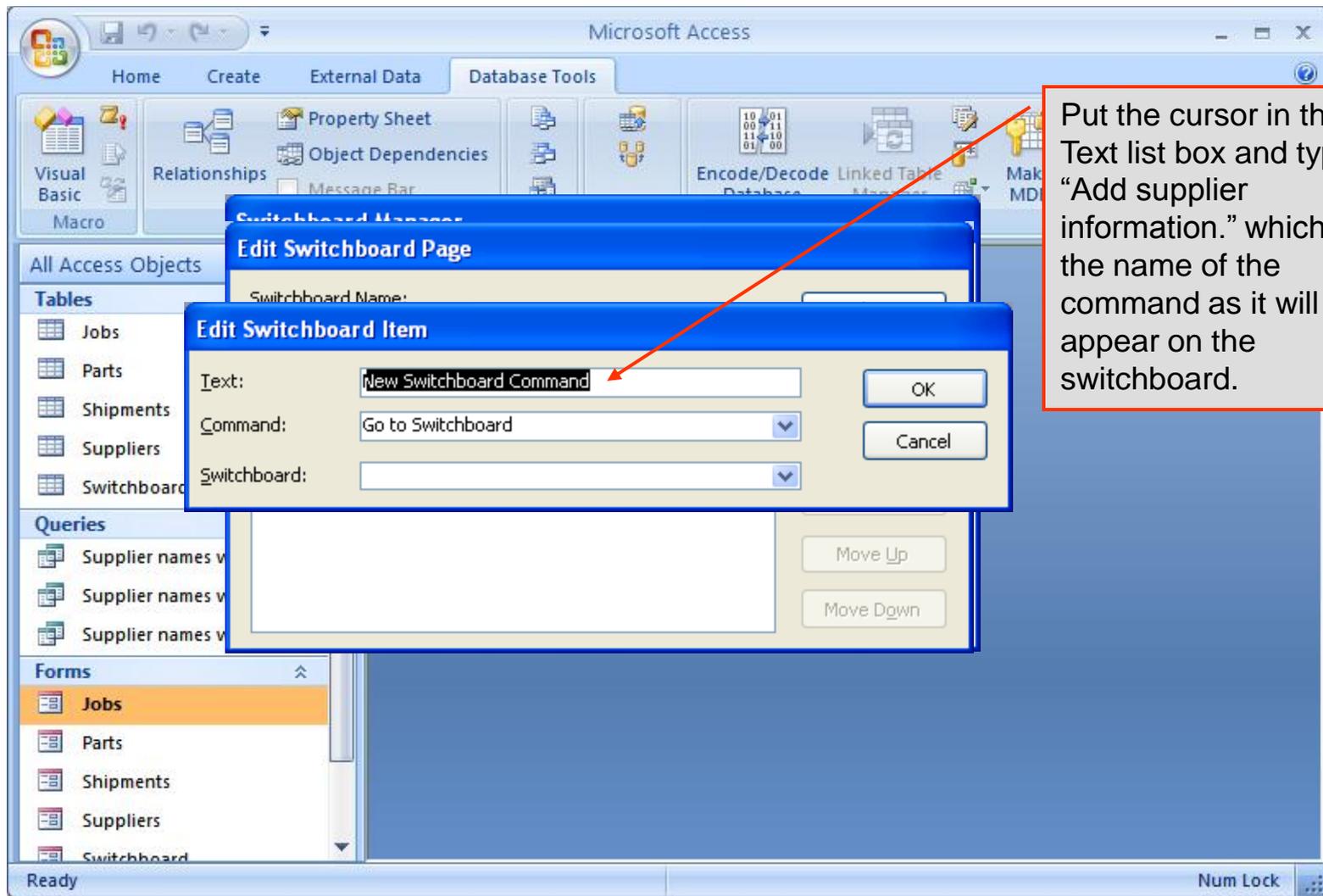
The Switchboard Manager Dialog Box



The Switchboard Manager Dialog Box



The Switchboard Manager Dialog Box



Put the cursor in the Text list box and type "Add supplier information." which is the name of the command as it will appear on the switchboard.



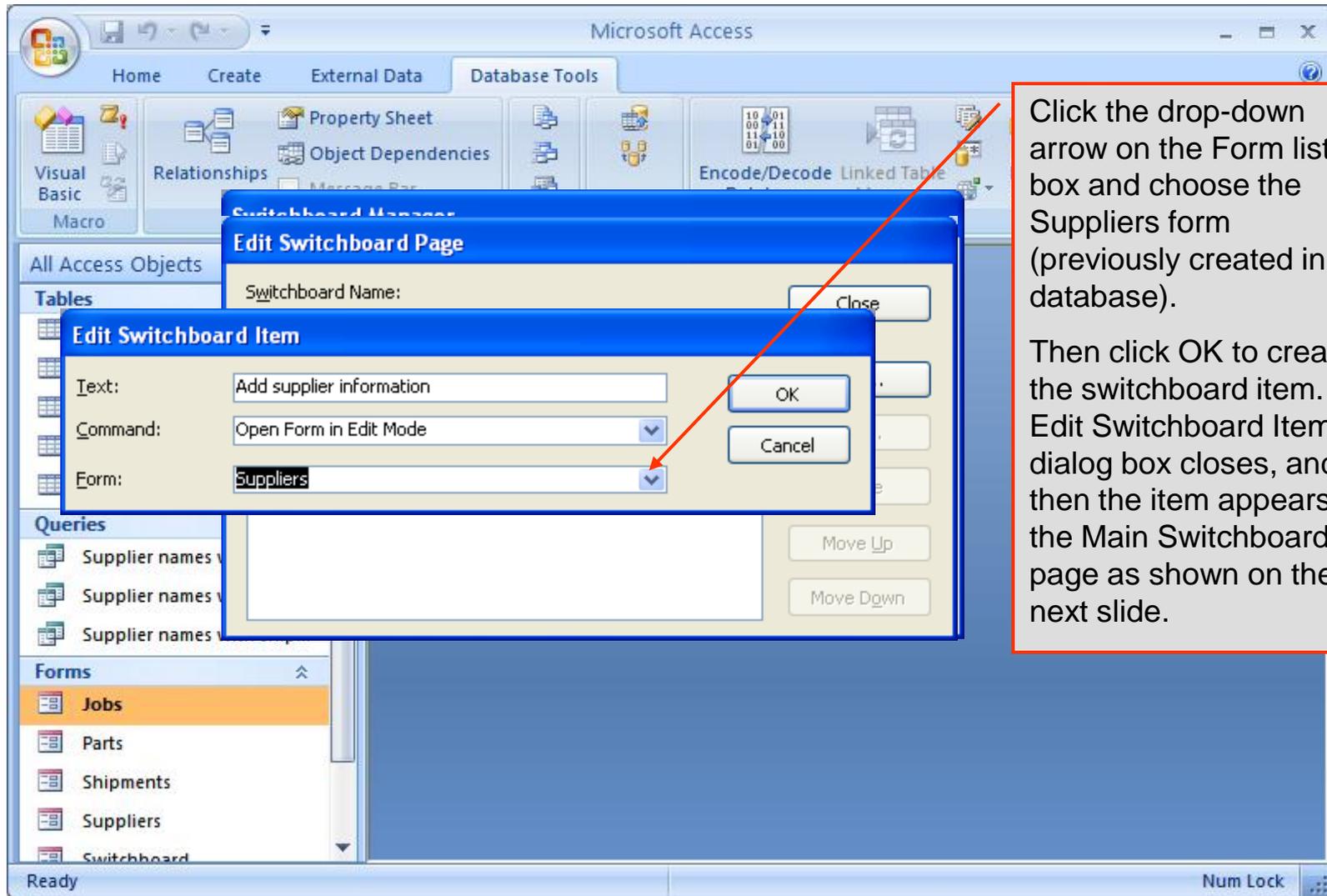
The Switchboard Manager Dialog Box

The screenshot displays the Microsoft Access interface with the Switchboard Manager dialog box open. The dialog box has three main sections: 'Edit Switchboard Page' at the top, 'Edit Switchboard Item' in the middle, and 'Move Up' and 'Move Down' buttons at the bottom. The 'Edit Switchboard Item' section contains a 'Text' field with 'Add supplier information', a 'Command' dropdown menu with 'Go to Switchboard' selected, and a 'Switchboard' list with 'Go to Switchboard', 'Open Form in Add Mode', and 'Open Form in Edit Mode'. A red box highlights the 'Command' dropdown menu, and a red arrow points to it from a text box on the right. Another red arrow points to the 'Open Form in Edit Mode' option in the 'Switchboard' list from the same text box. The background shows the 'Database Tools' ribbon and the 'All Access Objects' task pane with 'Forms' selected.

Click the drop-down arrow on the Command list box and choose the command to Open the Form in either the Add or Edit mode.



The Switchboard Manager Dialog Box

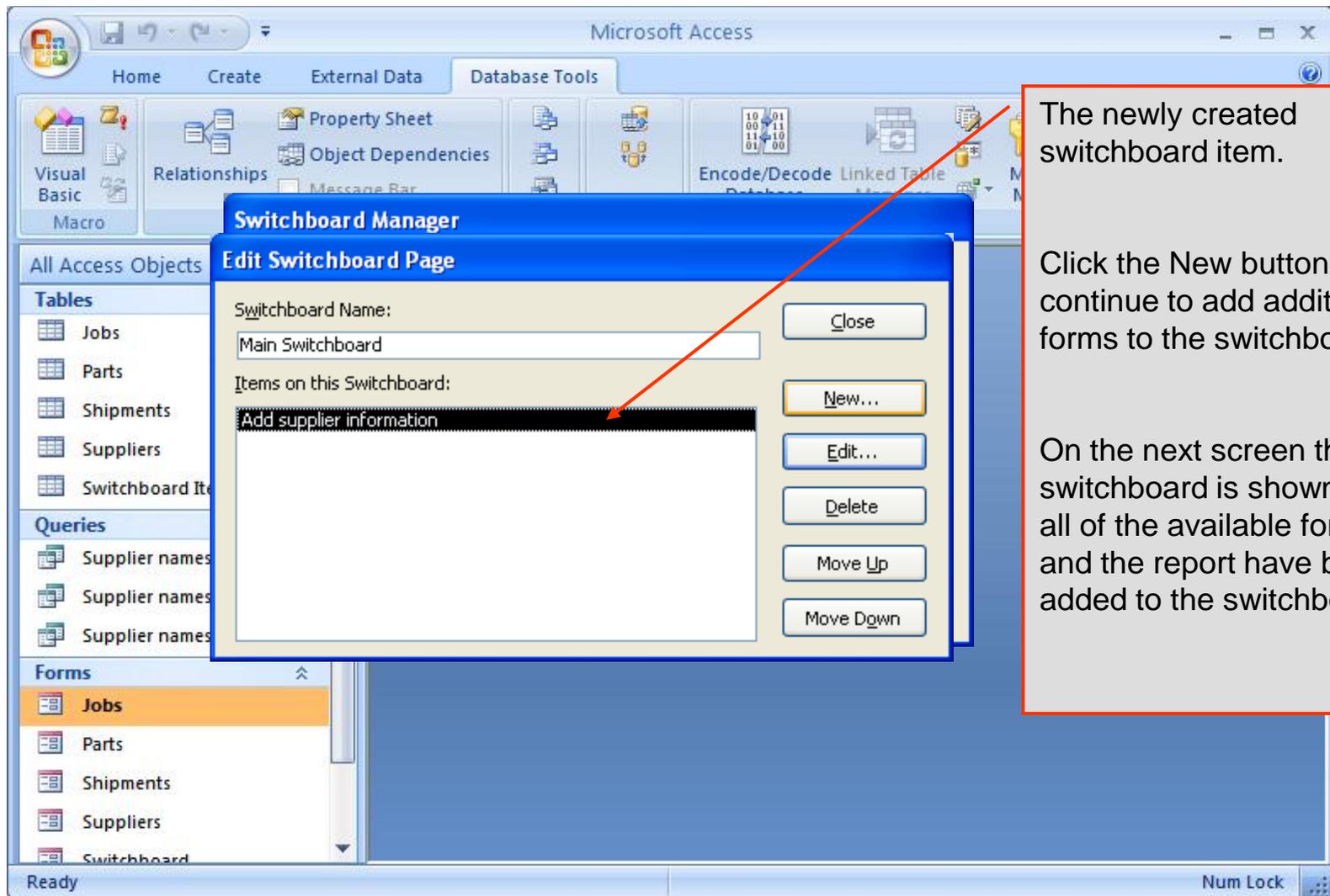


Click the drop-down arrow on the Form list box and choose the Suppliers form (previously created in this database).

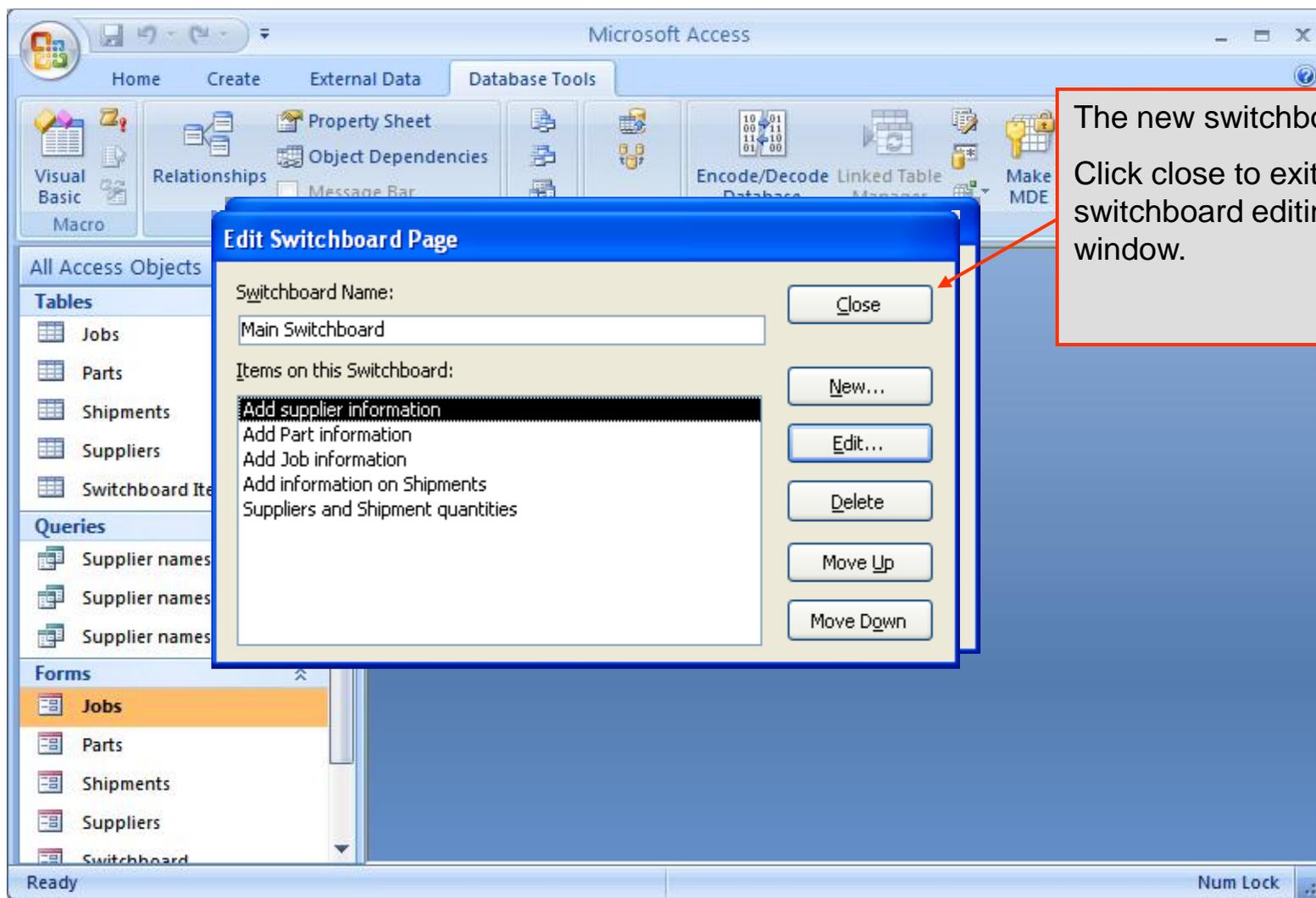
Then click OK to create the switchboard item. The Edit Switchboard Item dialog box closes, and then the item appears in the Main Switchboard page as shown on the next slide.



The Switchboard Manager Dialog Box



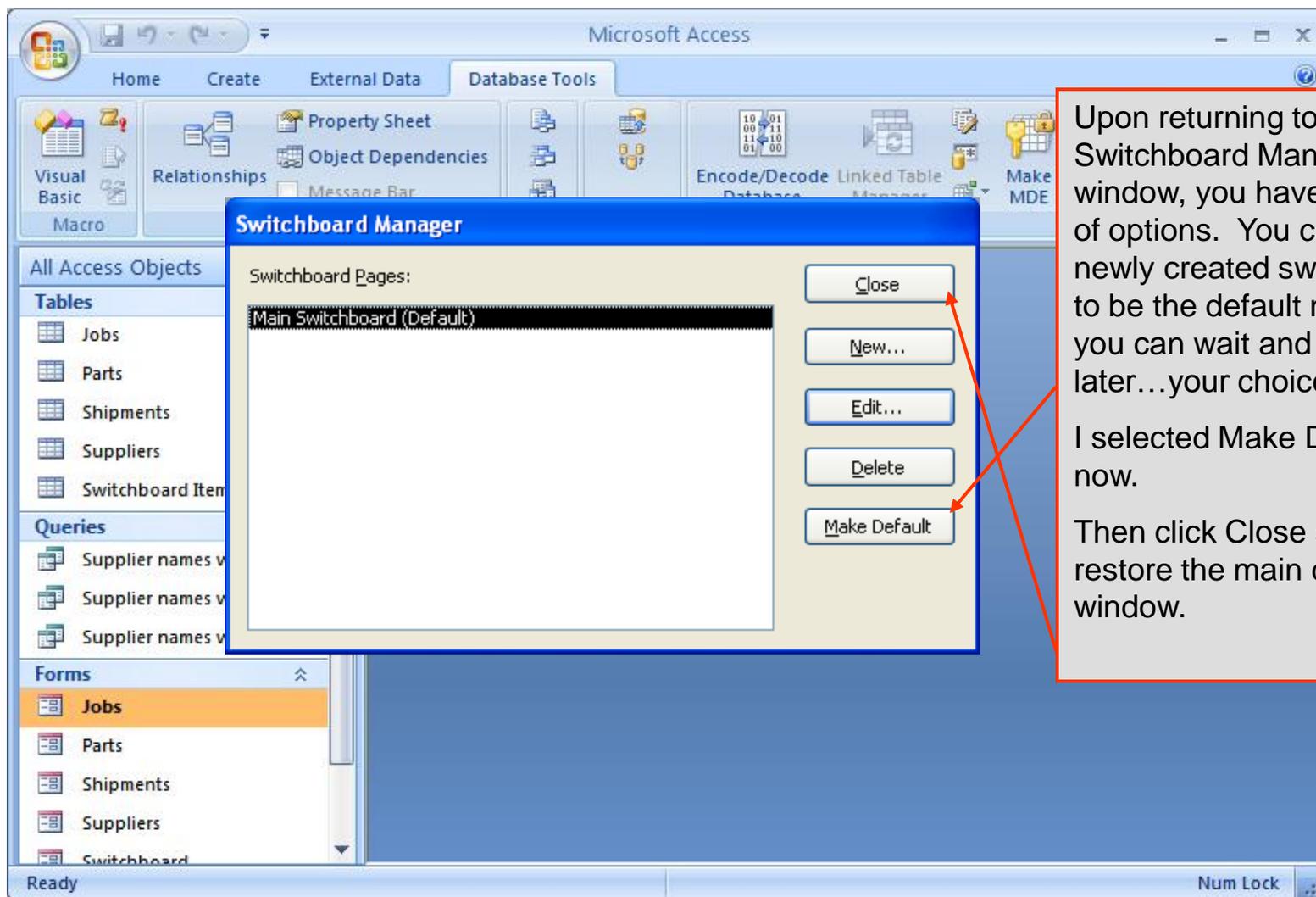
The Switchboard Manager Dialog Box



The new switchboard.
Click close to exit the
switchboard editing
window.



The Switchboard Manager Dialog Box



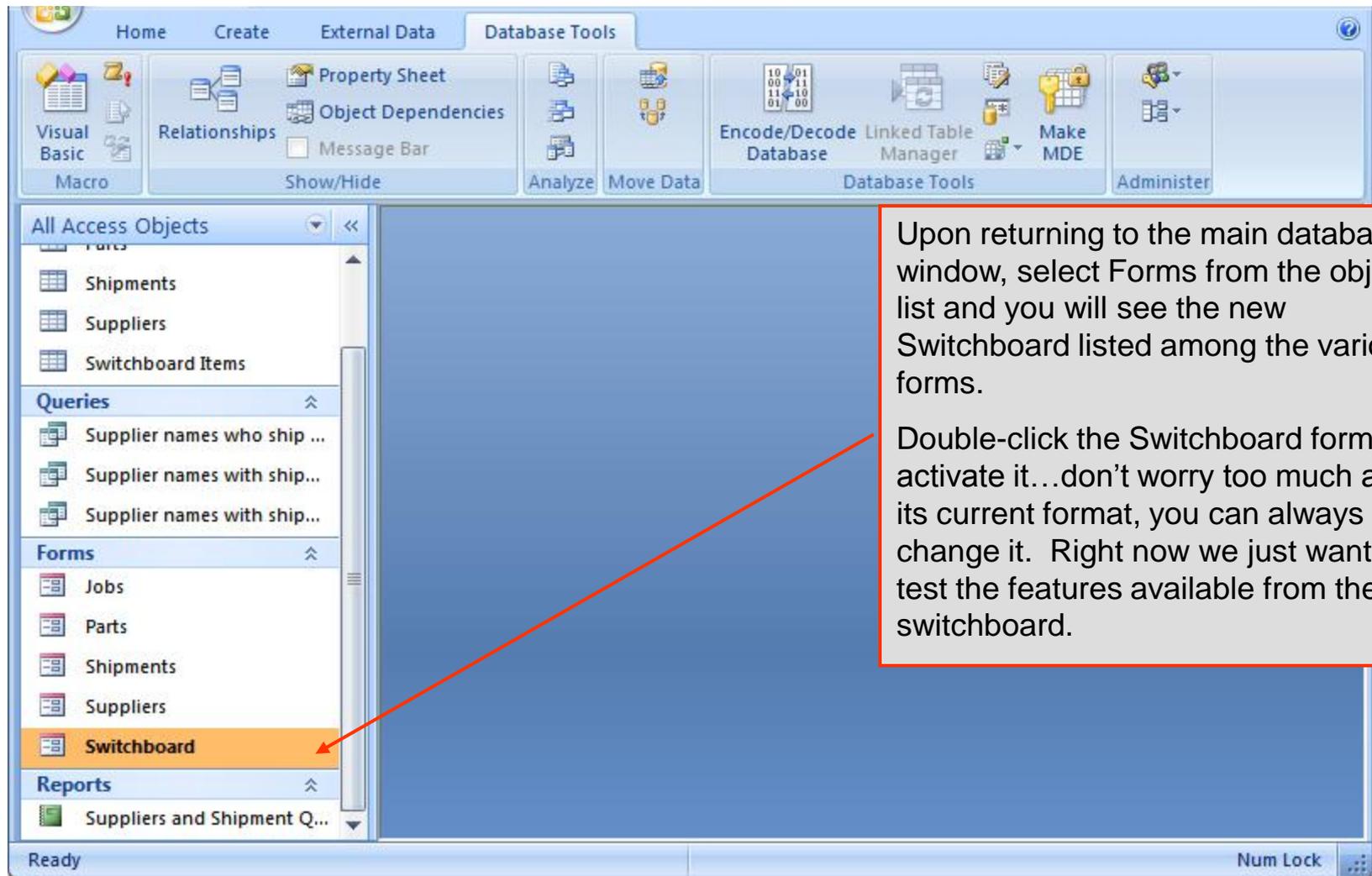
Upon returning to the Switchboard Manager window, you have a couple of options. You can set the newly created switchboard to be the default now (or you can wait and do it later...your choice).

I selected Make Default now.

Then click Close and restore the main database window.



The Switchboard Manager

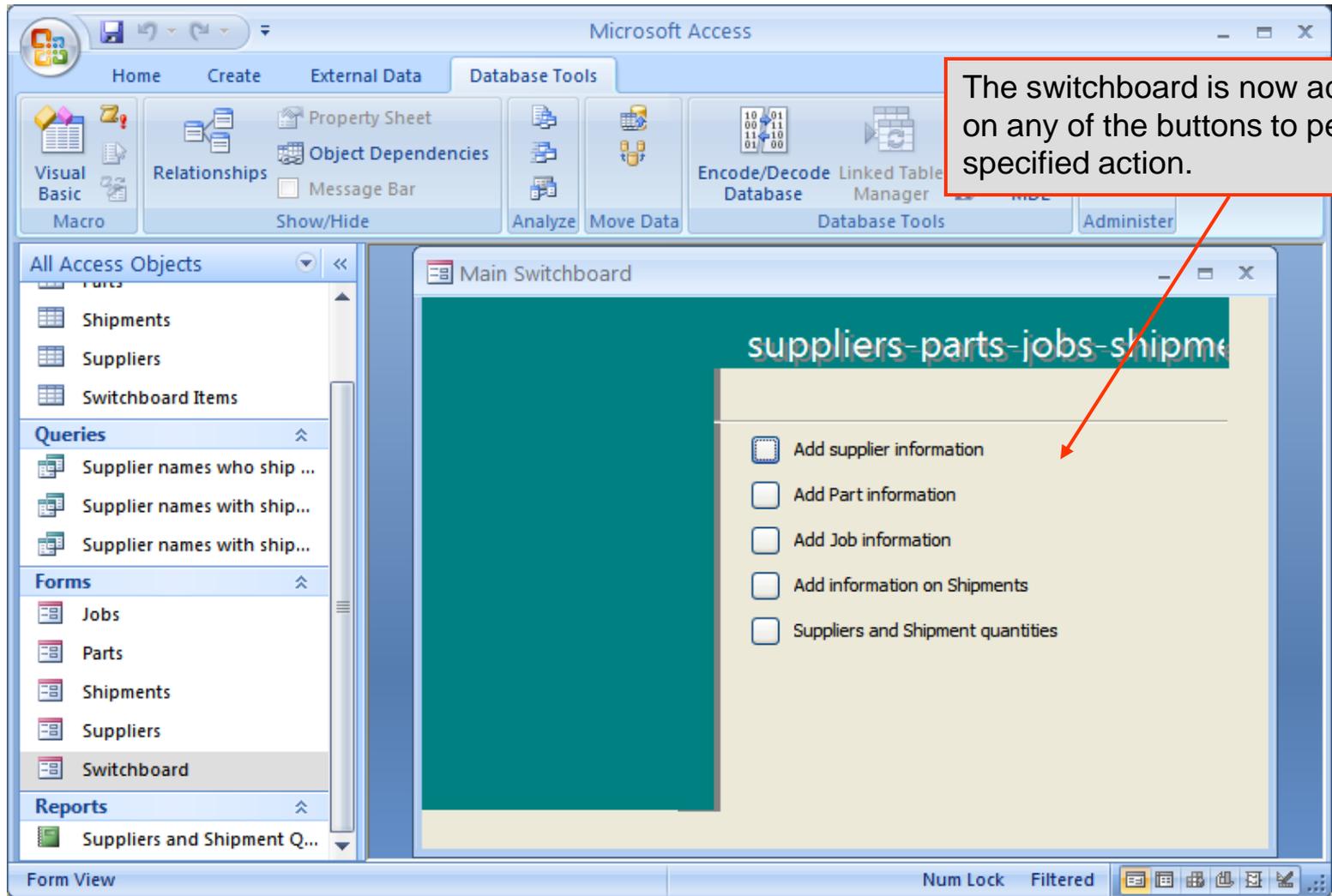


Upon returning to the main database window, select Forms from the objects list and you will see the new Switchboard listed among the various forms.

Double-click the Switchboard form to activate it...don't worry too much about its current format, you can always change it. Right now we just want to test the features available from the switchboard.



The Switchboard Manager



The Switchboard Manager

The screenshot shows the Microsoft Access interface. The ribbon includes Home, Create, External Data, and Database Tools. The left-hand pane shows 'All Access Objects' with categories: Forms (Jobs, Parts, Shipments, Suppliers, Switchboard), Reports (Suppliers and Shipment Q...), and Queries (Supplier names who ship..., Supplier names with ship..., Supplier names with ship...). The 'Suppliers' form is open, displaying a table with the following data:

snum	sname	status	city
1	Mark		4 Oviedo

Below the table, there are two checkboxes: 'Add information on Shipments' and 'Suppliers and Shipment quantities'. The status bar at the bottom indicates 'Form View' and 'Num Lock'.

After clicking on the Add Suppliers information button, the Suppliers form is activated. Note that since we selected the Open in Edit Mode for our Switchboard command, we can edit any record in the Suppliers table. This means that the default opening places you at the top of the table, to insert a new record move to the bottom of the table using the directional buttons on the form.

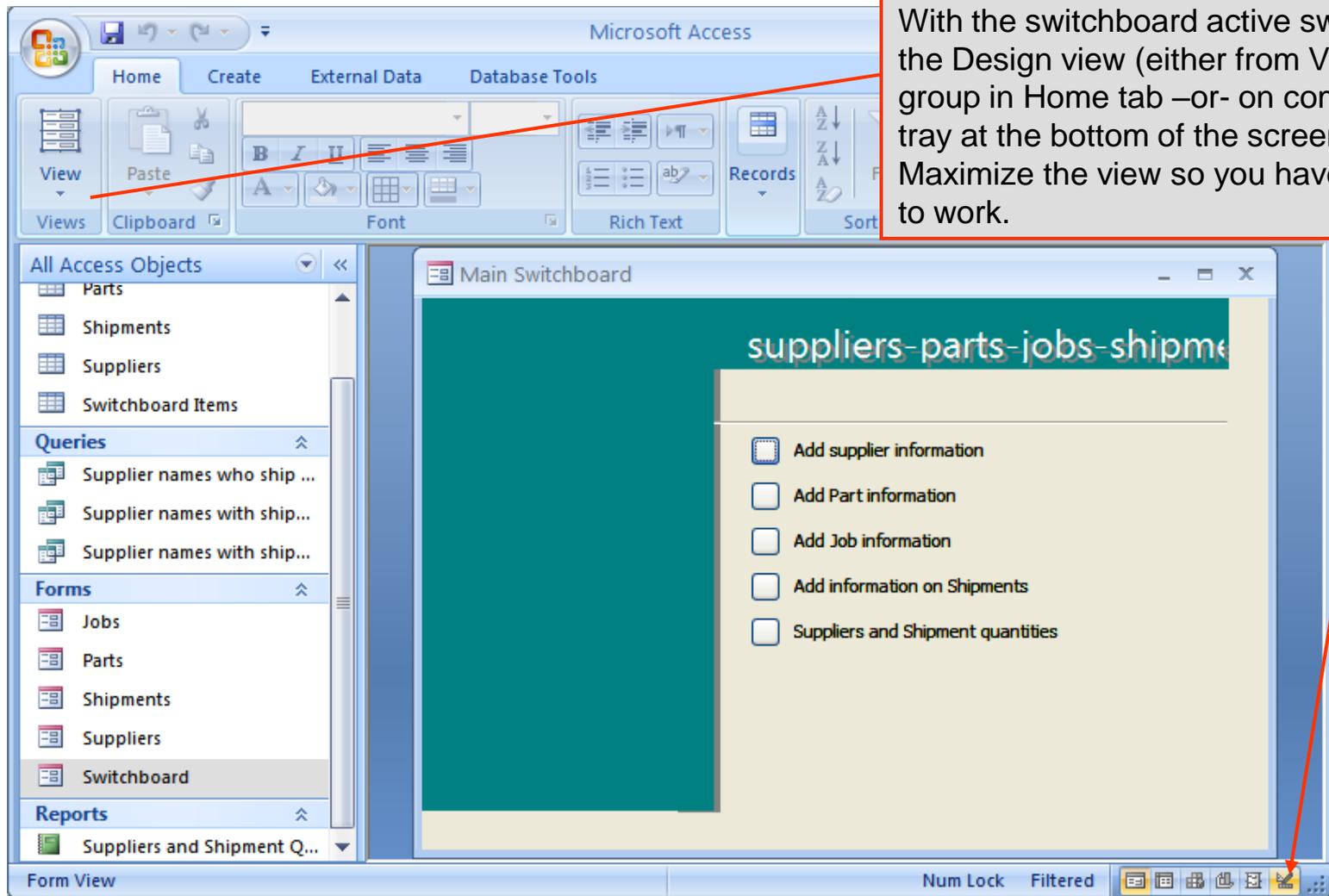


Assessment Point #1

- At this point, be sure that all of your buttons on the switchboard do what you wanted them to do and go back and modify any that don't perform the action you want.
- For example, maybe you really wanted the user to only be able to add new suppliers and not to be able to modify existing rows in the table. Then reset the Command mode to Open in Add Mode rather than the Open in Edit Mode we used. Try it.
- Once you're comfortable with your switchboard, move on and we'll add an icon to it to jazz it up a bit.

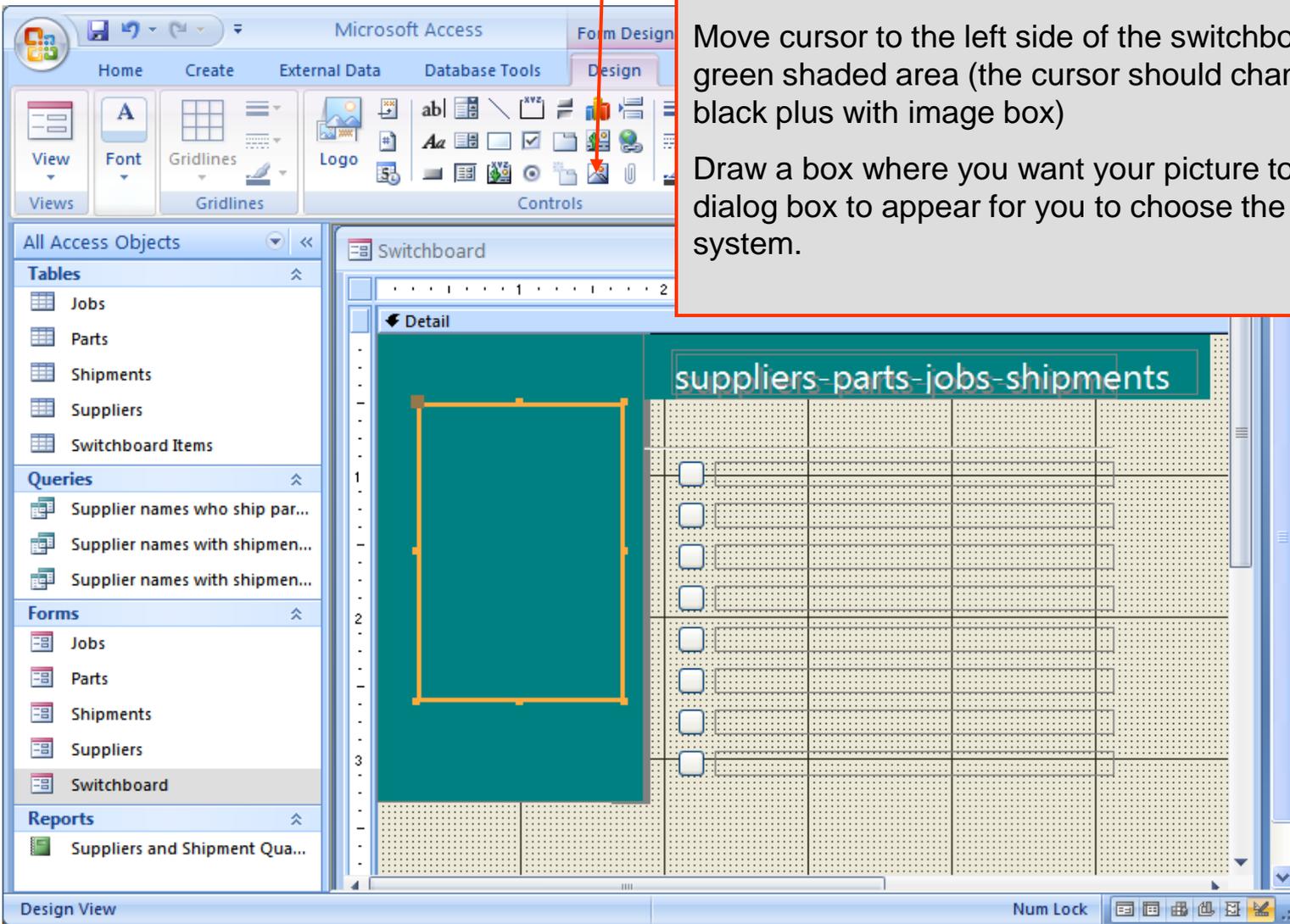


The Switchboard Manager



With the switchboard active switch to the Design view (either from Views group in Home tab –or- on command tray at the bottom of the screen). Maximize the view so you have room to work.





In Design tab, Click on Image button

Move cursor to the left side of the switchboard in the large green shaded area (the cursor should change to a little black plus with image box)

Draw a box where you want your picture to display. The dialog box to appear for you to choose the image on your system.



Microsoft Access

Home Create External Data Database Tools

View Font Gridlines Logo Controls Fields Sheet Tools

All Access Objects

Tables

- Jobs
- Parts
- Shipments
- Suppliers
- Switchboard Items

Queries

- Supplier names who ship par...
- Supplier names with shipmen...
- Supplier names with shipmen...

Forms

- Jobs
- Parts
- Shipments
- Suppliers
- Switchboard

Reports

- Suppliers and Shipment Qua...

Switchboard

Detail

suppliers-parts-jobs-shipments

	suppliers	parts	jobs	shipments
1	<input type="checkbox"/>			
2	<input type="checkbox"/>			
3	<input type="checkbox"/>			
	<input type="checkbox"/>			

Design View

Num Lock

Once you selected your picture click OK and it should drop into the area some where. Use the cursor to move it around and resize it until you get it where you want it. Then return to the normal view.



Voila! Your switchboard is done. You can do a lot of customization of switchboards in Access, including major layout changes and button formats. All of this can be accomplished in the design view of the switchboard.

The screenshot displays the Microsoft Access interface. The ribbon at the top includes 'Home', 'Create', 'External Data', and 'Database Tools'. The ribbon buttons include 'View', 'Paste', 'Font', 'Rich Text', 'Records', 'Filter', 'Sort & Filter', 'Size to Fit Form', 'Switch Windows', 'Window', and 'Find'. The left pane shows 'All Access Objects' with categories: Tables (Jobs, Parts, Shipments, Suppliers, Switchboard Items), Queries (Supplier names who ship par..., Supplier names with shipmen..., Supplier names with shipmen...), Forms (Jobs, Parts, Shipments, Suppliers, Switchboard), and Reports (Suppliers and Shipment Qua...). The main window is titled 'Main Switchboard' and displays a design view with a teal header containing the text 'suppliers-parts-jobs-shipments'. Below the header is a historical map illustration. To the right of the map is a list of five options, each with a checkbox: 'Add supplier information', 'Add Part information', 'Add Job information', 'Add information on Shipments', and 'Suppliers and Shipment quantities'. The status bar at the bottom shows 'Form View', 'Num Lock', and 'Filtered'.



The screenshot shows the Microsoft Access interface in Design View. The top ribbon is titled "Form Design Tools" and includes tabs for "Home", "Create", "External Data", "Database Tools", "Design", and "Arrange". The "Design" tab is active, showing a ribbon with groups: "Views", "Font", "Gridlines", "Logo", "Controls", "Add Existing Fields", and "Tools". An orange arrow points from the "Controls" group to a form design view. The form has a teal header with the text "suppliers-parts-jobs-shipments" and a grid of data below it. The grid has 5 columns and 7 rows. The first column contains checkboxes, and the second column contains text boxes. The third column contains a large image of a historical map. The "Navigation Pane" is visible on the left side of the window. The status bar at the bottom shows "Design View" and "Num Lock".

Microsoft Access

Form Design Tools

Home Create External Data Database Tools Design Arrange

View Font Gridlines Logo Controls Add Existing Fields Tools

Switchboard

Detail

suppliers-parts-jobs-shipments

Navigation Pane

Design View Num Lock

Many of the advanced features for designing the layouts are available under the Design tab. You can experiment with some of these features if you'd like.



Lab Assignment #4

Lab Assignment #4 – Due October 12th by 11:55 pm (WebCourses time) – 25 points

Create a new (different from the one we just created in this lab) switchboard for the suppliers-parts database using the Switchboard manager.

Use the same cut and paste method as in previous labs for your submission. Just take a “picture” of your finished switchboard.

NOTE: Please use the following naming convention for your uploaded files:

HW04_LastNameFirstName.doc or
HW04_LastNameFirstName.pdf

