

Build a Visio 2002 Diagram

Introduction After you **start** a diagram by opening a template and then dragging the first shape onto the drawing page, the next step is to build the diagram by adding more shapes, adding text to the shapes, and giving the diagram a title. If your diagram is a flowchart, organization chart, or other relationship diagram, you'll also want to connect related shapes.

As you build your diagram, you'll probably want to fine-tune it by rearranging, resizing, or rotating shapes.

To Open the Microsoft Visio Application:

STEP 1:

Click the **Start** button, point to **Programs**, and then click **Microsoft Visio**.

After you start the application, you will see a heading “Choose Drawing type”. You will see two columns under that heading

1. Category
2. Template

Under the **Category** heading, select **Database**. When you select **Database**, a list of icons will appear under the **Template** heading. Select **Database Model diagram** under the **Template** heading. After clicking on the **Database Model diagram**, a new Visio file will open.

To open a saved diagram file

You can open a previously saved Microsoft Visio® diagram file in the same way that you open other files.

 My Diagram.vsd

You can identify Visio diagram files by the distinctive icon and the VSD file extension.

1. Do STEP 1.
2. On the **File** menu, click **Open**.
3. In the **Look in** list, open the folder that contains the file you want to open.

Note To open a diagram file when Visio is already open, on the File menu, click the name of the file from the list of recently opened files at the bottom of the menu. Or, if the file you want to open isn't listed, click Open, navigate to the file, select it, and then click Open.

Add More Shapes

In Visio, shapes are the building blocks you use to assemble diagrams. Shapes are grouped by subject and stored in areas called stencils.

When you start a diagram by opening the Database Model Diagram template, you also automatically open stencils that contain relevant shapes. For example, Database Model Diagram template includes two default stencil:

- 1.Entity Relationship Stencil
- 2.Object Relational Stencil

By default, when you open a template, the default stencils are aligned vertically along the left side of the drawing page. To use shapes in your diagram that are not included in the default stencils of a template, open additional stencils. For Example, if you need to use an “ellipse” shape, you need to open the Basic Shapes stencil in the Block Diagram folder as described below.

How to Use Stencils

Goal	What to do
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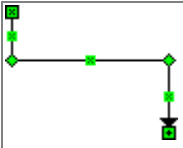
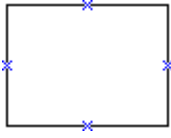
Add a shape to a diagram.	<ul style="list-style-type: none"> • Drag a shape from a stencil onto the drawing page.
View the shapes on a different stencil.	<ul style="list-style-type: none"> • Click the stencil's gray title bar to display its shapes.
Open a new stencil.	<ol style="list-style-type: none"> 1. On the File menu, point to stencils, and then click Open Stencil. 2. Double-click the folder you want to open. 3. Select the stencil, and then click Open.

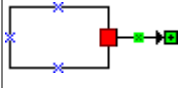
Connect Shapes to Show Relationships

To show a relationship in a Visio diagram, you connect two two-dimensional (2D) shapes with a third, one-dimensional (1D) shape called a "connector." Although connectors appear to be simple lines, like other Visio shapes, connectors are "smart." They not only connect two 2D shapes, but they also can be "glued" (attached) to the shapes. This means that you can move connected shapes without breaking the connection.

The following table describes the [shape elements](#) (endpoints and connection points) that are key to the connection process.

Endpoints and Connection Points

Element	Description	Illustration
Endpoints	Points on the ends of connectors used to "glue" (attach) connectors to other shapes.	 <p>Endpoints are the green squares at the ends of connector shapes.</p>
Connection points	Points on 2D shapes to which you can glue connector endpoints.	 <p>Connection points are the blue x's on two-dimensional shapes.</p>

<p>Endpoint glued to an entire shape (shape-to-shape connection)</p>	<p>When an endpoint is glued to an entire shape, the endpoint shifts to the closest connection point if the shapes are moved.</p>	 <p>A large, red endpoint on a selected connector indicates that the connector is glued to the entire shape.</p>
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Connect Shapes Using Connectors

<p>Drag Connector shapes onto the drawing page</p>	<ul style="list-style-type: none"> You have only a few shapes to connect. 	<ol style="list-style-type: none"> Drag two 2D shapes that you want to connect onto the drawing page. Drag the Dynamic connector shape onto the drawing page near the 2D shapes. If you don't see the Dynamic connector shape, on the File menu, point to Stencils, point to Visio Extras, and then click Connectors. You will find Dynamic Connector there. Drag one endpoint of the connector into the middle of the shape until the shape gets red border (to connect to the entire shape). Repeat step 3 using the other endpoint of the connector and the other 2D shape.
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You need to go to the [View](#) menu and click on [Connection Points](#) to see the Connection Points on shapes

You will find dynamic connector shape on the standard toolbar. Right click the mouse on it and a drop down menu will pop up. One of the options in it is snap & glue. Click on that to enable the [snap and glue](#) option.

Stencils and Shapes you would need are:

1) **Stencil name:** Entity Relationship Stencil which is the default stencil of the Database Model Diagram template

Shapes: Entity, dynamic connector

[Entity](#) is used to represent a table

[dynamic connector](#) is used to connect the shapes

2) **Stencil name:** Basic Shapes stencil

You can add this stencil by

1. On the **File** menu, point to stencils, and then click **Open Stencil**
2. Double-click the folder **Block Diagram**.
3. Double-click on **Basic Shapes**.

Then the Basic Shapes Stencil would be added to the list of default stencils.

Shapes: Ellipse shape.

Ellipse is used to represent the relationships

Add Text to Shapes

In the Visio diagrams you assemble, you'll want to include text in at least some of the shapes.

For the shapes **Dynamic Connectors and Ellipses**, you can add text by:

To	Do this
Add new text	<ol style="list-style-type: none">1. Double-click the shape to which you want to add text, and then type.2. When you have finished typing, click outside the shape.
Edit existing text	<ol style="list-style-type: none">1. Double-click the shape containing the text you want to edit.2. To replace the existing text, type new text. To revise the existing text, click in the text where you want to start typing.3. When you have finished typing, click outside the shape.
Delete text	<ol style="list-style-type: none">1. Double-click the shape that contains the text you want to delete.2. Press the DELETE key.3. Click outside the shape.

For shape **Entity**, you can add text by: When you double click on the **Entity** shape, you will see a window with name **Database Properties**. In that

window, you would see a column by name [Categories](#). Under that column you will see a list of options.

For giving a name to the table:

You must click on the [Definition](#) option. Then to the right of the [Categories](#) column, you would see a list of text boxes and the first of them is [Physical name](#). Enter a name for the table there and if any default text is there in the text box, delete that.

For giving names to the columns in the table:

You must click on the [Columns](#) option. Then to the right of the [Categories](#) column, you would see a table with rows and columns. And the name of the first column in the table is Physical name. Each row under that column is for one attribute of your table. You must give the names of the attributes in this column. You must type each attribute name in successive rows of this column. You need not fill any information in other columns of the table.

[To add a title to a diagram](#)

1. With the diagram open, click the title bar of the **Borders and Titles** stencil to display its shapes. If you don't see the **Borders and Titles** stencil, on the **File** menu, point to **Stencils**, point to **Visio Extras**, and then click **Borders and Titles**.
2. Scroll down until you can see all of the title block shapes on the stencil.
3. Drag a title block shape onto the drawing page, and then position it where you want.
4. Double-click the title block shape. Click to sub select the text you want to change, and then type your own title, subtitle, or company name.
Tip If you inadvertently delete the current date or subtitle when you type the title or company name, delete the title block shape and drag a new shape from the stencil. In the new shape, be sure to sub select the word **Title** before you replace it with your own text.
5. Click outside the shape.

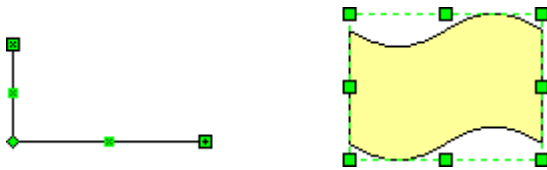
Move Shapes

To drag a shape to a new position Move the pointer over the shape you want to move, press and drag it to the position you want and then release the mouse button.

Change the Size of Shapes

You can change the size of most Visio shapes by:

- Dragging a selection handle, if the shape is two-dimensional.
- Dragging an endpoint, if the shape is one-dimensional.



When you select a shape, small green boxes called endpoints (on 1D shapes) or selection handles (on 2D shapes), appear on the shape. To change the size of the shape, drag one of these squares.

To	Do this
Resize a 2D shape proportionally	Place the pointer over a corner selection handle. When the pointer becomes a two-headed arrow, drag the selection handle.
Widen or lengthen a 2D shape	Place the pointer over a side selection handle. When the pointer becomes a two-headed arrow, drag the selection handle.
Change the length of a 1D shape	Place the pointer over one of the shape's endpoints. When the pointer becomes a four-headed arrow, drag the endpoint.

The **Entity** shape will resize itself automatically.

Note: Change the style of the connectors to **curve** from **straight line**. You can do this by:

- 1) Go to the [Shape](#) Menu
- 2) In the drop-down menu, click on [Lay Out Shapes](#) and a window will appear
- 3) You will find an option to change [Appearance](#) there.
- 4) Select the [Curved](#) option