

Word 2003: Flowcharts

Learning guide

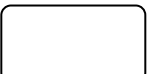

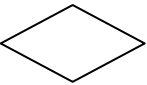
How can I use a flowchart?

As you plan a project or consider a new procedure in your department, a good diagram can help you determine whether the project or procedure is feasible and reasonable. Word’s flowcharting tools allow you to create diagrams that are clear and easy to read. These diagrams can help you:

- Document your department's procedures
- Promote and describe your department's services
- Create a project plan
- Display developing themes in collected data
- Plan the navigation structure for your department's web site
- Display the organizational structure of your department
- Design a structure for instructional multimedia or courseware

Flowchart basics

Flowcharts are composed of shapes and connecting arrows. Most flowcharts will utilize the following three shapes:

| Shape | Type | Usage |
|---|--------------------------|--|
|  | Start block or End block | Begins or ends a process |
|  | Process block | Describes the action taken as a process is ongoing |
|  | Decision block | Describes a required choice or decision |

Getting started

Word's flowchart tools are available from the **Drawing** toolbar, which usually appears at the bottom of the Word window.

- To determine whether the **Drawing** toolbar is visible, look for the **Draw** button and the **AutoShapes** button at the bottom left corner of the Word window.



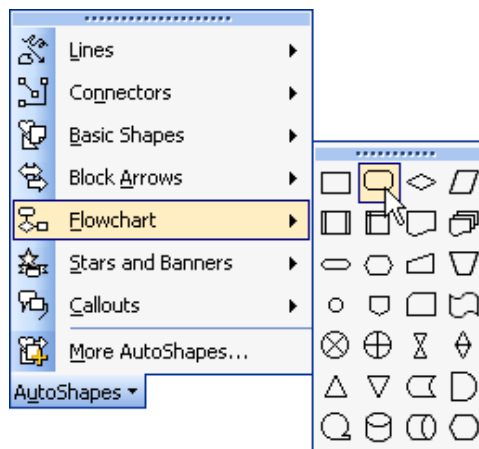
- If the **Drawing** toolbar is not visible:
 - From the **View** menu, select the **Toolbars** submenu.
 - From the **Toolbars** submenu, select **Drawing**.
- Word will display the **Drawing** toolbar at the bottom of the active window.

Creating flowchart shapes

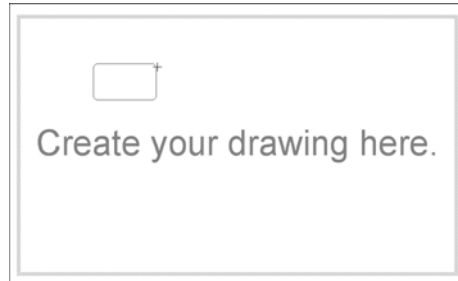
Drawing a start block

Every process has a starting point and the majority of flowcharts begin with a start block. To draw a start block:

- On the **Drawing** toolbar, click on the button labeled **AutoShapes**.
- From the **AutoShapes** menu, select the **Flowchart** submenu.
- From the **Flowchart** submenu, click on the menu item marked with a rounded rectangle.



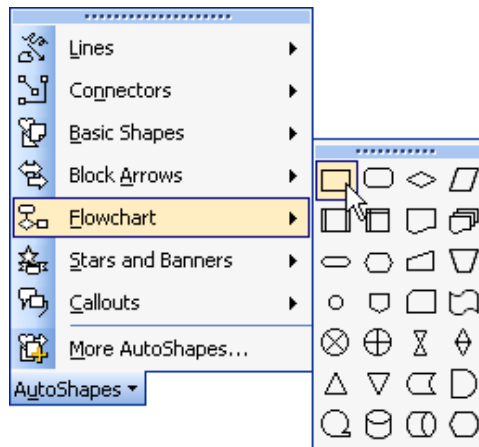
- Place your cursor within the box labeled **Create your drawing here.**
- Drag your cursor across the box to draw your starting block.
- Release the mouse button when the rectangle is large enough.



Tip: Word calls this box the **drawing canvas**.

Drawing a process block

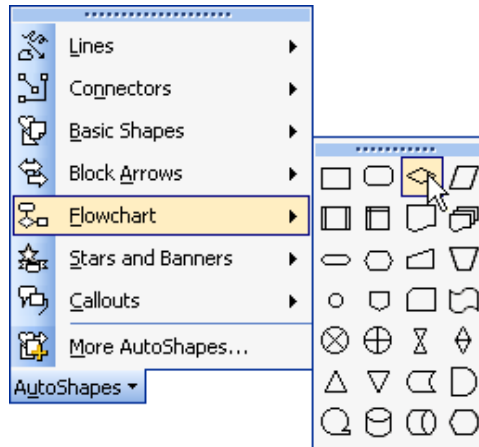
- On the **Drawing** toolbar, click on the button labeled **AutoShapes**.
- From the **AutoShapes** menu, select the **Flowchart** submenu.
- From the **Flowchart** submenu, click on the menu item marked with a rectangle.



- Drag your cursor across the drawing canvas to draw your process block.
- Release the mouse button when the rectangle is large enough.

Drawing a decision block

- On the **Drawing** toolbar, click on the button labeled **AutoShapes**.
- From the **AutoShapes** menu, select the **Flowchart** submenu.
- From the **Flowchart** submenu, click on the menu item marked with a diamond.

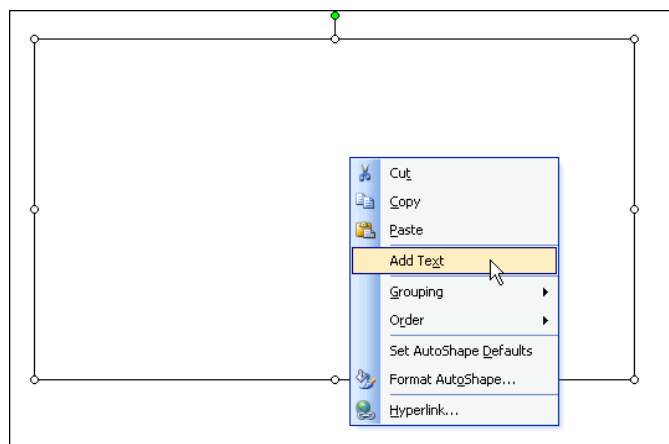


- Drag your cursor across the drawing canvas to draw your decision block.
- Release the mouse when the diamond is large enough.

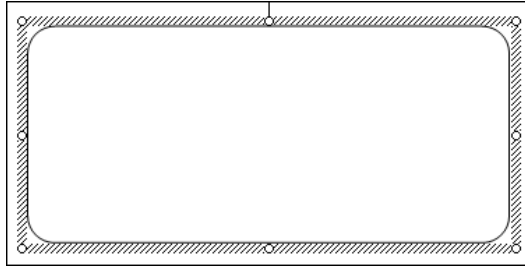
Inserting text inside a shape

Once you have drawn a shape on your flowchart, you can insert text within the shape. To insert text into a shape:

- Right click on the shape you wish to customize.
- From the menu that appears, select **Add text**.



- Word will display a hatched gray border around the shape, and a flashing insertion point cursor inside the shape.



- Type the text that you wish to display within the shape.
- Click the mouse button outside of the shape and the hatched gray border will disappear.

Customizing flowchart shapes

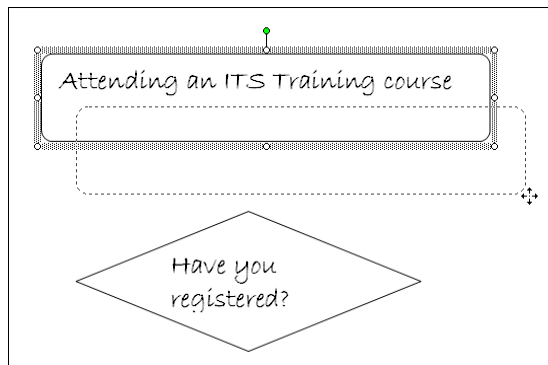
Once you've drawn the shapes on your flowchart, you can customize them to make your diagram more readable.

Moving a shape

- Click on the shape that you wish to move.
- Place your cursor over the edge of the shape.
 - Word will display a cursor with four arrows.

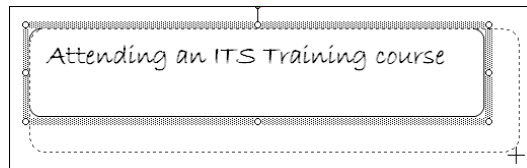


- Click and drag the shape to its new location.
- Release the mouse button when you are satisfied with the new location of your shape.



Resizing a shape

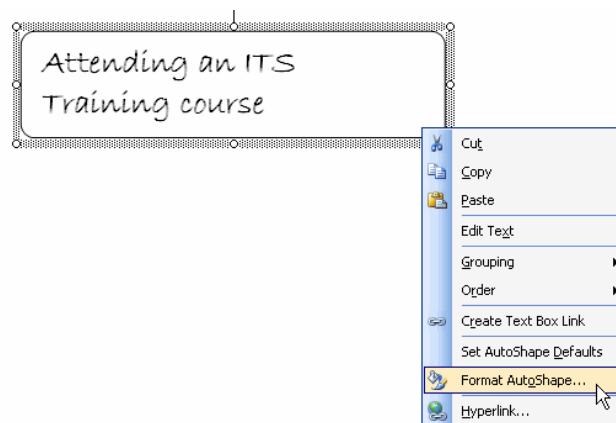
- Click on the shape that you wish to resize.
- Place your cursor over one of the round selection handles on one of the corners of the shape.
- Click and drag to resize the shape.
- Release the mouse button when you are satisfied with the new size of your shape.



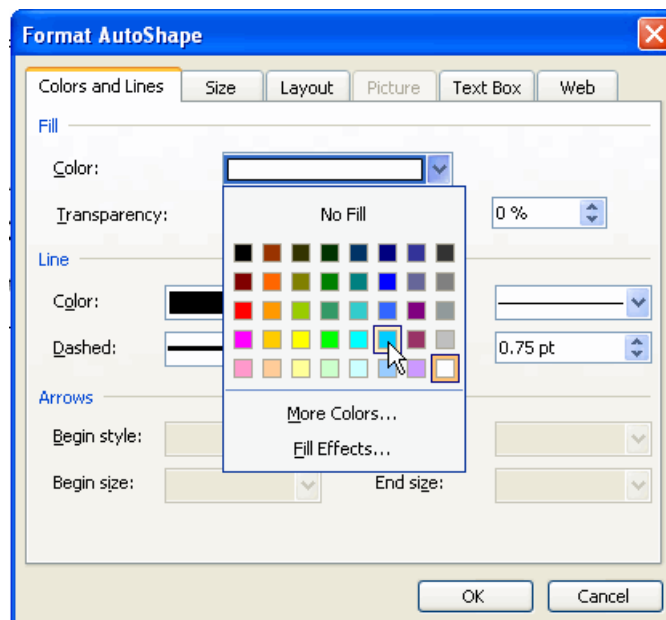
Tip: Dragging outward from the middle of the shape will make the shape larger, while dragging inward toward the middle will make the shape smaller.

Changing the shape's color

- Click on the shape whose background color you wish to change.
- Right-click on the edge of the shape.
- From the menu that appears, select **Format AutoShape**.

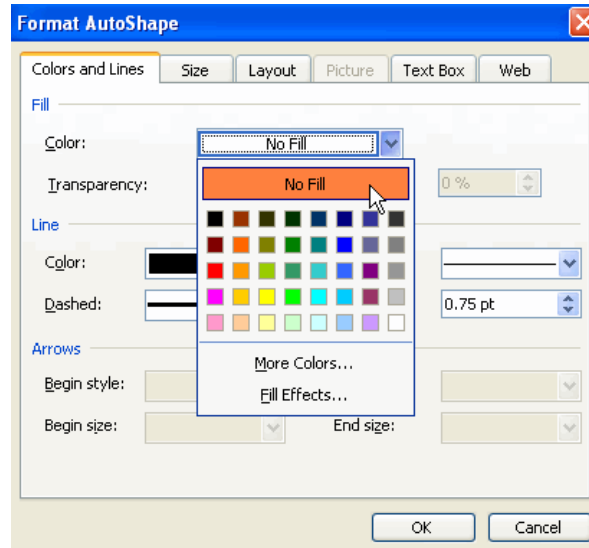


- The **Format AutoShape** window will appear.
- From the **Format AutoShape** window, click on the tab labeled **Colors and Lines**.
- In the **Fill** area, click on the down-facing arrow next to the box labeled **Color**.
- From the menu that appears, click on the color you wish to use as the background of your shape.
- If you do not see the color you wish:
 - Click on **More Colors**.
 - Select a custom color from the window that appears.
- Click the button labeled **Ok** to apply the changes to the shape's background color.



Making the background of your shape transparent

- Right click on the edge of the shape.
- From the menu that appears, click on **Format AutoShape**.
- From the **Format AutoShape** window that appears, click on the tab labeled **Colors and Lines**.
- In the **Fill** area, click on the down-facing arrow next to the box labeled **Color**.
- From the menu that appears, select **No Fill**.



- Click on the button labeled **Ok** to apply the change to the background of your shape.

Customizing a shape's border

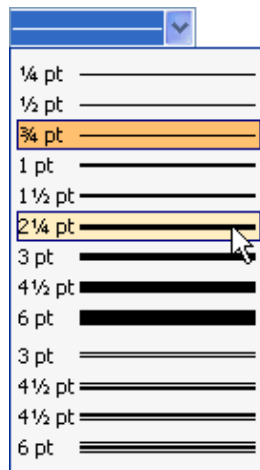
Occasionally you may wish to customize your flowchart by changing the color or style of your shapes' border.

Changing the border's color

- Click on the shape whose border you wish to customize.
- Right-click on the edge of your text box.
- From the menu that appears, click on **Format AutoShape**.
- The **Format AutoShape** window will appear.
- Click on the tab labeled **Colors and Lines**.
- In the **Line** area, click on the down-facing arrow next to the box labeled **Color**.
- From the menu that appears, click on the color you wish to use for the border of your shape.
- If you don't see the color you want for your border:
 - Click on **More Colors**.
 - Select a custom color from the window that appears.

Changing the border's style

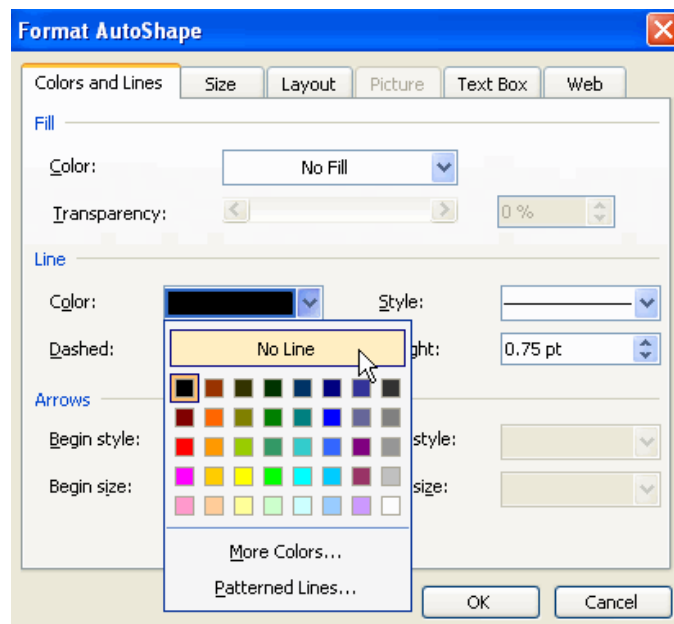
- Click on the down-facing arrow next to the box labeled **Style**.
- From the menu that appears, choose a new width for the border of your shape.



- Click the button labeled **Ok** to apply the changes to the shape's border.

Removing a shape's border

- Right click on the edge of the shape whose border you want to remove.
- From the menu that appears, click on **Format AutoShape**.
- The **Format AutoShape** window will appear.
 - Click on the tab labeled **Colors and Lines**.
- In the **Line** area, click on the down-facing arrow next to the box labeled **Color**.
- From the menu that appears, select **No Line**.
- Click the button labeled **Ok** to apply the change to the border of your shape.

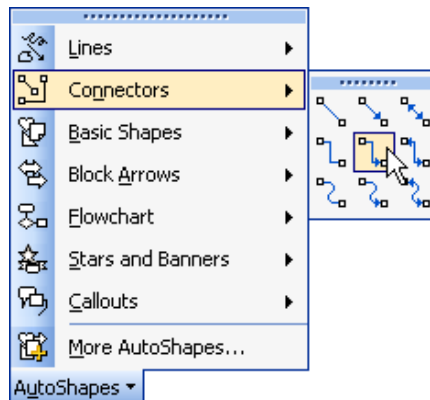


Connecting flowchart shapes

Once you've drawn the shapes in your flowchart and added text to each shape, you can draw arrows to connect your flowchart shapes in sequence.

Drawing an arrow

- On the **Drawing** toolbar, click on the button labeled **AutoShapes**.
- From the **AutoShapes** menu, select the **Connectors** submenu.
- From the **Connectors** submenu, click on the crooked arrow in the middle of the menu.



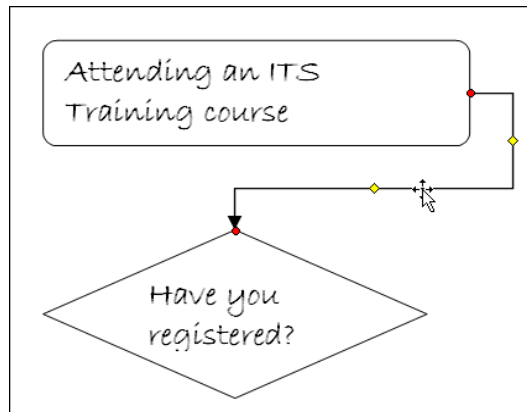
- Place your cursor on the edge of the shape from which your arrow will emerge.
- Drag the cursor toward the next shape in your flowchart's sequence.
- Release the mouse button when the arrow connects the first shape to the second one.

Tip: Word will attempt to connect your arrow to the selection handles at the nearest side of a rectangle or the nearest corner of a diamond. You won't be able to draw your arrow so that it connects with your shapes at other places on their borders.

Moving an arrow

Word allows you to move an entire connecting arrow, or reposition sections of the arrow. To move the entire arrow to another position in the flowchart:

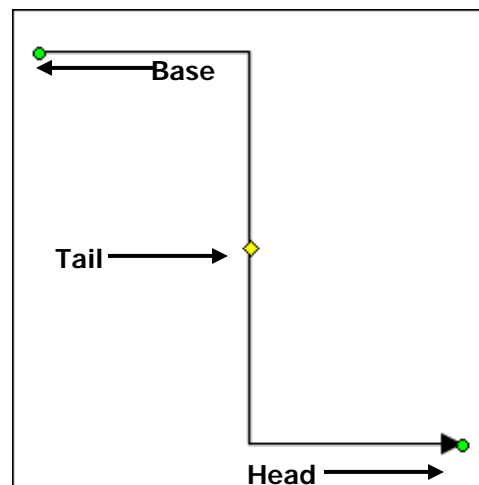
- Click on the arrow to select it.
- Place your cursor on the arrow.
- Word will display a special cursor with four arrows to indicate that it's ready to move your connecting arrow.



- Click and drag the arrow to its new location.
- Release the mouse button when you are satisfied with the arrow's new location.

Repositioning components of an arrow

Each arrow that you draw has several components that can be individually repositioned.

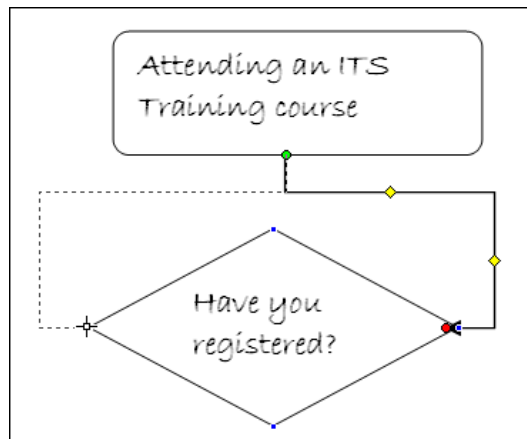


To reposition the base or head of an arrow:

- Click on the arrow to select it.
- Place your cursor over the arrow's base or head.
- Word will display a plus-shaped cursor.



- Click and drag the arrow component to its new location.
- Release the mouse button when you are satisfied with the new location.



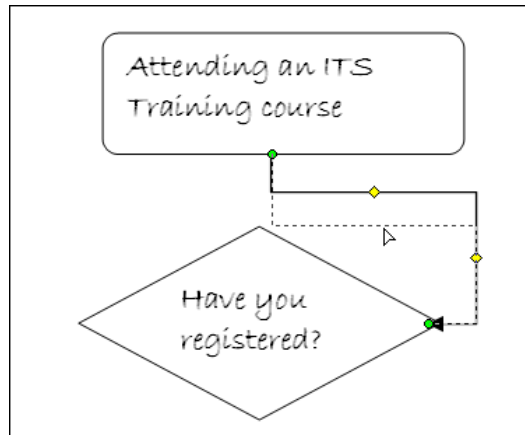
Tip: Remember that Word will seek to connect the base or head of your arrow to the nearest corner of a diamond or the nearest side of a rectangle. When your cursor is near one of these areas, it will appear as a plus with a circle at its center.

To reposition the tail of the arrow:

- Click on the arrow to select it.
- Place your cursor over one of the yellow selection handles along the arrow's tail.
- Word will display a white, triangular cursor.



- Click and drag that section of the arrow's tail to its new location.
- Release the mouse button when you are satisfied with the new location of the arrow's tail.



Adding Labels to your Flowchart

In many cases, your flowchart will be more readable if you label the arrows that connect the shapes in your diagram. Arrows originating from decision blocks should almost always be labeled. To label your arrow, you'll use a custom text box with no background color and no border.

Adding a text box

- On the **Drawing** toolbar, click on the **Text Box** button.



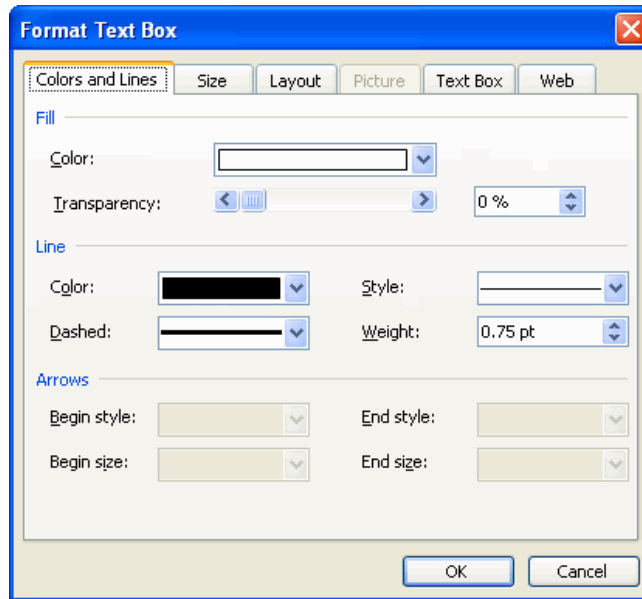
- Place your cursor near the arrow you wish to label.
- Drag the cursor across the drawing canvas to draw the box that will contain your arrow's label.
- Type the text for your label in the text box.
- If necessary, select the text within the text box and apply any new formatting.

***Tip:** You can select and format text within a text box with the same techniques you'd use to select and format text anywhere else in a Word document.*

Formatting the text box

To make the text box appear as a label, you must make the text box transparent and remove its border.

- Click on the outside edge of the box to select the entire box.
- Right click on the border of the box.
- From the drop-down menu that appears, choose **Format Text Box**.
- The **Format Text Box** window will appear.



Making the text box transparent

- From the **Format Text Box** window, click on the tab labeled **Colors and Lines**.
- In the **Fill** area, click on the down-facing arrow next to the box labeled **Color**.
- From the drop-down menu that appears, select **No Fill** to remove the background color from your text box.

Removing the text box's border

- In the **Line** area of the **Format Text Box** window, click on the down-facing arrow next to the box labeled **Color**.
- From the drop-down menu that appears, select **No Line** to remove the border from your text box.
- Click the button labeled **Ok** to apply these changes to your text box.
- Place your cursor on the edge of the box.
- Drag the box to place your label near the arrow it describes.