



Software Application Tutorial

Creating Organization Charts

Using

Microsoft Office Visio 2003

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Introduction - Creating ORG Charts

Organization charts are used to visually document the groups within an organization – such as departments and teams – and their reporting relationships. Using MS Office Visio, you can easily create organization charts by dragging shapes, which represent people within an organization, onto the drawing page.

When you drag shapes on top of other shapes, Visio positions and connects the shapes for you, creating the reporting hierarchy as you add shapes to the drawing page. Shapes in org charts can also store information about the people and relationships within the organization, and you can show as much or as little information as you choose. You can rearrange shapes in a chart and create synchronized copies of departments without redrawing the hierarchy from scratch.

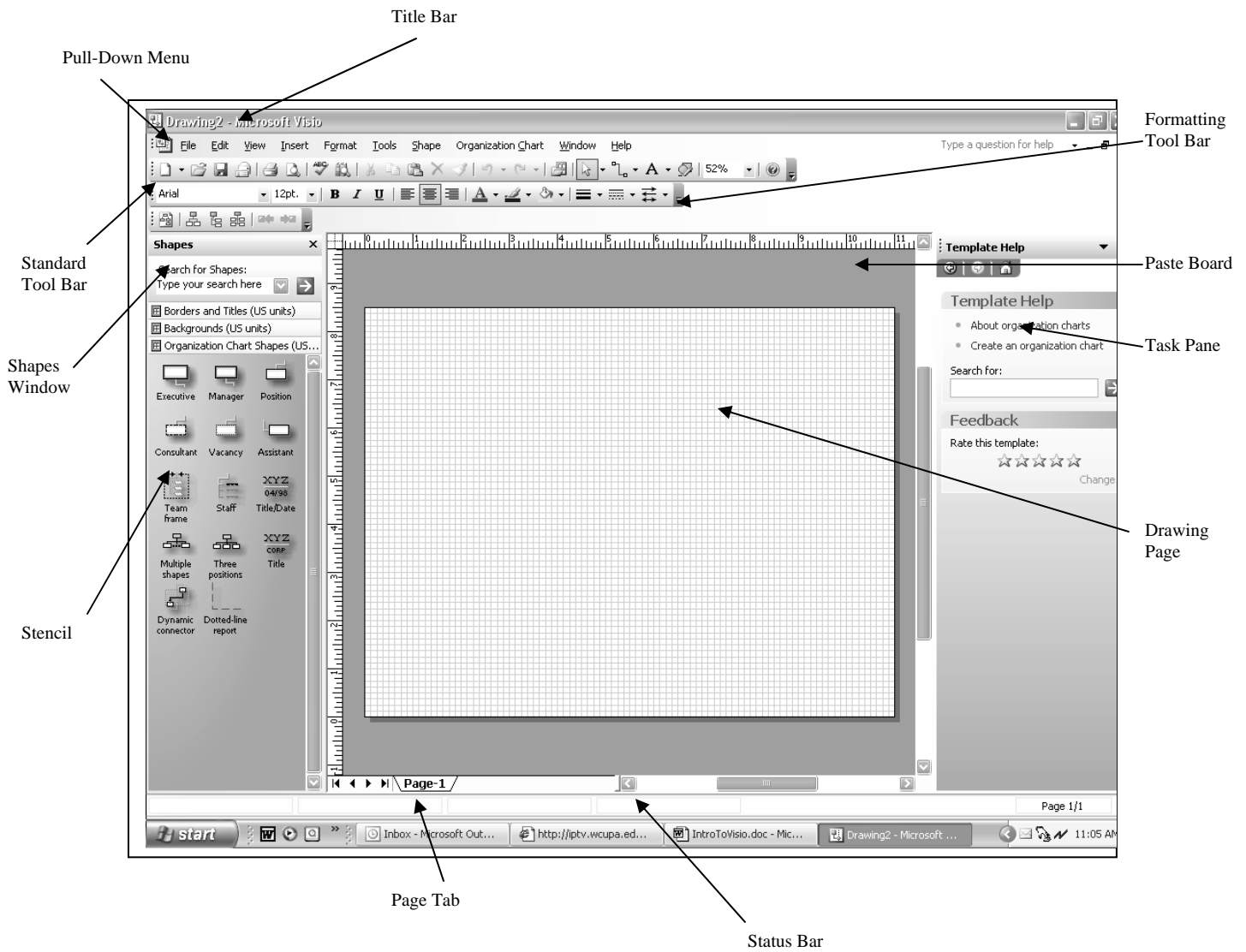
Working within the MS Office Visio Environment

When you start a diagram, the Visio window, which contains the Visio menus and toolbars, opens. The Visio window also contains the shapes window, drawing page, pasteboard, and rulers in a drawing window. The stencils that contain the shapes you need are located in the Shapes window to the left of the drawing page.

The Visio *drawing page* resembles graph paper with a *grid* that helps you position shapes. The horizontal and vertical *rulers* also help you position shapes and show you the size of the drawing page. Above the drawing page are the Visio menus and the Standard and Formatting toolbars, which contain the most commonly used tools for creating, modifying, and formatting text, shapes, and diagrams. If you use other programs in the MS Office System, many of the buttons on the toolbars should be familiar to you.

Many of the buttons on these toolbars have drop-down menus that include options or other tools you can select. To view the list for a specific button, click the down arrow on the button. If you are not familiar with a toolbar button, you can pause the pointer over it to display a *screen tip* that tells you which tool or command the button represents.

Below the drawing page, page tabs help you move between pages in multiple-page drawings, and the status bar displays information about shapes that are selected on the drawing page. To the right of the drawing page, you can display *task panes* from which you can quickly access task-specific and diagram-specific information. The area surrounding the drawing page is the *pasteboard*, which you can use as a temporary holding area for shapes and other drawing elements. Shapes on the pasteboard are not printed.



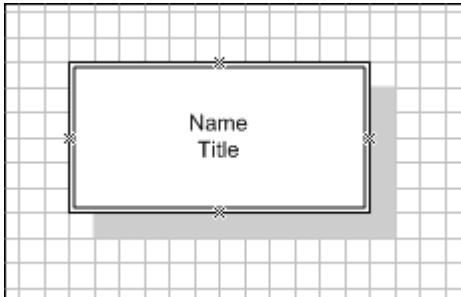
Screen Attributes

- ✓ Drawing Page
- ✓ Formatting Toolbar
- ✓ Pasteboard
- ✓ Pull Down Menu Bar
- ✓ Shapes Window
- ✓ Standard Toolbar
- ✓ Status Bar
- ✓ Stencil
- ✓ Task Pane
- ✓ Title Bar

Getting Started

From the ORG Chart Shapes stencil, place the cursor on top of the Executive shape and drag it to the drawing page. Drop the shape in the center of the page:

Executive:

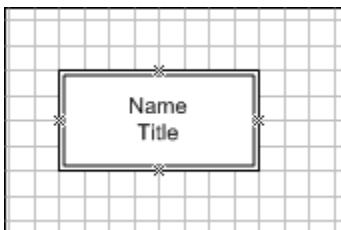


Note the size and border of the shape

To add text to a shape, select it, press F2 and type your text. Or merely double-click the shape and type your text.

Begin to add employees by selecting the Manager shape and dragging it on top of the Executive.

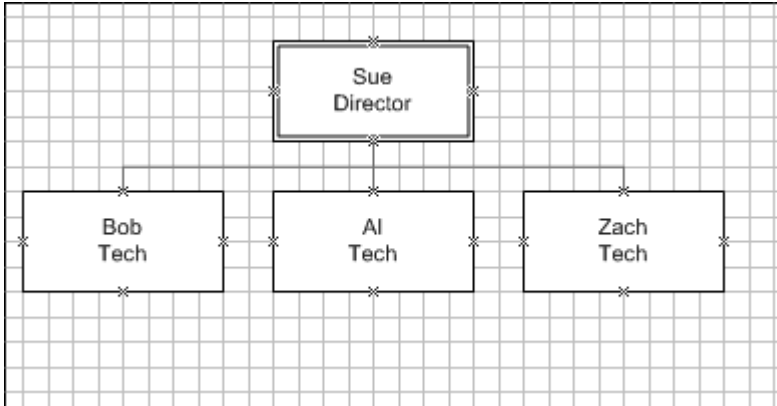
Manager or Director:



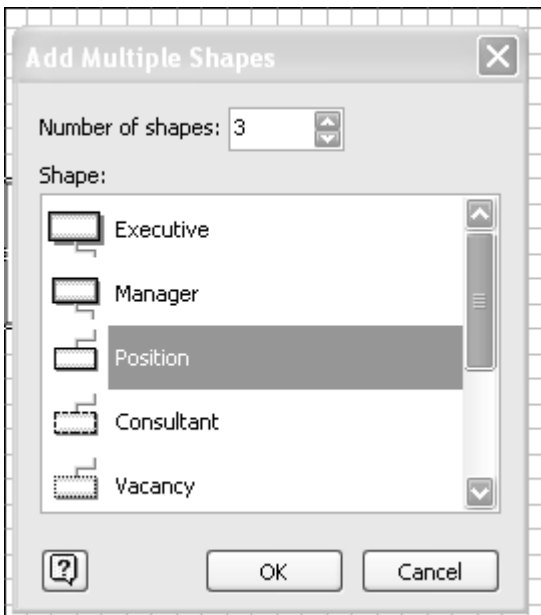
Note the shape

Now add subordinates to the Manager by selecting the Position shape and dragging it on top of the Manger. Drag as many Positions as necessary and Visio will automatically connect them to the Manager.

Manager with subordinates:

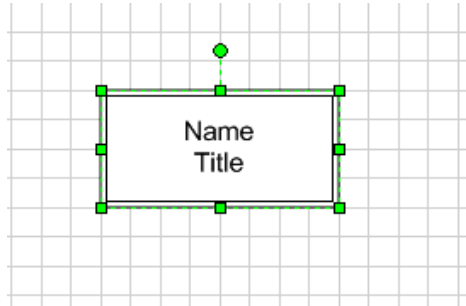


TIP: You can add up to 50 employee shapes to your organization chart at once by using **Multiple Shapes** on the Org Chart Stencil. Just drag the stencil on top of the shape that represents the manager to whom all the employees report, and then in the dialog box, select the number of and type of shapes you want to add.



About Shapes

All Visio shapes behave like 1-D or 2-D shapes. 1-D shapes, such as lines, have endpoints that you can use to shorten or lengthen the shape. 2-D shapes, such as rectangles or circles, have selection handles that you can use to increase the height or width of the shape.



You can drag a corner selection handle on a 2-D shape to resize it proportionally. Drag the rotation handles on a shape to rotate it.

When the pointer changes to a four-headed arrow pointer, you can move the shape. When the pointer changes to a two-headed arrow pointer you can resize the shape.

Connecting Shapes

Many types of Microsoft Office diagrams depict related ideas, relationships, or sequences by showing shapes that are connected with lines. For example, Organization Charts show employee relationships as a hierarchy of shapes connected by lines. Visio makes it easy to connect the shapes in the chart by using *connectors* – 1-D shapes (usually lines) that connect 2-D shapes.

Important – To connect shapes as you drag them onto the drawing page, make sure you select the Connector tool *before* you drag the shapes onto the drawing page. Connectors can be glued to the shapes that they connect. You can break the bond by moving a connector endpoint or deleting the connector. Connectors that are glued to shapes are represented with a red endpoint.

You can create two types of connections in Visio diagrams: shape-to-shape connections and point-to-point connections. Shape-to-shape connections connect shapes at the two closest points. Point-to-point connections connect shapes at specific connection points. When you move a shape connected by a point-to-point connection, the connector stays attached to the connection point.

You can reroute connectors by dragging an endpoint to a new shape or connection point, by dragging a midpoint on a connector segment. Delete a connector by selecting it and pressing the delete key. *DO NOT USE THE DELETE KEY ON THE NUMBER PAD.*

Creating, Storing, and Displaying Employee Information

You can store custom property data with shapes in Visio. In organization charts, you can use custom property data as text in charts to store more descriptive detail about an employee. The custom properties for organization charts shapes are Department, Telephone, Name, Title, and E-mail. By default, the Name and Title properties are shown in the shapes in a chart.

Click on a shape

On the **View** menu, click **Custom Properties Window**

Tip: If the Custom Properties window appears with no data displayed it's because a shape isn't selected.

Department	Information Services
Telephone	x2828
Name	James F. Gage
Title	Vice President
E-mail	fgage@wcupa.edu

Custom Proper...
X

Enter detailed information about the employee.

To display the information - on the **Org Chart** menu, click **Options**, then the **Fields** tab
By default, the Name and Title are shown in the shape. You can add department, telephone, and e-mail information.

Options

Options Fields Text

Block 1: Name Title Department E-mail Telephone

Block 2: None

Block 3: None

Block 4: None

Block 5: None

Block 2 Block 3
Name
Title
Block 4 Block 5

Restore Defaults OK Cancel

Collapsing Subordinates

Charts that represent large or complex organizations can be arranged on several pages so you don't need to cram the entire chart onto one drawing page. You can quickly build a multiple-page organization chart by creating synchronized copies of departments on pages in the drawing file. For example, on the first page of a chart, select a manager shape with subordinate employees that make up a department or team, and then create a synchronized copy of it. Visio cuts the subordinates from the first page, creates a new page and then places the manager and the subordinates on the new page. A shape representing the manager remains on the first page, indicating a synchronized copy is on another page, and then places the manager and the subordinates on the new page. A shape representing the manager remains on the first page, indicating that a synchronized copy is on another page in the drawing file. Any changes you make to the text or custom properties for any synchronized shape applies to all synchronized copies of it on other pages.

Select a Manager or shape.

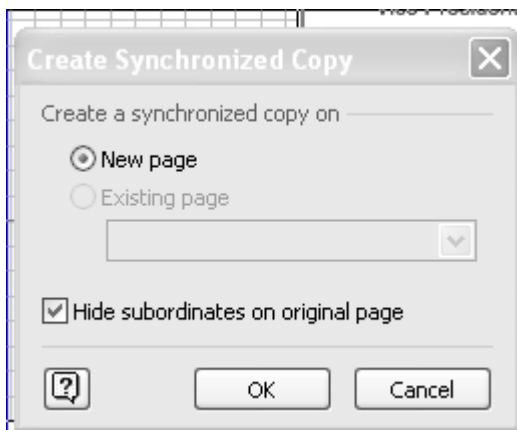
From the Pull-down menu, select Organization Chart

Select Synchronize

Create a synchronized copy

New Page

Hide subordinates on page (not checking this box will keep the subordinates on the original chart)



Visio creates a new page and moves the Manager and subordinates there.



Note the Manager's stencil shape on page one. This shape indicates there are subordinates 'behind' this manager.

Observe the Page Tabs – Visio has automatically added a second page to your diagram



You can easily rename pages in your ORG chart. First, double-click the page tab for the page you want to rename. Or, right-click the page tab and then click Rename page. Then, simply type the new page name to replace the old one.

Old tabs:



New tabs:



To return subordinates to the main page: From the Pull-down menu, select Organization Chart, Show Subordinates

Adding Pictures

When you want to add a picture to your chart, you can use the Picture command on the Insert menu. Visio allows you to insert pictures that have been saved in the file formats show below:

File Format	File Extension
Compressed Enhanced Metafile	.emz
Enhanced Metafile	.emf
Graphics Interchange Format	.gif
Joint Photographic Experts Group File Interchange Format	.jpg
Portable Network Graphics	.png
Scalable Vector Graphics	.svg and .svgz
Tag Image File Format	.tif and .tiff
Windows Bitmap	.bmp and .dib
Windows Metafile	.wmf

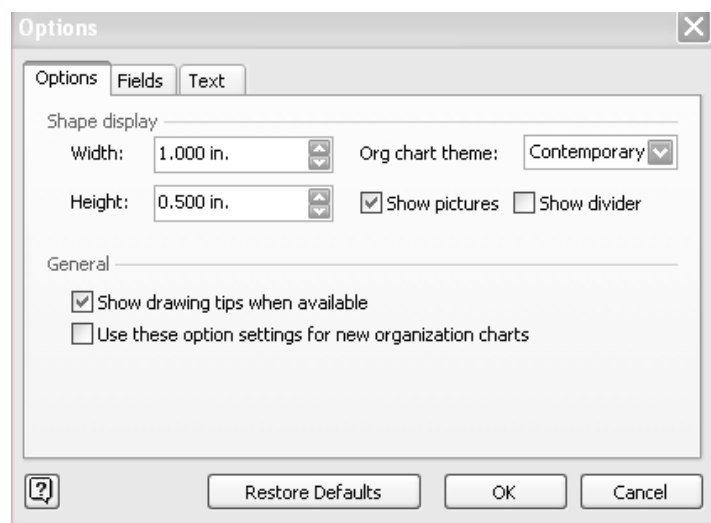
After you insert a picture, you can size, position and crop it, which means cut out portions you didn't want to appear. You can also format a picture's properties to change its brightness, sharpness, transparency, and other qualities that affect appearance. Visio includes a Picture command on the Format menu that even previews your changes before you apply them.

Tip: Using the Picture command, you can also insert clip art, logos, charts, equations, and photographs from a scanner or digital camera.

Changing the Appearance of a Chart

You may wish to change the color or design of the shapes, or add a background or border to your chart.

Changing the design of the shape: On the **Organization Chart** menu, click **Options** to open the **Options** dialog box. In the **Org chart theme** box, click the down arrow, select **Contemporary**, and then click **OK**. Visio changes the design theme for all the drawing pages in the chart.



Changing the size of shapes: On the **Organization Chart** menu, click **Options** to open the **Options** dialog box. In the **Shape Display** area, choose the size for your shapes. Visio typically uses 1 inch width x ½ inch length shapes.

Change the color of the shapes: Right-click the drawing page, and then click **Color Schemes** on the shortcut menu. The **Color Schemes** dialog box appears. In the **Color Schemes** dialog box, click **Coffee**, and then click **OK**. Visio changes the color scheme for all drawing pages in the chart.

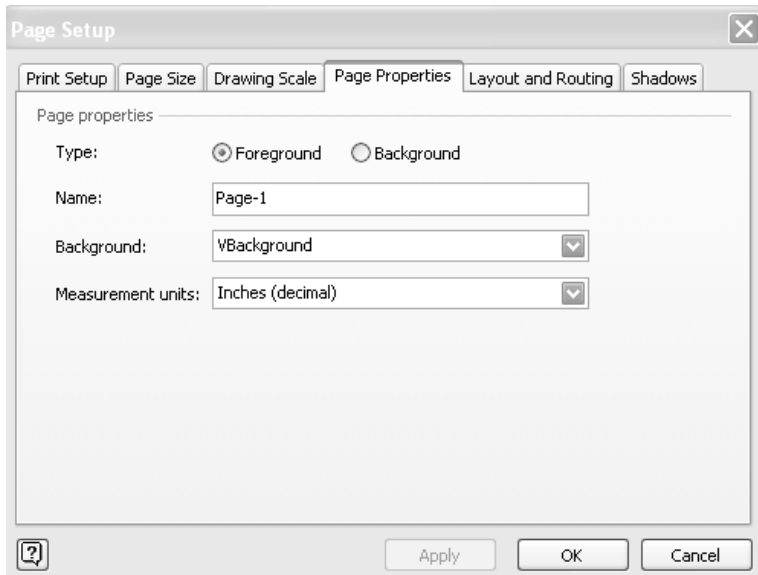
Adding a border: From the Shapes Window, Click the **Borders and Titles stencil** and choose a border by dragging the stencil onto the drawing page. To remove a border, highlight and delete it.



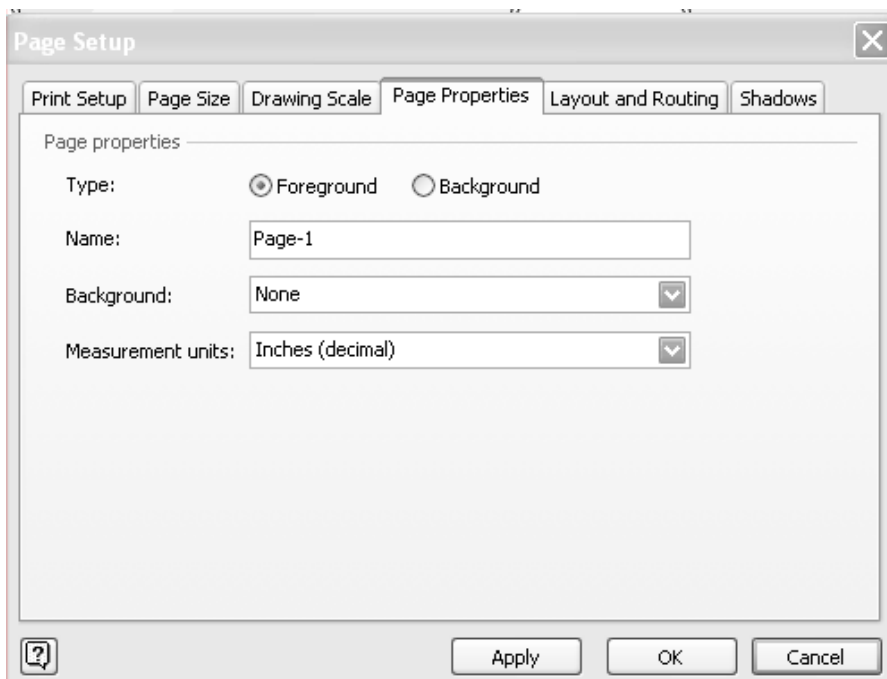
Adding a background: Click the **Backgrounds stencil**, and drag a background shape on to the drawing page.



If you have multiple pages, notice that not all pages include a background. The background should be added to each page. Click the Page Tab to add the border. Then, from the **File** menu, click **Page Setup**, and then click the **Page Properties** tab. In the Background box, click the down arrow, and then select **VBackground**. Click OK. Visio adds the background.



To remove a background, go to the **File** menu, click **Page Setup**, and then click **Page Properties**. In the Background box, click the down arrow and select none for EACH PAGE in your drawing.



Saving ORG Charts

Save Visio diagrams the same way you save any other Microsoft Office 2003 file. On the File menu, click the Save As option. Visio assumes you will save the document in the current directory. You can assign a different directory. A box will appear requesting the assignment of a filename. Choose a name for your chart and click Save. Visio assigns the document extension **.vsd** to all filenames.

