Crabby demystifies Visio terms

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Crabby Office Lady

It used to be that drawing during a meeting or at school was an indispensable way to pass time. Now it just might be an essential way to get things done. Who knew that doodling and shape-shifting could make you the hit of the office?

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I've never had particularly strong spatial abilities; I nearly flunked geometry in the ninth grade. Even today I probably couldn't find my way out of an origami-folded paper bag.

You too?

Meet Visio, the Office program that provides all the shapes, templates, and connectors (and all that stuff) so that you don't *have* to be geometrically or spatially inclined and yet create drawings and documents that make you look like you are. Of course, you do have to learn a bit of the lingo, and here are some of the terms that I needed to learn before I could even get my feet wet.

Ready, set ... define those terms!

Let us now demystify some of the main words you'll be using once you get excited and start frolicking in Visio.

Shape

A shape in Visio is like the cell in Excel: It's the building block of your drawings, your diagrams, your charts, and whatever else you're creating in Visio. It's a ready-made image that you drag onto your drawing page (the canvas where you work — like the document in Word or the spreadsheet in Excel). In fact, I like to think of the shape in Visio as an actor — it is designed to play a part, programmed to behave (act) a certain way depending on its context (the play, the production).

There are thousands of shapes available for you to use in Visio, not to mention countless ways to use them. And just like actors, shapes come in a variety of colors, designs, and sizes. The **Chair** and **Sofa** shapes are examples of two-dimensional (2-D) shapes; you can move them around to see how they fit together and how they look with the rest of the room you're creating. And there are the one-dimensional (1-D) shapes that when selected have a beginning point and an ending point. In other words, they are basically lines (which may not seem like "shapes" to all of you, but in Visio they are considered shapes).

Stencil

Now that you know what a shape is, it's time to move on to stencils. When you think about stencils, perhaps you think about tools that enable you to make better drawings. My 7-year-old loves her stencils — the hearts and flowers, the rainbows and the butterflies.

Of course, those are all fun and sweet, but with Visio, stencils are a bit more ... beefy (and perhaps a little less girly, although who am I to speculate?). In a nutshell, a Visio stencil is simply a container for all your shapes— it's a collection of shapes, and all those shapes in a particular stencil have something in common. They can be a collection of shapes that you need to create a certain type of diagram.

For example the **Basic Flowchart Shapes** stencil contains common flowchart shapes, the **Backgrounds** stencil contains a variety of backgrounds, and the **Arrow Shapes** stencil contains (oddly enough) a variety of arrow-shaped shapes.

Drawing

Okay, sure, we all know what drawings are (although not all of us can make them so that others can actually identify them — that'd be my stick drawings). In Visio, however, there are many different sorts of drawings, but they all start with a simple four-step procedure: Pick a template (a flowchart, a floor plan, or an engineering template, for example), add shapes from the template stencils to it, add text to the shapes, and then connect them in the ways that illustrate the point you're trying to make. Then show it off and make your point.

Diagram

A diagram in Visio is basically a drawing. You use shapes such as triangles, squares, rectangles, and arrows to create drawings for any number of activities and processes you're trying to explain visually. You open a template, you drag your shapes onto the drawing page, and then you build your diagram by adding more and more shapes. As you build and fine-tune your diagram, you can rearrange, rotate, and resize your shapes; add backgrounds and colors; and so on. Here is a partial list of the types of diagrams you can create using Visio:

- Brainstorming diagrams
- Business process diagrams
- Database diagrams
- Electrical engineering plans
- Maps
- Mechanical engineering plans
- Organization charts
- Process engineering plans
- Web diagrams

Consider a roomful of people about to embark upon a project, people who need to get their ideas on the table. What used to pass for a brainstorming session (which included a whiteboard or a legal yellow pad, not to mention many pairs of resentful glazed-over eyes staring at you) is now pretty much obsolete. We now know that there are better ways to work together. Of course, every person has his or her own idea of how to get this project going: Hillary wants to jump in there and just get all the ideas down and sort it all out later. She won't take no for an answer (and she types fast). Clark is the more contemplative sort of thinker: He isn't going to say a word unless he knows that what he says has value and that it will be taken seriously. His diagrams are meticulous, and he is known for his thoroughness. And Susie wants to be sure that everyone is able to express the ideas in their heads so that they don't leave the meeting feeling alienated, with all those ideas still simmering and bottled up.

Luckily for this unique team, Visio's brainstorming diagrams offer a variety of ways for people to get their ideas on the table. With the shapes that the brainstorming diagrams offer, your session can incorporate the freewheeling, free-association thinking, round-robin brainstorming style (where everyone gets a chance to have a say), as well as the confidential, let's-write-it-down-on-our-own-pads-first-and-gather-later method. Any sort of diagram has the potential to be a conversation starter.

Template

A template in Visio — just like a template in any other Office program — is a toolkit that contains everything you need to create a diagram. You get the menus and toolbars, the stencils, the shapes, and the drawing page you need to get your diagram put together. There are many templates included with Visio, and you can also get many, many more on Office Online.

Pasteboard

The pasteboard in Visio is the light blue area surrounding the drawing page. It's basically a temporary holding cell for shapes and other drawing elements you're considering for your drawings and diagrams. It's a place where you can see what your choices are before you make them. (Oh my, if only such a tool existed for all those lousy relationships I've had in my life. See them as they are — and how they match up with the others in your life — *before* committing ...)
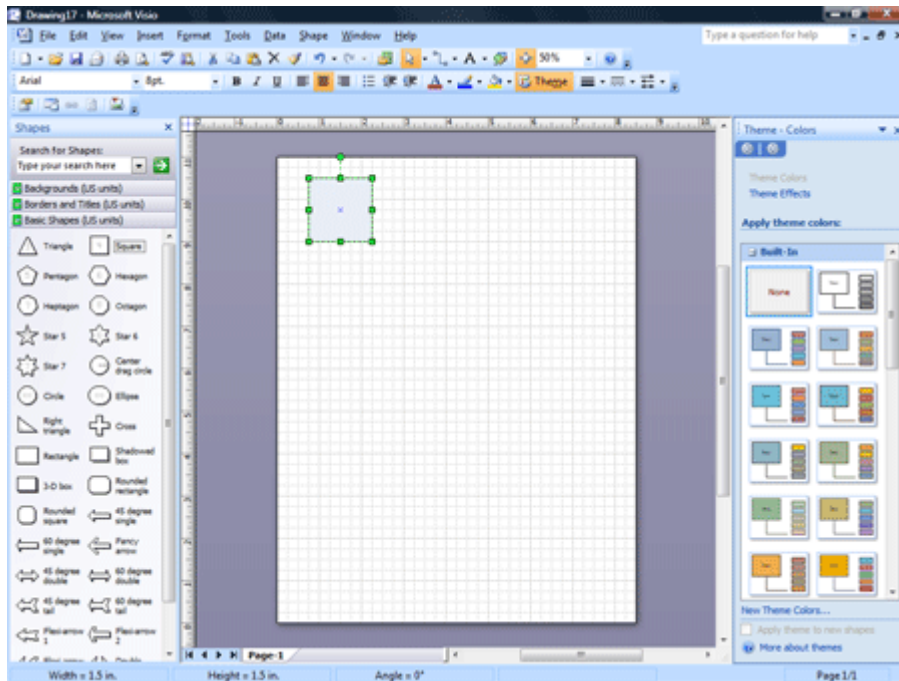
Connector

A connector is exactly how it sounds: It connects things — Visio shapes, specifically. In fact, a connector is a 1-D shape itself, a line that you use to connect other shapes in your diagram or drawing. If you have a diagram full of shapes that aren't connected in any way, it's pretty hard to tell how they fit together in the scheme of things. Connectors have "sticky *points*" (end points) that you can "glue" to the "sticky *parts*" of shapes (the connection points). To understand the direction of the connection between your shapes, you glue the begin point ⊠ to the shape you're connecting *from*, and glue the end point ⊞ to the shape you're connecting *to*.

PivotDiagram

A PivotDiagram (new for Microsoft Office Visio 2007), arranges your information — or data — in relationships so that you (and the folks looking at your drawing) can more easily see and understand the meaning and relationships among all the data on your page. This sort of diagram in Visio is very similar to a PivotTable report in Excel: It's all about relationships and being able to view them in a variety of ways. Less talking, less explaining, and more perspective. (Come to think of it, this may be some sort of method that marriage therapists could employ to encourage feuding couples to get a fresh perspective — see things from their loved one's point of view.)

When you create this sort of diagram in Visio, the program imports the data, or information, and adds three things to the diagram:

- A legend with information about the data source
- A title box
- A primary shape that aggregates all the data in the data source

Don't forget: You have to have your data set up already in order to create a PivotDiagram. You can use and import the following sources for your information:

- Microsoft Office Excel workbook
- Microsoft Office Access database
- Microsoft Windows SharePoint Services list
- Microsoft SQL Server database
- Microsoft SQL Server Analysis Services
- Other OLE DB or ODBC data sources

And while PivotDiagrams may sound daunting and complicated to you, I have to tell you that I created one of my own using a Microsoft Windows SharePoint Services list (and no, I am not a Visio know-it-all, let alone a PivotDiagram expert). Using the Data Selection Wizard, which walks you through everything, you come with the data, and Visio steps up to the plate with the rest of it.

Nudge

The quickest way to line up shapes that are just a little out of alignment is to nudge them using the arrow keys on the keyboard. A little push here, a little pull there ... and every shape is where it should be. (And you didn't have to resort to violence — just a little nudge.)

In fact, the nudge feature in Visio is often used in tandem with the zoom feature. If you're looking closely at a shape, and it just doesn't look right to you — perhaps the lines are a bit jagged, or perhaps you've resized a shape a bit and now the connectors are just not looking right — you can use the zoom tool to get a closer look. And once you've had your Aha! Moment and have seen the culprit, you can use the Nudge tool to move either (or both) the connector or the shape so that everyone is all lined up, like ducks in a row ... or a circle ... or a flowchart ... or a network diagram. (Smart ducks.)

Auto Layout

Auto Layout is a way to position shapes faster than moving them one at a time. I like to think of Auto Layout as a sort of drill sergeant: It gets every line, every shape, and even every momma's boy rogue connector shipshape ... without much fuss (or back talk). As with many of the features in Visio (and other Office programs, now that I think of it) it's designed to be a timesaving device. Who wants to have to move and rearrange every chair, every desk, and every cubicle in your perfectly arranged office layout diagram just because someone new joined the team and you're required to find her a window office — without, of course, insulting the folks who've been here for years and years and haven't seen the outdoors during working hours, let alone have had the opportunity to gaze out through a window every day (Yes! I'm projecting! I'm projecting! I'm projecting!).

Final words

I usually say that the best way to learn something is to jump right in there and frolic around in its waters. But with Visio, I really mean it. It's software for the visual side of life — it's colorful, it's shapely, its waters are warm and meant to be swum in. Try it — open a template, create your own, or just start with a blank page. Add some shapes from a stencil, nudge them hither and yon, and grab some data and see what a little perspective can do for you and your ideas.

More information

Below are some links that will give you more information (and even training) about some of the things I've discussed in this column.

- Shapes I: Introductory basics you can't live without
- Change how shapes are displayed on a stencil
- Create a basic diagram
- How can I tell what each Visio template is for?
- Connectors
- Demo: Get a new perspective on data with PivotDiagrams
- Move shapes

"Morality, like art, means drawing a line someplace." — Oscar Wilde

About the author

Annik Stahl, the Crabby Office Lady columnist, takes all of your complaints, compliments, and knee-jerk reactions to heart. Therefore, she graciously asks that you let her know whether this column was useful to you — or not — by entering your feedback using the **Did this article help you?** feedback tool below. And remember: If you don't vote, you can't complain.