

Basic Guide to Visio

This handout will show you how to create a basic process diagram using Microsoft Visio.

- Start Visio by selecting **Start>All Programs>Microsoft Office>Microsoft Office Visio 2003.**

Visio will then ask for what type of document you want to create.

- Open a new document from the file menu by selecting **New>New Drawing (Metric)** from the file menu select or type **Ctrl+N**.

A new empty document will appear on your screen as in Figure 1.

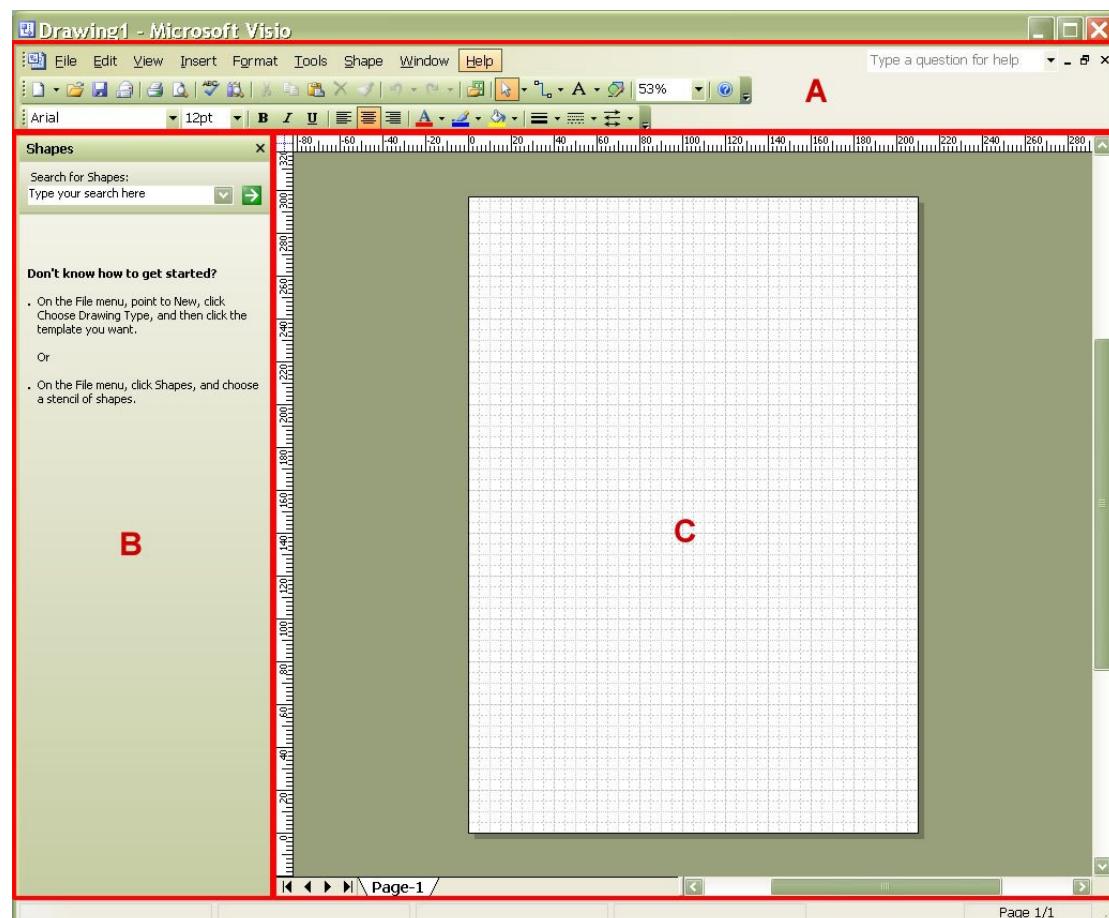


Figure 1: The Visio layout of an empty document.

- A. Toolbar and Menu
- B. Shapes Window
- C. Document Window

Next you will need to direct Visio to load up the GIS shapes into the shapes window. Alternatively, if you are not on a university machine, select the appropriate symbols from the selection provided with the program.

You need to download the GIS stencil file from
<http://www.geo.vuw.ac.nz/facilities/gis/guides/GIS-Shapes.vss>
Save this file to your local home directory.



- Click on the shapes button
- In the menu that pops up, select **Open Stencil...**
- Navigate to where you saved the file **GIS Shapes.vss** and select it and press OK.

In the shapes window three shapes will appear (figure 2).

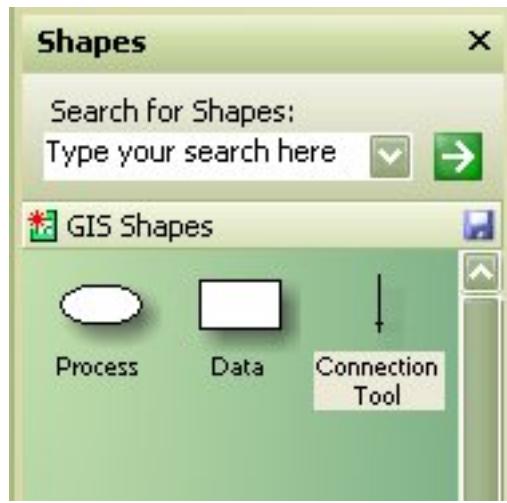


Figure 2: The three shapes for GIS process diagrams.

Below is an example of how to create a simple process diagram. The process diagram will show the selection of data, exporting that selection and carrying out a union on the exported data with another data set.

To start the process diagram, you need to add a data shape.

- Click on a data shape and drag it onto the document window.

The shape will appear on the document with control handles which can be clicked and dragged to resize the shape. The circular handle at the top, rotates the shape (figure 3).

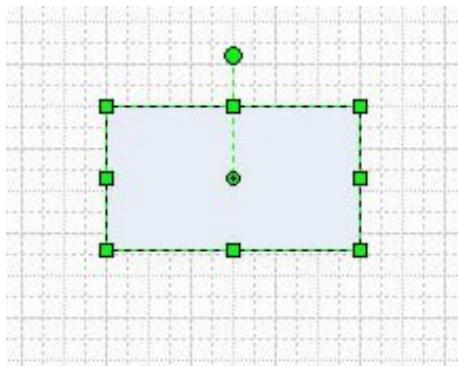


Figure 3: The control handles allow you to rotate the shape and size.

- Next add text to the data shape – the file name. The text tool on the toolbar is used to add the data's filename.

Note the convention is: Shapefiles always have a .shp on the end of the name of the data, while raster data and feature classes do not have a file extension.

Once you click the text tool it becomes highlighted and a cursor appears in the centre of the highlighted shape.

- Type in the filename (e.g.Roads.shp).

The font and text size can be controlled with the drop down menus on the tool bar.

When there is no highlighted shape the cursor turns into a page and crosshairs. Where ever the cursor is clicked a prompt to add text will appear.



- To stop using the text tool click on the pointer tool on the toolbar. This will allow you to resize the shapes in the document and will quit the text tool.

A process is represented by an oval (e.g. showing that data has been selected and exported).

- Drag the oval process shape into the document window and place it under the data shape. Add text explaining the process (e.g. select or union etc.).

- Add a new data shape is added to the diagram to represent the output data created after the export. Enter the filename of the data you created into the data shape.

- Repeat for the number of processes and new data used.

- Finally connect the files with the processes using the connection tool. Below are the simple steps that are used to connect the process diagram together.

1. First select the connection tool from the shapes file.
2. There are small crosses on the edges of the shapes. Drag one end of the connection shape onto the cross. It will snap into place and turn red (figure 4).

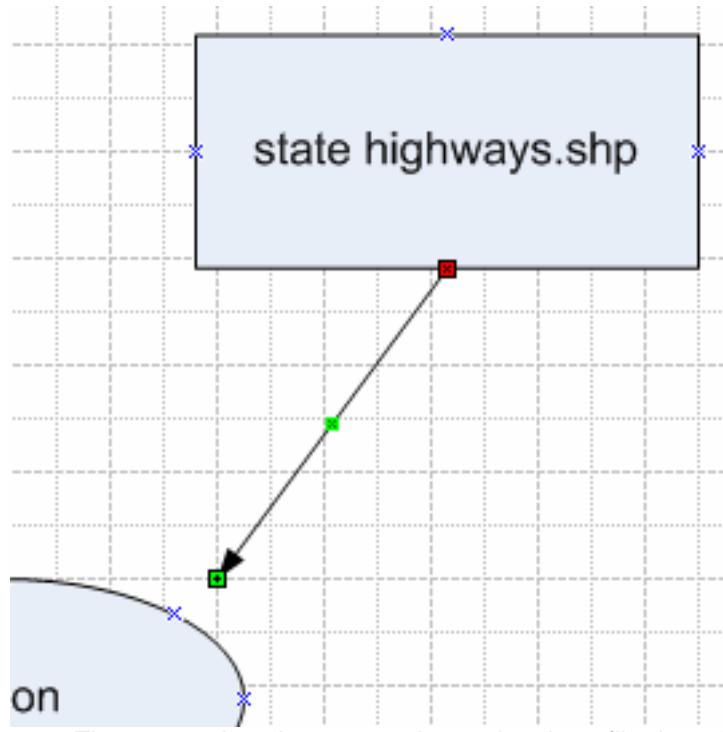
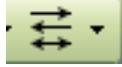


Figure 4: The connection shape snapping to the shapefile data shape.

3. Drag and snap into place the other end of the connection shape onto the cross (handle) on the process shape. This will connect the two items in the process diagram.
4. From the tool bar various directions for the connection can be selected
 The connection needs to be selected for this to work.

Use the text tool to give the document a title. Figure 5 shows the completed diagram.

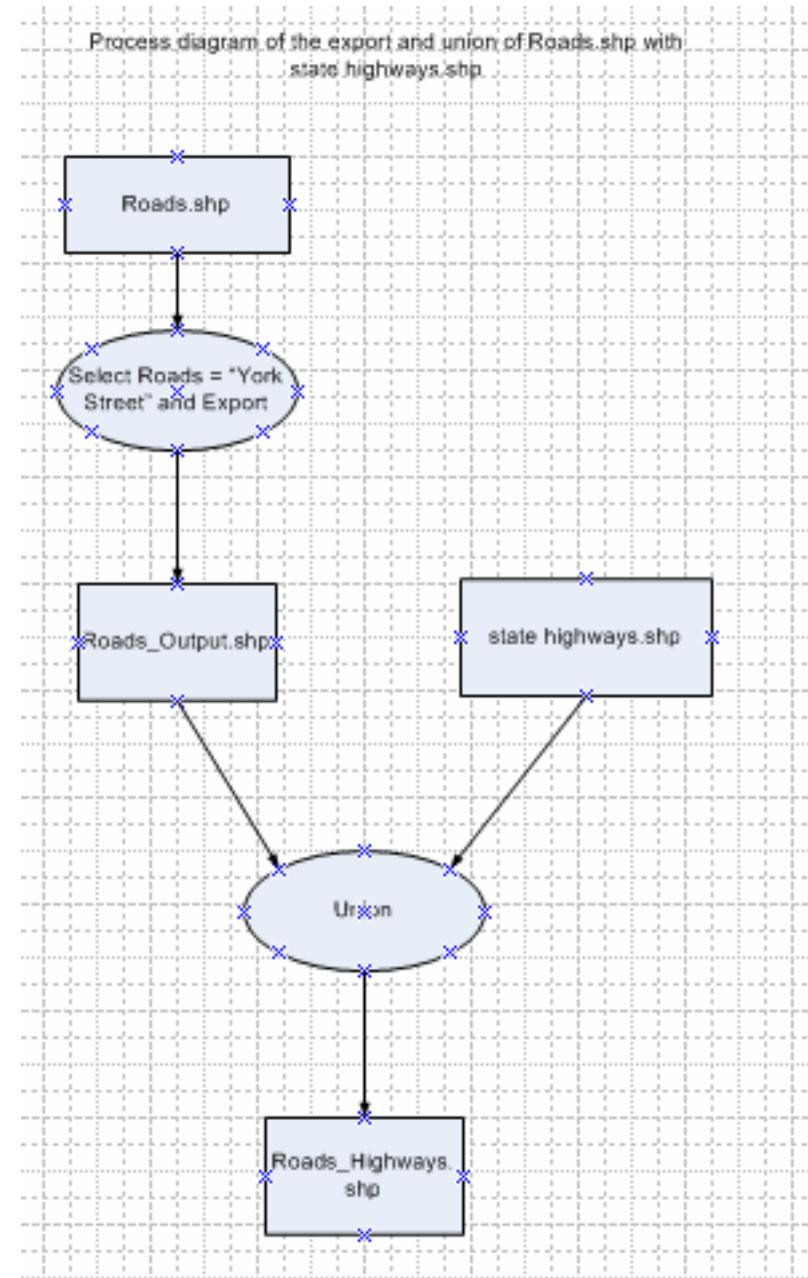


Figure 5: Completed process diagram of the selection, export and union of Roads.shp with state highways.shp