


Drawing with eVSM

Summary of key Visio shortcuts for productivity:

- Select - CTRL -Drag (to copy)
- CTRL-W (to zoom out to whole page)
- CTRL-SHIFT-Drag-Select region (Zoom into the selected region)
- SELECT-Roll the mouse center wheel (Zoom in/out of selection is you set these options in the tools>Options>General Tab form)
- CTRL- Drag applied to any edge of a Visio page will allow resizing of that page

 The best way to start a blank value stream map is to double-click the eVSM icon on your desktop.

Start eVSM

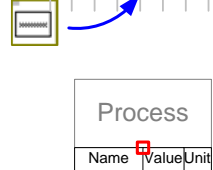
- If your Visio security setting is set to anything but low, messages will come up asking for permission to "Enable Macros". You must answer "Yes" to these messages for eVSM to operate



The "eVSM v2" stencil contains a complete set of shapes for value stream mapping. Simplified starter stencils are available for manufacturing, services and healthcare applications

v2

Start the map by identifying the operations in the value stream and starting at the customer end. Snap shapes to the grid and avoid resizing shapes.



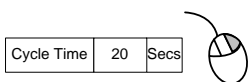
Add data to each operation using the Long NVU (Name, Value, Unit) shapes.

Drag and glue the NVU shape to the operation shape in a single step. Glue is indicated by a red square appearing briefly at the glue location.

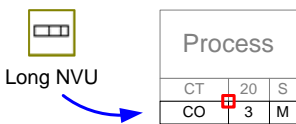


Long NVU

To select and move NVU, VA, NVA, Buffer and Supermarket shapes you must do the left mouse select at the center of the Value field

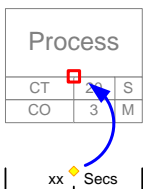


Both the Name and Unit fields in the NVU shape have pre-defined names that can be selected with the right mouse button. Double-click the field to type in a custom name or unit



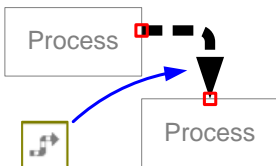
Long NVU

Additional data can be added to a process. Drag & glue new NVU's to the bottom of existing NVU's.



Data shapes that do not touch the operation or its data blocks directly should be associated with the operation by dragging the flying yellow connector and gluing that to the operation.

Flying connectors should NOT be used where shapes are touching

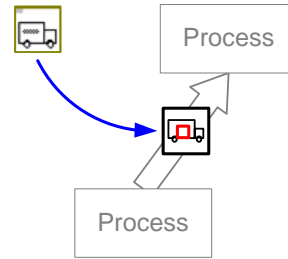


Drag out, drop and then glue arrows to the operations or their data blocks for easy future modification of the map

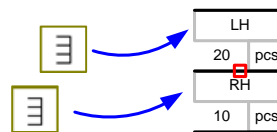
Inventory shapes should be placed on the drawing and the flying yellow connector used to glue them to an operation



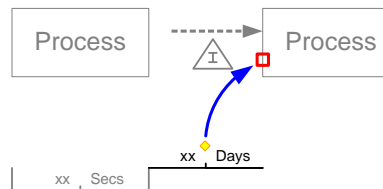
Drag out the NVU shape and glue it to the bottom of the inventory rectangle to document inventory type and quantity. Use additional triangles and NVU blocks for each inventory type or hang an additional NVU block to the base of the one above. Each inventory item associated with any one operation MUST have a different name.



Drag out transportation shapes and glue them to transport arrows for ease of modification. NVU shapes to hold transport variables can be attached to the base of the transport icons



supermarket and buffer shelves, drag out one shelf at a time. The icon shows multiple shelf and can cause confusion. Shelves glue to the base of the shelf above.



Glue NVA shapes to operational shapes with a flying connector

Where there are several VA/NVA metrics to be tracked, the Long NVU shape should be used instead of the specific VA, NVA shapes

Standardization of Variable and Units



Shapes like this one in the "eVSM Standardization" stencil can be dropped onto an existing map and inherit the names and units used in that map into the right mouse click menu. The shape can then be dropped a stencil for reuse.

Combination or Template Shapes



This "Combo Maker" shape in the "eVSM Standardization" stencil can be dropped onto a grouped set of eVSM shapes to make a combination shape. This combination shape can then be dropped into a stencil for reuse

Re-opening eVSM Stencils

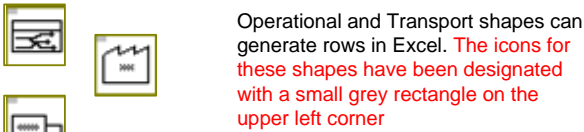
If you have "lost" the eVSM stencils from your drawing file, here are the steps to re-open them.

1. In Visio, click:
Visio 2002: **File > Stencils > Open Stencil...**
Visio 2003: **File > Shapes > Open Stencil...**
2. Navigate to the following folder:
C:\Program Files\GumshoeKI\Visio2002\Setup\Solutions
3. Select all the stencil files in this folder and then click the **Open** button.
4. Save your Visio file.

Analyzing with eVSM

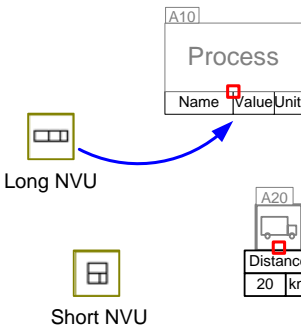
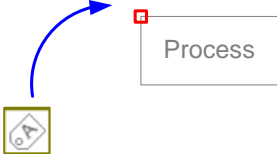


The eVSM Calculator function in the toolbar provides bi-directional transfer of information between the map and a spreadsheet. The function only operates on the current map page

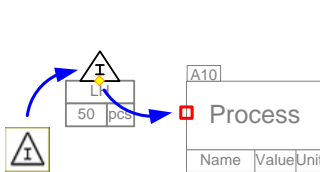


Shapes that can generate rows in Excel have to be tagged for data transfer to occur.

Excel rows are alphabetically sorted by tag number. The tag MUST be an alphabetic character followed by upto 3 numerals.



NVU's glued to the operational or transport shapes create data columns in Excel



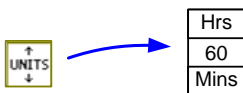
Inventory icons glued to the operational shapes create inventory columns in Excel.

Supermarkets, Bufferstock, VA and NVA shapes behave in a similar fashion

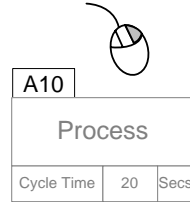
A10		
Process		
Cycle Time	20	Secs

A20		
Process		
Cycle Time	10	Mins

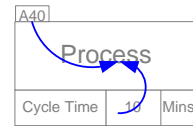
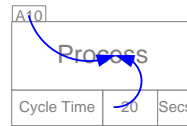
Each uniquely named variable on the map (like "Cycle Time") can have only one column in the spreadsheet and each column can only have one "Unit". If variables have different units on the map then the user must drop "Unit Converters" on the map to facilitate data transfer to the spreadsheet



Unit conversion variables are automatically created in Excel



Tagged shapes create rows that are sorted by tag number. While drawing a quick way to find the data that will appear on a particular row is to select a tag shape, click the Right Mouse button and select the "Show Tag Group" menu option. This will highlight all the data that will appear on the row associated with that tag

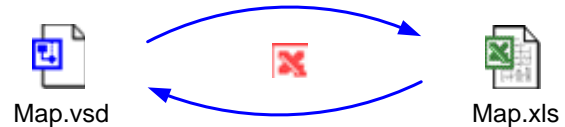


The eVSM Glue Display On/Off icon in the toolbar is a useful way to show the glue connections on the overall drawing

Raw data values are input in Visio and Formulae are input in Excel. Results from Excel calculations are redisplayed on the map in Visio.

The results of formula-based values are shown in Red in Visio and Excel to distinguish them from Raw data typed into Visio

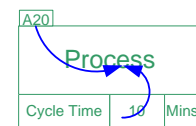
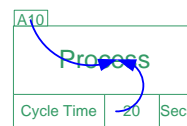
Number formats set in Excel for formula-based cells are inherited by Visio shapes. Colors of cells in Excel are inherited by Visio shapes. Cell colors can be set directly or by using Excels conditional formatting capability



The Excel file name is copied from the Visio filename. The Excel file is stored in the same folder as the Visio file. Map page names in Visio correspond to worksheet page names in Excel.

Unit conversion variables in Excel are also scoped by the page name.

eVSM relies greatly on the correspondence in names. Map names should not be changed after work with the eVSM calculator has begun unless the spreadsheet is regenerated from scratch.



A visual check page is automatically created every time the eVSM calculator function is invoked. It has the same name as the map page but with an "_Excel" suffix.


The check page color codes all the data transferred to Excel and also shows the glue connections between shapes with arrows. It is a great way to understand and resolve data transfer problems with Excel.

v2
v2

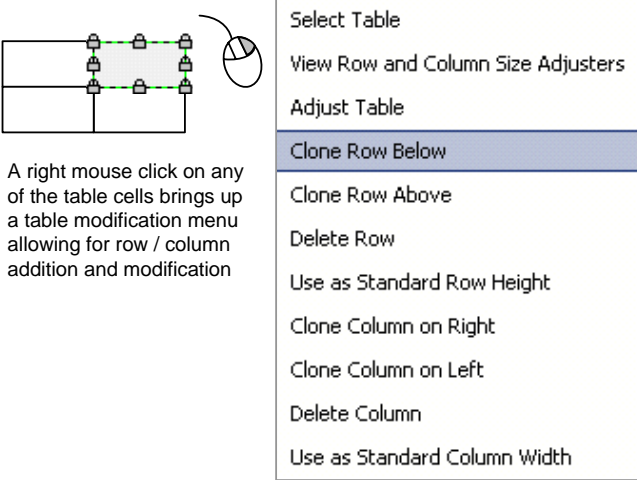
v2

Managing with eVSM

eVSM Table Shape

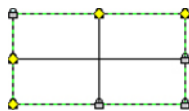
 This "Table" shape in the "eVSM Standardization" stencil is a simple starter table that can be further customized

Accessing table modification menu

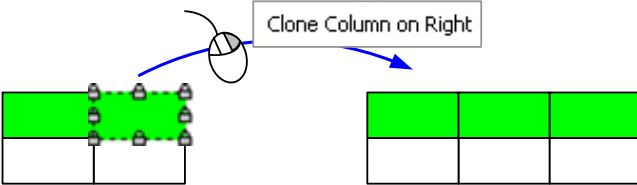


A right mouse click on any of the table cells brings up a table modification menu allowing for row / column addition and modification

Resizing Rows and Columns

 Picking the "Select Table" menu (above) highlights the yellow diamond cell size controls. Select the "Adjust Table" option AFTER these controls have been moved to their new positions

Cloning Rows and Columns



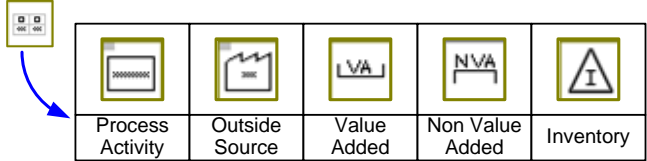
The table on the left was modified to have a 3rd column using the "Clone Column On Right" menu pick. Note that the new column is actually copied from the existing column (hence the word cloning). All formatting is preserved between the two columns

Calculations with Table Data

A10		
	Current State	Future State
Lead Time	23 days	2 days
Capacity	1057	2000

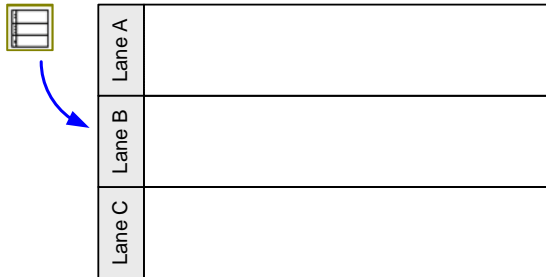
Table data is also transferred to the spreadsheet if the table is tagged as above. Each table creates its own worksheet page in the Excel Workbook

Specialty Table : Key Table



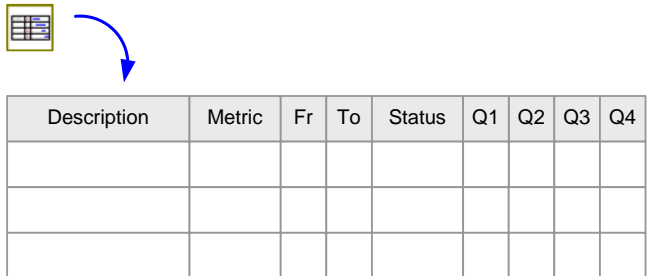
This table has the special property that when it is dropped onto a map, it creates a key of all eVSM shapes CURRENTLY used on the map.

Specialty Table : Swim Lane Table




This table allows swim lanes to be added and deleted using the standard table functions. Swim lanes are often used for organization names to show how a process has handoffs between organizations

Specialty Table : Kaizen Table



This table has the special property that when it is dropped onto a map, it finds all the kaizen bursts and then makes a task list of the kaizen descriptions within the table. Additional shapes are available to glue onto the table to indicate duration, status etc..

Combination of Tables

 This "Combo Maker" shape in the "eVSM Standardization" stencil can be dropped onto a grouped set of eVSM tables to make a combination shape. This is an easy means of creating a storyboard template with tables for team, metrics, method, projects etc..

Sharing with eVSM

There are a number of ways of sharing your eVSM drawings with team members who do not have the eVSM Software or Microsoft Visio

Copy and Paste into Powerpoint or Excel

Visio shapes can simply be selected, copied and then pasted into other Microsoft office applications like PowerPoint and Excel. Be sure to paste a picture (using the **Paste As...** command). This will allow re-sizing of the pasted picture without requiring editing and font adjustments.

Visio Viewer

A free Visio Viewer is available for download from Microsoft at:

<http://www.microsoft.com/downloads>

This provides an easy way of viewing and printing eVSM drawing files.

Acrobat PDF

Acrobat PDF allows capture of any size drawing in a single file, which can be viewed with the free Acrobat Reader, and is easily printable. On-screen viewing is good, it is searchable, and supports password security. The author must have the Acrobat Distiller software, the audience only need the free Acrobat Reader. Steps to convert an eVSM map to PDF:

1. Click the **File>Print...** menu.
2. Select **Acrobat Distiller** as your Printer, and click OK.
3. You will then be prompted for the PDF file name and the location to save the PDF file in.

Publish to Web

eVSM maps can be converted to web format which can be viewed in any web browser. The web format files can be uploaded to a web server or E-mailed. Steps to convert to web format: To convert, your file to web format:

1. Click **File>Save as Web Page...**
2. In the Save As dialog. Click, the **Publish...** button
3. In the Publish dialog, click the **Format Options...** button, set format to GIF, and click OK.
4. To later view this in a web browser, just open the html file with the name same as your eVSM filename in a web browser.
5. The conversion to web format, creates a collection of web files. All of these need to be included in any E-mail transfers or upload to a web server.
6. To open the drawing in a browser, click the *drawing_name.htm* file.

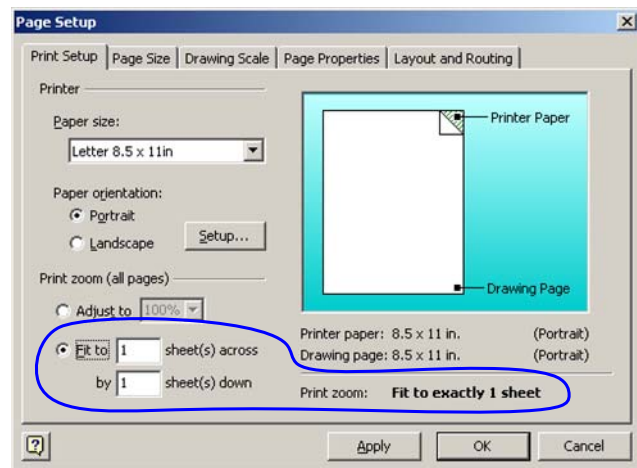
Convert to Bitmap

Common bitmap formats such as JPEG, GIF, and TIFF can be viewed in most browsers without any additional software. eVSM maps can be converted to these and other graphic formats with the **File>Save As...** menu. On the **Save As** dialog, click the **Save as type** pull-down and select the format.

Print

Visio allows drawings of any size. The drawings can then be printed on any size paper supported on available printers.

When the drawing size does not match the paper size, you can either print across several sheets. You can also shrink (or expand) the drawing to fit the paper by clicking **File>Page Setup...** and then checking the **Fit to 1 sheet** checkbox.



The **Print Preview** function can be used to assess the print output before committing the drawing to paper.

Useful URLs

eVSM Demonstration

<http://www.evsm.com/demo>

Download Trial

<http://www.evsm.com/trial>

Check for Latest Updates

<http://www.evsm.com/updates>

Download Sample Value Stream Maps

<http://www.evsm.com/samplemaps>

eVSM On-line Help and eLearning

<http://www.evsm.com/help>

eVSM Installation Help

<http://www.evsm.com/install>

Information on eVSM Training

<http://www.evsm.com/training>