

Main Toolbar

Button	Definition
	New Model: Creates a new Vensim model.
	Open Model: Opens an existing Vensim Model.
	Save: Saves the Vensim model under its current name. (The name can be changed using the “Save As” option on the “File” menu.)
	Print: Prints the current selection in the Build Window (or the entire sketch, if there is no selection). A “Print Options” dialog will be displayed to make custom settings. A “selection” is made by dragging the mouse to select a rectangular area.
	Cut: Cuts the current selection into the Windows Clipboard.
	Copy: Copies the current selection into the Windows Clipboard.
	Paste: Pastes the current contents of the Windows Clipboard into the sketch.
	Set up a Simulation: Highlights the constants and lookups on the sketch in the Build Window. Clicking on a highlighted name allows you to temporarily change it for only this simulation run.
	Name the Simulation to be Made: The selected dataset is shown in the box. To change this, click on the vertical bar to the right of the box.
	Run a Simulation: If the dataset shown in the box to the right of this button already exists, you will be asked if you want to overwrite it.
	Automatically simulate on change (SyntheSim): A visual sensitivity analysis simulation approach vs. the change, compute, and review approach.
	Run Reality Checks: Allows user to make statements thought to be true about a model for it to be useful, and provides the machinery to automatically test a model for conformance with those statements
	Build Windows - show/circulate: Makes the Build (Sketch) Window visible.
	Output Windows - show/circulate: Makes the Output Windows visible. If they are visible, circulate the active Output Window.
	Control Panel: Shows the Control Panel. This is used to select the Workbench Variable, adjust the time axis for graphs, set the type of scaling for graphs, manage datasets, and create/manage custom graphs.

Sketch Tools

Button	Definition
	Lock Sketch: Sketch is locked. Move/Size pointer can select sketch objects and the Workbench Variable but cannot move sketch objects.
	Move/Size Words and Arrows (Pointer): Moves, sizes, and selects sketch objects in the Build Window. Move an object by dragging it with the Move/Size pointer. Select an object by clicking on it with the Move/Size pointer. Select multiple objects by dragging across them with the Move/Size pointer. Add or subtract an object to/from the currently selected objects by shift-clicking on it. (Hint: As a shortcut, many of the other tools will act like the Move/Size pointer for purposes of moving objects.)
	Variable - Auxiliary/constant: Creates variables (that is, Constants, Auxiliaries, etc.) in the Build Window. Click on the spot in the sketch where you want to insert the variable, and a box will open up for you to enter the name of the variable. To edit the name of an existing variable, click on it with the Variable tool. To enter the variable into the sketch, press the “Enter” key. Right-click on the variable name with the Move/Size pointer or Variable tool to change the way the variable is displayed (for example, to change the font or to put a Clear Box around it so that the name can be displayed on multiple lines.)
	Box Variable - Level: Create variables with a box shape in the Build Window (used for Levels/Stocks). Works in a similar manner to the Variable tool. The size of the box can be adjusted by dragging the box handle (small circle) with the Move/Size pointer tool.
	Arrow: Creates straight or curved arrows in the Build Window. Click on the origin variable, and then move the arrow pointer to the destination variable and click again to create a straight-line arrow. (Note: Do NOT drag from the origin to the destination.) You can make the line into a curve by dragging on its “handle” (the small circle) with the Move/Size pointer or Arrow tool. (Hint: As a shortcut, you can directly create a curved arrow by clicking on the origin variable, then clicking on a blank part of the sketch, and finally clicking on the destination variable.)
	Rate: Creates Rate (Flow) constructs in the Build Window, consisting of perpendicular “pipe” sections, a valve and, if necessary, sources or sinks (clouds). As with the Arrow tool, first click on the origin variable, and then click on the destination variable. If you make one of these clicks on a blank part of the Sketch, then a cloud will be created for the appropriate origin or destination. You can make right-angle bends in the pipe by shift-clicking on blank parts of the Sketch with the Rate tool where you want the bends to appear. The formatting of the valve can be changed by right-clicking on it.
	Shadow Variable: Adds an existing model variable to the sketch in the Build Window as a shadow (ghost) variable (without adding its causes).
	Input Output Object: Adds input sliders and output graphs and tables to the sketch. See the Vensim documentation for more details.
	Sketch Comment: Adds comments and pictures to the sketch in the Build Window. Click where you wish to place the Sketch Comment, and a dialog will open up with many options for the form of the comment. Note that with some types of comments you may have difficulties accessing some model variables after you have created the comment because the comment is overlaid on the model variable. If this happens, push the comment to the background using the rightmost button on the Status Bar.
	Delete: Deletes structure, variables, or comments from a sketch in the Build Window. Place the pointer for this tool on the object to be deleted and click the left mouse button.
	Equations: Creates and edits model equations using the Equation Editor. After the Equations tool is selected, variables without equations will be highlighted in the Build Window. Click on a variable to start the Equation Editor for that variable.
	Reference Mode: See the Vensim documentation for further information.

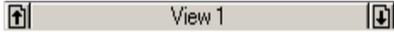
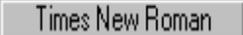
Analysis Tools

Button	Definition
	Causes Tree: Creates a tree-type graphical representation showing the causes of the Workbench Variable.
	Uses Tree: Create a tree-type graphical representation showing the uses of the Workbench Variable.
	Loops: Displays a list of all feedback loops passing through the Workbench Variable.
	Document: Presents equations, definitions, and units of measure for the model.
	Causes Strip: Displays graphs in a strip for the Workbench Variable and its causes, which allows you to trace causality by showing the direct causes of the Workbench Variable. (This can also be used to display the graph for a lookup function.)
	Graph: Displays a graph for the Workbench Variable in a larger graph than the Causes Strip. Note that a custom graph showing any desired variables can be developed using the Graphs tab on the Control Panel.
	Table: Generates a table of values for the Workbench Variable that is displayed in a row.
	Table Time Down: Generates a table of values for the Workbench Variable that is displayed in a column.
	Runs Compare: Compares all Lookups and Constants in the first loaded dataset to those in the second loaded dataset. You manage datasets using the Datasets tab on the Control Panel: To change the order of the loaded datasets, click on a loaded dataset that is currently not at the top of the loaded dataset list, and this dataset will be moved to the top of the loaded dataset list. The order of the loaded datasets impacts the order in which datasets are displayed by various graph tools.

Notes on the analysis tools:

1. The output of the analysis tools is “dead” in the sense that it does not change if you make more simulation runs. Therefore, if you are doing experimentation, be careful that you keep track of what simulation run generated the output displayed in each output window.
2. Most output windows display information related to the Workbench Variable. You can select a variable to be the Workbench Variable by clicking on it in the Sketch. You can also select the Workbench Variable by clicking on a variable name in an output window.
3. The icons in the upper left corner of the output windows control various useful things. The horizontal bar at the left-most end deletes the window. The small padlock next to this is used to lock-out the delete function so that you do not accidentally delete the window. (Click this again to reactivate the delete function.) The small printer icon is used to print the contents of the window, and the clipboard icon is used to copy it into the Windows Clipboard. The floppy disk icon is used to save the window contents to a file.
4. For graph output when there are multiple curves on the same graph, the curves are displayed in different colors on the computer screen. With some black-and-white printers, it may be difficult to tell the curves apart in printed output. The curves can be marked with distinct numbers using the “Show Line Markers on Graph Lines” option on the “Options” menu.

Status Bar

Button	Definition
	<p>Controls to display different views: The two arrows at each end of the bar rotate through the available views. The bar shows the title of the current view and displays a list of all available views when clicked.</p>
	<p>Set fonts on selected vars: Select a variable in the Build Window by clicking on it before clicking this button. Select multiple variables by dragging across them with the Move/Size pointer tool. Add or remove a variable from the selected set by shift-clicking on it with the Move/Size pointer. If no variables are selected, then you can change the defaults used in the model.</p>
	<p>Set size on selected vars: Select the variable(s) before clicking on this button.</p>
	<p>Set bold on selected vars: Select the variable(s) before clicking on this button.</p>
	<p>Set italic on selected vars: Select the variable(s) before clicking on this button.</p>
	<p>Set underline on selected vars: Select the variable(s) before clicking on this button.</p>
	<p>Set strikethrough on selected vars: Select the variable(s) before clicking on this button.</p>
	<p>Set color on selected vars: Select the variable(s) before clicking on this button.</p>
	<p>Set box color on selected vars: Select the variable(s) before clicking on this button.</p>
	<p>Set surround shape on selected vars: Select the variable(s) before clicking on this button.</p>
	<p>Set text position on selected vars: This is useful for variables that have an associated graphic, such as a level box or a rate valve.</p>
	<p>Set color on selected arrows: Select an arrow by clicking on its handle (small circle). Select multiple arrows by dragging across them with the Move/Size pointer tool. Add or remove an arrow from the selected set by shift-clicking on its handle with the Move/Size pointer.</p>
	<p>Set arrow width on selected arrows: This is used to set width. More detailed control of the appearance of an arrow can be obtained by right-clicking with the Move/Size pointer tool on the handle (small circle) of the arrow. In particular, a delay mark can be put on the arrow in that way.</p>
	<p>Set polarity on selected arrows: Use this to mark arrows in a causal loop diagram. More control of this and other aspects of arrows can be obtained by right-clicking with the Move/Size pointer on the handle (small circle) of the arrow.</p>
	<p>Push the highlighted words to the background: This is useful if you have created a large comment with the Sketch Comment tool that overlaps one or more model variables (for example, a large box around some portion of the model). In this case, you may not be able to select the variables because they are “behind” the comment. Select the comment and push it to the background to fix this problem.</p>