

T²S Draw for Windows v 1.1

T²S Draw for windows is a simple object oriented drawing program. It makes use of many internal Windows features to be as small, fast and efficient as possible. The program cannot import anything, but it can copy the current picture to the clipboard as a bitmap.

An object oriented drawing program is one where elements of a picture are stored as 'objects'. Objects are data structures which store the elements size and position, and which 'know' how to draw themselves. A circle, for example, might only have its center,color and radius stored. This makes the files much smaller and allows the program to take up less memory. It also allows you to modify the picture in some interesting ways. Objects can easily be moved and resized. Object oriented pictures also print out more exactly as they appear on screen because they can be scaled more accurately than bitmaps (such as Paintbrush makes). This version of the program only allows you to copy, move and resize objects. T²S Draw is also a Multiple Document Interface. This means that there is a 'container' window which frames all of your picture windows. This window can be resized and moved like any other window, but your picture windows are only visible inside it, if they go off the edge, they are 'clipped' (Your picture still exists, and you can use the scroll bars to see the rest of it).

The method used for drawing is the usual mouse drawing action:

Position the mouse pointer to the location where you want your object, press the left mouse button and hold it down, move the mouse while holding the button down to set the size of the object, then release the button to draw the object.

The icon bar beneath the main menu allows for quick access to tools and colors. clicking one of the icons has the same effect as selecting a menu option from the 'tools' or 'colors' menu. The tools are described in more detail in the menu selection documentation.

These Icon options are (from left to right):

- circle
- disk
- line
- rectangle
- box
- polygon
- filled polygon
- pen
- text
- eraser
- polyline
- round rectangle
- round box
- select

The colors displayed as Icons are the 20 default colors in Window's standard palette. Depending on your particular computer, the colors displayed may differ slightly from the color on the button. The dialog box that appears when you select the 'colors' menu option gives an exact representation, however.

FUNCTIONS BY MENU:

File menu:

New - Opens a new picture window for you to draw in. It assigns the default file name of UNTITLED to it.

Open - Opens a picture that you have saved.

Save - Saves the currently active picture

Save As - Allows you to change the filename of your picture. The new name is automatically put in the title bar of the window that the picture is in.

Print - Prints your picture out to your printer. It automatically scales drawing to fit on one page. (Changing the size of the window does not affect the size of the picture)

Printer Setup - allows you to configure your printer.

Close All - closes all open pictures. Prompts you to save any that have been altered.

Exit - Exits the program.

Edit menu

Undo: Undo allows you to 'take back' the last action that you performed. This is a one level undo.

Copy : copies the entire picture to the clipboard as a bitmap,

Copy Object: Copies the currently selected object to the clipboard (Select objects with the select tool,described later)

Paste Object: Pastes an object form the clipboard (If there is one);

Copy and paste object do not work with text objects, freehand pen objects, polygons, or filled polygons. The way that they are stored is incompatible with the clipboard.

Line menu

Line thickness :sets the thickness of any lines drawn in the program available sizes range from 1 to 8 pixels.

Line: Sets the style that all lines will be drawn with.
Note that this only functions with lines one pixel thick.

Tools menu

Font : choose the font with which any text will be drawn.

Fill Pattern: choose the pattern with which filled objects will be filled.

Circle : circle tool, used to make unfilled circles and ellipses.

Disk : disk tool, used to make filled circles and ellipses .

Line : line tool, used to draw lines.

Rectangle: rectangle tool, used to make unfilled rectangles.

Box : box tool, used to make filled rectangles.

Polygon : polygon tool, used to make unfilled polygons. This tool uses the right mouse button: select the first point with the left button and hold the left button down, then move the mouse around and click the right button to select additional points. Releasing the LEFT button completes the polygon. (The program automatically connects the first and last points)

Filled Polygon : same as polygon tool, only it gets filled in

Pen : Freehand drawing tool, use this tool to add in freehand type drawing
Simply press and hold the left button and move the mouse.

Text : Text tool, click at the position where you want the text to start and type. Changing the tool or clicking the screen again will start a new text object. Use the select tool to reselect the object if you want to edit it.

Eraser : Eraser tool, erases objects.

Polyline : same as polygon, But the first and last point are not connected by the program, as they are with polygons.

Round Rectangle : round rectangle tool, makes a rectangle with rounded off corners.

Round box: round box tool, makes a filled rectangle with rounded off corners.

Select : object select/modify tool, with this tool, you can select existing objects to be moved or modified. press and hold the left button on an object, then move the mouse to move the object. click the left button on an object, then press and hold the RIGHT button while moving the mouse to resize an object. Some notes: text, polygons, filled polygons, polylines, and pen drawings cannot be resized. If you have selected an object, pressing 'Home' will cause it to be moved to the top of the picture. This means that it will cover anything that overlaps it. If you press 'Insert', a copy of the object will be made. Pressing 'C' will cause the current color/font to take effect on the object.

Colors : this is not a submenu, rather it displays a dialog box from which you may choose a color. Or you can create a new color by choosing 'define custom colors'.

To Use Define Custom Colors: First, press the button labeled 'define custom colors', Then, choose one of the boxes in the grid of boxes just above the button labeled 'define custom colors'. The large multicolored box allows you to choose a color. clicking in it will display a color and the nearest solid color in the small box under the multicolored box. The long bar on the far right is the darkness control. Moving the small arrow up or down changes how dark your color is. When you are happy with the color, press the 'add to custom colors' button, and the color will be added to the box that you selected at the beginning. That box can then be chosen just like any of the other boxes on the top of the left side.

Window menu

Restore : restores the window to its original size after a maximize or minimize command.

Maximize : enlarges the current picture window to the maximum size, has the same effect as the 'up arrow' on the window title bar.

Minimize : reduces the current picture window to an icon, has the same effect as the 'down arrow' on the window title bar.

Tile : Arranges all open windows neatly so that all are visible and none overlap.

Cascade: Arranges all open windows so that they overlap neatly going from upper left to lower right, with the active window on top.

Arrange Icons: Arranges all icons in a neat row at the bottom of the container window.

There is also be a list of names at the bottom of the menu, you can use this list to select which picture you want to be active. Just click on the name of the one that you want.

About : displays a dialog box about this program. It does not contain a plea for registration.

Miscellaneous Notes:

The way to close an individual window is to use its command menu. The command menu is located in the gray square in the upper left corner of each window. If you click on it, you will get a menu of options dealing with the window. Choose close to close the window.

To restore an icon, either double click on it, or choose restore from the 'window' menu in the menu bar.

Sorry, pictures cannot be resized. (The window that they are in can be resized, but the actual picture is always the same size, regardless of the window)

If you choose 'Open' from the file menu, and then choose 'Cancel' in the dialog box, the program puts a message box 'Could not open file'. Don't worry about it, just press 'OK', it doesn't matter.

This program saves in its own format, and cannot read or write any other format. If you know how to read Windows' .BMP files, .PCX files, and .GIF files, I would be grateful if you would share it with me.

If you find any bugs or problems, please let me know so I can fix them. I will also gladly welcome any suggestions or hints that you have for me, as well as additional features that you would like the program to have. The T²S Programming bit is really just for fun, as I am a full time student, and this is my hobby. I would also welcome any suggestions on this documentation, because I am not very good at deciding how to write instructions. I know how to use the program, I wrote it. What do you need to know to use this program.

(My Name is **T**homas **T**ilden **S**tocksdale, that's where I got **T²S**)

Changes in version 1.1:

Line tool now works properly.

You can change the color (and font for text) of any object

There is now an Undo feature.

You can now move polygons, polylines, and pen objects.

The pen object no longer slows down if you make the line too long

You can now copy simple objects to the clipboard.

Thank you for using T²S Draw. T²S Draw is shareware, so if you use and enjoy it, you should send me the registration fee of \$15. When you register your copy of T²S Draw, please be sure to include your name and address, and what type of disk you would like to receive upgrades on. Make any checks payable to Thomas Stocksdale.

If you need to contact me either leave a message to me on CompuServe (My ID is 71175,1307), or write to my permanent address. If you leave a message to me on CompuServe, it may take several days for me to get back to you since I do not have time to check it every day. It will take a while for me to respond to correspondence to my permanent address because I am a college student. Please leave any questions on CompuServe because I can check it more frequently.

My permanent address:

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T²S Draw requires:

- 80286 or better processor
- Microsoft Windows 3.1+
- VGA or EGA