

Expert Tutorial

This tutorial assumes 2 things:

- 1) You are familiar with Windows basics, whether Windows 3.1 or Windows 95. For example, saving and loading files, using dialog boxes, moving and resizing windows, including child windows in multi-window applications like DAUB.
- 2) You have either finished the Novice Tutorial, or achieved a similar level of knowledge by just spending up to an hour or so with DAUB already.

The fairly complex example worked through here, while not a superb example of graphic art, will cover some short cuts and finer points of working with DAUB. The example will also introduce you to some of the most powerful capabilities of the program.

Before you go any further, it might be a good idea to print this tutorial on paper. This way, you can use DAUB without having to swap back and forth between it and this tutorial.

The finished example is in the file *tute_exp.dob* - print it now, from DAUB, so you can refer to it as you work through this tutorial. You may not like the look of the example, and your own attempt might turn out better or worse, but persist with it because after doing it once you will know a lot more about DAUB!

The process of creating the example graphic is organized into steps, with the graphic being saved to a disk file after each step except the first one. This way you can stop at some point and come back to it later with a minimum of bother. If you make a mistake at any point, in most cases you can undo the last change you made by typing <Ctrl>+Z. That is, hold down the <Ctrl> key and press the Z key. (This way of writing control codes is used throughout this tutorial.) If worst comes to worst, you can always read in *logo.dob*, and start again from the beginning of the step you were working on.

Step 1.

Maximize DAUB so it fills the screen, and maximize the child window also. Using the **Options | Other Options** menu item, set the background colour to the first blue colour in the list - a light pastel blue. Using the **Options | Guidelines** menu item, turn off the **Descenders Finish** guideline by unchecking the check box. Make sure all the others are turned on. Set the horizontal distances as follows, from top to bottom: 8, 3, 0, 5. Set the vertical angle to 12 degrees and vertical spacing to 8 brush widths.

Step 2.

Via **Objects | Strokes | Setup (static, fixed angle)**, set the brush to a size of 12 pixels, an angle of 45 degrees, delay of 30 milliseconds and an RGB colour value of (0,0,0) i.e. black. When you exit the dialog box, the static fixed angle brush will be automatically selected, if it wasn't already selected. Draw a cursive capital *D*, lining it up with the guidelines in any way that seems right to you. Select **Tools | Pointer** from the menu and click on the *D*, to select it. Press the *Smooth* button once to smooth it, then press the *Curve Fit* button.

Select **Objects | Strokes | Alter Variable** from the menu. Next to **Blue Inc**, under the **Attr Min** column, type in 255, and next to **Green Inc**, under the **Attr Max** column, type in 255. Select the **Slope** attribute, and type in 10 and 80 under the **Min** and **Max** columns respectively. Press <Enter>, and see how blue and green colour has been added in, according to the slope of the brush stroke.

Select **Objects | Strokes | Alter Variable** again, and under the **Attr Max** column type in (-105, -105, -105, 0, -40), from top to bottom. Make sure all other edit boxes under **Attr Min** and **Attr**

Max contain 0. Select the **Length** attribute and type in 45 and 90 under **Min** and **Max** respectively. Press <Enter>. See how roughly half (45% exactly) of the stroke is unaffected, while the rest is gradually darkened and twisted.

Finally, we will add in some red towards the bottom of the stroke, and make the stroke thicker towards the top. Select **Objects | Strokes | Alter Variable** again. Under the **Attr Min** column type 8 next to **Size Inc**, and under the **Attr Max** column type 110 next to **Red Inc**. Make sure all the other edit boxes under **Attr Min** and **Attr Max** contain 0. Select the **Y Pos** attribute and type in 5 and 95 under **Min** and **Max** respectively. Press <Enter>. You have now seen how different effects can be layered, one after the other.

Select **File | Save**, and save your work under the filename *logo.dob*.

Step 3.

Using **Options | Guidelines** again, change the distance between the 1st and 2nd guideline to 4 brush widths. Next, select **Objects | Strokes | Setup (dynamic, fixed angle)** from the menu. Under the **Attr Min** column, type in (0, 0, 64, 12), from top to bottom. Under the **Attr Max** column, type (0, 255, 255, 12). Also, change the angle of the brush to 45 degrees and set the delay to 30 milliseconds. Averaging for **Colour** and **Size** should both be set to 1, in the **Averaging** section. Select the **Speed Hi** attribute and type in 1 and 8 under **Min** and **Max** respectively. Press <Enter>. Draw the letters *aub* in cursive (connected) script using the guidelines as a guide, anywhere in the window. Don't worry if it is a little shaky, this will be fixed later on.

Select **File | Save**.

Step 4.

Select **Tools | Pointer** to select the *Pointer* tool. Click on the *D* and drag it so its bottom edge lines up with a guideline (any one will do) near the middle of the window. Do the same with the *aub*, so it forms the word *Daub*. Now, select **Objects | Strokes | Setup (static, fixed angle)** and set a size of 8 pixels, an angle of 45 degrees, 30 milliseconds delay and RGB colour of (0, 128, 255). Press <Enter>. Draw a flourish, starting very close to where you finished the *b*. Try to make it fairly similar to the flourish in the example graphic, *tute_exp.dob*. Don't worry if it is not very smooth, that will be fixed later.

Select **File | Save**. (It's always a good idea to save frequently while working on something complex.)

Step 5.

Press the tool button to bring up the tool palette. Select the *Axe* tool and chop the flourish close to where it first passes the bottom left of the *D*. Select the first section of the flourish (using the *Pointer* tool from the top left of the palette), and choose **Objects | Strokes | Alter Variable** from the menu. Under **Attr Max**, type in 100 next to **Angle Inc**, and make sure all the other fields under **Attr Min** and **Attr Max** are set to 0. Select the **Length** attribute, with **Min** and **Max** set to 0% and 100% respectively, and press <Enter>.

Now select the second section of the flourish, and alter it according to length also, using **Objects | Strokes | Alter Variable**. This time, however, type in 100 next to **Angle Inc** under **Attr Min** and -8 next to **Size Inc**, under **Attr Max**. Make sure all other edit boxes under **Attr Min** and **Attr Max** contain 0. Press <Enter>.

Select **File | Save**.

Step 6.

Using either the tool palette or the menu, select the *Glue Tube* tool and join the letters *aub* to the flourish. Just click in the gap between the end of the *b* and the start of the flourish. Also, join the first and second sections of the flourish in the same way. Select the *aub*+flourish with the *Pointer* tool. Select the menu item **Objects | Strokes | Outline** and type 2 next to **Smooth**, then press <Enter>. This is equivalent to pressing the *Smooth* button twice. The word *Daub* should now look rather attractive, at least in outline, if not the colour!

Select **File | Save**.

Step 7.

Now it is time to add some character-based text. The strokes you have drawn so far take time to display, particularly if you do not have a fast machine with graphics acceleration. To minimize this problem while you do the rest of the example, you can do a couple of things. Select **Options | Other Options**, and you will notice a section in the dialog box titled **Rendering**. Type 3 in the edit box, and check the **Frame Only** check box. Press <Enter>. Not only has all the colour disappeared, but only every 3rd brush mark is processed. Thus you can see the general shape and size of the word *Daub*, but it takes only a fraction of the time to display. No more calligraphic characters will be drawn by hand in this example, so the calligraphic guides are not needed any more. So, select **Options | Guidelines** and uncheck all the check boxes in the dialog box, before pressing <Enter>.

Select **File | Save**.

Step 8.

Select the whole graphic via **Selectors | Select All** and, with the *Pointer* tool, drag on a corner selector square to shrink the whole graphic to about 2/3 of its original size. Next, drag it to the centre of the window. Using either the menu or the tool palette, select the *Ellipse* tool and create a circle that encloses the word *Daub*. Try to get it fairly close to a true circle, rather than an obvious ellipse. Use the *Pointer* tool to adjust its shape and position, until it looks 'right'. The colour and thickness is not important since this circle will only be used to line up some text.

Select **Objects | Text | Setup** and select the *Arial* font. Also, change its height to 45 pixels, make it bold and colour it (0,0,0) i.e. black. Press <Enter>. Now type *Dynamic Brush* as individual letters, starting from the top left of the window: type a letter, click a short distance along, then type the next one, and so on. Don't worry about lining them up at this point. You should end up with 12 separate letters. Select the first letter i.e. the *D*, with the *Pointer* tool. Then select **Objects | Text | Move** from the menu. Type in -120 for angle, making sure the other edit boxes have zeroes in them. Press <Enter>. The *D* will now be rotated 120 degrees anticlockwise. In the same way, rotate the other letters by the following amounts: y (-100), n (-80), a (-60), m (-40), i (-20), c (0, so do nothing), B (40), r (60), u (80), s (100), h (120). When all the letters are rotated, drag them onto the big circle so each one is perpendicular to the circle.

Now select the big circle and delete it by pressing the <Delete> key. The words *Dynamic Brush* should form a horseshoe shape.

Select all these letters as a group (by holding down the <Ctrl> key while you click each one) and then type <Ctrl>+C to take a copy of them. Now paste in a copy of the letters by typing <Ctrl>+V. Select **Objects | Text | Alter** from the menu and increase the amount of green by 128 i.e. type in 128 next to **Green Inc**. Press <Enter>. Drag the green letters (as a group) so they are quite close to the black ones, giving the impression of shadows.

Select **File | Save**.

Step 9.

Select the *D* in *Daub*, and create a copy of it via a copy and paste. The quickest way is by doing <Ctrl>+C then <Ctrl>+V. Remove brush strokes from the new *D* twice by pressing the *Remove* button twice. Now select **Objects | Strokes | Move** from the menu. In the **Scale (%)** section of the dialog box, type 25 in both edit boxes. This will scale down the stroke to 25% of its original size. Press <Enter>, then copy the stroke by typing <Ctrl>+C. Then type <Ctrl>+V, tapping the *V* three times while holding down the <Ctrl> key to quickly paste the extra copies. The copies are on top of one another, so keep dragging the top one off until you have 4 separate *Ds*. Click on one of them, then hold down the <Ctrl> key while clicking on the other 3. Now, using the menu, copy and paste the entire group. Select **Objects | Strokes | Move** again, this time check the **Vertically** check box in the **Flip** section of the dialog box. This will flip the selected group of *Ds* around so they are a mirror image of the original group. Press <Enter>.

Select **File | Save**.

Step 10.

In order to line up all the little *Ds* in a neat row, equally spaced, it will be necessary to use a grid. Select **Options | Other Options** from the menu and look at the **Grid** section of the dialog box. Type 40 in the edit box, for a 40 pixel spacing, and check both the check boxes. After pressing <Enter>, arrange all 8 little *Ds* in a row, one by one, starting with the leftmost one. Notice how they 'snap' into position. Don't worry about the precise position of the row just yet. Select all the *Ds* as a group, as you did before.

Select **Objects | Strokes | Alter Uniformly** from the menu and type (0, 128, -128) next to the colour increments. Press <Enter>. This will give a green tinge to the line of *Ds*. Now select **Options | Other Options** and turn off the grid by unchecking both check boxes. Also, in the **Rendering** section, restore full rendering by typing 1 in the edit box and unchecking the **Frame Only** check box. Press <Enter>. Drag the row of *Ds* as a group to a position that looks 'right' somewhere underneath the horseshoe shaped text *Dynamic Brush*.

Select **File | Save**.

Step 11.

The final element of the design is a twirl with a very wide brush that will form a backdrop to the other elements. It will be more convenient to create this separately, so select **File | New** from the menu to open a new window. Resize the window so it takes up most of the available space. Now select **Objects | Strokes | Setup (dynamic, monotonic)**. Under the **Attr Min** column, type in (180, 200, 255, 190), from top to bottom. Under the **Attr Max** column, type in (128, 255, 160, 190). Ignore **Angle** and set a delay of 40 milliseconds. Select the **Slope** attribute, ranging from 5 degrees to 85 degrees. Press <Enter>.

Draw a twirl by moving the cursor in the shape of a tight coil, like a pig's tail. Since the brush is very wide, it will sweep around and create a roughly circular shape. Draw this fairly quickly, about the speed you would normally write something by hand, then select it with the *Pointer* tool. Select **Objects | Strokes | Alter Variable** and under the **Attr Max** column type in (-90, -90, -90, -110, 0), from top to bottom. Make sure all the other edit boxes under **Attr Min** have zeroes in them. Select the **Length** attribute, and set its range to 0% - 100%. Press <Enter>, then press the *Curve Fit* button 3 times.

Select **File | Save**, and save this graphic under the name *twirl.dob*.

Step 12.

Bring the first child window to the top (titled ...logo.dob), select **Selectors | Select All** from the menu, and type <Ctrl>+X to cut everything out of the window. Now swap back to the other window and paste everything in on top of the twirl by typing <Ctrl>+V. Maximize the window. With the *Pointer* tool, select the twirl and resize and shift it so it looks 'right' behind everything else. Click on the box marked U in the tool palette, and type in a color of (128, 128, 0) from top to bottom. This will lighten the twirl and make it more yellow. Press <Enter>. Your work should now look very similar to the graphic in the example file, *tute_exp.dob*.

Select **File | Save As** and save the graphic as *logo.dob*. A warning dialog will come up saying that this file already exists - just press <Enter>.

This is the end of the expert tutorial. You should now have a good idea of what is possible with DAUB. With a little patience, and particularly if you have some artistic talent, you should be able to produce some very eye-catching work.

Good luck, and may your creativity know no bounds!