

# 16 Tasks

## Can I use Fontographer and Illustrator output both in the same Typestry file?

Ahhh. We were hoping you would ask that. See this picture? It uses both. Here's the story.

First, a nice fat little star was created in Fontographer.

Three separate star "words" consisting of 4, 11, and 5 star characters (top, middle, and bottom, respectively) were brought into Pixar Typestry 2. The stars were sized and positioned. The wall background was added and the file rendered. This rendered Black and White EPS file was imported into Adobe Illustrator and the strings were drawn in. The star image was deleted

and the strings were saved in three files (top, middle, bottom). Each Adobe Illustrator string was imported into Pixar Typestry 2, sized and positioned through the appropriate set of stars.



The Christmas ornament was created using three of the snowflakes in the Zapf Dingbats font and the Rubber Sheets option. The top of the ornament is simply an extruded Gill Sans capital "O" with no bevel. The hook eye is the upper case "U" from the Charlemagne font.

Grouping was extremely handy for this project. All

the stars and strings were grouped as were the ornament parts.

Looks: The stars are EC Gems Dented Jewel with the highlight strength and spread turned up and the



Pits relief added. The string is a Threads relief, combined with a shiny red Instance of the Metal Look. The snowflakes on the ornament were created with EC Gems-Corrosion, again with the highlight spread and strength turned up. To this point all the Looks were customized in Glimpse.

The blue ornament background is the Starter\Materials\Metal\Smooth\Chrome with the highlight strength and spread turned up and the color set in Typestry 2. The ornament top is Starter\Combinations\Engraved Metal and the hook eye is Starter\Materials\Metal Polished set to gold.

Last but not least, the back wall is Pixar 128 Belizan Mahogany.

Lights: #8 at 100% with a spot and shadows. #5 at 100% with a spot, focused tightly on the ornament only.

Final rendered size was 7x5 inches at 300 dpi, because it was intended to be used as a Christmas card.

### **How do I change a word's bevel?**

Well first of all, you can change the bevel only for whole objects that remain as they were generated in the text dialog. This means that you can't type in a word, and change the bevel of one of its letters. You

must change the whole object. If you need to change the bevel of a letter, you should type in the letter separately and group it with the rest of the word.

But to change an object's bevel:

1. Select the object.
2. If it's not already showing, bring up the Details window by selecting Details from the Windows menu.
3. Click on the Build tab.
4. Set the Bevel Style or Depth.
5. Click on the Modify button.

### **How do I kern letters in Typestry 2?**

There are no facilities specifically designed to do kerning *per se*, but you do have two options. First, you can use Illustrator or CorelDraw 4.0 (or greater) to adjust almost anything you'd like about your text, and import that file. Second, within Typestry you can always move individual letters to adjust their spacing. This is best done with the Camera (in the Effects menu) set to Telephoto:

1. Select Telephoto from the Camera menu (under Effects).

2. Select a letter (double-clicking to select the letter as a subelement of a text object, if necessary).
3. Select the Move tool.
4. Hold down the Shift key to constrain the direction of motion while starting to drag the letter horizontally.
5. Don't forget to set the Camera view back to Normal, if that's what you were using.

### **How do I use my own texture on a word (or wall or floor)?**

1. Select the object.
2. If it's not already showing, bring up the Details window by selecting Details from the Windows menu.
3. Click on the Look tab.
4. Click on the New Look button.
5. Use the Browser to find the Picture/Background Look in the *Looks\Simple\Useimage* folder; then click on Select.
6. Click on the Edit Look button in the Look tab.

7. Find the Color Picture parameter in the Look Editor dialog and click on the Browse button. This brings up the Select An Image dialog.
8. Click on the name of the image (in BMP or TIFF format) you'd like to use. Set Wrapping On if you'd like the image to repeat vertically and horizontally across the surface; click on OK.
9. In the Look Editor, click on Save As and save the Look.
10. Render! You may need to adjust the scale in the Object Info dialog, available by clicking on the Object Info button in the Look tab.

### **How do I avoid having letters run together?**

If you use a large bevel size this may be unavoidable. Using a smaller bevel size will help, but otherwise:

- Move the letters one at a time using the Shift key to constrain motion to the horizontal (see the kerning task above); or
- Type a space between each letter as you type in the text dialog.

### **Can I use any font at all?**

Typestry can only use a font if:



- it is a Type 1 outline font present in the list in the ATM Control application.
- it is a TrueType font present in the list in the Fonts Control Panel.
- ATM is present and On.

Warning: Some TrueType and Type 1 fonts (typically shareware or freeware) are poorly or illegally constructed. If this is the case, Typestry may not be able to properly convert characters into 3D.

Some of the packages you might use to create font characters are Fontographer, FontMonger, and CorelDraw. You can use Illustrator to create any shape; it doesn't output a font *per se*, just PostScript.

### **How do I adjust Looks (change color, size, orientation, etc.)?**

1. Select the text with the Look on it.
2. Click on the Object Info button in the Look tab in the Details window.
3. Use the Object Info dialog to change the Look's size, color, orientation, opacity, and projection.

If you'd like to make more extensive changes you should click on the Edit Look button in the Look tab and use the Look Editor.

See the chapter on *The Look Attribute* for more information on both of these procedures.

### **How can I speed up rendering?**

- Use lower quality settings when appropriate (to check on position, orientation, preliminary lighting, etc.).
- Make your window smaller: larger images take longer to render than smaller ones — you may not always need to see things at full screen size.
- Use the crop window liberally. If you apply a Look to some text, you may not need to see all of it — a single letter might suffice.
- Use effects judiciously. Motion blur, perforations, and shadows can all slow down rendering, and the more perforations and shadows there are, the slower the speed. Using your own pictures in Looks will tend to slow things down somewhat, too.
- The more shadow-casting lights you have turned on, the slower the rendering. Your image may need a lot of lights, but you may not need all of them every time you render.

If you've done all this, and you're willing to spend money to buy more speed you should consider either accelerator boards or a faster machine.

Some accelerator boards are designed specifically for speeding up RenderMan renderers. Most generic accelerator boards will also speed things up.

### **How do I guarantee enough memory to render?**

If you find you run out of memory when you render a file, you'll probably have to increase the Windows "swap file" size. This is controlled by the Virtual Memory control panel. Refer to your Windows documentation for instructions on how to change the swap file size.

### **How do I improve the quality of my shadows?**

Shadows are computed for an image of a particular size. If you have computed shadows for a small screen image, and then render to a file (or window) of larger dimensions without recomputing shadows, you may get poor results.

When rendering to a file, always use "Compute Shadows" instead of "Render with old Shadows," unless you know the old shadows are both correct and an appropriate size.

### **How can I correct typos?**

1. Select the object to be changed.
2. Bring up the Text tab in the Details window. This displays the current text.
3. Type in the correct text (using the same font and style settings!).
4. Click on Modify.

### **How can I get one word behind another?**

1. For this you'll probably want to make sure the words are in separate groups. Use the Score window to do this.
2. Then select Left or Top from the Camera popup, available under the Effects menu. These allow you to see the words from a more convenient perspective.
3. Use the Move tool to move the words into the right positions.
4. Get the Front view back from the Camera popup under Effects.



## How can I get reflections?

In a nutshell, to reflect on a floor, make a duplicate of the object, reverse it, put it under the floor, and make the floor semi-transparent. The process is rather inexact, and is kind of cheating, but hey, whatever it takes... Here are the steps:

1. Create two identical versions of the text object.
2. Superimpose one on top of the other as accurately as possible (see the next task).
3. Bring up the Scale dialog by holding down the right mouse button while clicking on the object with the Scale tool.
4. Click on Nonuniform and type -100 (that's negative 100!) in the Height box.
5. Drag the reversed object down (using the Shift key to constrain movement) so its top meets the bottom of the regular object. This will be the reflection. (If you want the object to look like it's floating in air, the reflection won't meet it, so move the bottom one farther away.)
6. Group the two objects. This way you can adjust them (move, rotate, etc.) together.
7. Select Floor from the Backgrounds menu item under the Effects menu.

8. Now select Floor Setup from the same menu.

9. Click on the Manual setting and try to line the floor up so it falls exactly halfway between the two objects; click on OK.

10. After you've applied a Look to the floor, get the Object Info dialog by clicking on the More Info button in the Look tab.

11. Turn down the Opacity a little so it's around 80 or 90%, and click on OK. (You'll have to experiment with this setting to get just the reflective effect you want.)

12. Render.

This trick has its limits. Since the "reflection" is really just another object, its surface won't look upside down with respect to its counterpart (though you may be able to adjust this by flipping the Look in the Object Info dialog, depending on the Look). But you may not see enough of it to really notice.

Also, if the object is tilted forward or back, its reflection will have to be tilted in the opposite direction. You should do this before you group the words.

To reflect on a wall, you'll have to put a copy of the object (not reversed, as for the floor) behind the wall. See the "How can I get one word behind another" task for this procedure. Check the Wall

Setup dialog (from Backgrounds under the Effects menu) for placement of the wall and the objects in relation to it.

### **What's the best way to align things?**

1. Select Telephoto from the Camera menu item under the Effects menu.
2. Select Preferences from the File menu and increase Wireframe Complexity to the maximum. Also, set the grid dimensions to some number that will give you enough grid marks to help line things up: 25x25, 40x40, whatever works for you.
3. Make your window as big as possible.
4. Select Toggle Grid from the Edit menu.
5. Line your objects up.
5. When you're done, set the Camera back to what it was!

### **How can I get a light to track by itself?**

A light can only track an object, but you can create an invisible object (maybe just a single character) for the light to track, so it looks like it's tracking by itself. To make an object invisible, just turn its Opacity setting all the way down in the Object Info dialog, avail-

able by clicking on the Object Info button in the Look tab in the Details window. (You must first apply a Look to it.)

### **I rendered a word and brought it into my page layout program, and I got the word on a black background. How do I get rid of the background?**

The short answer is you can't, unless like Adobe Photoshop, your page layout program (or whatever) uses an alpha, or matte, channel. If an alpha channel is supported, then:

1. In Typestry, select Preferences from the File menu.
2. Make sure the "Transparent" Colored button is selected.
3. Click on OK.

But if you just need a white background in your image so it blends in with a white page, the solution is simple. Use the steps above, but make sure the "Empty Space" Colored button is selected, and that the color is pure white.

When you rerender, you'll have a white background. Of course, the Empty Space color can be anything, and so can match any solid background you may have.



But what if you want the word to lie on top of an image you already have on a page? Well, the fact of the matter is, you're stuck with importing a rectangular area. But despair not, for Typestry is capable of making empty areas of an image disappear using "coverage."

The theory is, modify the idea of a pixel so that in addition to color information, it includes an amount of coverage. Now, when you bring in an image over a background, for each pixel in your image you can ask the question, "Should this pixel cover what's under it?" If the answer is yes, you see the regular dot of color in the image. If the answer is no, you see the background. Voila! A rectangular image covering a non-rectangular area!

Using the alpha channel, not only can we turn coverage on and off, we can also turn it on a little, a lot, or anywhere in between. Turning it on completely for a part of an image makes that part completely opaque. Turning it off makes it completely transparent. Anywhere in between makes it semi-transparent.

In those programs that know what to do with alpha information ("support" an alpha channel), each pixel of an image is described by four values, three for color (RGB) and one for coverage (alpha). In those programs that don't support alpha, an image's pixels

have only RGB values, and all the pixels are just there, covering everything.

Currently, there's a problem. We're in one of those transition times where some software supports an alpha channel, and some doesn't. Unfortunately, most page layout and paint programs don't yet support alpha. So where's this leave us?

Well, it depends on what you need to do. If you want to include a Typestry word in an image you've made, buy a program that supports a matte, or mask channel and just copy the "covered" part of the Typestry image into your image. No unsightly rectangle, no extra pixels, just the word.

If you want to put a Typestry word over your text, you'll either have to plan on having a rectangle around the word or lobby for your application to support an alpha channel!

### **How do I know what size and resolution and stuff like that to use if I'm printing to a laser printer (or Lino, etc.)?**

OK. We'll assume you've made your project window the shape you want your image to be. Additionally, you must know what linescreen you'll be using when you go to print. If you don't know about this, read on. If you're printing on a laser printer, figure on 60. Then:



1. In the Image Format dialog (under the Render menu), click on the ">>" button to load these values into the Output File boxes.
2. Check the Constrain Aspect Ratio box.
3. Change the popup from pixels to inches.
4. Enter the Width and Height of the image as it should appear on the printed page.
5. Multiply your linescreen number by 1.5 and type this in the Resolution box.
6. Render to file.

And now a little explanation. No matter what printer you're going to use, you need only decide on a linescreen value to know what numbers to use in Typestry. The linescreen number is typically something like 60 for a 300 dpi laser printer, and more like 120–150 when going to Lino or high-resolution imagesetters. The linescreen basically determines how coarse the image looks.

Bear in mind that the higher the linescreen number, the less color subtlety you'll see in any but the highest-resolution imagesetters (2400 dpi or more).

For the Resolution you can actually use a number that's between 1 and 2 times the linescreen number, and you may want to try a test or two to see what you like best. But 1.5 should work pretty well.

## **How can I get my animations out to video?**

If you want to see your animation in real time, you're probably going to have to get fancy and spend money. Video for Windows is useful for many purposes, but to get real speed and large frame capabilities, you may want to look at video systems. These can consist of a board to plug in your machine and software that allows you to record a series of images onto frames of videotape. You can then edit frames, add special effects, and so on. And of course, you'll be able to play them back at video rates, just like you see on your television. Some packages (Diaquest, for example) can record either individual frames, or whole AVI movies to video disk or tape.

## **Are there any rules of thumb for getting good results in Typestry?**

While there are a lot of ways to make a good picture using Pixar Typestry, there are also a lot of ways to make a bad one. To help you avoid some of the pitfalls in the process we've come up with some tips and caveats.

- Lighting from above (lights 1, 4, and 7) tends to look most "natural."
- A reasonable light setup could have all lights off, except for light 7, which should be all the way on.



(An unreasonable setup would have all the lights on.)

- When using perforations, usually a small bevel size will help readability.
- Avoid using transparency when bevel size is large unless you want to see the internal structure of a letter's beveling.
- When using motion blur, the longer the streak, the more dissipated it will look.
- To get highlights on objects where you want them, think of the surface as a mirror; tilt the object (or move the light) so you could see the light in the mirror.