

## Making the most of scenery

By James Flanders (a.k.a eso)



**E**very route builder has their own secret tips and tricks that they use in their creations to impress the end user. My purpose in writing this article is to share some of the techniques and a bit of the theory that I use when creating for *Trainz Eastern Routes*.

I have always believed that scenery will make or break a route and is quite often badly neglected in favor of more track work. Scenery, when used correctly, can make any route come alive to the operator. The best way to learn good scenery technique is to observe how other skilled creators have made use of objects and textures and then practice them on your own routes.

For ease of explaining my techniques I have divided scenery into two specific areas to concentrate on separately:

Background scenery

Utilized scenery

Each of these scenery types requires a different approach to make the process more efficient. The general rule when it comes to scenery on a route is to find the best compromise between detail and frame rate. This balance can be extremely difficult to get right and can take many hours of practice to achieve. Recently I came to understand that this balance can only really be defined by your own computer specifications and limitations. I, like many other creators, have at one time or another tried to create a route aimed at a target computer specification. Every time I have tried this the results have been less than promising.

First, though, we need to prepare the base, as shown in the following example (figures 1 and 2).

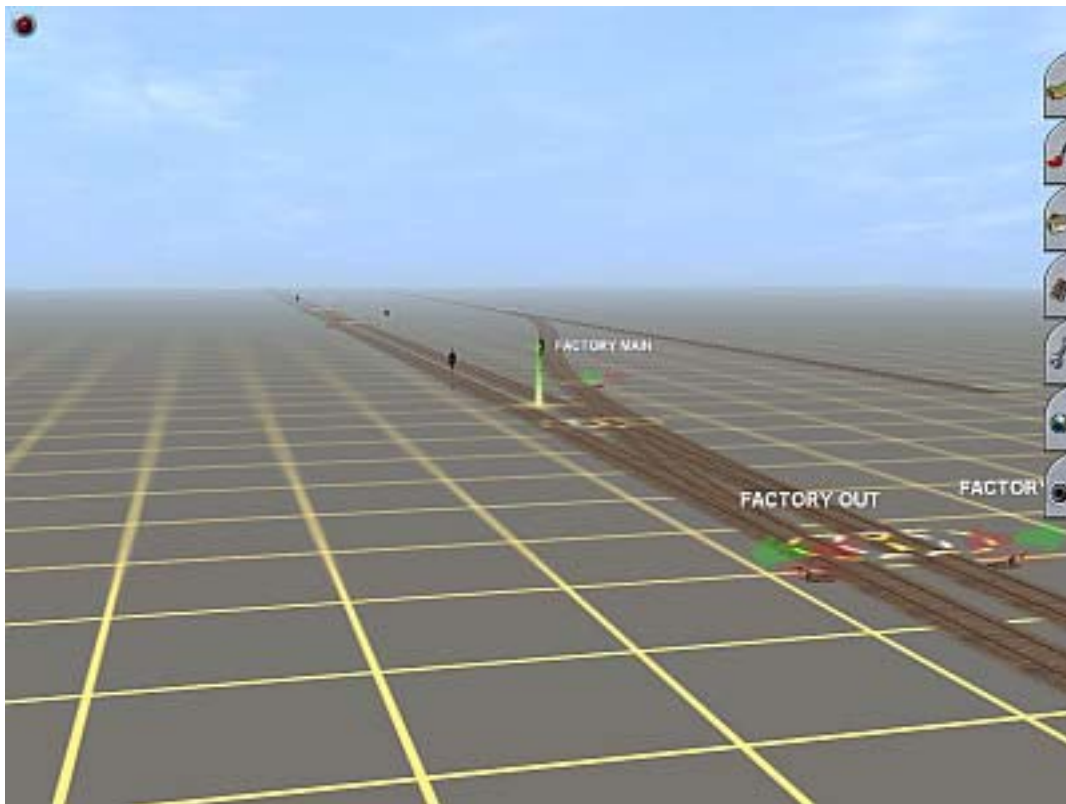


Figure 1: Start off with basic route, i.e., track, signals, levers, etc.



Figure 2: Add all major utilized scenery and basic textures.

**Background scenery** Background scenery is often neglected in routes, or is usually not used to its full potential. However, when used correctly a good backdrop to your route can add limitless amounts of depth and realism. The Trainz Download Station (DLS) has very few actual backdrops, but there is more than enough excellent content there to substitute. In some aspects, using buildings rather than 2D backdrops has the advantage of creating more depth and, therefore, more realism. The best solution I have found for depth in backgrounds is to make baseboards one board wider than normal and use this extra space for background detail.

A great effect can be achieved here by raising the edges of the boards to create a hill or mountain range. The elevation does not need to be large, but just enough to break the horizon up a little. When scenic items are placed on these elevations the results can be mind blowing. Obviously, creators that work from Digital Elevation Model (DEM) terrain need not worry about this as the elevations are already present. It may be a good idea to download a few routes made with DEM terrain to see how this all works. Trainz Eastern Routes has some free routes that are made from DEMs and can be found at [www.trainzdownloadz.com](http://www.trainzdownloadz.com).

Placing foliage, especially splines, is an excellent way of closing a route in and creating a nice border to your routes. These work really well in open areas such as plains or farmland. I played

around with this technique when building my *King Mountain Line* (available at the DLS) and I feel the results were visually effective. David Drake (a.k.a. Dmdrake) has created many superb items of foliage that are available at the DLS, and it's most definitely worth the time to download as many as you can. Once you find the right balance of background scenery you should start to see how much more realistic your route building becomes.



Figure 3: Background raised to mask board edge.



Figure 4: Add buildings and trees as background scenic items.



Figure 5: Add more detailed close-up scenic items.



Figure 6: Finish off minor details like fences, etc.

### Utilized scenery

Utilized scenery is completely different to work with, as the emphasis here is placed much more on detail rather than frame rate friendliness. Once again, mastering this area of route building will make a massive difference in the quality of your end product. I personally believe that it is in this area that each route builder adds their unique signature to their work. In my routes I tend to go slightly overboard and often find myself scaling back unnecessary close-up details. There is one very simple rule that if applied here will make life much easier for you:

***Every structure placed on a map must have a specific function to perform.***

This is simple enough to remember, but not always easy to adhere to. Many times I have found myself placing things onto a route that don't necessarily have to be there. In real construction, buildings are made to fit a designated space. However, in *Trainz* everything works the other way around and you have to create the space for a specific building. To help with the interest level in your route, try to rotate/elevate/combine buildings wherever possible and then accent with minor details that are required without going overboard.

Minor details are purely up to your discretion. Just keep in mind that every detail will have some impact on frame rates, however miniscule it may be. A good solution here is to create a list of everything you think will be necessary to complete a scene. For example, if you are making a factory type scene, decide early on what the factory is to produce and list out the specifics, i.e. fencing, loading docks, parking areas, gates, products/boxes, trucks, cars, signs, foliage, etc. As you can see, the list can get very large very quickly. To keep the list smaller, try to justify leaving out as much as you can.

## **Conclusion**

I cannot stress enough the importance of both practice and patience. There are creators out there who have worked on routes for over two years (you know who you are) and are never quite happy enough with the results. For every route that I have submitted to the DLS, I estimate at least 20 have gone under the delete key. So go out onto the DLS or people's homepages and get some inspiration and fresh ideas, and sample as much of the amazing content that is available for free. I look forward to downloading all of your routes when you are done with them.





Figures 7 and 8: Add *Trainz* and enjoy ☺

***James***

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