Trainz Feature

Let's Do the Run Around!

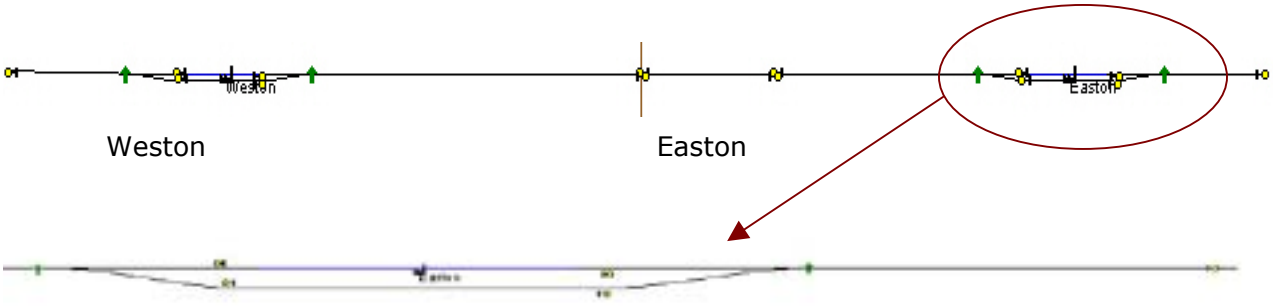
By John D'Angelo

Heading to Easton.

Recently I've been having lots of fun doing the run around with my local trains. When you perform a *Run Around* you bring in a passenger train to a terminal station, load the passengers, then uncouple the locomotive from the train. You pull forward, then take a passing track and reverse past the consist, switch back to the track the consist is on, and re-couple to the consist. After doing this procedure you head back out on the main line going in the opposite direction.

I enjoy doing this procedure using the artificial intelligence system of *Trainz* rather than manually doing it myself. In addition, by programming the steps prior to starting up the route, you can have the train go through the motions while you just relax and watch from the sidelines. You can also run other trains on your route as your shuttle does its thing.

To demonstrate this procedure and explain how it is programmed, I built a simple two-baseboard route using *Trainz 2006*. It has a terminal station at each end called *Easton* and *Weston*. The train will drive to *Easton*, do a run around, drive back to *Weston* do a run around, and repeat the process. Here is the track plan:

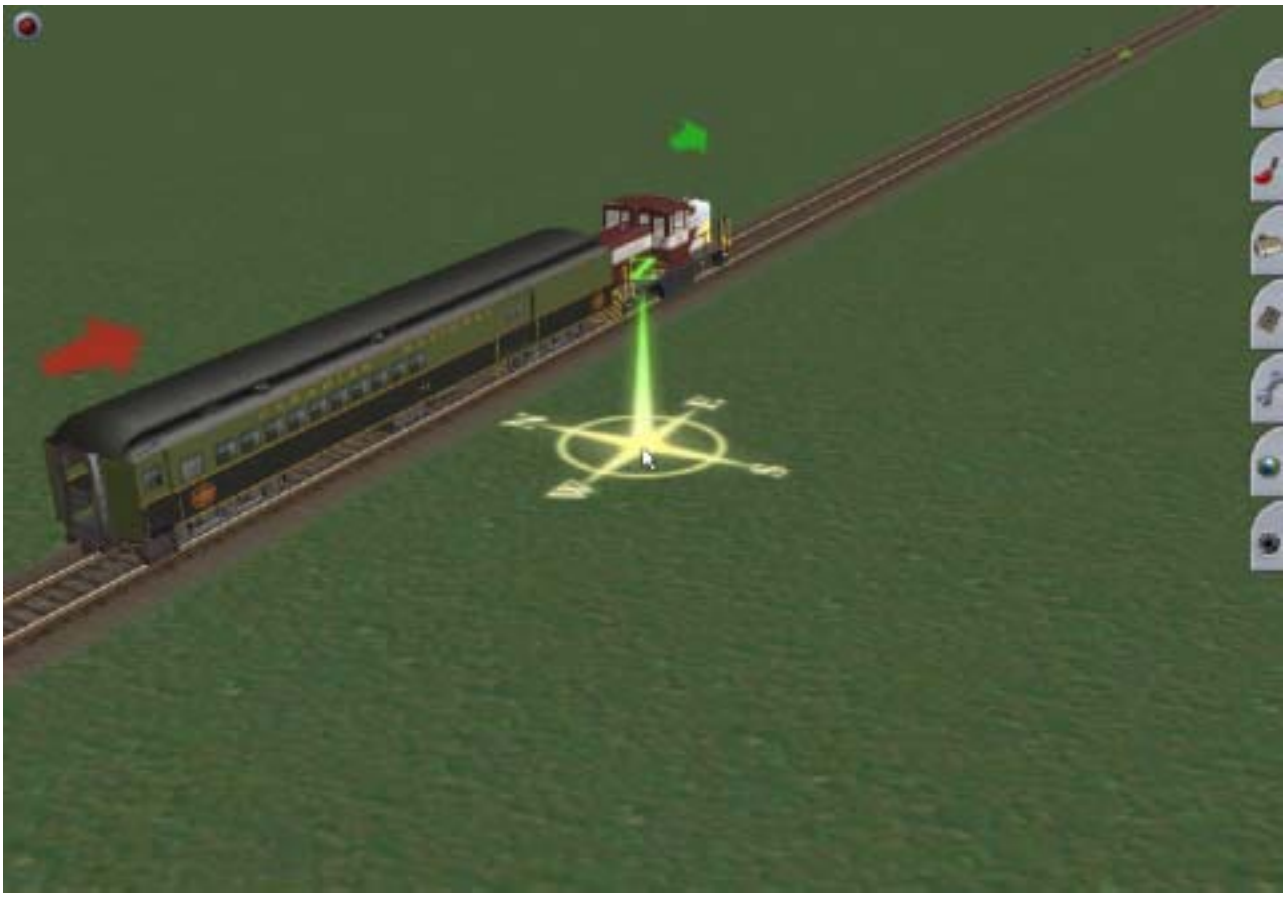


The enlarged section is the Easton Station diagram showing the run around track. Weston is a mirrored duplicate of this. Note the signal positions and see that there is no signal placed before the joining part of the switch. I'll explain why later.

I decided to use a very simple train for this example; the locomotive I used was a GE 44T switcher and a single heavyweight combine car. You can use any single unit diesel or steam engine, however you cannot use a steam engine pulling a tender. In AI operation the steam engine will uncouple from the tender and do the run around by itself, which is not very prototypical! A Tank type loco is perfect for this if you want to use steam.

OK, it's time to program this baby!

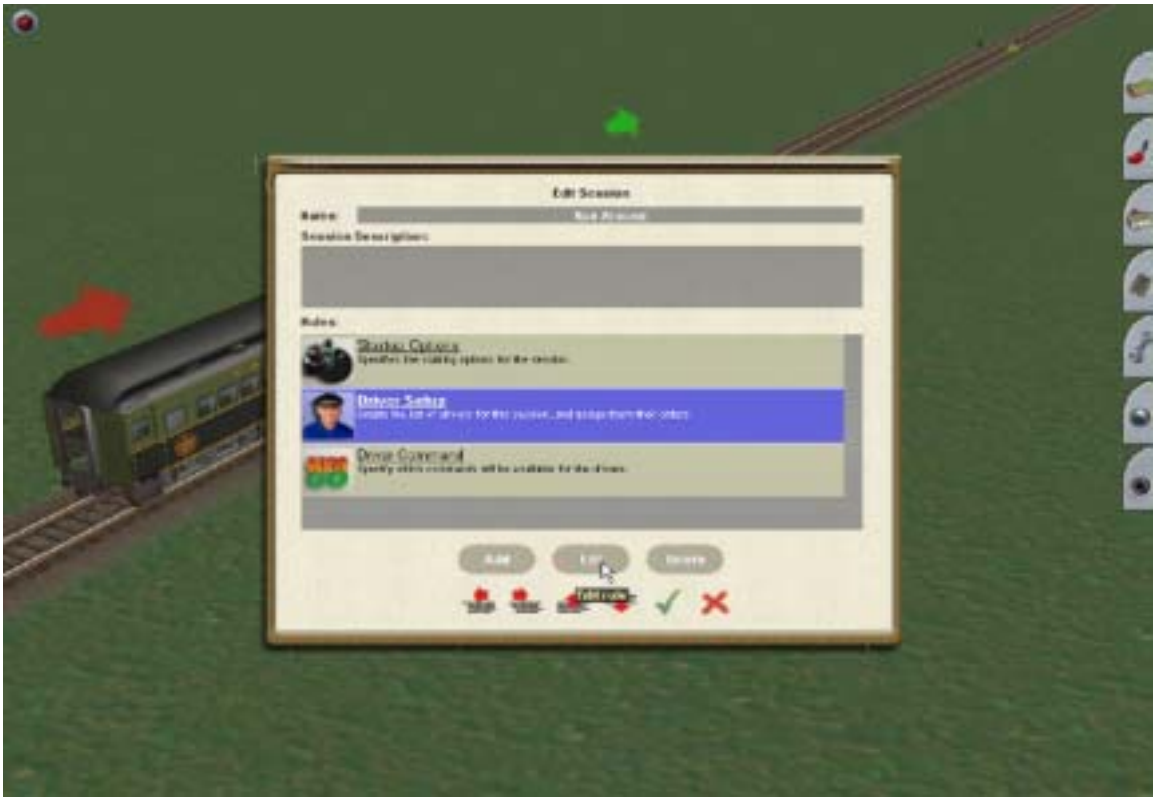
While in Surveyor I placed the train between Weston and Easton and facing in an easterly direction.



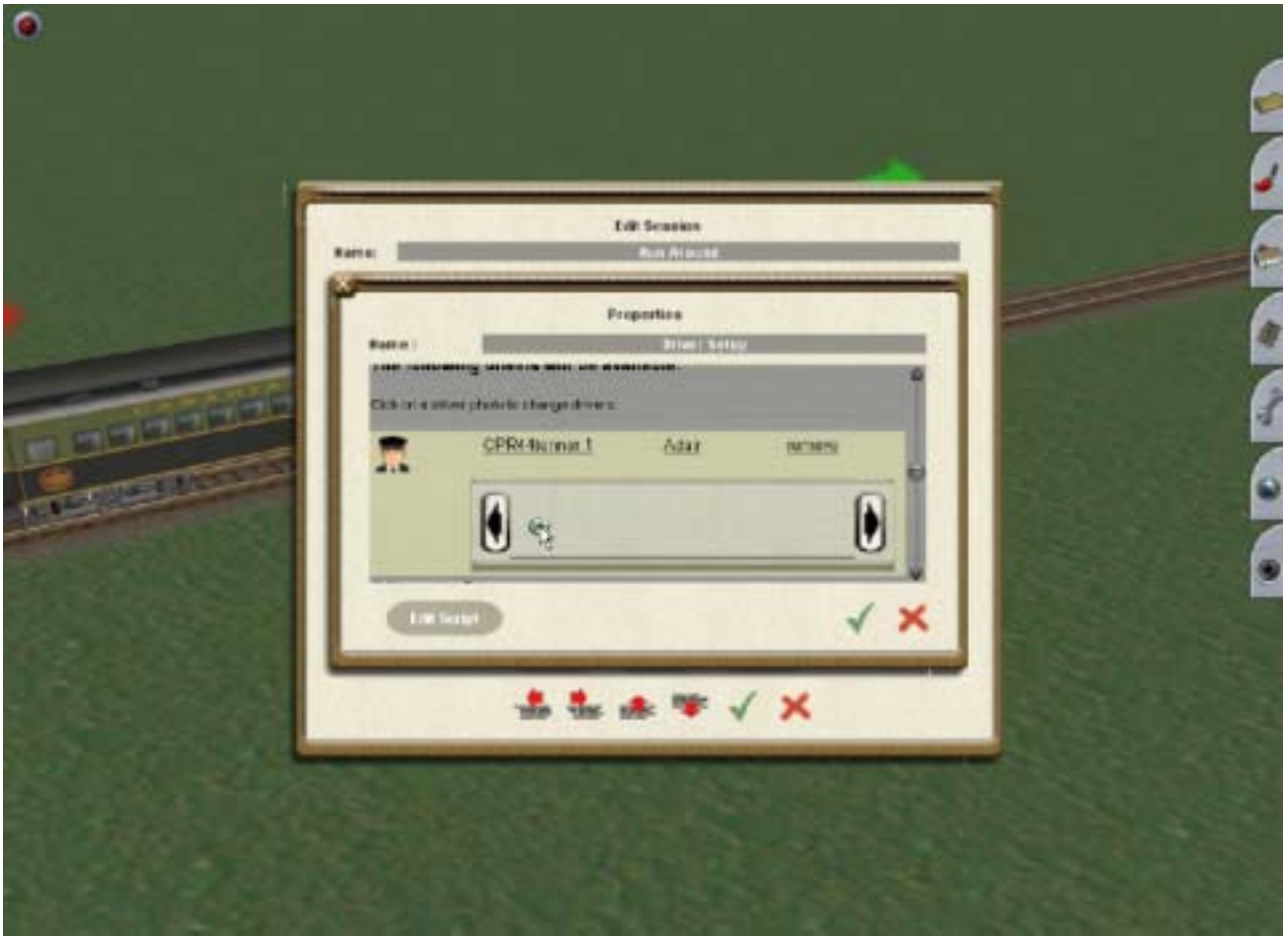
Train facing east towards Easton.

To program the moves required, I needed to go to the upper pull down menu and chose **Edit Session**.

Then I brought out the Edit Session menu.



I then chose **Driver Setup** and clicked on **Edit**.



Editing the properties.

In the Properties menu I will choose the directions my driver will follow. The green pointer that my cursor is on represents a step in the procedure. By clicking on the green pointer the menu listing, the steps to choose will be revealed. Once I choose a step, the image of the step will be shown and the green pointer will move to the right of the image so I can choose another step if I wish. The large black arrows at each end are there to allow me to scroll from one side of the command group if it is wider than the window. I am not going to show a picture of each command as I enter it, because the image is too small. I will be using the commands:

Drive To (give a destination from the places listed)

Load

Run Around Train

Repeat

Here are the commands as I entered them:

Drive To Easton, Load, Run Around Train, Drive To Weston, Load, Run Around Train, Repeat.

Here is how the commands look on the screen.

In this view all the commands are not visible and I would need to scroll to the right to see them all. The picture below is from the Driver screen and shows all the commands. Note the all-important Repeat symbol at the end.

Drive To **Load** **Run Around** **Drive To** **Load** **Run Around** **Repeat**

When I start up the simulation, my little 44T switcher will cheerfully head to Easton, load the passengers, run around the train, travel to Weston, load the passengers there, run around the train and head back to Easton and continue repeating the sequence.

Of course, this is a simple example. You could have multi-car trains traveling across a route, stopping at any number of stations along the way, and then reverse and head back over the route. Before

you try a complicated setup, you might want to just try out this example route and experiment a bit with it to see how the AI system handles the operation. For some reason, at times the AI system does not do things the way we would normally expect it to.

For example, when I ran this route, after the locomotive had completed the run around and re-coupled up, it acted a bit differently than it would have if I were driving the train. After coupling up, instead of just heading out for the other station the train backed the entire consist back onto the stub track, then switched over to the run-around track and passed by the station using the run around track on its way to the destination. That was a bit of a roundabout way to do the process and was not logical to me.

At first I thought that perhaps the train was being left-favorable, so I redid the example with the passing track to the right and the station track to the left. That wasn't the case, because my train once again took the passing track and switched to the right to do that. I even tried putting a track mark just past the station on the station track, and instructed the engineer to go via this track mark, hoping to keep him from the passing track.

Taking the passing track.

No such luck! My engineer drove to the track mark, but then *still* reversed back into the stub track and once again took the passing track. I think that in the run around programming logic there must be an instruction that makes the train follow the same route used for the run around maneuver.

Since this is the case, you will need to be sure that your stub track will be long enough to hold the locomotive and as many cars as will be in the consist. The engine must have enough room to back over the switch and clear it or it may just get hung up, or push the cars back past the bumper derailing the consist.

Now, about the signal placement I mentioned earlier. In *Trainz 2006*, if you place a signal at the switch join, and the consist is on the station track, the signal will show red. When the locomotive reverses past the switch to the stub track and then faces the red signal, it will not move forward to re-couple. The *Run Around Train* command will not override the red signal. Just don't have a signal there and the operation will work fine.

That's the basics of doing the Run Around, I have a number of branches on routes of mine that have the track laid out so that run around operations can be done if I wish to do them. They are useful, interesting and fun to watch in motion.

Have fun!

John