MARLEYMAN

# MARLEYMAN'S SCENARIO CREATION TUTORIAL TS2013 PART 2-PASSENGER OPERATIONS



TS2013 Scenario Creation Tutorial | Marleyman

# Contents

Train Simulator Scenario Creation Tutorial by Marleyman
http://www.railworks.marleyman.co.uk/store/

# Creating a Scenario for Railworks TS2013

## Part Two

### By

*Marleyman*

**Key**

Any handy tips will have this icon.

Any Cautionary notes or tools you should be careful with will have this icon.

You know you are doing well when you see this icon...

Text in this colour means you should be clicking on something or selecting something on screen.

Text in this colour means you should be typing something into a box on the screen.

I would recommend you run the included 60 min scenario before you do anything. That way you will know what you are about to build. You can also open the scenario in the editor to help you understand what I have done.

Part two includes Adding AI Trains, Building and Saving Train Consists for Placing on Tracks, Planning a Scenario and much more.

Install the scenario using the Utilities before progressing.

I would recommend running the completed scenario too before you start building.

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*Class 377 heading for London Victoria*

## Introduction

This tutorial is for New Scenario Designers in Railworks TS2013 you should have already completed Tutorial One and be comfortable with the knowledge in that tutorial. Here, we will continue through creating a Passenger Scenario with AI Traffic for the London to Brighton Route using a Class 377 Electrostar electric multiple unit in Southern livery.

Planning is everything, and even for this tutorial I have to plan ahead and sometimes work ahead and undo parts of the scenario to get things working the way I intended or the way that TS2013 dictates. The two are not mutually exclusive, it just seems that way sometimes. For that reasons your plan should be simple and flexible. Do not try to overcomplicate the players role in the simulation in just one scenario, you may be able to accomplish a better balance of simulation of a real train drivers experience of a working day with fun and playability in two short scenarios rather than one long complicated one.

This scenario will be limited by rolling stock for the route as I want to have this scenario work for a New Copy of TS2013. For that reason it will not look great or have lots of prototypical liveries for the route. Also, due to the teaching aspect some railroad operations in this tutorial may not be realistic but they will be educational.

The first plan you should make is a map, even if you just write the Station Names down in list format in the direction of travel, it is a good guide that saves time looking a the 2D map on screen, especially for routes you know nothing about. Check the manual that comes with the route, some have 'proper' maps that you could print. London to Brighton does not.

Since I have had to compile a map and a station list I have included it with this tutorial for you future reference. All stations are not included, just the mainline stations. There are quite a few branches with stations on them that could be used for short scenarios but to keep it simple I have just listed the mail line stops. I have also omitted the many yards and depots on the route, these are also great starting points for scenarios. Explore the route and plan ahead if you make any scenarios for this route.

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# Route Map

The station list running from London Victoria to Brighton
is as follows:

London Victoria
Battersea Park
Clapham Jct
 Wandsworth Common
Balham
Streatham Common
Norbury
Thornton Heath
Selhurst
East Croydon
South Croydon
Purley Oaks
Coulsdon South
Merstham
Redhill
Earlswood
Salfords
Horley
Gatwick Airport
Three Bridges
Balcombe
Haywards Heath
Wivelsfield
Burgess Hill
Hassocks
Preston Park
Brighton

The station diagram will give you a general idea of distance between stops as the station markers are spaced to show some relevant distance.

LONDON VICTORIA

BATTERSEA PARK

CLAPHAM JCT

WANDSWORTH COMON

BALHAM

STREATHAM COMMON
NORBURY
THORNTON HEATH
SELHURST

EAST CROYDON
SOUTH CROYDON

PURLEY OAKS
PURLEY

COULSDON SOUTH

MERSTHAM

REDHILL

EARLSWOOD
SALFORDS
HORLEY
GATWICK AIRPORT

THREE BRIDGES

BALCOMBE

HAYWARDS HEATH

WIVELSFIELD

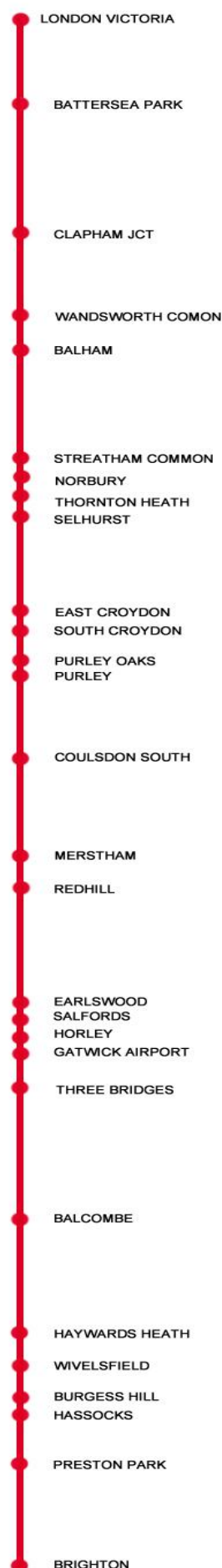BURGESS HILL
HASSOCKS

PRESTON PARK

BRIGHTON

You should also consider other reference material before starting a scenario. Use the available TS2013 forums but do not limit yourself to that knowledge.  There are plenty forums with current and ex railroad workers that are happy to reminisce about their past or talk about current operations on the railroads. If you are polite you can get some great story ideas from listening to them or just hanging out in their forums.

Wiki is ok but not to be taken as absolute fact. It will help with train consists and general routing.

Other questions to resolve before opening the editor:
What rolling stock should you use? Is there freight on the line? Do you need a reskin? Do you want to replicate a modern timetable? What do you want the player to actually do, drive fast, drive with caution, stick to a time table, amble along...?

Time of day/night, Weather, Season and  duration should all be in your planning.

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# Scenario Plan

The plan for this scenario is to run a twelve car Class 377 from Brighton to London Victoria with a stop at Gatwick Airport and Clapham Jct. The driver will pick up passengers at all four stations and will be on a timetable for all stops. The driver then gets a long fast run but will also have to be on time at all three stops and wait for departure at Brighton.

To ensure that the driver is not rushed to start the scenario, which may hinder their ability to keep to the timetable, we will also timetable the start of the scenario for 3 mins after the driver loads the scenario. Plenty of time to read the briefing and get the passengers loaded at Brighton. We will also Split the train at Gatwick suggesting the four rear coaches will make a return trip to Brighton as a shuttle.

The start time will be *'dark o'clock'* if only to show you the *'torch'* in the editor, but in reality to justify the timetable as we are an early train and therefore passenger expectations would be higher as they commute to work. The weather will be cloudy, (*plenty rainy scenarios around nowadays*) the Season will be Winter and the date will be Friday Dec 23 2011. AI traffic will be present and at least one blocking train will added to the scenario to break up the drive and allow the driver to manipulate the controls instead of watching the show.

As a further point of interest, the drivers train will not be in the station at the start of the scenario, it will 'arrive *from the train wash'* after the scenario loads. This feature is not all that common in scenarios, perhaps because it is not documented very well. Note: you can only do this with a Timetabled Scenario, not a Standard Scenario.

The drivers train for the scenario will be the default Class 377 and AI interest will be provided by the included Class 450 and Class 375 SE. There will be no additional trains so it will look bland but the tutorial will appeal to all new users of TS2013 with no additional stock requirements. Your own scenarios should include a wider variety of stock.

The first thing to do then is open the included scenario. Our first problem is where to place this train in order for it to get into the station and give us plenty time to have it stop and get the driver on board. I have set the scenario properties already, feel free to check them.

Load the Scenario *[MM] Marleyman's TS2013 Scenario Creation Tutorial Pt2 begin* included with this tutorial to build along with this document.

Load the Scenario *[MM] PLAY Marleyman's TS2013 Scenario Creation Tutorial Pt2* included with this tutorial to play the completed scenario as I built it or to check just how I placed an object or set the AI rules.

Before we proceed here is a reminder of all the tools and where to find them;

# Editor Screen and Tool Boxes

The Scenario Editor has many boxes that are hidden from view to maximise the screen viewing area when editing scenarios. Now would be a good time to at least introduce you to the boxes and let you know their names and a short description of their uses. To Expand these boxes hover your mouse pointer over them.

1. The **Tool Box**



2. The **Browser List**



3. The **Options Box**



*Note the PIN on some boxes to hold the box open.*

4. The **Quick Time Player**. Use with EXTREME CAUTION which I will explain again, later.

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5. The **Navigation Box**



6. The **Drive Box**
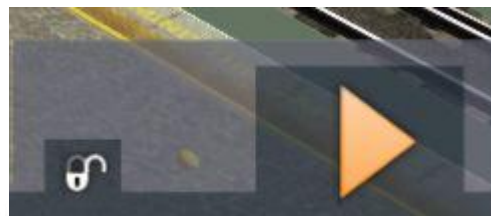


7. Special Mention; **The Scenario Marker**



Here are all the tools on screen;
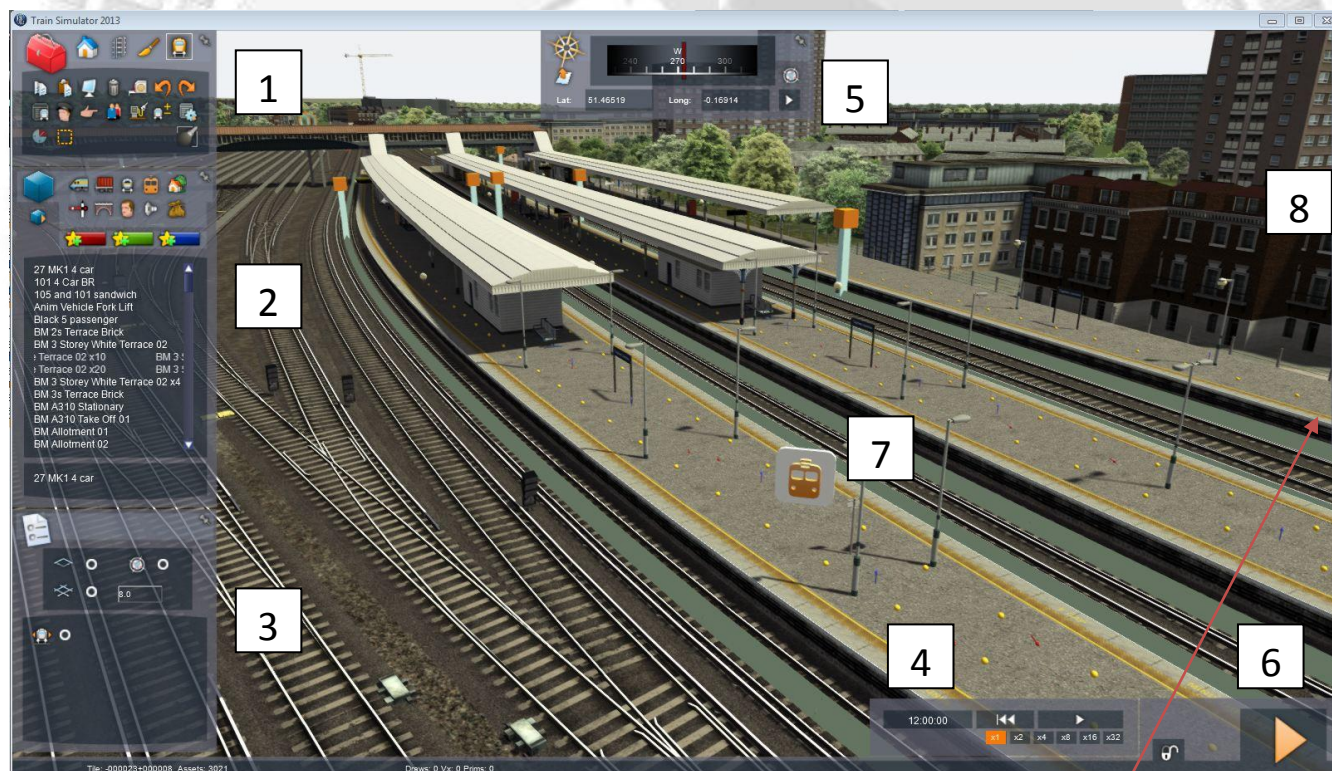


8. Selecting some tools within these boxes may cause another toolbox to appear on the right hand side of the screen and it may not be obvious to you at first. This screenshot has that box displayed on the right hand side. Not so easy to see here but I will let you know when to look for it.

All these tools can be Pinned to the Screen or Un-Pinned depending on your requirements. Just select the Pin at the top right of each tool box.

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1. The **Tool Box**
Allows access to sub tools like Display, Consist Saver, Driver, Timetable view, passenger instructions. Also allows access to the World Editor so some care should be taken not to enter the World Route Editor.

2. The **Browser List**
One of your main tools, used to select the Object Set Filter (*Asset Providers)*, add rolling stock and scenery items to your scenario

3. The **Options Box**
Used to select whole consists

4. The **Quick Time Player**.
Used to test run the scenario inside the editor.  Warning this tool can destroy hours and hours of work in your scenario just with one errant click.

5. The **Navigation Box**
Can be used to instantly move around the 3D world instead of 'flying'.

6. The **Drive Box**
Used to enter the scenario in standard play mode.

7. Special Mention;  **The Scenario Marker**
The details of your scenario, the weather and start time are stored here as well as the players initial start position.

8. **Hidden Properties**
This toolbox on the right hand side will have different functions depending on which inital tool launches the Properties box here. It can display asset providers, scenario details, route markers, siding and platform clutter markers...

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# Scenario Marker

The scenario marker has been completed and placed in a spot at the front of the platform. This is a Timetabled Scenario marker. This is the spot the player will find themselves at when they load the scenario and is very close to where the cab of the train will be after it arrives at the station.

What we need now is a train for our driver. There is more than one way to get a train on the track and we do not always have to build it car by car like we did in scenario one. Some consists have already been provided for this route. Pin open your Browser list and select the Consists icon.

You can see several Class 377 consists, scrolling left to right, in the list. If the scrolling annoys you just hover your mouse on any one consist in the list and it will display a helpful popup with the consist title that you can read. Select the Third one from the list, a 12 car unit.

We need to place this out of sight *(as per our scenario plan, we want the train to be getting washed before starting duty)* of the driver but not too far away that it arrives late and spoils the beginning of the scenario. The driver is on a timetable after all.

After testing, I found placing the rear of the train in line with the buffer just SW of *Brighton Dn Lovers Walk*, suits our purpose. You will have to fly North out of the Station to this point, To see the markers on screen press F6 . Place your 12 car unit and add a driver to the front of the train. Turn the markers of again by pressing F6.

If everything is a bit too dark for you select 'The Torch' and shed some light on the track.

I just love the torch!

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# Train Instructions

Initial Instructions for this train are a little more verbose and seem convoluted compared to the usual strategy of starting the driver in their train. Double Click on the Driver Icon and set the properties by Naming your train and setting the train priority to Express Passenger.

This train is the Drivers train and usually we would tick the *Player Consist* box. If we do that this time then the driver will have to take the train down to the station and we don't want that. We want the AI to bring the train into the station and hand the train over to our driver, who is waiting patiently on the platform.

So, do not tick that box this time around, that is how this little trick is done. Just don't assign a train to the player in the first place. One small caution when doing this, make sure the scenario marker is in the correct place for when the train stops, position it so that it is obvious that this train is the correct one for the driver. (I have done this for you). Should the driver click on any other AI train, they will erroneously take control of that train and have to start again.

That would be the main reason I have provided two tutorial scenarios for this exercise. The Initial Placement of the scenario marker is quite important here. The second scenario is the completed scenario for you to drive and inspect as we build.

We now need a good starting set of instructions to get this train onto the platform in time for the driver to board passengers and to ensure that the beginning is smooth and not rushed. The driver will still want to read the briefing and get the train controls set up without failing the departure time of 06:00hrs.

Open the Timetable view.

The actual instruction set we will build is shown below. We will require a *Trigger Instruction*, *Stop at Destination* Instruction, *Pick Up Passengers* Instruction and a *Final Destination* Instruction.

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Here is a reminder of our Timetable Tool Bar and a highlight of the tools you require from left to right.

Save.    Delete.    Deselect All.        Select All.        Move Up.        Move Down.    Merge.    Split.
Stop at Destination.        Pick up Passengers Instruction.            Pick up Freight or Fuel Instruction.        Marshall.
Add to Front.    Add to Back.    Drop Off.        Trigger Instruction.        Final Destination.        Waypoint.
??        ??        Relay Point



Our first task is to give our train a Final Destination. Let's do that now and let's make it London Victoria P2. I do this instruction first to let the AI plot the complete path to the end destination. I also know all other instructions will always be placed above this one automatically, and any errors will display instantly.

The next Instruction to select will be the Stop At Destination. Click that icon now and complete the instruction like this one.
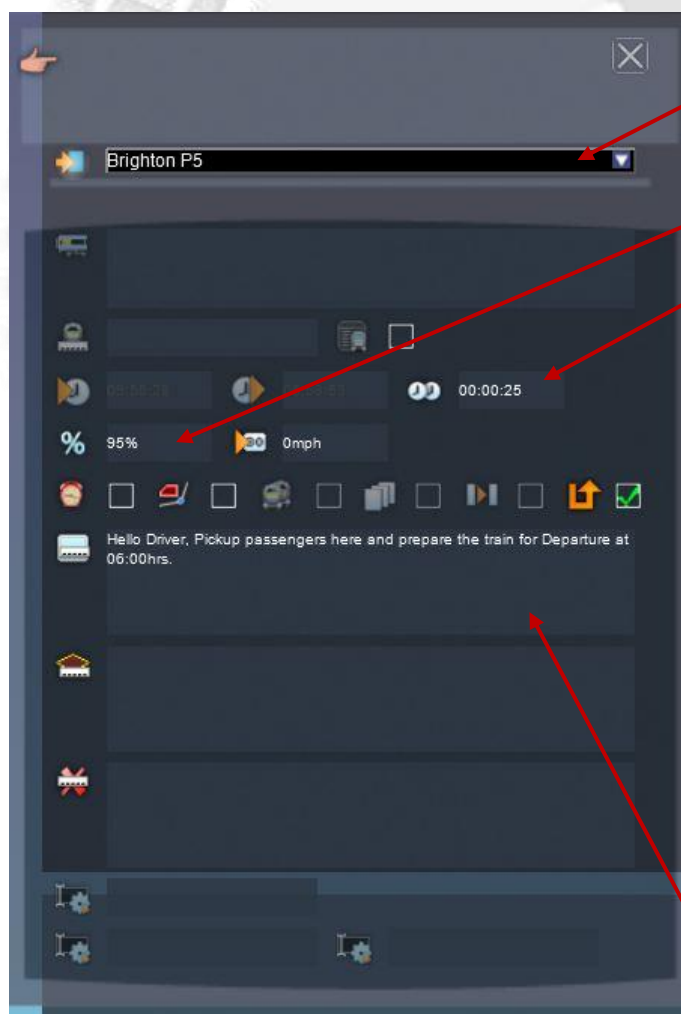


Select Brighton P5 as the place for the instruction to occur. This will force the AI to drive our train onto the platform.

Set the Performance to 95% to make sure the AI is quick about it.

Then set the duration for the stop instruction to 00:0025 This is just a short delay to help the driver actually get into the train after it stops and for the pop up message to display. This also helps to keep the 06:00hrs departure time timer displaying...

Add a note to this instruction.  The reason we need a note is to stop the AI moving too fast and triggering the *Pickup Passengers Instruction*. I want the player to execute that instruction. This will allow the player to see the Timer for *pickup passengers* elapse before the departure time.  *(The red line that moves across the driver display in game).*

If that does not happen the Driver may drive off at 06:59hrs because the signal will be green, not a disaster but still not our plan. I want the driver to pick up passengers and have the timer hold the train until departure time. Sometimes the two instruction will complete before 06:00hrs and it looks tardy...

Just type a note to say Good morning and remind the driver to pick up passengers here, you could mention the Departure time too.

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# The Instruction Box

The instructions box has many uses and depending upon which instruction box you open some may be greyed out or not available,  it contains quite a few tools. Here is a look at  them all. Remember not all instructions are available all the time.  The Instruction boxes available to you from the Timetable tool box are;
*Stop at Destination.  Pick up Passengers. Pick up Freight or Fuel.  Marshall. Add to Front. Add to Back. Drop Off. Trigger Instruction. Final Destination. Waypoint.*
Throughout the three tutorials we will use all the instruction, for now here is a more in-depth look at what the instruction are.

Set Destination.

Departure Time

Speed

Add rail Vehicle

Brighton P5

Rail Vehicles in Task List

Rail Vehicle Group Name

Duration

Arrival Time

05:58:53     06:00:00     00:01:07

Allow reversing

Performance

95%

Timetabled

Handle Off Path

Pick up/Drop off

Display Message

Operational Order

Achievement Text Successful

Drive to Gatwick

Consist Order

Achievement Text Unsuccessful

Pickup passengers first

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The next instruction for our scenario is the Pick Up Passengers Instruction. Click that Icon on the Timetable Tool Bar now.

Set Performance to 95% then Brighton P5 as the location for this instruction to trigger.
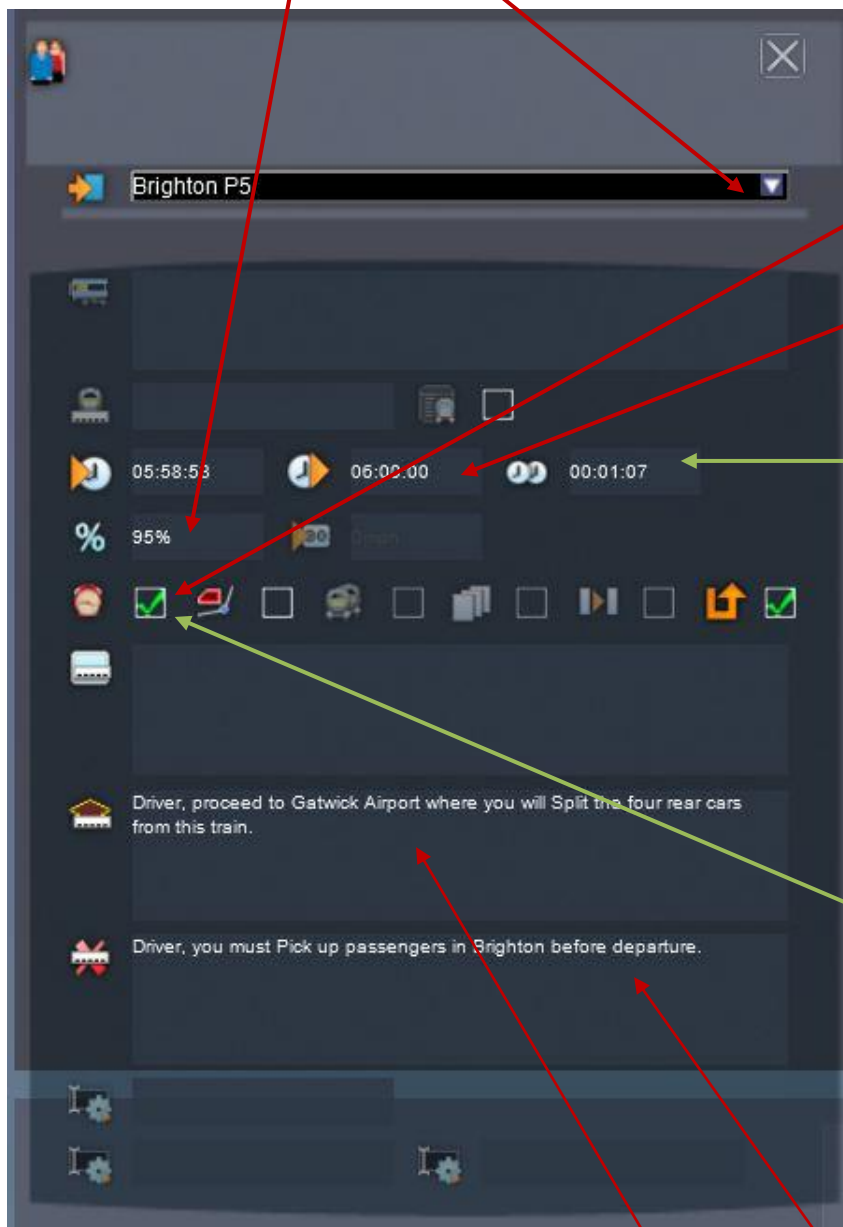


This instruction needs to be timetabled to force the departure to 06:00hrs. To do that we need to do two things.

First check the Timetabled box by left clicking inside it.

Now we need to set the Departure Time to 06:00:00

When we do that the Duration for the instruction changes from 00:00:35, the default, to 00:01:07.

The AI has worked out the time to complete all other instructions and decided that 1min and 07 seconds is the remaining time from the completion of the last instruction to the completion of this instruction.

Note however that the Arrival and Departure times are sometimes in Red. This usually means the AI is telling you that *'it can't be done'* and your timings are wrong.

To correct that, remove the check mark from the Timetabled box and reapply it. The AI will have another guess and you can set the 06:00hrs departure time again.

In some cases the instruction and scenario will be perfectly fine if the times are red. Only testing will tell.

We should now add two notes to this instruction. Usually we just add *'All Aboard'* or some such text to the *Display Message* box to give a visual display to our driver that an instruction has completed.

This time we will use the boxes below that one, the *Successful* and *Unsuccessful* message boxes. If the driver picks up passengers at Brighton P5, when the departure time arrives, the message in the *Achievement Text Successful* box will display.

If the driver fails to perform the Pickup Passenger action, the message in the *Achievement Text Unsuccessful* box will display when the departure time arrives. This pairing of successful and unsuccessful messages can be used at our stops at Gatwick too, if the driver is late the Unsuccessful message can be displayed. Perhaps telling the driver to get a move on.
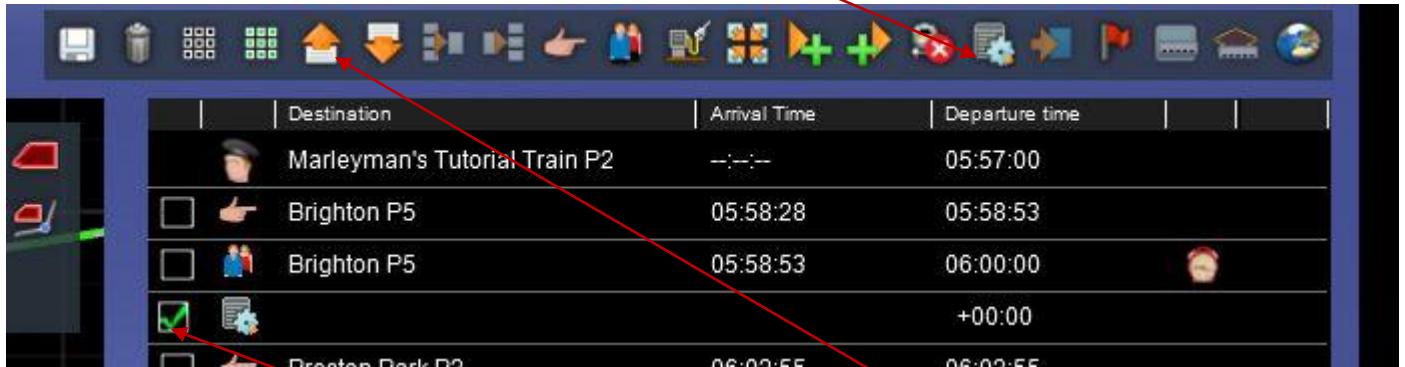
Add the following messages to the boxes;
*Achievement Text Successful* Driver, proceed to Gatwick Airport where you will Split the four rear cars from this train.

*Achievement Text Unsuccessful*  Driver, you must Pick up passengers in Brighton before departure.
The final piece of information for now is a *Trigger instruction* Instruction that will pop up at the beginning of the scenario telling the Driver to wait where s/he is whilst the train is  brought down to the platform.



I have left this instruction out deliberatley to let you see how to move instructions up or down the list.
Once the instruction appears in the list, tick the check box next to it. Then use the Move Up command to shuffle the instruction up the list to the top. Remove the check mark and then open the instruction for editing.  *You can only move one instruction at a time.* Add the following note to the instruction.

Good morning driver, your train is being brought down to the platform from the Carriage Wash and will stop on this platform shortly. When the train comes to a halt, click on the train to take control. You can then view your driver briefing for this scenario. Departure is set for 06:00am.
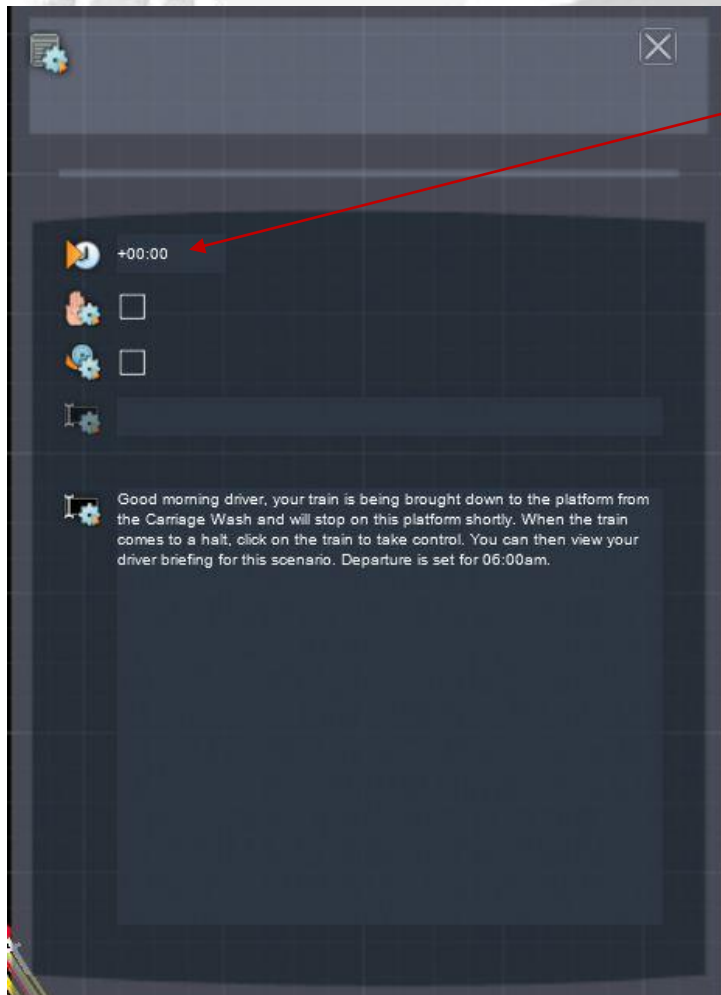


Do not adjust the delay time for this message as we want this to pop up when the scenario starts.

Setting a delay for instructions can be very useful for getting a message to a player. You could for instance send a message to the player 05.00 min after departing a station just by placing the *trigger instruction* instruction after a station stop. You would then set the delay to 5 min and type a message, perhaps reporting a signal failure ahead, and like magic, 5 minutes after departing the station a message will pop up on the players screen.

Just be aware that if you want another message seven minutes after leaving the station and there is a message timed for 5 mins, then the subsequent message must have the delay set to 2 mins. This is because the delay timer on all *trigger instruction* instructions starts from the end of the previous instruction.

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# Running the Scenario for the First Time

The time has almost come for you to run the scenario for the first time. It should be noted that to get this far I have run this scenario at least six times already just to get the timings correct for the train arrival on Brighton P5 and to get the pop up messages and everything else we have done so far, correct.

What we really need to know before we go any further, before we add AI trains to the scenario, is where the drivers' train is likely to be at any given time on the route. You could just run the scenario and check the 2D map every so often. I prefer a more accurate way to get timings.

Usually I would say open the timetable view and look at the train path, check the stations it will pass through then select the Waypoint instruction from the Timetable toolbar. This instruction will be very useful.



A waypoint will be added to the bottom of the list.
Click the red flag to open this instruction. Then in the left hand window scroll the train path to find the first station our train will pass through. Preston Park P2. Set that as the Destination. Don't be doing this for this scenario.
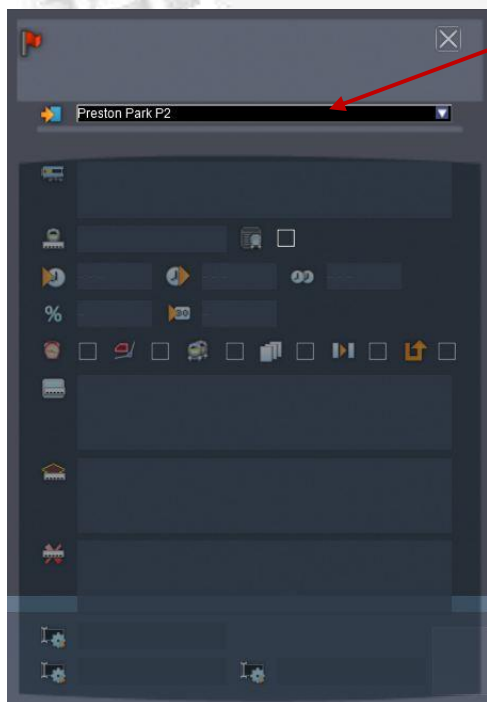


What this will do in game is make the Station *Preston Park* appear on the Train Path on the Drivers HUD as the driver approaches that station. Without this waypoint this station will not appear in the train path HUD and we will need to press 9 to view the 2D map to find out which station we just ran through.

The waypoint is useful to us because we can then write down the time we pass that station without messing in the 2D map as we drive and if we add several more waypoints along the journey we can get very accurate timings for where the driver is going to be. This will allow us to time the AI services better and reduce the risk of AI trains being stationary. It also means less test runs as we add AI trains because we will know what time we pass specific points on the route.

You can use any marker on the route that the train passes over as a waypoint. One such example is the Destination Marker Brighton Up Fst Quarry Line between Gatwick and Purley. Useful to add because the distance between the two stations is quite long. Battersea Up and Stewards Lane are also useful timing markers for adding AI later.

This method would work and is by far the most economical, scenario builder friendly way to do this. However, because we have no driver assigned to our train TS2013 will not display the information on the HUD. No need to display info if no one will see it, right? The game thinks this is an AI train, if we had ticked the Player Consist check box earlier, this would work.

We will have to use the Stop at Destination Instruction instead. We get the station displayed in the Drivers' Train Path component of the HUD and we will get an instruction displayed in the left hand side of the HUD that names the stopping point, in this case a station. we can use that to note our timings down.

Add the following *Stop at Destination Instruction* instructions to your train and a Pick up passenger instruction for Gatwick and London Victoria; (see next page for list) Set the Speed command within that instruction to 1mph
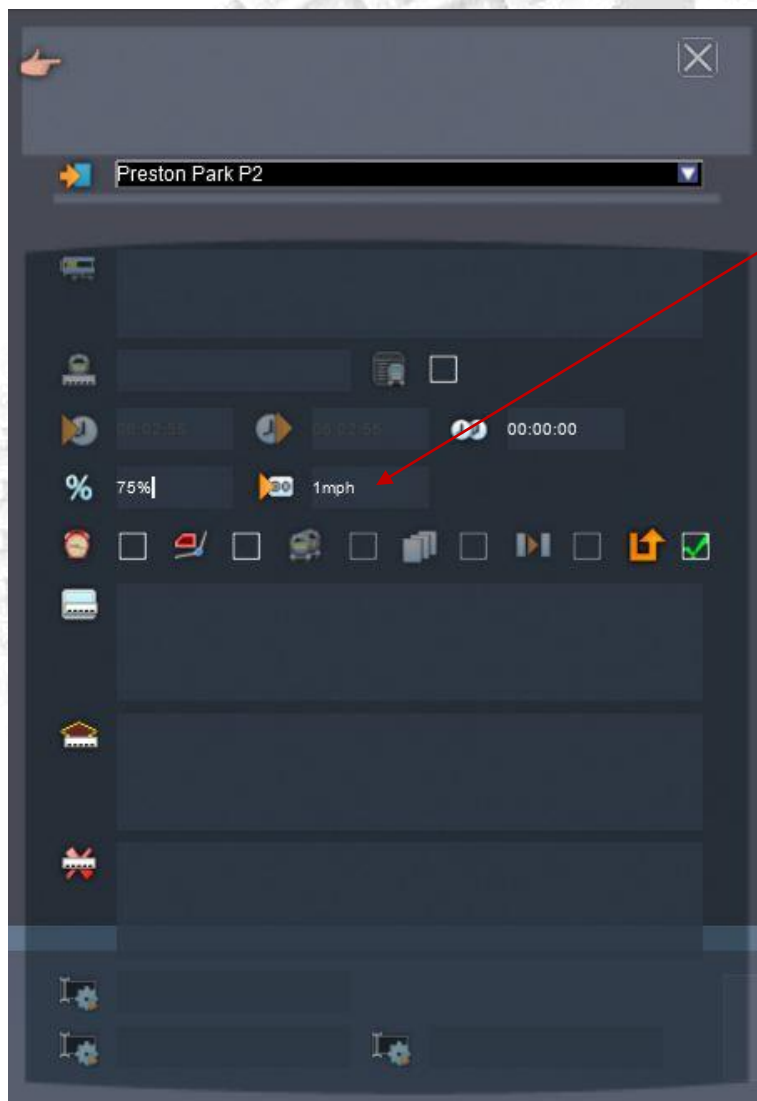


Setting the Speed to 1mph here changes this instruction to a *'rolling instruction'* or *'waypoint'*. If you want the instruction to be marked as completed then the speed must really be set to 1mph. (Technically for us it matters not, it is just a timing marker and we will delete it soon).

What the speed setting actually means is; if a driver passes over this point, *Preston Park P2* at a speed of 1mph or greater, they will receive an *Achievement Successful* report for this Instruction.

If you set the speed to 50mph for example and the player passed over this point at 49mph or less, they would receive an *Achievement Unsuccessful* report for this Instruction. They would need to pass the point at 50mph or greater.

We need to add a lot of these and they all need to have the speed set to 1mph. The performance field can be left at 75%, it is not important to us at this time.

Go ahead and set the instruction to match the next screenshot. Remember to add the passenger stop instructions too.

| | | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|---|
| | | Marleyman's Tutorial Train P2 | --:--:-- | 05:57:00 | | |
| ☐ | | | | +00:00 | | |
| ☐ | | Brighton P5 | 05:58:28 | 05:58:53 | | |
| ☐ | | Brighton P5 | 05:58:53 | 06:00:00 | | |
| ☐ | | Preston Park P2 | 06:02:55 | 06:02:55 | | |
| ☐ | | Hassocks P1 | 06:09:02 | 06:09:02 | | |
| ☐ | | Haywards Heath P3 | 06:14:51 | 06:14:51 | | |
| ☐ | | Balcombe P1 | 06:19:02 | 06:19:02 | | |
| ☐ | | Three Bridges P4 | 06:23:55 | 06:23:55 | | |
| ☐ | | Gatwick Airport P4 | 06:26:59 | 06:27:34 | | |
| ☐ | | Brighton Up Fst Quarry Line | 06:34:01 | 06:34:01 | | |
| ☐ | | Purley P1 | 06:40:51 | 06:40:51 | | |
| ☐ | | South Croydon P1 | 06:43:29 | 06:43:29 | | |
| ☐ | | Selhurst P4 | 06:47:29 | 06:47:29 | | |
| ☐ | | Norbury P4 | 06:50:15 | 06:50:15 | | |
| ☐ | | Balham P4 | 06:54:19 | 06:54:19 | | |
| ☐ | | Clapham Junction P12 | 06:57:26 | 06:58:01 | | |
| ☐ | | Battersea Up Clapham | 06:59:52 | 06:59:52 | | |
| ☐ | | Stewarts Lane Up A | 07:03:33 | 07:03:33 | | |
| ☐ | | Chatham Up Slw Victoria | 07:05:23 | 07:05:23 | | |
| ☐ | | London Victoria P2 | 07:07:52 | 07:08:27 | | |
| ☐ | | London Victoria P2 | 07:08:27 | 07:08:27 | | |

**You should set your train instructions to match this screenshot. All stop at instructions need to have 1mph speed limits set.**

Press F2 and save the scenario.

 It is now time to make tea.

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# The test drive

I like to test drive the scenario and make up a grid to write the timings down as I pass each station or the majority of stations, here is one I prepared in Excel for this scenario test. Feel free to print it out and write down the times as you pass each marker.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Marleyman's Tutorial Train P2 | | | | | | | |
| | | | | | | | |
| Brighton P5 | | | | | | | |
| Brighton P5 | | | | | | | |
| Preston Park P2 | | | | | | | |
| Hassocks P1 | | | | | | | |
| Haywards Heath P3 | | | | | | | |
| Balcombe P1 | | | | | | | |
| Three Bridges P4 | | | | | | | |
| Gatwick Airport P4 | | | | | | | |
| Brighton Up Fst Quarry Line | | | | | | | |
| Purley P1 | | | | | | | |
| South Croydon P1 | | | | | | | |
| Selhurst P4 | | | | | | | |
| Norbury P4 | | | | | | | |
| Balham P4 | | | | | | | |
| Clapham Junction P12 | | | | | | | |
| Battersea Up Clapham | | | | | | | |
| Stewarts Lane Up A | | | | | | | |
| Chatham Up Slw Victoria | | | | | | | |
| London Victoria P2 | | | | | | | |
| London Victoria P2 | | | | | | | |

For now, make sure the scenario is saved and press the play button at the bottom right. **EXIT the scenario and start it from the game menu.** This is because the camera will be wherever you just left it and we want to test the Scenario Marker position. So go to the main menu and navigate through to this scenario in the normal way.
When driving this scenario keep note of the times as they will become very important as we add AI trains. We will delete all those waypoints later.

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You can see what marker is coming up next here.



# Double Check the Path

OK, the first run produced interesting results the least of which being the times, the worst being the train path is wrong. The AI has routed us through Stewarts lane, that's the uphill 15mph stretch you just drove over during that test. I can't see the Express Passenger train being sent round there so I have sacked the dispatcher and looked up and down the markers on the route and modified the path for a 'fast express train'. The new route is as follows.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | | Marleyman's Tutorial Train P2 | --:--:-- | 05:57:00 | | | |
| ☐ | | | | +00:00 | | | |
| ☐ | | Brighton P5 | 05:58:28 | 05:58:53 | | | |
| ☐ | | Brighton P5 | 05:58:53 | 06:00:00 | 🔔 | | |
| ☐ | | Preston Park P2 | 06:02:55 | 06:02:55 | | | |
| ☐ | | Hassocks P1 | 06:09:02 | 06:09:02 | | | |
| ☐ | | Haywards Heath P3 | 06:14:51 | 06:14:51 | | | |
| ☐ | | Balcombe P1 | 06:19:02 | 06:19:02 | | | |
| ☐ | | Three Bridges P4 | 06:23:55 | 06:23:55 | | | |
| ☐ | | Gatwick Airport P4 | 06:26:59 | 06:27:34 | | | |
| ☐ | | Brighton Up Fst Quarry Line | 06:34:01 | 06:34:01 | | | |
| ☐ | | Purley P1 | 06:40:51 | 06:40:51 | | | |
| ☐ | | South Croydon P1 | 06:43:29 | 06:43:29 | | | |
| ☐ | | East Croydon P2 | 06:45:22 | 06:45:22 | | | |
| ☐ | | Brighton Up Fst Croydon | 06:46:13 | 06:46:13 | | | |
| ☐ | | Selhurst P4 | 06:47:45 | 06:47:45 | | | |
| ☐ | | Thornton Heath P4 | 06:49:07 | 06:49:07 | | | |
| ☐ | | Streatham Common P4 | 06:52:01 | 06:52:01 | | | |
| ☐ | | Balham P4 | 06:55:02 | 06:55:02 | | | |
| ☐ | | Wandsworth Common P4 | 06:56:16 | 06:56:36 | | | |
| ☐ | | Clapham Junction P12 | 06:58:57 | 06:59:32 | | | |
| ☐ | | Brighton Up Fst Clapham | 07:00:13 | 07:00:33 | | | |
| ☐ | | Battersea Park P0 | 07:03:01 | 07:03:21 | | | |
| ☐ | | Brighton Up Fst Battersea | 07:04:04 | 07:04:24 | | | |
| ☐ | | Brighton Up Fst Victoria | 07:05:45 | 07:05:45 | | | |
| ☐ | | London Victoria P12 | 07:07:43 | 07:08:18 | | | |

I also noticed that the scenario marker needed to be turned to look up the track better and moved closer to the track a bit as well as raised a little.

You will need to modify the train instructions now.

The major changes to the train path being the *Up Fst* routing directions and the final destination platform, now P12. This new path took a further 30-40 mins to get correct.

Clearly the timings we gathered are ok up to Clapham but the run must be done again on the new path.

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Update your train instructions to match the screenshot on the previous page, starting after South Croydon P1 by adding East Croydon P2 to the instruction list and moving it up the list as shown earlier.
*Note that I was going to leave this error out of the tutorial but thought better of doing that as errors will occur even with seasoned scenario builders. If you have seen enough already then scenario building is just not for you. If you can change the instructions and accept that you will be doing this a lot, then welcome to TS2013 scenario building.*

When you have modified the instruction you will need to **run the scenario again** and note the timings again.

The first run gave me the timings under *run1*. Just note the time that you pass any marker, it will update to the next marker as you pass it. I will add the second run, the new path, here too. Time to run the scenario again, you will do this quite a bit, running your own scenarios. After a test run on the new path *run2* shows the results below.

| | Destination | run1 | run2 |
|---|---|---|---|
| | Marleyman's Tutorial Train P2 | | |
| ☐ | | | |
| ☐ | Brighton P5 | run1 | run2 |
| ☐ | Brighton P5 | 06:00:00 | 06:00:00 |
| ☐ | Preston Park P2 | 06:02:00 | 06:02:00 |
| ☐ | Hassocks P1 | 06:06:00 | 06:06:00 |
| ☐ | Haywards Heath P3 | 06:10:00 | 06:10:00 |
| ☐ | Balcombe P1 | 06:13:00 | 06:13:00 |
| ☐ | Three Bridges P4 | 06:16:00 | 06:16:00 |
| ☐ | Gatwick Airport P4 | 06:19:00 | 06:19:00 |
| ☐ | Brighton Up Fst Quarry Line | 06:25:00 | 06:26:00 |
| ☐ | Purley P1 | 06:30:00 | 06:30:00 |
| ☐ | South Croydon P1 | 06:32:00 | 06:31:00 |
| ☐ | East Croydon P2 | 06:34:00 | 06:33:00 |
| ☐ | Brighton Up Fst Croydon | 06:36:00 | 06:34:00 |
| ☐ | Selhurst P4 | 06:39:00 | 06:35:00 |
| ☐ | Thornton Heath P4 | 06:42:00 | 06:35:00 |
| ☐ | Streatham Common P4 | 06:45:00 | 06:37:00 |
| ☐ | Balham P4 | 06:48:00 | 06:39:00 |
| ☐ | Wandsworth Common P4 | 06:51:00 | 06:40:00 |
| ☐ | Clapham Junction P12 | 06:53:00 | 06:43:00 |
| ☐ | Brighton Up Fst Clapham | | 06:44:00 |
| ☐ | Battersea Park P0 | | 06:46:00 |
| ☐ | Brighton Up Fst Battersea | | 06:46:00 |
| ☐ | Brighton Up Fst Victoria | | 06:47:00 |
| ☐ | London Victoria P12 | | 06:49:00 |

This is the time that I passed the markers, you may have different times depending upon your driving skills. That is quite important too, you really need to be an expert driver to get these timings set.

Granted the players of the scenario may not be experts and they will not always get to the markers before the times listed. That too is important. Getting there later will be ok, because we will have our AI trains in motion.

In some cases you can dictate when a player departs a given point by using the timetable or a *'blocker AI train'*. Useful to keep a tight control on your player and scenario.

Timings up to East Croydon P2 are pretty much the same for both runs and after that, well, it is a new path and different timings. For now *run2* will be our template. Just remember to ignore the timings shown inside the editor which is predicting times based on the train performing at 75% of the line speed.

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# Add the first AI train

Adding the AI trains will now be a lot easier because we know what time the player will be at each platform or marker along the route. The simple thing to do is to fly to each marker and drop an AI train onto the track and set a start time a few mins before the player train gets there, based upon the timings we gathered.

Really? I hear you say, well in essence yes, it can be that easy. If you are not producing a scenario that is based upon Working Time Tables (WTT) then you can just about do that. Populate the scenario from your imagination and make sure that oncoming trains are set to depart before the player gets to them.

Some routes only have two tracks and that is about all you can do, have oncoming trains pass the player. Our route has more scope and there is nothing more fun and challenging than having passing traffic going in the same direction as the player. I smile every time I see this and admire scenario builders that manage to do that. This also produces a psychological effect of *'boy racer'* in the player as they chase the train ahead of them and may cause them to be penalised for speeding, this is a good effect as it adds a subtle challenge, that many do not realise, for the player to keep to the speed limit.

Before we get too far ahead though, lets create a 'consist' or two that we can store within the game that gives us quick access to a full train for placing rather than building a train car by car every time. To do this you will need a clear, straight piece of track to build the consist. *Brighton Montpelier No6* just outside of the main station looks good. Set the camera view parallel to that track and high above it too. Then open the Browser List and find the Class 450 entries.

We will set up a Class 450 train for quick selection and placing. *The entire Class 450 series consists of four car multiple units, semi permanently formed as DMSO(A)+TCO+TSO+DMSO(B).* In the browser list there is:
Class 450 DMOS BML
Class 450 TCO BML
Class 450 TSO BML

Perfect, just what we need. Select and then place each of the following to create a train;
Class 450 DMOS BML- Class 450 TCO BML- Class 450 TSO BML- Class 450 DMOS BML

You can also create the Class 375 DMOC SE-MOSL SE-TOSL SE-DMOC nd SE after crating the Class 450.

Now, from the Tool Box select the Consists tool.



*Intentional blank*

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On screen and above our placed train, there will be small grey boxes.
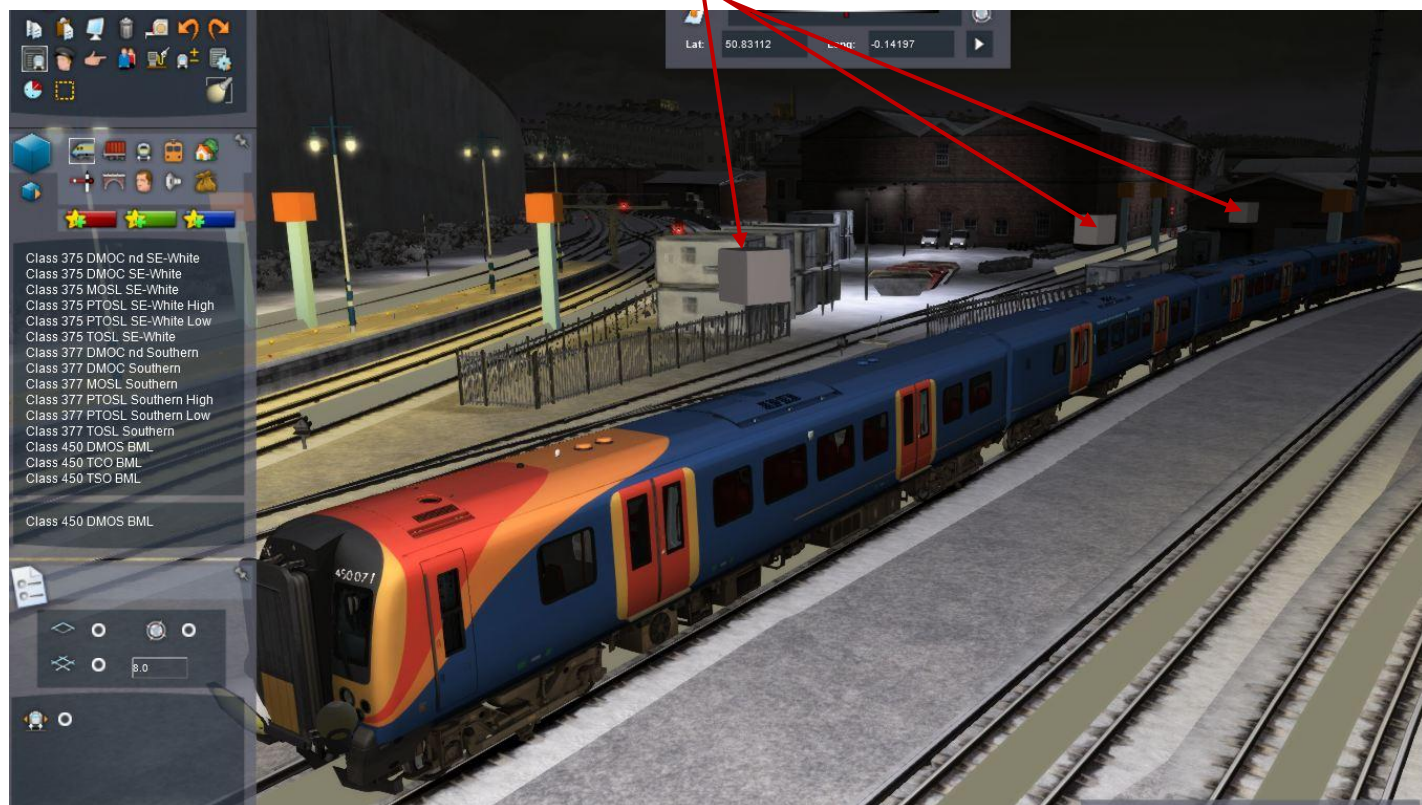


After clicking on one of the boxes a Consist Properties Box will open on the right hand side of the screen. Remember, you may need to hover your mouse on that screen edge to have the box pop out. Do that, and pin the box open.

*Intentional blank*

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Here is the properties box and in that box you need to name this consist. Think of this as 'saving' this particular 4 car setup to the scenario for future use or quick recall. Name the consist #Class 450 4 cars. The # tag at the beginning forces your saved consists to the top of the list.



After entering the name just click anywhere inside the editor window, the consist is now saved.
**Important**, right click inside the editor window to 'deselect' the consist tool, you know it is deselected when the grey boxes disappear from above the train.

Now select the Browser Tool again and this time select the Consists tool from here.
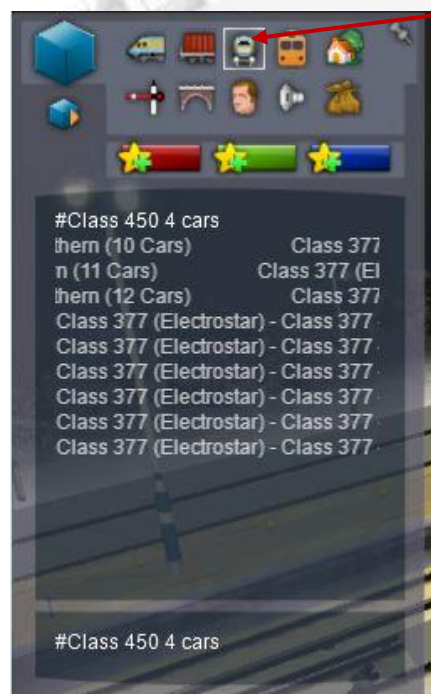


Note that your #Class 450 consist is now in that list alongside a few 377's that RSC have already made for this route.

In future, you can create any consist you like for any route, using this method. Think about the long passenger trains like the Pendolino or the Class 43 HST. Just make one and save it. You can do this with any rolling stock, freight trains, passenger trains, Steam trains, any stock you want to place regularly can be saved in this manner and found in the Consists tool within the Browser.

The only caveat is that the consist is tied to the route not the editor.

Create and store a Class 375 4 car consist for placing in this scenario also.

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Ok, now we need to either delete or move that train as we don't want it sat there. That was just a convenient place to build it. So, to pickup or select a whole train, you will need the **'Consist select'** tool. That can be found inside the Options Box at the bottom of the editor.



Here is the box and this is the Consist Select tool we require. Click inside the circle to place a check mark inside it.

What that has done is 'glued' every coupler on every train together. So when we select one car in a train we are actually selecting the whole train. If you left click on the Class 450 that you placed and then select 'delete' on your keyboard the whole train will be deleted.

So be careful with this tool and don't go deleting trains that have instructions bound to them unless you are sure you want to delete the whole train form a scenario.

The tool also allows you to pick up the whole train and move it, let's do that. Just Left Click and Hold with your mouse and the train will stick to your pointer. Place the train at the back of the Platform Brighton P7.

After placing the Class 450 on that platform give the train a driver and set a final destination of Lewes South the portal, using the timetable view. Give the train a name, Service1 Brighton-Lewes South so we can identify it in case of errors later. Set the departure time to 05:58. Again, if you were using real time tables you may want to refer to the train by a head code and departure time. I will refer to this one by its start position and exit portal. Press F2 to save.

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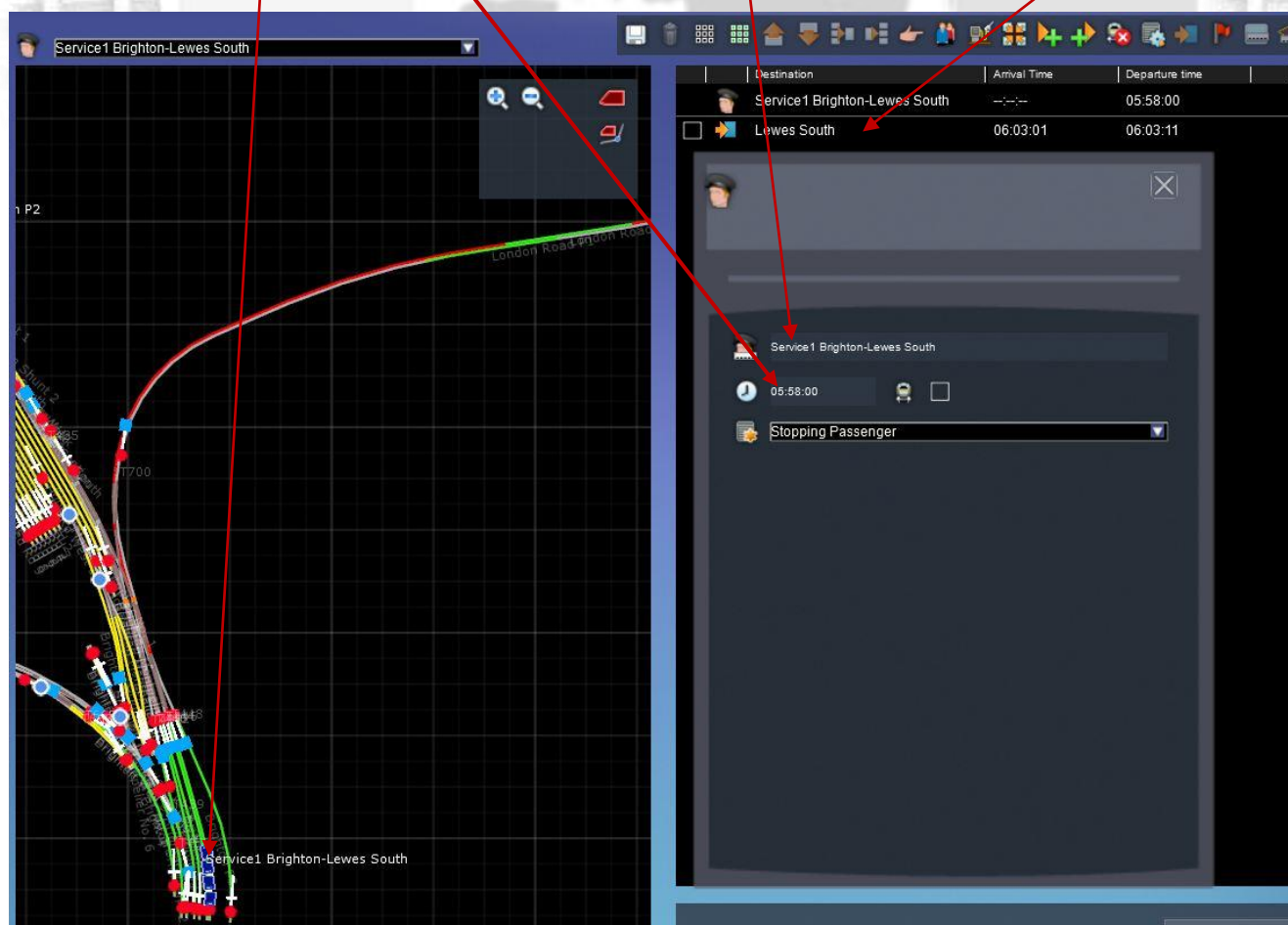
AI Train two can now be placed and this train will give us *'two effects for the price of one'* which is always great in scenario building. Select the Consists Tool from the Browser and choose the Class 377 (Electrostar)-Class 377-Southern (6 cars). Place this consist as far back as you can on Brighton P3. Then set the instructions for this train as per this screenshot.
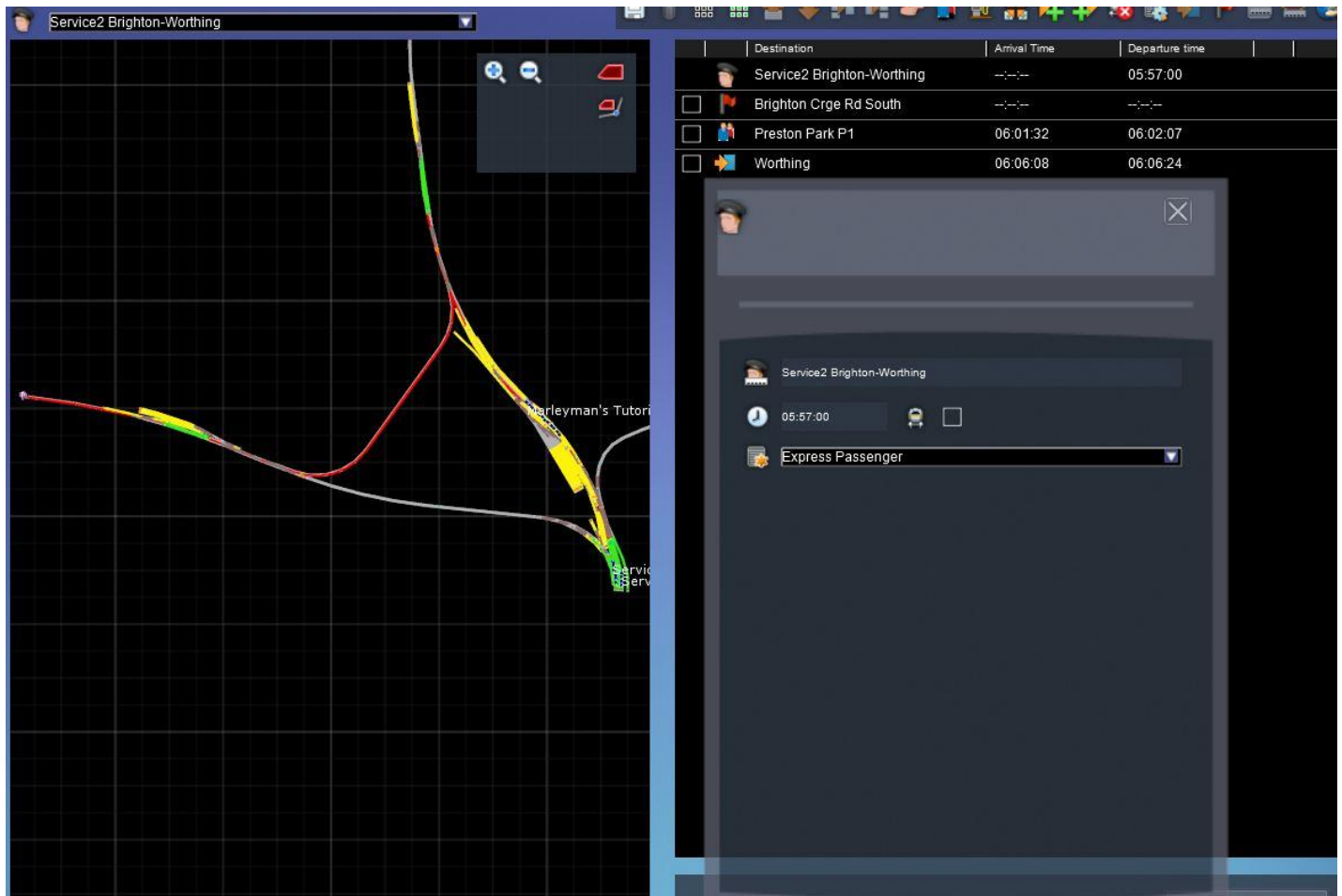


Set the Final destination first as Worthing. That is a portal west of Brighton.
Then add a Waypoint for Brighton Crge Rd South. (Select the red flag icon.)
Then set a Pick up Passengers instruction for Preston Park P1.

The reason for the waypoint is to make sure this train gets past the Player train we placed first. Leave the start time as 05:57:00. In fact, you don't need to do anything more for this train. The neat thing about this one though is that the player sees this train depart as s/he waits on the platform for their train to arrive and then, as the player approaches Preston Park Station they will be blocked by a Red Signal for this train to run out of Preston Park to the Portal at Worthing. Your player has no idea that it is the same train that left Brighton P3, they just see the train approach as they sit behind the red signal.

Two trains placed and three trains observed by the player, not bad for 6am in the morning. You could add more traffic to make it appear busy, for this tutorial we will press on. However, before we do, I forgot one thing, setting the train destination boards on our train. So, fly up to the players train now.

Each car on the 377 has a Passenger Information Display and we need to set these if we want to do things properly here. Perhaps no one will ever notice we have done this, but on the other hand, if we do not do this and someone does notice, it makes us look lazy.

Double Click on the very end car of the train, the one nearest to the station. You should also keep in mind that we intend to split this train at Gatwick. So, we will be setting two different destinations on our train. The four rear most cars will have Gatwick Airport displayed and the front eight will have London Victoria displayed.

After you double click on the car, a properties box will pop out on the right hand side, mouse over it to make it appear. You will notice our train says *Not In Service.*



This status is determined by the properties box, specifically in this case by the first character of the *Rail Vehicle Number*. For the last four cars only, change the letter 'y' for lower case letter **h.** The destination will update to Gatwick Airport. Do not change any other character in the string.



For the front eight cars change the letter 'y' to the lower case letter **o.** This will change the display to read London Victoria.

Feel free to do this on AI trains as well, Brighton is lower case letter a.  and may be the one used most for south bound AI traffic. Before we move up the line it would be a good idea to 'dress the set ' as this is something else that can be ignored and make the difference between a good scenario and a great one.

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💡 Look around the yard and shed areas and place some rolling stock using your consists tool then press  F2 Save the scenario. If placing static trains in a shed, think about other users and perhaps just place one car in the shed. If the player will not see in the shed no need for a whole train to be in there taking up computer memory and processer cycles. Also, in some cases assign a driver to the train but do not give it any instructions. This just adds some engine noise to the scenario as the player passes by, subtle but effective. I usually denote these with an X in the train name.



This is the 2D screenshot if the dressing that I have done.

Moving on up the line, first checking our timings, the player train will reach Balcombe at about 06:13am. So, since we are doing this scenario for entertainment and not following a WTT I suggest placing an AI Train there. Some 10 minutes after the player last saw a moving train. So, it is about time they seen another one.

To get there quickly press 9 on the keyboard to bring up the 2D map, then pin open the Navigation Box (top centre).

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Zoom the map out using your mouse wheel and drag the map position around using the right mouse button. When you find Balcombe zoom into the platforms. Then Ctrl and Left Click on the green platform marker, or very near to it. The map will auto centre on the position you Ctrl clicked on.

Next, left click on the Go icon inside the Navigation Tool.
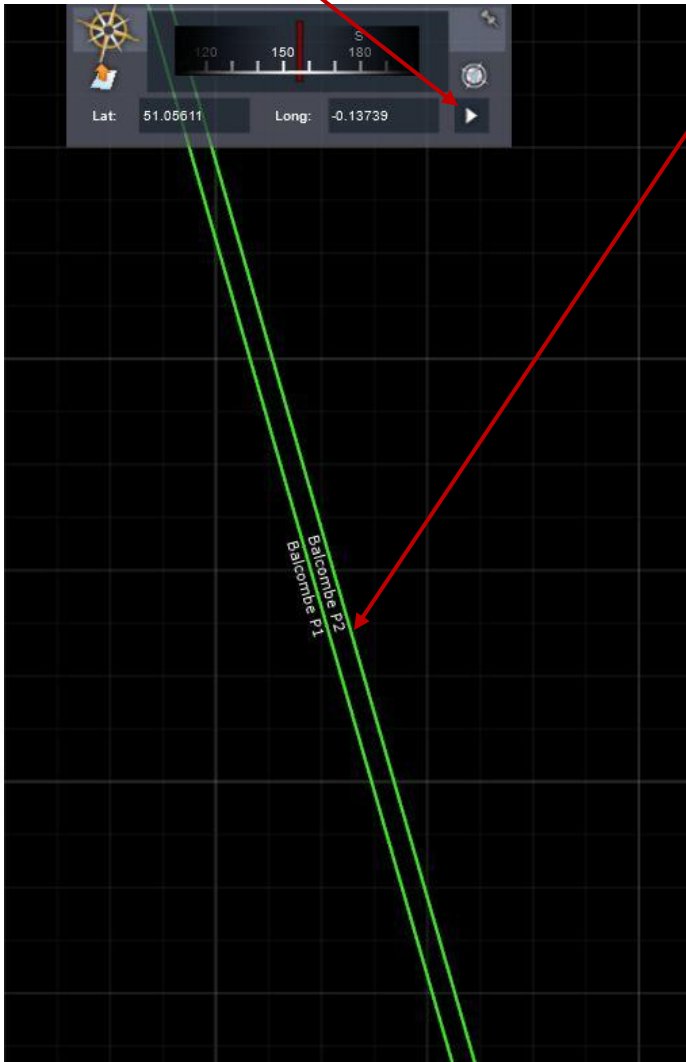
The Lat and Long co-ordinates will update. Next, right click inside the 2D map and like magic you will be at Balcombe. This method will work for moving the view to any part of the 3D world in any route.

When you get to the 3D world right click and hold and move your mouse to orientate your view to North. Now when you come to placing a train heading for Brighton you will know that it wants to be on the right hand track as you are looking 'up' the track Northwards to London. Since this is a UK route the trains tend to drive on the left track.

That means our player train will run through Balcombe P1 and we just need to get our bearings before we place a train.

Select the Browser Tool and then the Consists tool from there. Note that our Class 450 is listed, select that and it will stick to your mouse. Place this complete train on Balcombe P2. No need for great accuracy here, anywhere near P2 will do.

Add a driver to this train and double click on the driver icon that appears on the train. Pin open that properties box as it opens then name this train Service3 Balcombe-Brighton. Again, this name is for our reference and if you are using WTT's then you need to name the trains accordingly.

For the tutorial we just want to know where a train started if we have to identify it in the game world after it has moved from its starting point. As mentioned earlier, the player will get to this point about 06:13, so set the start time for this train to 06:11.

Set the train priority to Stopping Passenger.

we still need a final destination for this train and for that we need to open the Timetable view.

Find your new AI service in the left hand window and select it. All AI services should be directed to a portal in as many cases as possible and should exit the nearest portal after passing the player. If the Ai service has completed its function, get it out of the 3D world or the computer has to use resources to track it.

Now, you cannot always gauge where the passing will occur and portals are not always placed generously, especially on this route. Most routes have a portals on the main line, London to Brighton does not, and to compound the issue the portals that are available are on branches that do not have bi-directional access.

This route is a bit 'rubbish' for exit portals so we will have to send this train all the way to the Worthing Portal. Select Worthing as the final destination. Note that Lewes North is closer, ( a shorter journey) but some precision would be required to ensure the player has seen this train before it hits the branch line. Do keep Lewes North Portal in mind though.

Running south from Balcombe are the stations;
Haywards Heath
Wivelsfield
Burgess Hill
Hassocks
Preston Park
Brighton

Chances are we will see this train around Haywards Heath. It is worth giving this train some stops instead of just running it 'non-stop' to the portal. In fact it is always worth it to give your AI trains some instructions and not just have them run non-stop to portals. That way a mix of trains will be seen moving at high speed, accelerating, decelerating, departing or arriving at platforms or loading passengers. Sometimes you get 'happy accidents' when you program the AI trains.

Add Pickup Passenger Instructions for Haywards Heath P2 and Wivelsfield P2 to this train and set the performance to 95%. F2 Save.


## Test Run Two

Our scenario is now approaching the Three Bridges Station and that has four platforms and some yard areas, ideal for a bit more interest. Before we do anything there though, let's do a test run and check out timings, they will have changed because of the Red Light Stop we added just south of Preston Park. So, load up the scenario and run it up to Three Bridges and note the timings on the markers.
Here is what I recorded.

Preston Park       06:04
Hassocks           06:08
*Wivelsfield*       *06:10*
Haywards Heath 06:12
Balcombe           06:15
Three Bridges    06:18

I have noted *Wivelsfield 06:10* because that is just north of the branch that leads to Lewes North Portal. That is important to us because **Service3 Balcombe-Brighton** could exit there. In fact, that service passed me before it reached *Wivelsfield* which means we can change that final destination to Lewes North Portal. The start time for that service can be left alone.

Arrival, or pass through at Three Bridges was 06:18am and on the run into that station there are four tracks just after you exit the tunnel north of Balcombe. So, do you remember *Service2 Brighton-Worthing* we cheated on that one and

sent it out of a portal west of Brighton. Well now we can cheat a little more and pretend we are passing that Slow Service as it approaches Three Bridges. There is every possibility that this would happen if that service was a regular stopping service on the line ahead of us, so lets resurrect that one just north of the tunnel exit I mentioned.

Use the 2D map (9) to find the Siding, a yellow location, named **Substation Siding** that is just north of Balcombe. Use the method mentioned earlier to fast travel there, (Ctrl Left Click, Go, Right Click) You may have a view underground, just move the camera above ground. You should be near a bridge and a small power substation. Orientate the view North then fly up the line to Three Bridges Station and just observe the track on the way. Just after the bridge, it splits to four tracks, this is where our Slow Service could have moved over to the left, double track. This location will allow us to place a train here and run it into Three Bridges and have our players fast train pass it on the way up.

We now know the player will pass through Three Bridges at about 06:18, so place a train from the Consists as we did earlier, a Class 377 (Electrostar)-Class 377-Southern (6 cars). To make it accurate for all reading, place the train in the substation siding at the rear of this siding next to the sub-station. The start position will not be seen by the player so although it is an odd start position it's not a worry as no one sees this.

Add a driver and open the driver properties or open the timetable view, either will get the job done. Name the train Service4 Balcombe to Horsham since it is starting near Balcombe and will exit the Horsham Portal. Give the train the following instructions:

| | | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|---|
| | 👮 | Service4 Balcombe to Horsham | --:--:-- | 06:14:30 | | |
| ☐ | 🧍 | Three Bridges P2 | 06:18:32 | 06:19:07 | | |
| ☐ | ➡ | Horsham | 06:22:44 | 06:22:54 | | |

Service4 Balcombe to Horsham
06:14:30
Stopping Passenger

Set the train performance to 80% just to make sure it is slower than our train and set the start time to 06:14:30 and Service Class to Stopping Passenger.

On my run I exited the tunnel at this siding at 06:16 which is well after the start time of this new AI service.

The AI Service will arrive at Three Bridges P2 at about 06:18:32 so the player should pass the train as it approaches the station.

We will keep an eye on that during the next test run. Already though, you can see why test runs, route knowledge and an active imagination are all important. Fly on up to Three Bridges Station and dress the yards around there. My dressing will be boring because I am not using any stock that is not with the route, not even the Kuju folder... You should be using more stock for better interest.

At the moment Three Bridges P2 and Three Bridges P4 are being used by the scenario and this is a large station so it seems only right that perhaps it should look busy too. We can certainly use Three Bridges P5 and have a fast service either passing through as we do or, a stopping service approaching this platform as we pass through. I think we could also use Three Bridges P1 and have a train match our train all the way to Redhill via Gatwick too.

So, let's add Service 5 and Service 6 with that as a plan. Timings and Train Performance settings will need to be good here for the effect and we will need a test run to check these new services.

Service 5 sits on Three Bridged P1 just opposite the station sign and is facing North. It is the Class 455 we created earlier for quick placement from the Consists list. Place your Class 455 in the same spot.



Give the train a driver and open the timetable view and find this new service. Name it Service5 Horsham to Guildford. Instructions for this train are as follows.

Start Time 06:17:30
Pickup Passengers Instruction Gatwick Airport P2 with performance for that instruction set to 98%
Pickup Passengers Instruction Redhill P1 with performance for that instruction set to 98%
Final Destination Guildford Portal

I expect the player train to reach Gatwick Airport at 06:21 based on the +2mins difference that the last test run produced for markers after Preston Park. So I am working on that prediction but testing may mean a tweak or two. For now this is not a bad guess.
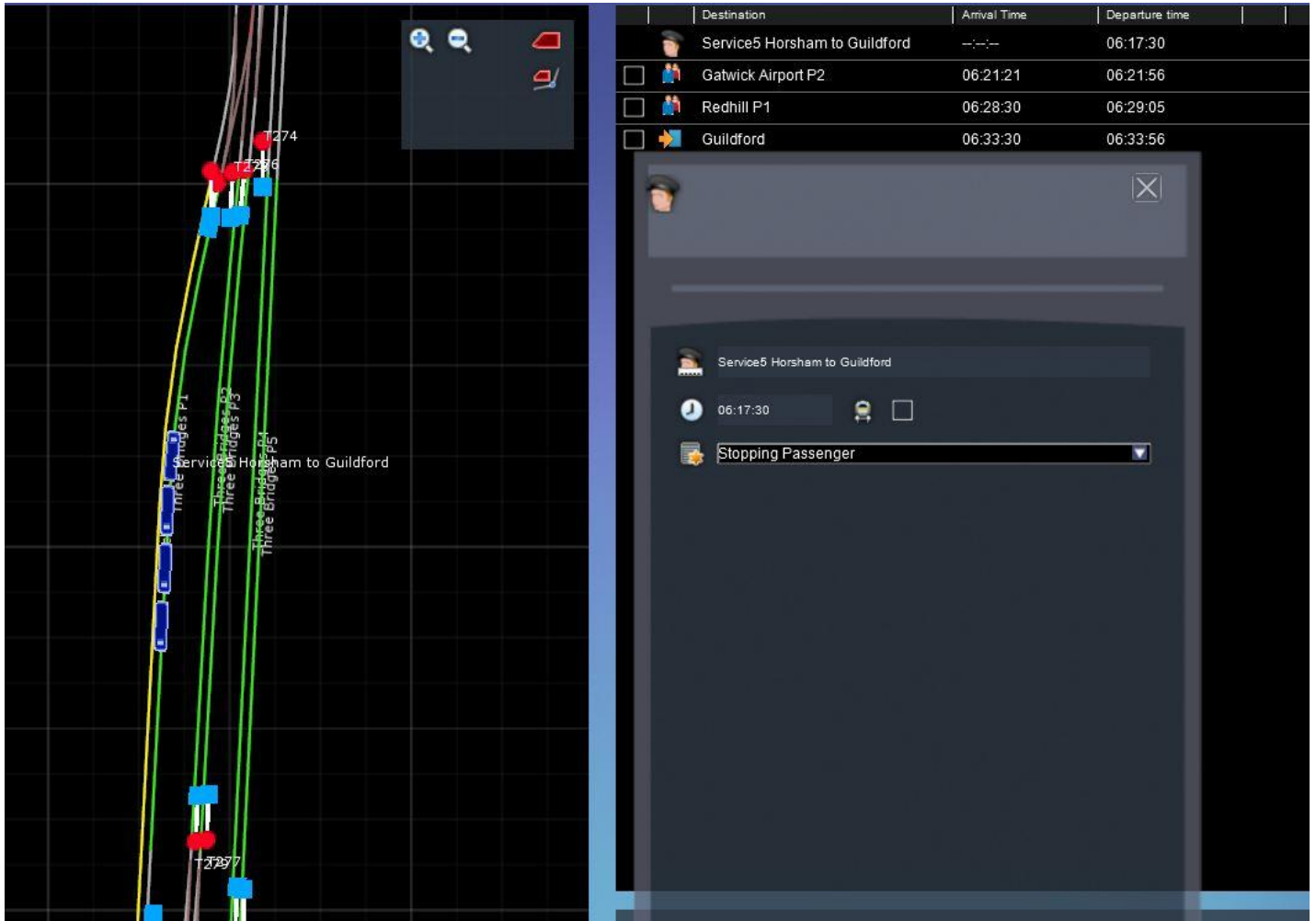
**Service 6** can now be placed, again I will look for a precise spot to keep it easy to build along with me. Fly up the 3D view to Horley Station and place a 12 car Class 377 from the Consists list onto Horley P4.

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Give the train a driver and open the timetable view to set a name and some instructions for this train. Name it Service6 Horley to Lewes set the service class to Express Passenger and the start time to 06:15:00. Set the final destination to Lewes North, that being the closest exit for this train... Then add a Stop at Destination Instruction and set this for Three Bridges P5. Open that instruction by left clicking on it and modify it to look like this.

| | Destination | Arrival Time | Departure time | |
|---|---|---|---|---|
| | Service6 Horley to Lewes | --:--:-- | 06:15:00 | |
| | Three Bridges P5 | 06:17:57 | 06:17:57 | |
| | Lewes North | 06:31:43 | 06:31:53 | |

Three Bridges P5

95%    60mph
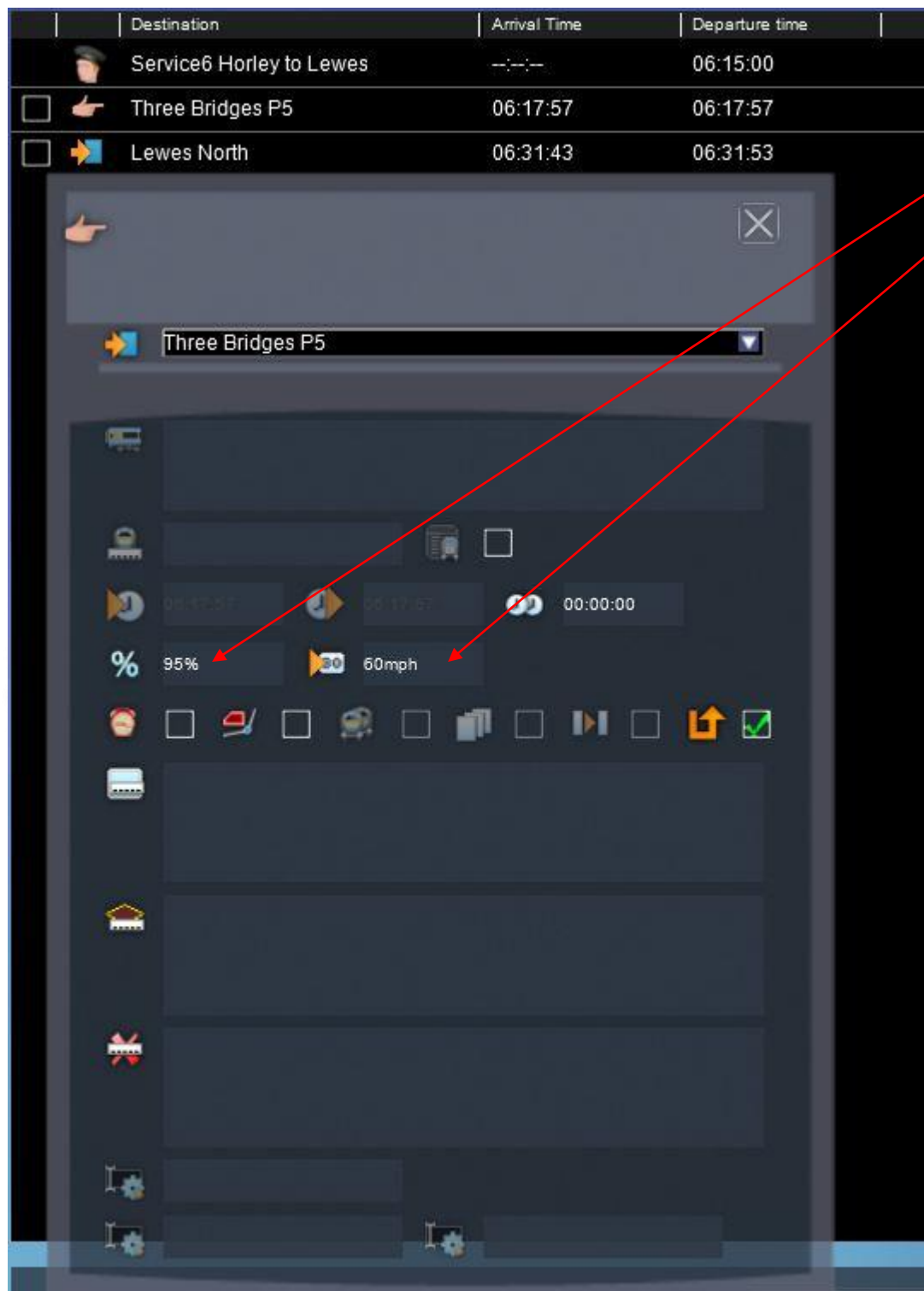
Set performance to 95% to make sure this train moves fast and set the speed to 60mph.

These settings will tell the AI Dispatcher to send the train via Three Bridges P5 but to keep the train moving at a speed of at least 60mph.

In other cases we have set this speed to 1mph, if we do that here the AI Dispatcher will slow the train to 1mph and that will look silly.

The reason I add this instruction is to ensure that the AI Dispatcher sends the train via Three Bridges P5 and does not make an alteration to the train path on the fly during play.

Time to save the scenario again and then...

yes, tea time! It would also be wise to run the scenario up to Gatwick now and check the

timings and keep an eye on the AI services we have placed and see if they behave as we have planned them. So, F2 save, make tea, then run the scenario.

# Split the Train

Having completed the run up to Gatwick and noted timings again, I am pleased they are the same and most AI traffic behaved as expected.

Preston Park        06:04
Hassocks            06:08
*Wivelsfield*       *06:10*
Haywards Heath 06:12
Balcombe            06:15
Three Bridges   06:18
Gatwick Airport 06:21

**Service 5** was perhaps a bit slow of the mark and could be set back about 30 seconds to start at 06:17:00. Just open the timetable view and make that change to the start time now.

Before our player departs Gatwick Airport we want them to split the train to simulate that rear portion of the train acting as a shuttle back to Brighton and the front portion of the train as an express train up to London Victoria stopping at Clapham Junction. We will add that instruction but first we can clear down some of our timing marker instructions. The player will not need to see those and we don't require them for the run to Gatwick now that we have some consistent timings.

Select Preston Park P2 , Hassocks P1, Haywards Heath P3,  Balcombe P1 and Three Bridges P4 by placing a tick mark in the check box beside them.



Select the Delete tool to remove the instructions from the list.

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It may also be good to add some drama to the scenario, a sense of urgency, so let's give the Pickup passengers Instruction for Gatwick Airport a fixed time. 06:21:00 seems to be very achievable. Open the instruction by clicking on it within the timetable view.
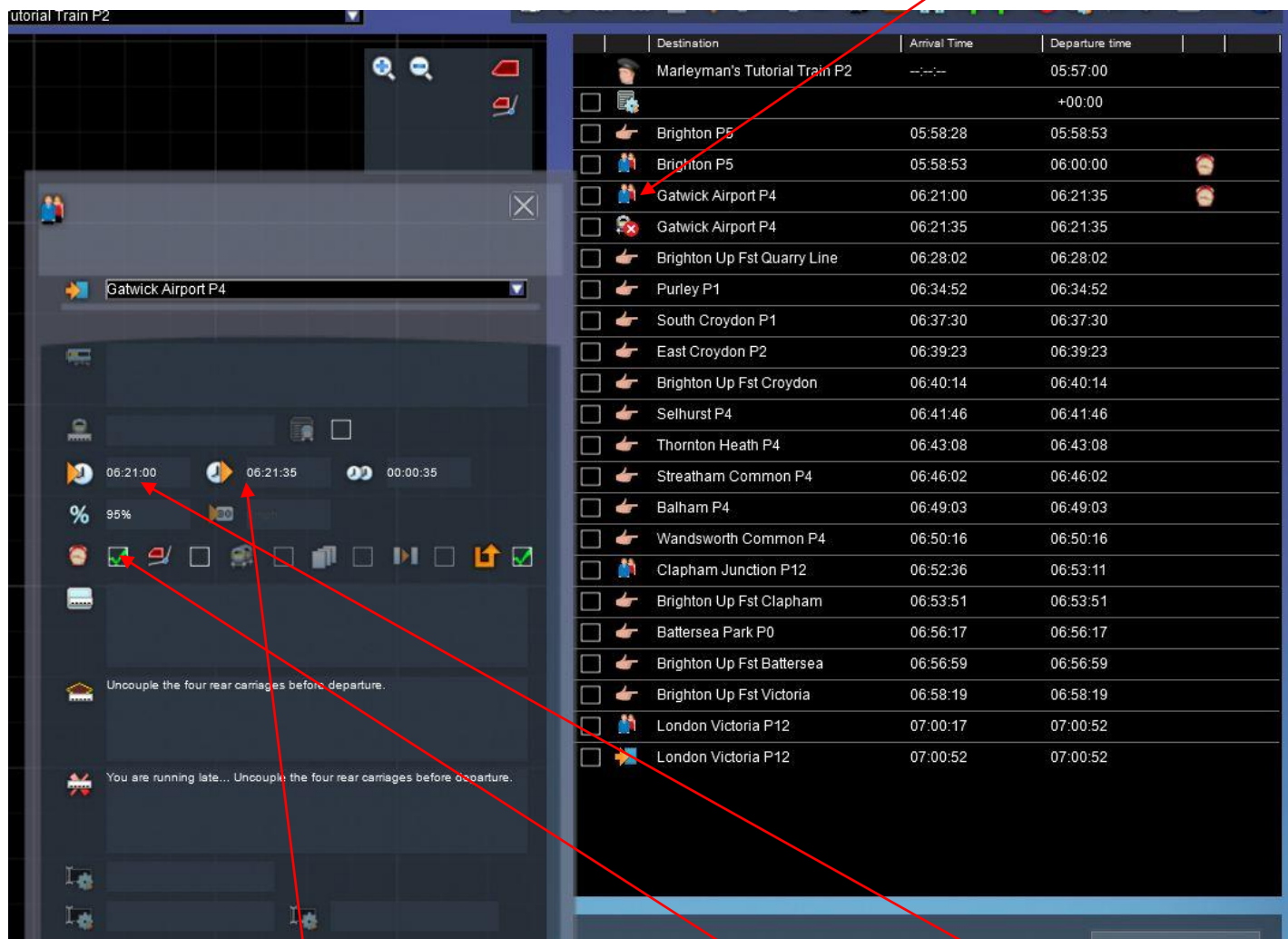


You will now have to set the Arrival time and most likely the Departure time too. First of all, let the instruction properties know that we want a timetabled instruction by ticking the Timetabled box. Set the Arrival Time to 06:21:00 and the departure time to 06:21:35 if it does not set automatically. Set the performance to 95% this will stop the instruction showing up red in our list, which means the dispatcher agrees we can achieve this time. I think we can and we have done so once but will test on the next run to make sure it is a viable time.

It would also be good to let the player know that they need to uncouple the four rear cars before they hurry off up the line, so post a message 'Uncouple the four rear carriages before departure', in the Achievement Text Successful box of this instruction and 'You are running late... Uncouple the four rear carriages before departure' in the Achievement Text unsuccessful box .

Now depending upon what time our driver gets to the station they will get one of two messages but each will remind them to detach the rear of the train.

Now select the Trigger Instruction instruction from the tool bar.
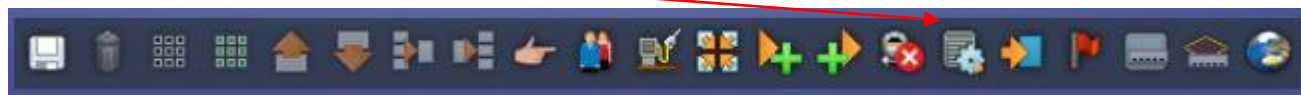
We need to add a Pop up message to the driver to break up the instructions, on two out of four test runs I got AI consist collisions when detaching the rear carriages. Further testing with the added instruction prevented this. So add the trigger instruction to the bottom of the list and move it up the list to display after the Pickup Passengers at Gatwick P4. Add the following message to the instruction; Driver, detach the Four Rear Carriages of the train to form the Gatwick to Brighton Shuttle Service then proceed to London Victoria.



Now select the Drop Off instruction from the tool bar.



This will add the instruction to the bottom of the list, place a tick in the box next to it and move the instruction up the list so that it follows on from our Pickup Passenger Instruction at Gatwick Airport P4 but after the pop up message.

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Until we complete the instruction we will have these error exclamation marks all over our list. Just ignore them and open the Drop Off instruction by clicking on the icon.

We will populate the properties box with the following information:

Set Destination-Gatwick Airport P4

Drop Off carriage numbers, h78699377999, h78698377998, h78697377997, h78696377996 *(your carriage numbers will be different)*

Rail Vehicle Group Name-Gatwick-Brighton Shuttle

Achievement Text- Gatwick Shuttle has been detached. Proceeding to Clapham Junction.  and You must detach the Brighton-Gatwick shuttle portion of the train before you leave.

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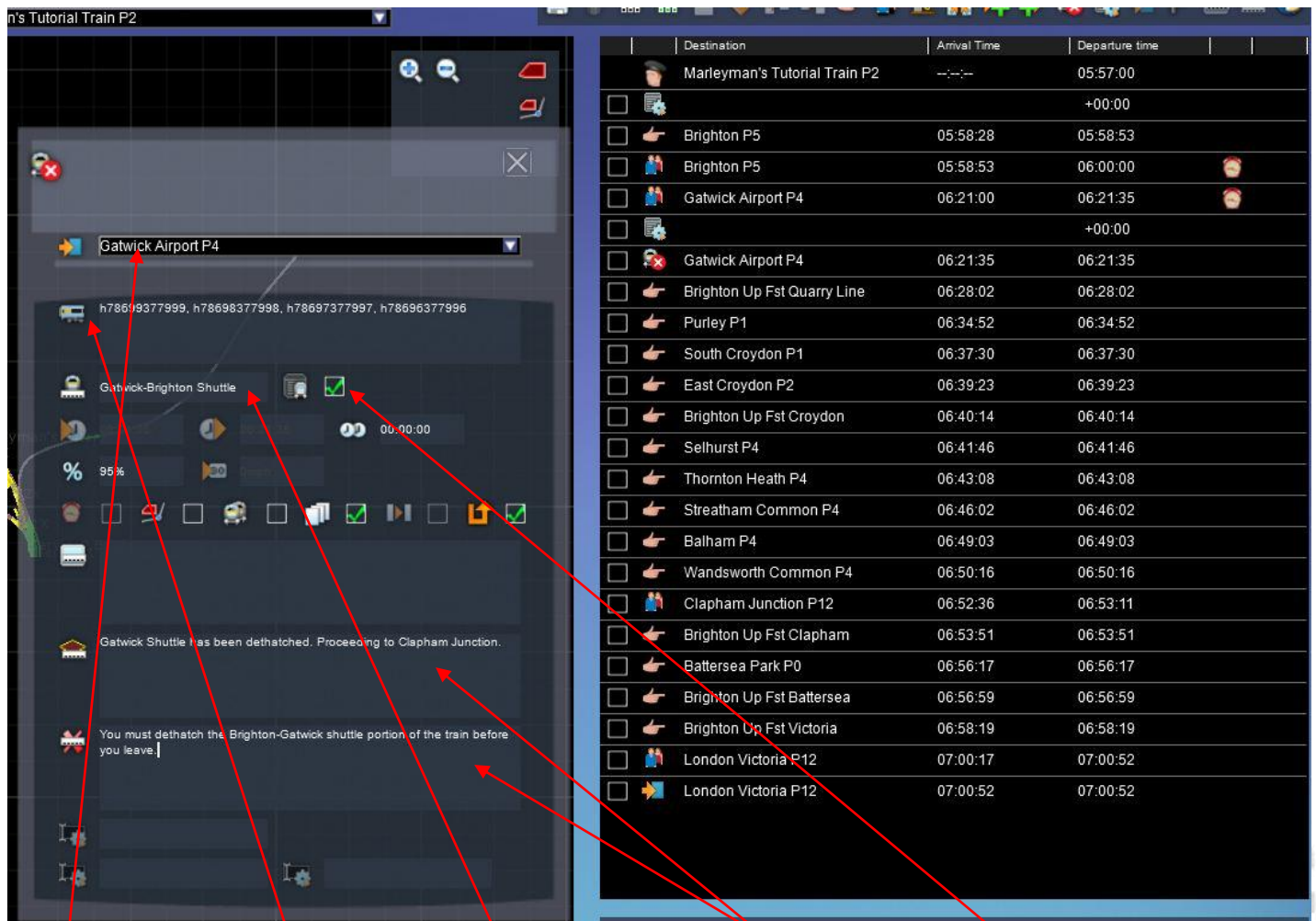
Set Destination  - Add Rail Vehicle - Rail Vehicle Group Name - Achievement Text- Rail Vehicles in Task List

The *Rail Vehicle Group Name* entry just makes the instruction look tidy when the player views the instruction in game. Instead of a list of carriage numbers they will see *'Gatwick-Brighton Shuttle'* which sounds a bit more formal. You could leave the box blank and the game will read the Add Rail Vehicle box only. This just names those carriages as a *'set'* with the name we provided. Tick the Rail Vehicles in Task List box too so the carriage numbers are displayed for the player.

Press F2 and let's test our instructions and pop up messages and check that our 06:21 arrival time is indeed reasonable. When testing just make sure that the instructions that pop up are clear and that it is obvious to the player that they should be doing two things at Gatwick Airport. Picking Up Passengers and Dropping off the rear four carriages of the train, in that order.

Also check that your train does not deviate from the path we expect it to follow, Haywards Heath P3 and Three Bridges P4 for example, if it does we will add some waypoints to keep it on path.

Test run provided an odd result with Service2 Brighton-Worthing no longer blocking the player train at Preston Park. I have no idea why this has changed but I have a solution that ensures the block occurs as we want it to. Service 5 however did perform much better and was in the players view on the run onto Gatwick Airport, arriving alongside the player train. Just as I hoped... planned I mean.

Open the instructions for **Service 2** and change the Service Class to Special this will increase the priority over the players train and force the block.

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# Adding AI for the Run to London

I have now run this scenario to Gatwick about 10 times in order that you don't have to. All the modifications above came about from loading and running the scenario, making a small change and troubleshooting other issues, like the block-not blocked issue I ran into. Your scenario may not produce that error and that is just one good example of why you need to get 'testers' to run your scenario on their set up. Or, run two legal, independent versions of TS2013, like I do.

You now need to run the scenario all the way up to London Victoria. We know our timings up to Gatwick and can guess that timings to London will be +2min over *run2* as they were for the run up to Gatwick. However, you need to run it to make sure the scenario still completes without any AI collisions.

My timings are here:

| Destination | run1 | run2 | run3 |
|---|---|---|---|
| Marleyman's Tutorial Train P2 | | | |
| | | | |
| Brighton P5 | | | |
| Brighton P5 | 06:00:00 | 06:00:00 | 06:00:00 |
| Preston Park P2 | 06:02:00 | 06:02:00 | 06:04:00 |
| Hassocks P1 | 06:06:00 | 06:06:00 | 06:08:00 |
| Haywards Heath P3 | 06:10:00 | 06:10:00 | 06:12:00 |
| Balcombe P1 | 06:13:00 | 06:13:00 | 06:15:00 |
| Three Bridges P4 | 06:16:00 | 06:16:00 | 06:18:00 |
| Gatwick Airport P4 | 06:19:00 | 06:19:00 | **06:20:00** |
| Brighton Up Fst Quarry Line | 06:25:00 | 06:26:00 | 06:28:00 |
| Purley P1 | 06:30:00 | 06:30:00 | 06:32:00 |
| South Croydon P1 | 06:32:00 | 06:31:00 | 06:33:00 |
| East Croydon P2 | 06:34:00 | 06:33:00 | 06:35:00 |
| Brighton Up Fst Croydon | 06:36:00 | 06:34:00 | 06:35:30 |
| Selhurst P4 | 06:39:00 | 06:35:00 | 06:36:30 |
| Thornton Heath P4 | 06:42:00 | 06:35:00 | 06:37:00 |
| Streatham Common P4 | 06:45:00 | 06:37:00 | 06:39:00 |
| Balham P4 | 06:48:00 | 06:39:00 | 06:41:00 |
| Wandsworth Common P4 | 06:51:00 | 06:40:00 | 06:41:30 |
| Clapham Junction P12 | 06:53:00 | 06:43:00 | **06:43:40** |
| Brighton Up Fst Clapham | | 06:44:00 | 06:45:00 |
| Battersea Park P0 | | 06:46:00 | 06:46:30 |
| Brighton Up Fst Battersea | | 06:46:00 | 06:47:00 |
| Brighton Up Fst Victoria | | 06:47:00 | 06:48:00 |
| London Victoria P12 | | 06:49:00 | **06:49:30** |

It would also be a good idea to fly from Gatwick to Victoria inside the 3D world editor taking note of track layout that may be useful for adding interest to the scenario. Redhill and Coulsdon certainly look useful for adding some 'busy points' on the run. Also South Croydon has some extra track merging into the Station.

We can also add more 'up' trains from Streatham Depot. Always good to have areas where a train travelling in the same direction as the player can enter the scenario from a hidden point.

First, let's add some more down traffic to the Gatwick area, being as it is almost 06:30 when we get there we can safely presume that the commuter run is picking up.

Add a **new service 7** to Gatwick Airport P3, name that **Service7** Guildford-Horsham. I have added a 4 car *Class 375 SE White* just because it is the only other stock available to me in this tutorial that I know everyone with the London to Brighton route will have.

Give this service a start time of 06:18 and a final destination of Horsham Portal but add a Pickup Passenger instruction to the list for Three Bridges P3 and set performance to 95%. The reason for that is to get the train moving fast and off the scenario fast too. Set the Service Class to Stopping Passenger. No need for screenshots are there? Good.

Add **another service 8** to Gatwick Airport P6, I made this an eight car Class 377, add a driver, this train will be static when we get there but give it a final destination of Horsham Portal anyway to remove it from the game, we may need that platform later and we will have blocked P4 with the drop off, so we don't want to block any more platforms but we do want Gatwick to look busy.

Set instructions for this train to depart at 06:25, plenty time for any really slow drivers to see this train and for 'on time' drivers too. Name it **Service8** Gatwick-Horsham.  F2 save the scenario. I also added a Class 450 four car static train to *Gatwick Short Siding* just North of the Station, this will be left there with no driver, it is just more dressing. Perhaps it is there for the rush hour a bit later on...

**Another down service 9** to pass Service 5, which runs very nicely beside us on the track to our left, as we leave Gatwick, would be nice. So fly up to Redhill or use the 2D map to fast travel there. Place 2 of the Class 450 consists we made earlier to make an eight car train on Redhill P3. Orientate the view South and place a driver on the train. Name it **Service9** Redhill-Horsham and set a final destination of Horsham and a start time of 06:22. Give the train Passenger Pickup Instructions for Salfords P2 and Horley P2 and set the Performance to 95% for both instructions.

Further up the track you will find *Coulsdon Town* merging in from the left and *Coulsdon South* merging in from the right of the track that the player is on.
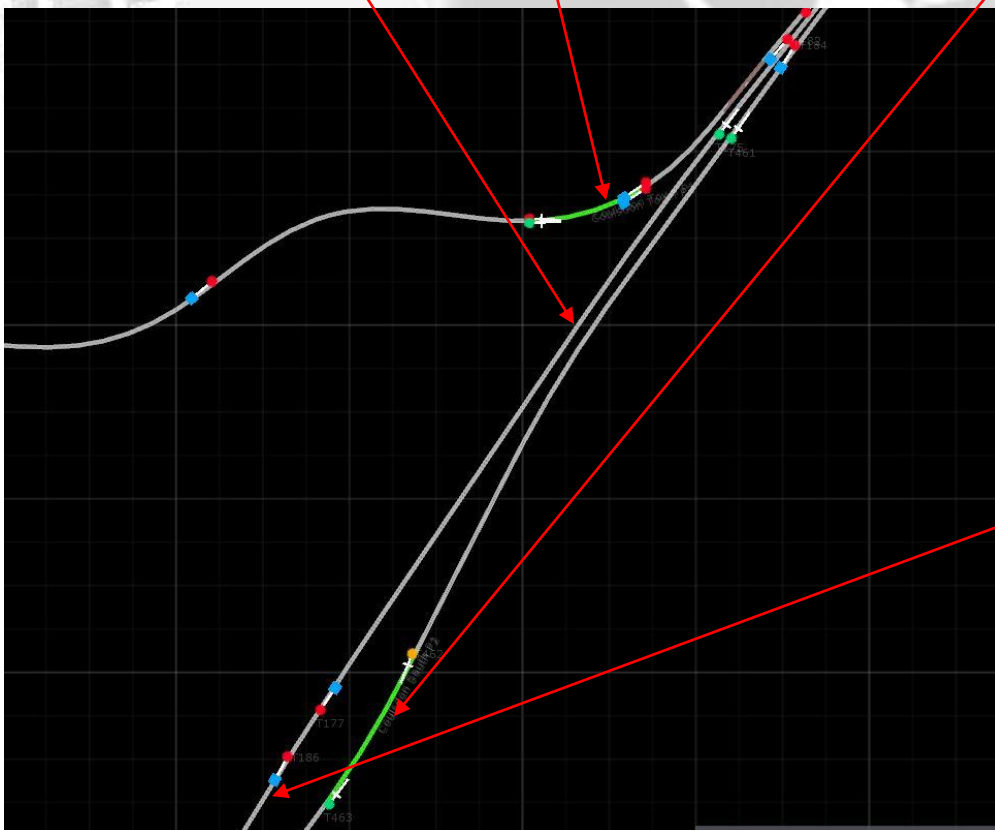


This looks like a nice opportunity to add at least two trains. Coulsdon Town to Purley because of the underpass into the station and Purley to Coulsdon South just as interest on the down line.

I did make a mental note earlier that we *pass this spot* at 06:31.

I have added five new services to the scenario and ran at least three more test runs, it is a new day in the real world and so far I have spent about 50 real hours building this scenario, testing it and documenting it for the tutorial. It is not uncommon to spend anything from 30 to 80 hours getting just one scenario built, tested and completed. I just thought you should know that before you get really interested in scenario creation.

So, the new services that you need to add are as follows:

**Service10** Coulsdon-London Br, here is the placement near Coulsdon Town P1, again I have placed a 4 car *Class 375 SE White* but you can use any other stock you like.
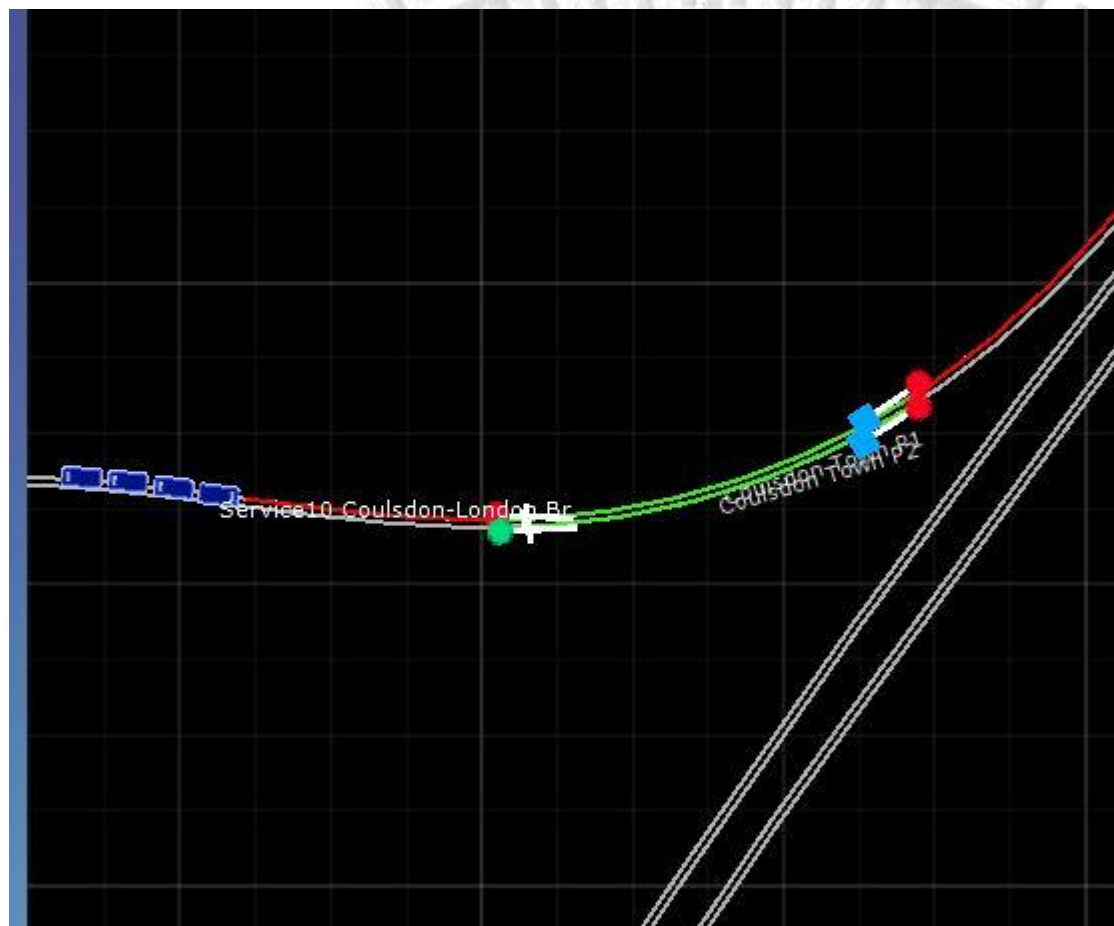


Instructions for this train, after testing, were changed to create a slow train in front of the player train. I thought the run was a bit bland and decided that the player should have more of a challenge whilst diving.

Just sitting back and running at full speed is boring so a few yellow lights in front of the player will create the illusion of the line getting busier as we approach London.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service10 Coulsdon-London Br | --:--:-- | 06:26:30 | | | |
| ☐ | 🧍 | Purley P4 | 06:30:41 | 06:31:16 | | | |
| ☐ | 🧍 | South Croydon P1 | 06:34:02 | 06:34:37 | | | |
| ☐ | 🔜 | London Bridge Fast | 06:39:26 | 06:39:41 | | | |

Add a driver, name the train Service10 Coulsdon-London Br, set the start time to 06:26:30, give the train a pick up passengers instruction for Purley P4 and South Croydon P1 with performance set to 95% and a final destination of London Bridge Fast portal.

The next service is ok to place but I don't really like placing trains that I cannot exit from the game if those trains have instructions. I just don't trust the dispatcher a lot. Since this route is a bit short on portals, as I mentioned before, this train will not be exiting the game world because there is no nearby portal.

**Service 11** I have placed another *Class 375 SE White* named  Service11 Purley-Woodmansterne onto Purley P6, heading south.
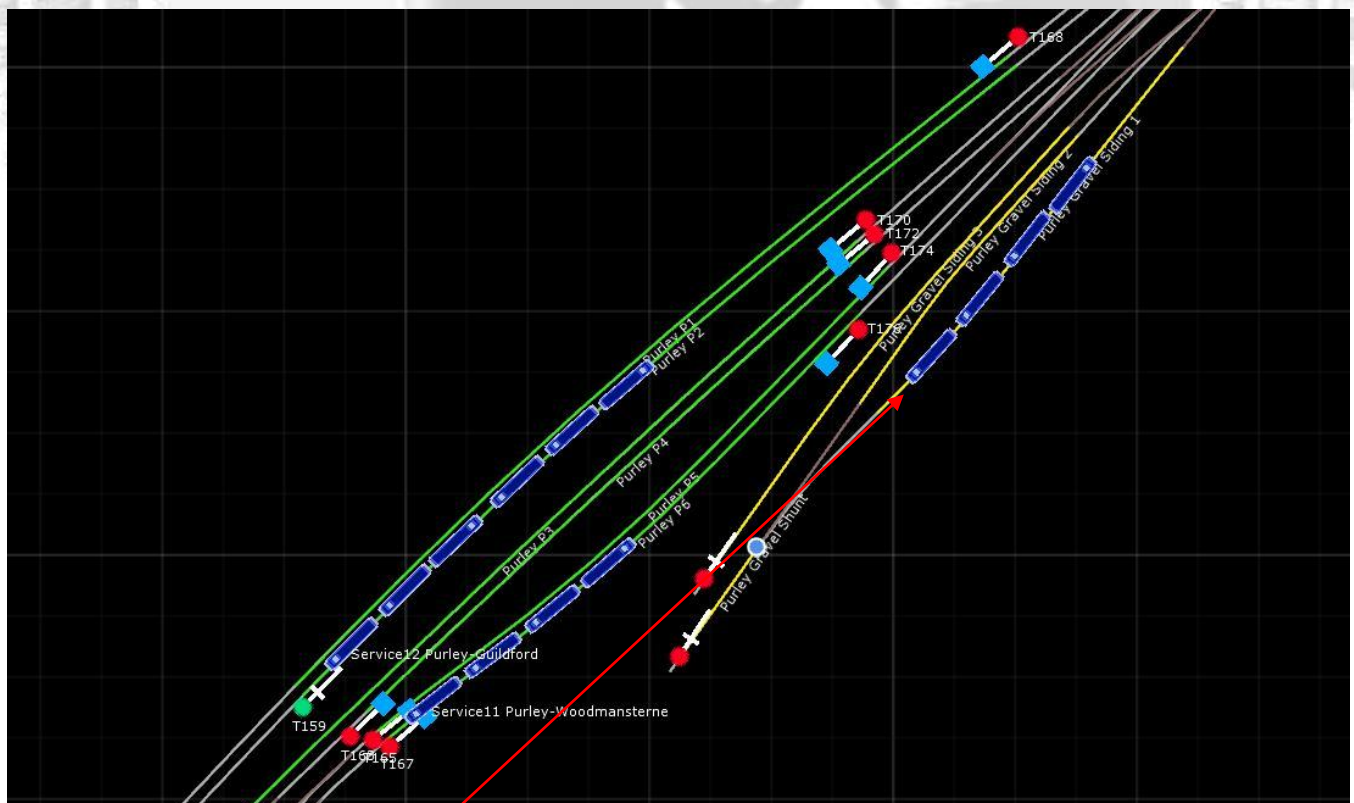
| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 🎩 | Service11 Purley-Woodmansterne | --:--:-- | 06:27:30 | | | |
| ☐ | 🧍 | Reedham P2 | 06:29:45 | 06:30:20 | | | |
| ☐ | 🧍 | Coulsdon Town P2 | 06:32:11 | 06:32:46 | | | |
| ◼ | ➡ | Woodmansterne P2 | 06:36:04 | 06:36:04 | | | |

Set the instructions as per the above screen shot with performance on both pick up instructions at 95%.

The next **service 12** is a six car class 377, placed on Purley P2  and named  Service12 Purley-Guildford.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 🎩 | Service12 Purley-Guildford | --:--:-- | 06:30:00 | | | |
| ☐ | 🧍 | Coulsdon South P2 | 06:32:17 | 06:32:52 | | | |
| ☐ | 🧍 | Reigate P2 | 06:41:10 | 06:41:45 | | | |
| ☐ | ➡ | Guildford | 06:41:59 | 06:42:25 | | | |

Set the instructions as per the above screen shot with performance on both pick up instructions at 95%.



I added one other train, just for dressing.

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As you move up the track, (heading North East), from Purley there is another line merging in from the right. On that line is a station, Sanderstead.
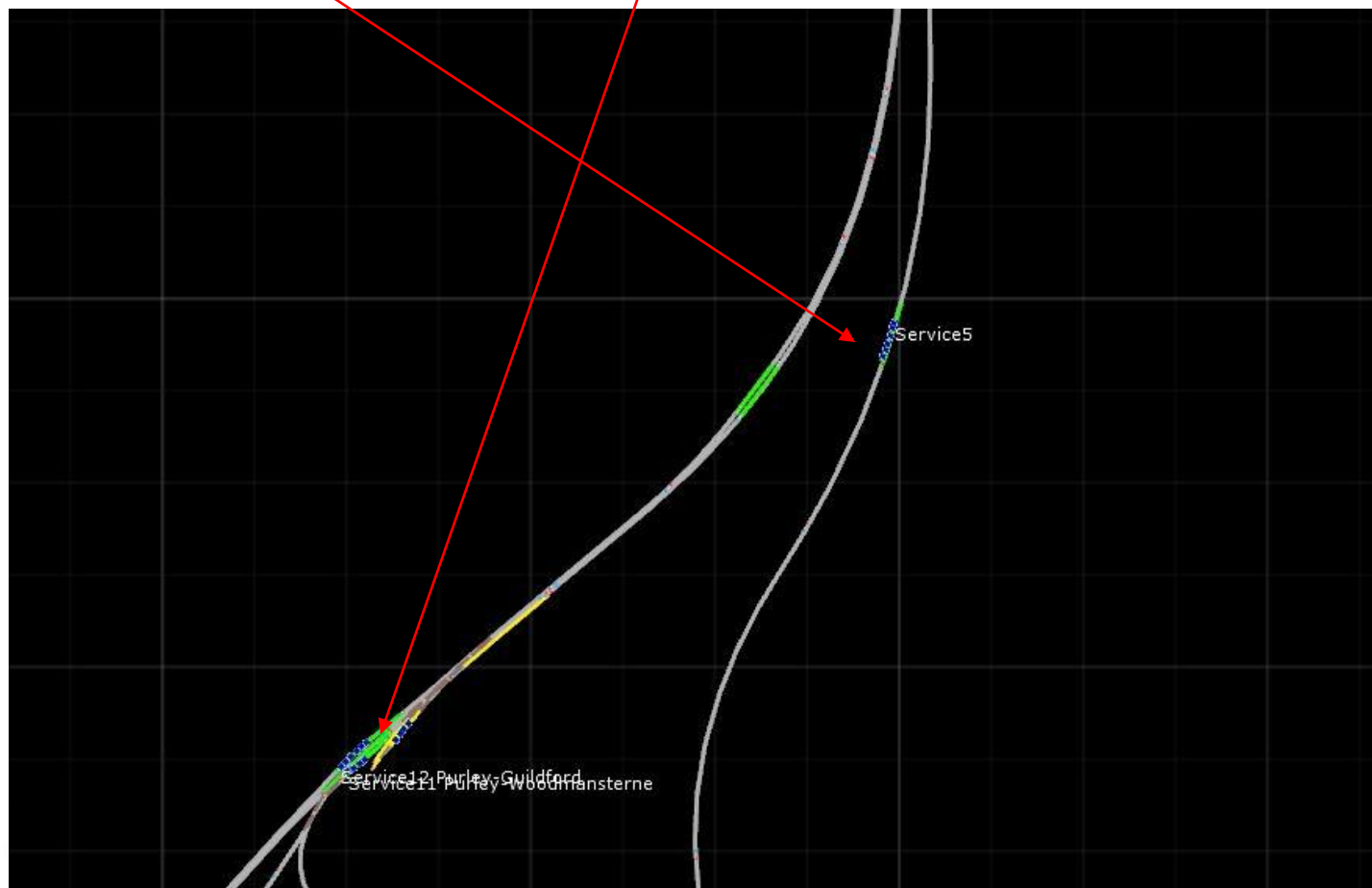


This is where our next **service 13** will be entering our scenario from. The idea for this service is to have it run parallel to the player as s/he runs from East Croydon to Streatham Common where it will then take the branch line to Tulse Hill.

**Service13 Sanderstead-Tulse Hill** set this train on Sanderstead P1 heading North with the following instructions and performance set to 99% on both pickup instructions.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 🧑‍✈️ | Service13 Sanderstead-Tulse Hill | --:--:-- | 06:32:30 | | | |
| ☐ | 🧍 | South Croydon P3 | 06:34:53 | 06:35:28 | | | |
| ☐ | 🧍 | Streatham Common P2 | 06:41:59 | 06:42:34 | | | |
| ☐ | ➡️ | Tulse Hill South | 06:45:29 | 06:45:34 | | | |

The final **service 14** I added for this area was **Service14 East Croydon-Tonbridge** placed at East Croydon P6.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 🧑‍✈️ | Service14 East Croydon-Tonbridge | --:--:-- | 06:36:00 | | | |
| ☐ | 🧍 | South Croydon P5 | 06:38:23 | 06:38:58 | | | |
| ☐ | ➡️ | Tonbridge | 06:53:20 | 06:53:46 | | | |

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Time for another test run paying attention to the new AI services as well as timings for points after Gatwick Airport. Load up the scenario and run it up to Clapham Junction to get a time of arrival for there as we will timetable that stop too.

| Destination | run1 | run2 | run3 | run4 |
|---|---|---|---|---|
| Marleyman's Tutorial Train P2 | | | | |
| | | | | |
| Brighton P5 | | | | |
| Brighton P5 | 06:00:00 | 06:00:00 | 06:00:00 | 06:00:00 |
| Preston Park P2 | 06:02:00 | 06:02:00 | 06:04:00 | 06:04:00 |
| Hassocks P1 | 06:06:00 | 06:06:00 | 06:08:00 | 06:08:00 |
| Haywards Heath P3 | 06:10:00 | 06:10:00 | 06:12:00 | 06:12:00 |
| Balcombe P1 | 06:13:00 | 06:13:00 | 06:15:00 | 06:15:00 |
| Three Bridges P4 | 06:16:00 | 06:16:00 | 06:18:00 | 06:18:00 |
| Gatwick Airport P4 | 06:19:00 | 06:19:00 | **06:20:00** | **06:20:00** |
| Brighton Up Fst Quarry Line | 06:25:00 | 06:26:00 | 06:28:00 | 06:27:00 |
| Purley P1 | 06:30:00 | 06:30:00 | 06:32:00 | 06:32:00 |
| South Croydon P1 | 06:32:00 | 06:31:00 | 06:33:00 | 06:36:00 |
| East Croydon P2 | 06:34:00 | 06:33:00 | 06:35:00 | 06:37:00 |
| Brighton Up Fst Croydon | 06:36:00 | 06:34:00 | 06:35:30 | 06:38:30 |
| Selhurst P4 | 06:39:00 | 06:35:00 | 06:36:30 | 06:39:30 |
| Thornton Heath P4 | 06:42:00 | 06:35:00 | 06:37:00 | 06:40:00 |
| Streatham Common P4 | 06:45:00 | 06:37:00 | 06:39:00 | 06:41:20 |
| Balham P4 | 06:48:00 | 06:39:00 | 06:41:00 | 06:43:00 |
| Wandsworth Common P4 | 06:51:00 | 06:40:00 | 06:41:30 | 06:44:00 |
| Clapham Junction P12 | 06:53:00 | 06:43:00 | **06:43:40** | **06:46:00** |
| Brighton Up Fst Clapham | | 06:44:00 | 06:45:00 | |
| Battersea Park P0 | | 06:46:00 | 06:46:30 | |
| Brighton Up Fst Battersea | | 06:46:00 | 06:47:00 | |
| Brighton Up Fst Victoria | | 06:47:00 | 06:48:00 | |
| London Victoria P12 | | 06:49:00 | **06:49:30** | |

Timings for the test are listed as *run4* and overall the scenario is looking good. Service 10, 11 and 13 may need a tweak but only minor tweaks.

I won't post the tweaks here. I will go back and edit the document so that they are correct in the first place. The changes are quite minor, all three will have 20 or 30 seconds added or taken off their start times and the Performance % of Service 13 will be increased.

East Croydon has six platforms and so far we are using P2 for the player to pass through and:

P1 for Service 10
P4 for Service 13
P6 for Service 14

I think we can add one more service south bound, out of P3 at east Croydon. We are closing in on Clapham junction and it is worth making this area busy.

Fly to or use the 2D map to navigate to East Croydon Station and place the Class 450 we made earlier from the consist tool in the Browser tool set.

Place the **service 15** on East Croydon P3 and name it Service15 Croydon-Guildford, set instructions as this screenshot shows and set performance to 95% for all instructions.

| Destination | Arrival Time | Departure time |
|---|---|---|
| Service15 Croydon-Guildford | --:--:-- | 06:34:30 |
| South Croydon P2 | 06:36:43 | 06:37:18 |
| Purley Oaks P2 | 06:39:49 | 06:40:24 |
| Reigate P2 | 06:51:51 | 06:51:51 |
| Guildford | 06:52:16 | 06:52:42 |

Add some dressing at your own discretion around the sidings at East Croydon and move on up the track to just north of the station, there is a branch to the right that leads out to London Bridge Portal. There is a siding named ***Siding57***. Place a 4 car **service 16** of your choice parralel to that siding, just on the track right next to it. Name the service, Service16 London Br-Tonbridge and set the train instructions as shown here.
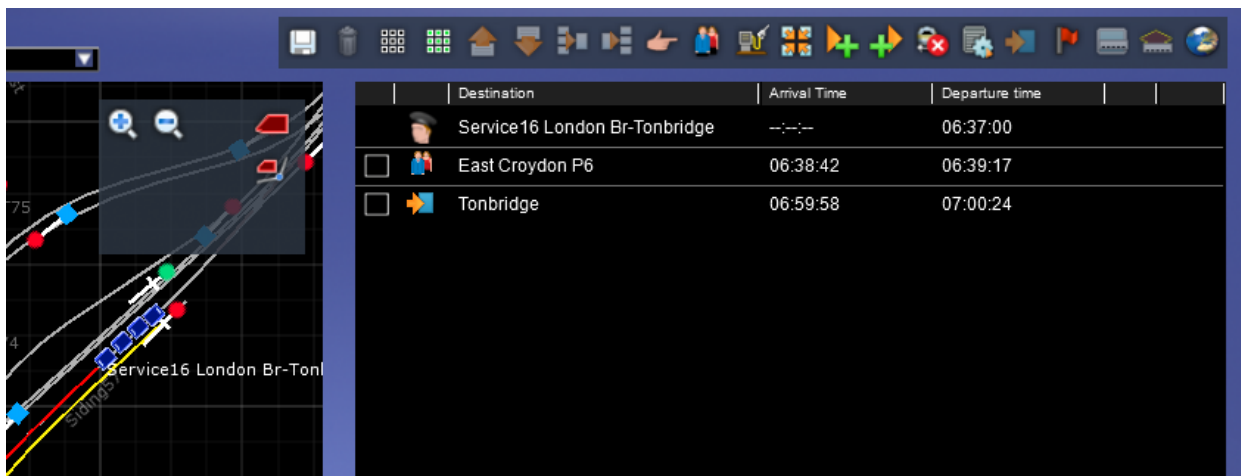


That should take care of East Croydon, now just one more service before we investigat Clapham Junction.

## Croydon to Clapham

As we approach Clapham the traffic should increase significantly, the track has been well laid around here and we should be able to add plenty trains without getting any collisions or major path issues.
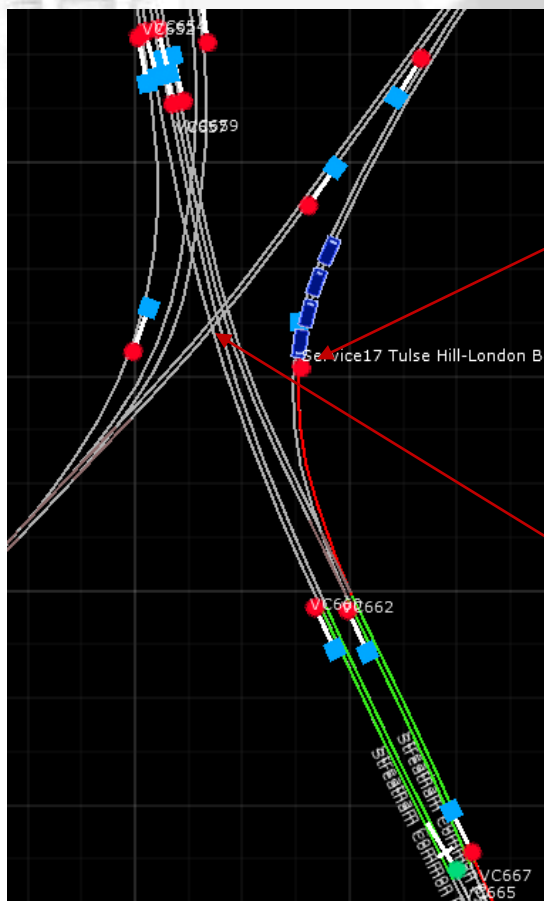


Our first train for this section will be starting near Streatham, so fly on up the track to that station. There is a branch line on the right, out to Tulse Hill and a signal just on that junction. Place a train **service 17** there on the southbound track just behind that signal.

Set the start time to 06:37 and give it a final destination of London Bridge Slow and pickup passenger instructions at the intermediate stations to the exit, excluding Streatham Common, so Norbury P1, Thornton P1 and Selhurst P1 will do.

Set the train as Stopping Passenger and performance to 95% for all stops. Name this service Service17 Tulse Hill-London Br Slow.

Also notice that there is a Rail Bridge crossing from Mitcham Eastfields to Tulse Hill. It would be a shame not to have a train pass over the players train at this point.

There is a ramp southbound, up to this point too, just after the bridge, might as well have a train going up there too!
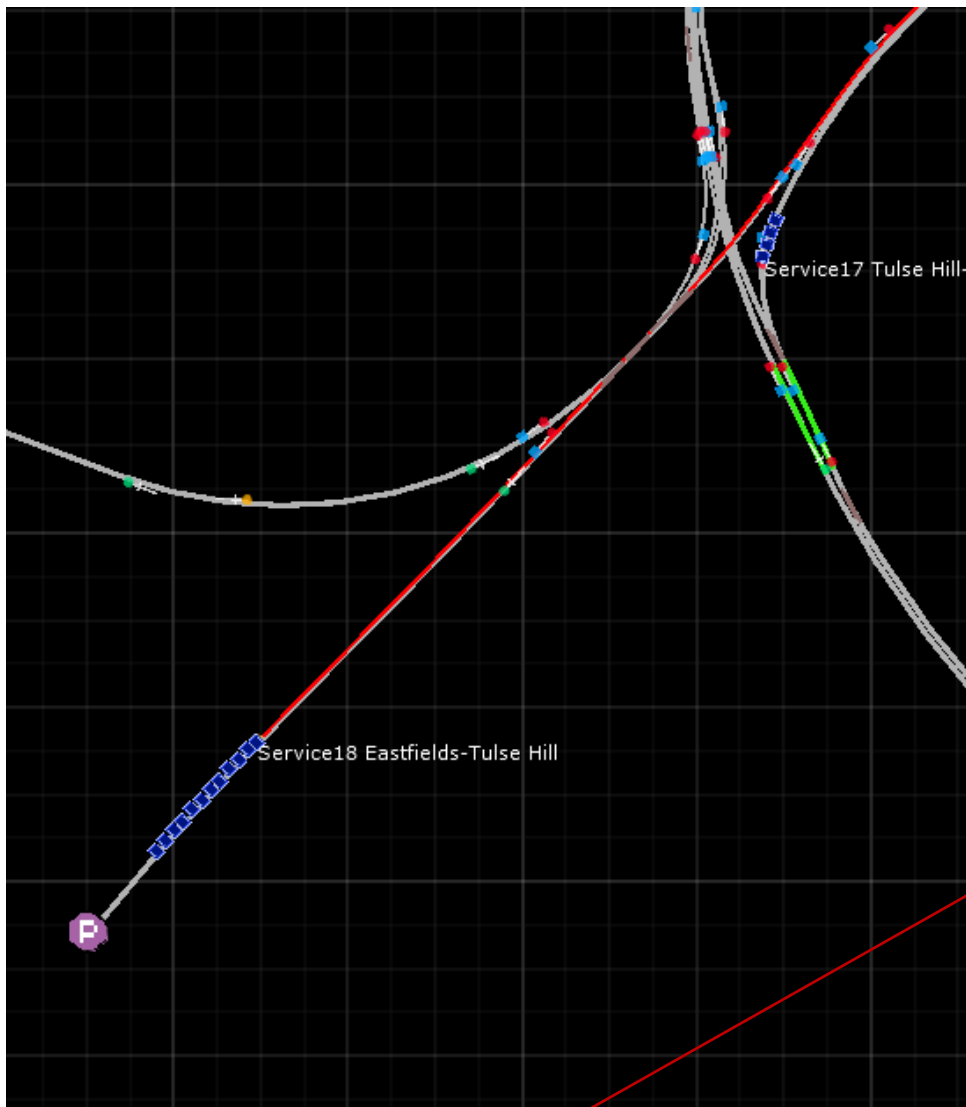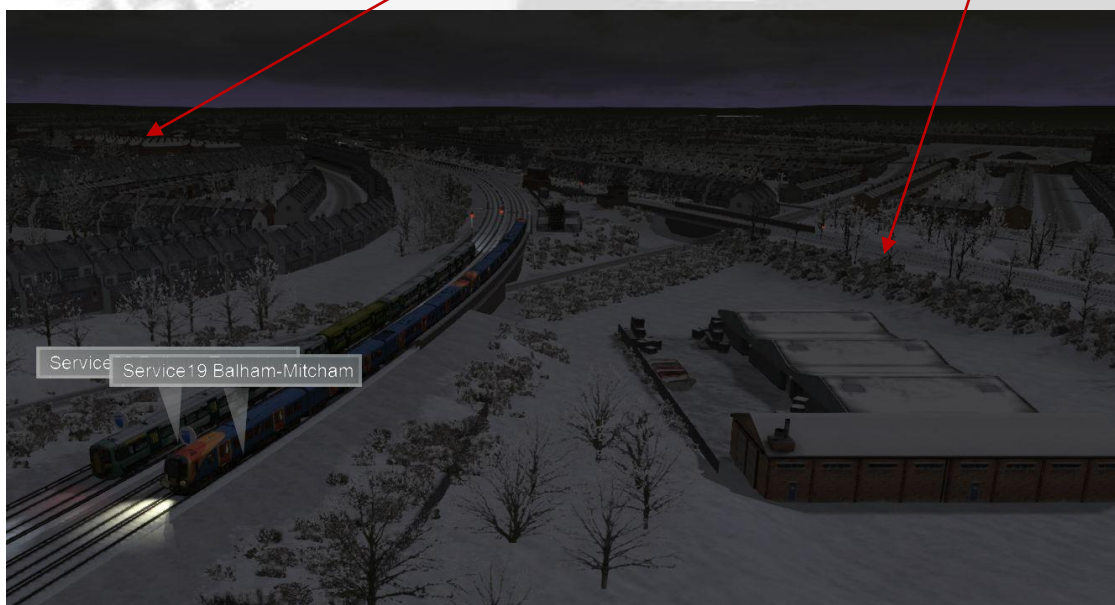
Here is Service 17 and 18 on the 2D map to give you an idea of where I am placing this Service 18.

In order to make sure the player sees **service 18** I have made that a 12 car class 377 train. I think a start time of 06:40:30 will be ok and that train can exit the Tulse Hill portal.

Place your train and name it Service18 Eastfields-Tulse Hill and give it just the one instruction, a final destination of Tulse Hill South. You can set the priority to Express Passenger.

One more **service 19**, Service19 Balham-Mitcham can be placed on the bridge just south of Balham Station and opposite Streatham Wash Road

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Name this service, Service19 Balham-Mitcham and set the start time to 06:39:30, set the service class to stopping passenger and give it just one instruction, final destination Mitcham Eastfields portal.

Set one more train, **service 20**, Parallel to Service 19 as in the screenshot on the previous page, and name that Service20 Balham-Tonbridge. Set this as an Express Passenger service with just one stop and set performance for that stop to 95%.

| | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|
| | Service20 Balham-Tonbridge | --:--:-- | 06:37:00 | | | |
| ☐ | Nutfield P2 | 06:54:02 | 06:54:37 | | | |
| ☐ | Tonbridge | 06:54:40 | 06:55:06 | | | |

## Clapham Junction to Victoria

The run into Victoria from Clapham should look very busy. If you look at the track round Clapham Junction you could not be blamed for avoiding doing a scenario on this route or for making this part look poor. The secret is planning and testing. Just break the track down into blocks.

The platforms are already in blocks if you take a good look at them on the 2D map. The London Brighton trains only use  platforms 12-15 really.  So if we run one train into P15 and one out from 14 up to Victoria, that will be ok, we are using P12 for our player so that takes care of three platforms.

Platforms 16-17 are for Kensington. we can run one train into P17 undisturbed because it will come under the main tracks on an underpass. You can run one out of P16 to Kensington portal just as you approach the station too. In fact, a train running in from as far back as Streatham Hill P2 can stop at Clapham P16 at the same time as the player train if we time it and plan it well, it can then run out at Kensington Olympia portal.

Platforms 1-6 are not even in our way and run between the Twickenham and Waterloo portals,  so we can add two trains going each way over there and it will look busy. Then we have Platforms 7-11, those can be dealt with by trains running from Wimbledon Portal to Waterloo Portal as well. Again two trains each way will suffice.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | *(1 2 3)* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Twickenham and Waterloo portals | Wimbledon and Waterloo portals | London Victoria to Tulse Hill or Clapham High St portals | Kensington Olympia and Tulse Hill portals |
|---|---|---|---|

*The arrows are showing where I have a train **coming in** or **going out** of a platform. 'In' being toward the player.*

Here it is in a visual format for you. If you run trains in these blocks then you should not get any difficult path issues. I would advise and will use Waypoint Markers just to make sure the trains do behave, again, just because I don't trust the AI dispatcher to change his mind at the last minute.

Whilst placing trains in this section I will name them in a format that will allow you to pick these specific trains out of the editor train list a bit easier. They will first of all start from Number 1 again to show you the order I placed them, they will all then have Clapham as the next part of their name to let you know they are going through Clapham

Junction, followed by the platform they are going to stop at, pass through or start on and finally, they will then have their exit portal in their name.

For example:

Service1 Clapham P15-Tulse Hill
Service2 Clapham P5-Twickenham
Service3 Clapham P11-Wimbledon
Service4 Clapham P16-Kensington
Service5 Clapham P3-Waterloo 3
Service6 Clapham P9-Wimbledon
Service7 Clapham P14- Clapham High St
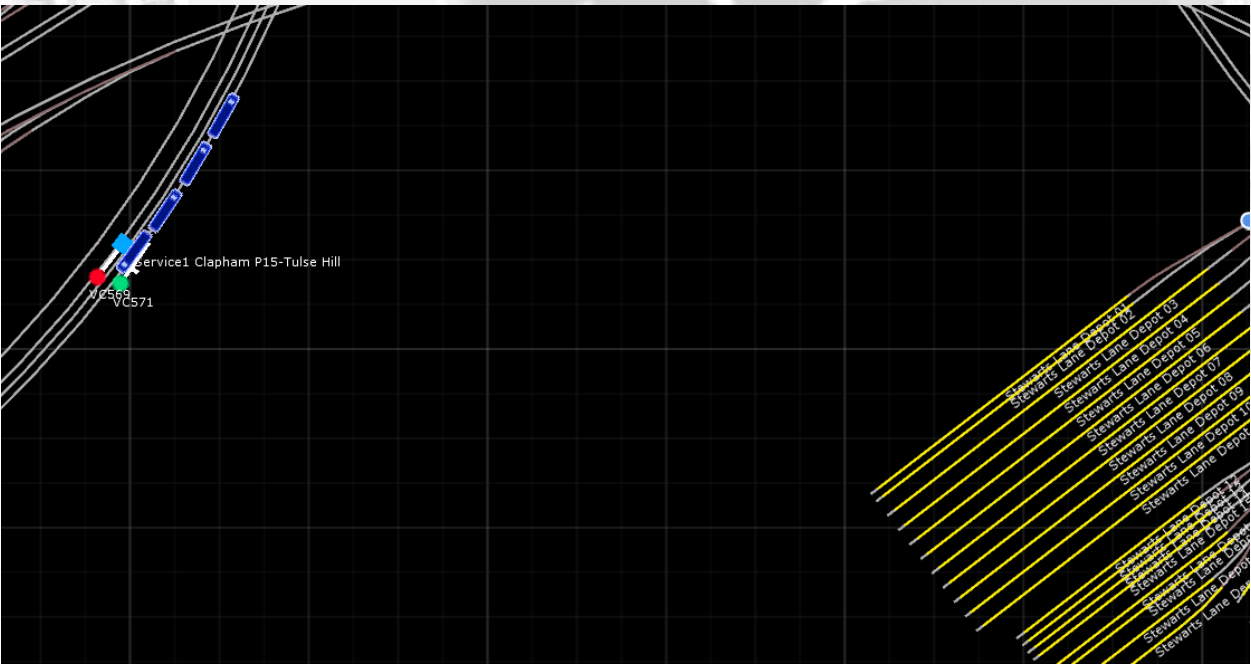Service8 Clapham 12-Tulse Hill North
Service9 Clapham P5-Twickenham

I will subsequently list them all here. So by the time you read this, that list will be complete. To find each train on the track when you want to review what I have done, just look in the list of trains in the editor and click on the Zoom to Train tool to see where the train actually is on the track.
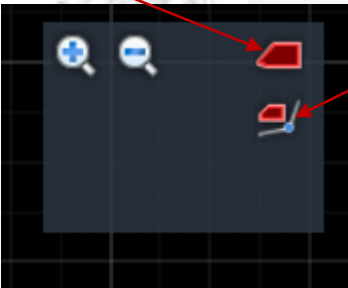


The Zoom to Path tool expands the window to show the full path for any train.

The + and - are for zooming the window but I use the mouse wheel for that instead.

**Service 1 for Clapham** is placed here, opposite Stewarts Lane Depot and just behind signal VC571:



Train instructions are: Priority Stopping Passenger.

| | | Destination | | Arrival Time | | Departure time | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Service1 Clapham P15-Tulse Hill | | --:--:-- | | 06:44:00 | | | |
| | | Clapham Junction P15 | | 06:46:14 | | 06:46:49 | | | |
| | | Tulse Hill North | | 06:53:09 | | 06:53:14 | | | |

The Pickup passenger instruction for all trains should be set to 95% unless stated otherwise. You can place any assets you like, you will get an idea of what I place from the screenshots at least showing how many carriages are in the train.

**Service 2 for Clapham and Service 3 for Clapham** Priority Express Passenger.
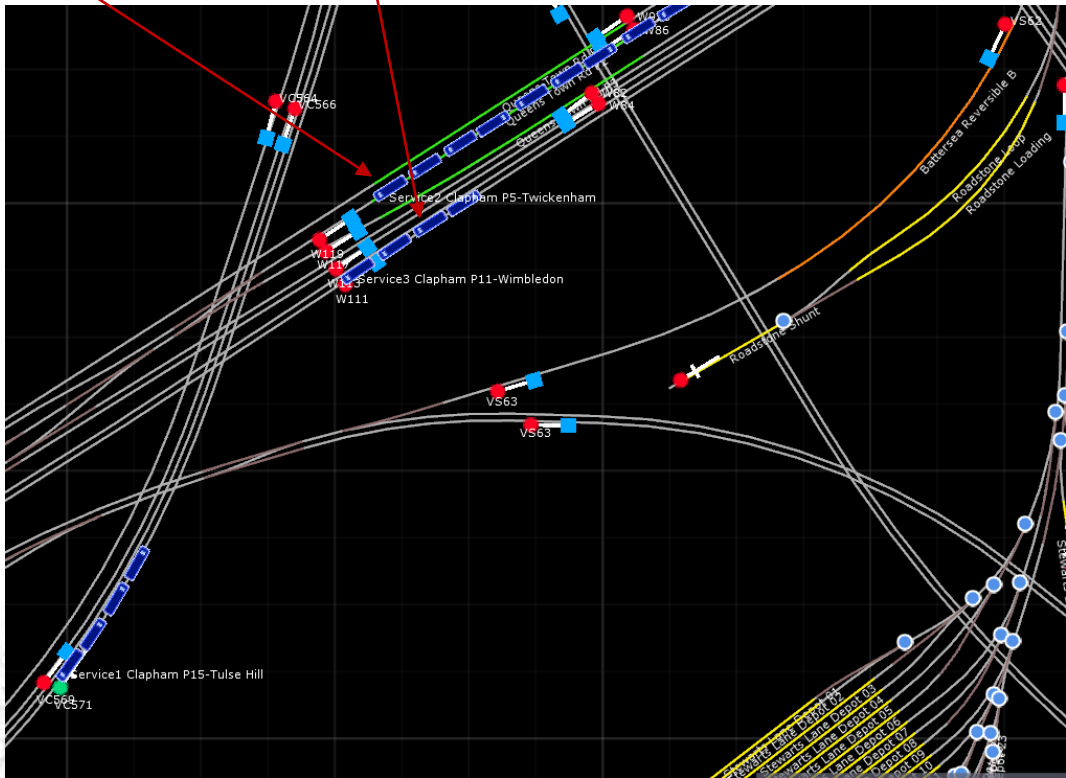


Service 2 and 3 for Clapham are over on Queens Town Road. Well Service 2 is on Platform 3, Service 3 is close by, behind signal W111.

**Instructions for Service two** require two waypoints to be added and these pass through junction markers. The waypoint instructions have no sub instruction within them that can be set.

So just chose the correct destination for each one and that is all there is to them. They take control away from the AI dispatcher and you then know exactly where that train is going.

| | | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|---|
| | 👮 | Service2 Clapham P5-Twickenham | --:--:-- | 06:46:00 | | |
| ☐ | 🚩 | Windsor Dn Relief Clapham | --:--:-- | --:--:-- | | |
| ☑ | 🚩 | Windsor Dn Fst Clapham | --:--:-- | --:--:-- | | |
| ☐ | 👥 | Clapham Junction P5 | 06:48:34 | 06:49:09 | | |
| ☐ | ➡️ | Twickenham Fast Lines | 06:49:55 | 06:50:03 | | |

**Instructions for Service 3 Clapham** are as follows, again, we have a waypoint instruction to keep tight control of these trains. Priority Stopping Passenger.

| | | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|---|
| | 👮 | Service3 Clapham P11-Wimbledon | --:--:-- | 06:46:00 | | |
| ☐ | 🚩 | Southampton Dn Slw Clapham | --:--:-- | --:--:-- | | |
| ☐ | 👥 | Clapham Junction P11 | 06:48:37 | 06:49:12 | | |
| ☐ | ➡️ | Wimbledon Up | 06:51:19 | 06:51:24 | | |

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**Service 4 for Clapham**



First of all the start location is a long way away...

Clapham Junction is here.

Wandsworth Common

Streatham Hill, **Service 4 Clapham** start location is here on Platform 2. Navigate to that station and place a 4 car train

Service 4 will have a few stops and depending upon how the player drives they may pass this train before it reaches Clapham. Not really a worry we just want to create the feeling that the line is busy round here and if they see it heading into Clapham then it has served its purpose.

Remember to set all performance to 95% and note that the start time is timed to 'the second'.
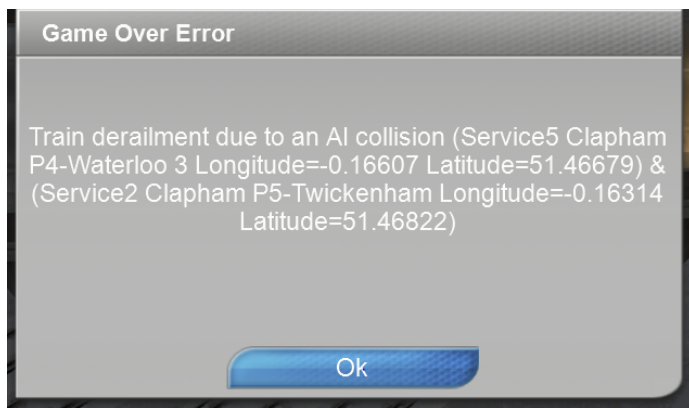
**Service 4 Instructions.** Priority Stopping Passenger.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service4 Clapham P16-Kensington | --:--:-- | 06:37:30 | | | |
| ☐ | 👫 | Balham P2 | 06:40:16 | 06:40:51 | | | |
| ☐ | 👫 | Wandsworth Common P2 | 06:42:35 | 06:43:10 | | | |
| ☐ | 👫 | Clapham Junction P16 | 06:46:40 | 06:47:15 | | | |
| ☐ | ➡️ | Kensington Olympia | 06:50:00 | 06:50:12 | | | |

**Service 5 for Clapham** Priority Stopping Passenger.
This service starts from Clapham Junction P3 and has the following instructions.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service5 Clapham P2-Waterloo 3 | --:--:-- | 06:46:00 | | | |
| ☐ | 🚩 | Windsor Up Slw Clapham | --:--:-- | --:--:-- | | | |
| ☐ | 👫 | Queens Town Rd P1 | 06:48:38 | 06:49:13 | | | |
| ☐ | ➡️ | Queens Town Rd P1 | 06:49:13 | 06:49:13 | | | |

F2 save and test these new services.

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Reasons to be testing, part one... The first AI collision. You don't need to worry about that as I have updated the document to avoid the collision but I need to run the scenario again to make sure I got it correct. If not, I will update the document again and test.

**Service 6 for Clapham** Priority Stopping Passenger.

This service is set back to the rear, as the player approaches, of Clapham Platform P9 and is a 4 car Class 450.

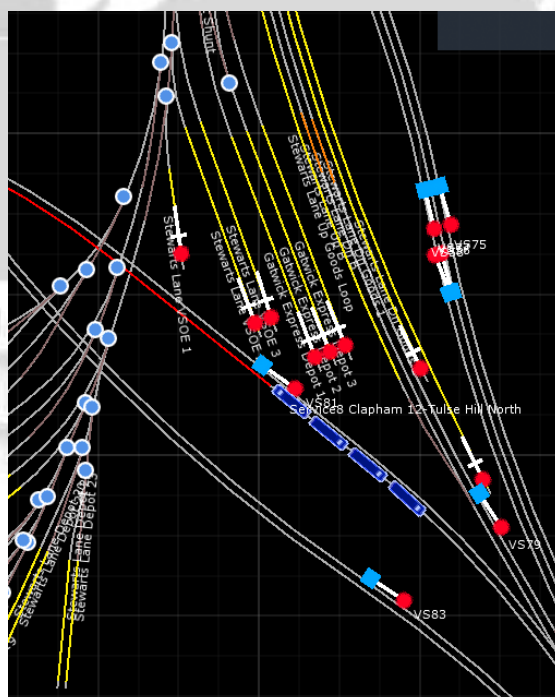| | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|
| | Service6 Clapham P9-Wimbledon | --:--:-- | 06:45:15 | | |
| ☐ | Wimbledon Dn | 06:47:24 | 06:47:29 | | |

**Service 7 for Clapham** Priority Express Passenger.

This is a 10 car class 377 placed on Clapham Junction P14 and is set to leave as the player stops.

| | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|
| | Service7 Clapham P14- Clapham Hi | --:--:-- | 06:46:00 | | |
| ☐ | Brighton Up Fst Clapham | --:--:-- | --:--:-- | | |
| ☐ | Battersea Up Clapham | --:--:-- | --:--:-- | | |
| ☐ | Clapham High Street | 06:50:33 | 06:50:38 | | |

**Service 8 for Clapham** Priority Stopping Passenger.

This service is placed near Stewarts Lane sidings out towards Clapham High St portal.

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| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service8 Clapham 12-Tulse Hill Nort | --:--:-- | 06:47:00 | | | |
| ☐ | 🚩 | Battersea Down Clapham | --:--:-- | --:--:-- | | | |
| ☐ | 🚩 | Brighton Dn Fst Clapham | --:--:-- | --:--:-- | | | |
| ☐ | 👥 | Clapham Junction P13 | 06:51:09 | 06:51:44 | | | |
| ☐ | ➡️ | Tulse Hill North | 06:58:15 | 06:58:20 | | | |

**Service 9 for Clapham** Priority <span style="color:red">Stopping Passenger</span>.

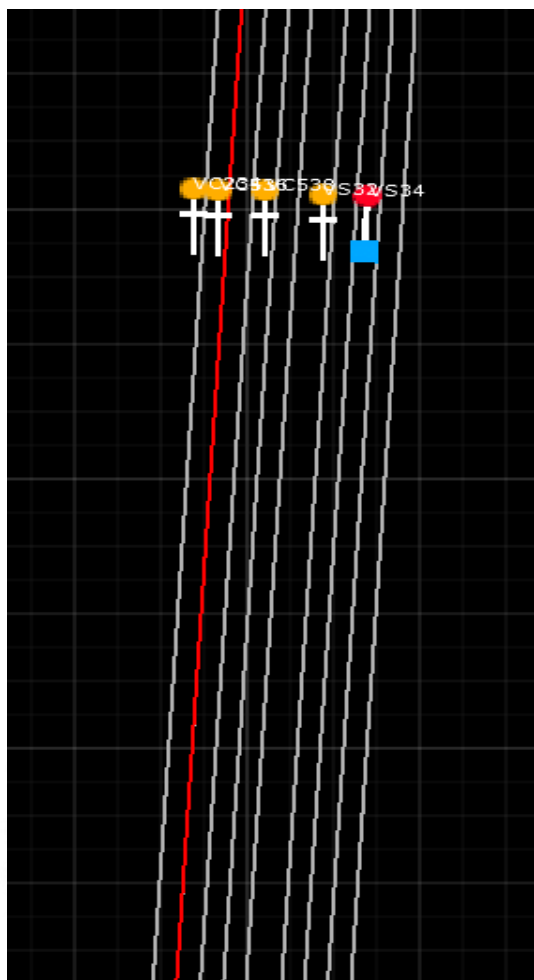This train is placed on the 5th Track in, over at the Waterloo portal and is timed to be passing through Queens Town as we hit the over pass.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service9 Clapham P5-Twickenham | --:--:-- | 06:47:00 | | | |
| ☐ | 🚩 | Windsor Dn Relief Clapham | --:--:-- | --:--:-- | | | |
| ☐ | 🚩 | Windsor Dn Fst Clapham | --:--:-- | --:--:-- | | | |
| ☐ | ➡️ | Twickenham Fast Lines | 06:51:47 | 06:51:55 | | | |

I think Clapham will be busy enough for now and frame rates may be harmed if we get too carried away. So time to concentrate on the London Victoria Station approach. The player is going into P12, almost in the centre of the station.

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# London Victoria Approach



This is the path on Chelsea Bridge, and it looks like we have some track to our right to make things on this approach look busy too. Perhaps the four tracks on the right can have a train on each track. two in and two out.

The three tracks immediately to the right of the player path can have one train in and one train out and the single track to the left of the player can have a train coming out too. Well that is the plan.

There is another helpful way to visualise what you are doing at large busy points like this. For Clapham I used pen and paper and planned the trains positions and path to platforms. For Victoria you can drop all the trains onto the track at Chelsea Bridge, across the Thames, near Battersea Power Station. There is a signal gantry there and I have placed eight trains on the track, four either side of the gantry. Those on the North side will be moved and start in Victoria Station and will be our out bound trains, those on the south side of that gantry will be moved back and will be our trains heading into Victoria.

Here they are on the bridge. Up Trains this side, Down Trains this side. Do not place these I am just showing my train of thought. (no pun intended).

Here is the Player Train instruction list. The point here is there are no path errors with those trains on the track so if we keep them on those tracks all should be well. If there was a 'Static Consist Error' we could expect problems unless we wanted a blocker on the track.

| | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|
| | Marleyman's Tutorial Train P2 | --:--:-- | 05:57:00 | | |
| | | | +00:00 | | |
| | Brighton P5 | 05:58:28 | 05:58:53 | | |
| | Brighton P5 | 05:58:53 | 06:00:00 | | |
| | Gatwick Airport P4 | 06:21:00 | 06:21:35 | | |
| | | | +00:00 | | |
| | Gatwick Airport P4 | 06:21:35 | 06:21:35 | | |
| | Brighton Up Fst Quarry Line | 06:28:02 | 06:28:02 | | |
| | Purley P1 | 06:34:52 | 06:34:52 | | |
| | South Croydon P1 | 06:37:30 | 06:37:30 | | |
| | East Croydon P2 | 06:39:23 | 06:39:23 | | |
| | Brighton Up Fst Croydon | 06:40:14 | 06:40:14 | | |
| | Selhurst P4 | 06:41:46 | 06:41:46 | | |
| | Thornton Heath P4 | 06:43:08 | 06:43:08 | | |
| | Streatham Common P4 | 06:46:02 | 06:46:02 | | |
| | Balham P4 | 06:49:03 | 06:49:03 | | |
| | Wandsworth Common P4 | 06:50:16 | 06:50:16 | | |
| | Clapham Junction P12 | 06:52:36 | 06:53:11 | | |
| | Brighton Up Fst Clapham | 06:53:51 | 06:53:51 | | |
| | Battersea Park P0 | 06:56:17 | 06:56:17 | | |
| | Brighton Up Fst Battersea | 06:56:59 | 06:56:59 | | |
| | Brighton Up Fst Victoria | 06:58:19 | 06:58:19 | | |
| | London Victoria P12 | 07:00:17 | 07:00:52 | | |
| | London Victoria P12 | 07:00:52 | 07:00:52 | | |

The London Victoria trains will have a different name from the others too, just so you can find them all to make this all easier to follow.

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**Service1 Victoria In P11** Express Passenger.

This service will begin near the Clapham High St portal and should be on the middle track down there.
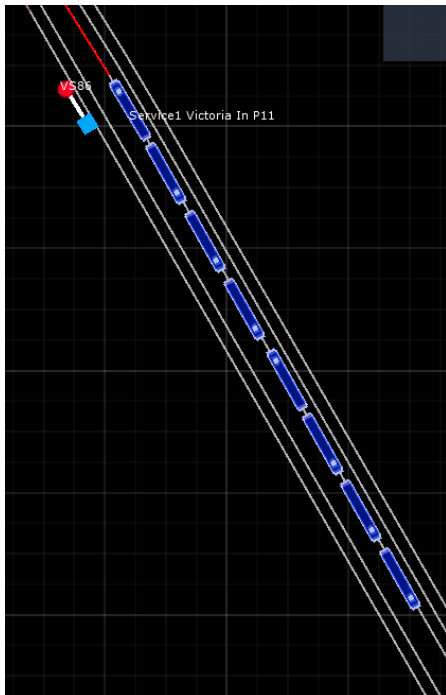


Instructions for this service include waypoints again. We need to keep a tight control of the path for these trains. Again, they all need to have their performance set to 95% wherever they make pickup stops. Train Service Class will also be important to help with the departure times, we don't want a free for all.

| | | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|---|
| | 👮 | Service1 Victoria In P11 | --:--:-- | 06:48:00 | | |
| ☐ | 🚩 | Stewarts Lane Up B | --:--:-- | --:--:-- | | |
| ☐ | 🚩 | Stewarts Lane Haverlock Jn Rev | --:--:-- | --:--:-- | | |
| ☐ | 🚩 | Battersea Reversible A | --:--:-- | --:--:-- | | |
| ☐ | 🚩 | Brighton Up Slw Victoria | --:--:-- | --:--:-- | | |
| ☐ | 👥 | London Victoria P11 | 06:53:05 | 06:53:40 | | |
| ☐ | ➡️ | London Victoria P11 | 06:53:40 | 06:53:40 | | |

**Service2 Victoria P1 Out Clapham High St.** Stopping Pasenger.

This service sits on London Victoria P1, a small cheat has been added here too. This train is at the front of the platform, it is a four car Class 450. Behind it, on the same platform, there is another four car Class 450, just for dressing. So long as we do not give this train a pickup passenger instruction for London Victoria P1 it should depart the station without collision.

| | | Destination | Arrival Time | Departure time | | |
|---|---|---|---|---|---|---|
| | 👮 | Service2 Victoria P1 Out Clapham Hi | --:--:-- | 06:50:30 | | |
| ☐ | 🚩 | Chatham Dn Fst Victoria | --:--:-- | --:--:-- | | |
| ☐ | 🚩 | Stewarts Lane Dn A | --:--:-- | --:--:-- | | |
| ☐ | 🚩 | Stewarts Lane Dn B | --:--:-- | --:--:-- | | |
| ☐ | ➡️ | Clapham High Street | 06:55:30 | 06:55:35 | | |

**Service3 Victoria P18 In** stopping Passenger this service is starting just in front of Battersea Park P0, this is the path the players train will be taking but we do not need to worry as the service will be on the move before we get there.
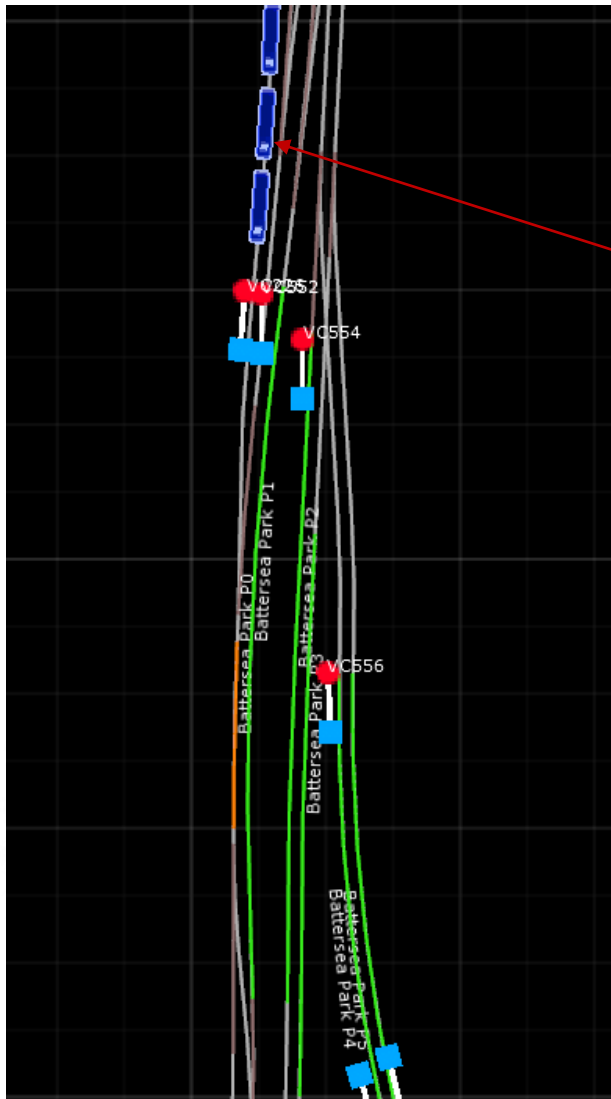
Fly over to Battersea Park station and you will notice that Platform 0 is on the left. Check in the 2D map, it is not a 'green' platform.

Place service 3, an eight car train, for Victoria just in front of the signal VC226 and set the train instructions as per the next screen shot.

**Service4 Victoria P4 In**  is placed 'to the left' somewhat, of this train.  If you zoom the map out a little you will see a section of double track and a signal, VS57.

Place an eight car train on that line behind that signal. You may as well place another eight car train in the track right next to it behind signal VS55

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service3 Victoria P18 In | --:--:-- | 06:49:00 | | | |
| ☐ | 👥 | London Victoria P18 | 06:52:34 | 06:53:09 | | | |
| ☐ | ➡️ | London Victoria P18 | 06:53:09 | 06:53:09 | | | |

See the next screen shot for the two trains, service 4 and service 7 as they will be, on the track I described.

Service 3 Victoria

Service 4 Victoria

Service 7 Victoria

Battersea Station
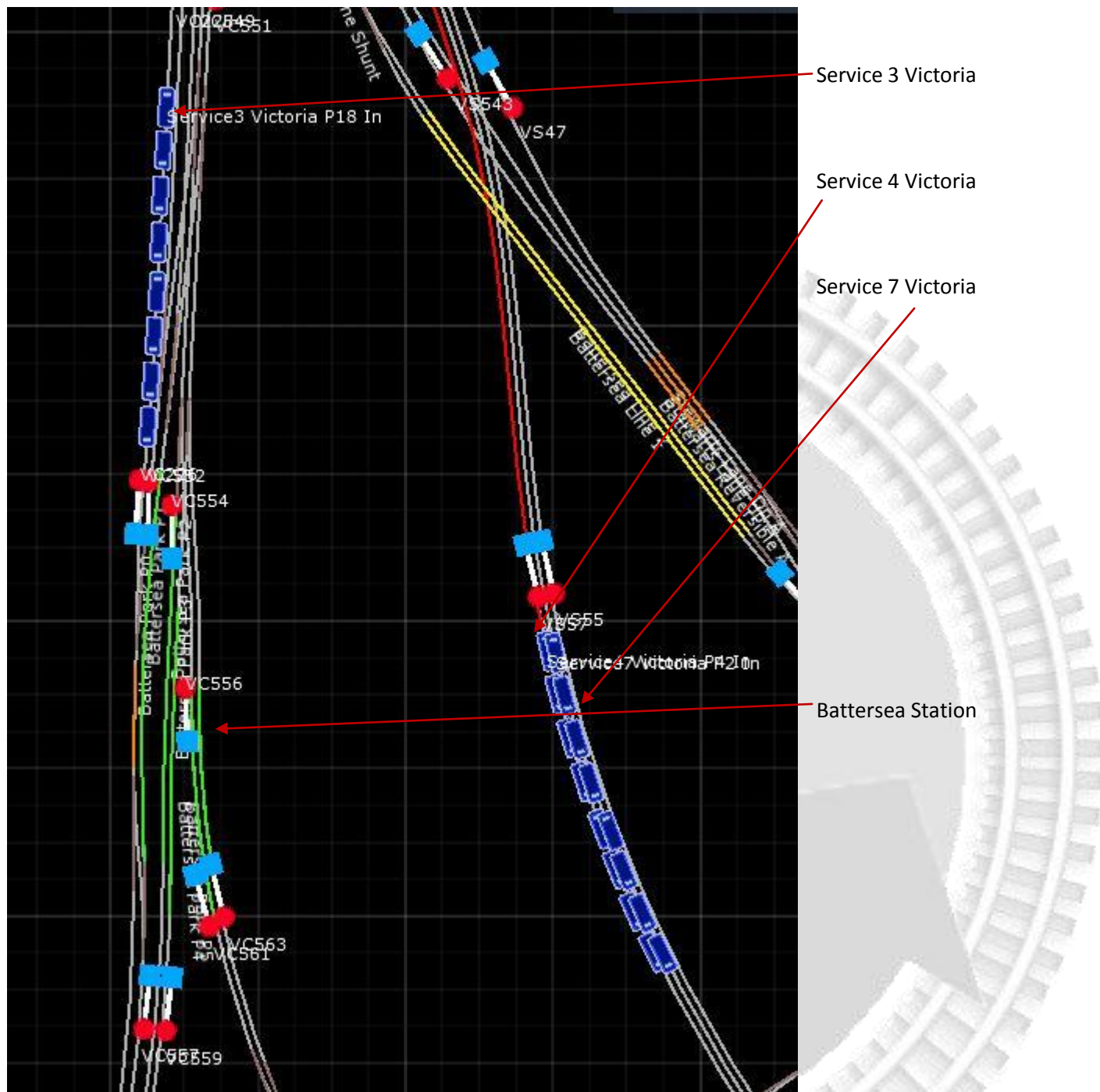
Instructions for Service 4 Victoria P4 in

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service4 Victoria P4 In | --:--:-- | 06:49:00 | | | |
| ☐ | 🚩 | Chatham Up Slw Victoria | --:--:-- | --:--:-- | | | |
| ☐ | 👥 | London Victoria P4 | 06:52:39 | 06:53:14 | | | |
| ☐ | ➡️ | London Victoria P4 | 06:53:14 | 06:53:14 | | | |

And since you just placed service 7 right next to that one you may as well set instructions for service 7 now before placing service 5 and 6.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service7 Victoria P2 In | --:--:-- | 06:50:00 | | | |
| ☐ | 🚩 | Chatham Up Fst Victoria | --:--:-- | --:--:-- | | | |
| ☐ | 👥 | London Victoria P2 | 06:54:11 | 06:54:46 | | | |
| ☐ | ➡️ | London Victoria P2 | 06:54:46 | 06:54:46 | | | |

**Service5 Victoria P8 Out** Stopping Passenger is placed on London Victoria Platform 8 and is a 10 car train.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service5 Victoria P8 Out | --:--:-- | 06:46:00 | | | |
| ☐ | 👥 | Battersea Park P5 | 06:49:22 | 06:49:57 | | | |
| ☐ | ➡️ | Clapham High Street | 06:52:07 | 06:52:12 | | | |

**Service6 Victoria P10 In** Stopping Passenger is placed next to Service 1 Victoria in P11.  That is over by Clapham High St portal.
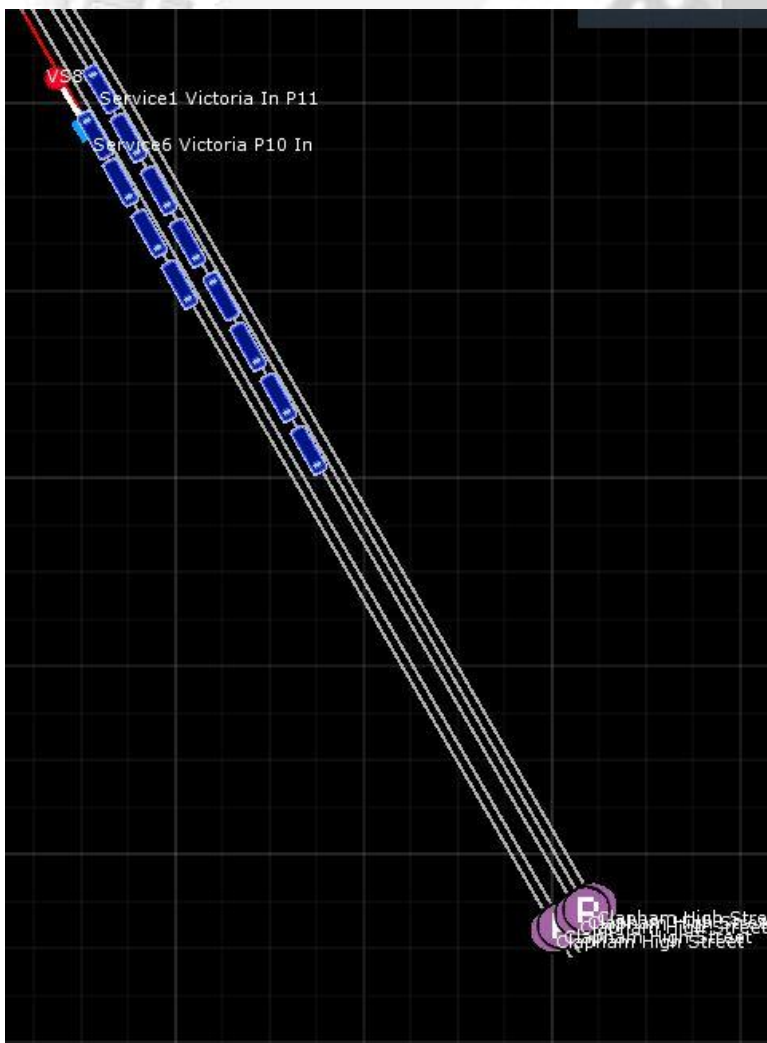


Service 6 Victoria is on the left most line.

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Instruction for this service are as follows.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service6 Victoria P10 In | --:--:-- | 06:47:00 | | | |
| ☐ | 👥 | Battersea Park P4 | 06:48:41 | 06:49:16 | | | |
| ☐ | 🚩 | Brighton Up Slw Battersea | --:--:-- | --:--:-- | | | |
| ☐ | 🚩 | Brighton Up Slw Victoria | --:--:-- | --:--:-- | | | |
| ☐ | 🔶 | London Victoria P10 | 06:56:08 | 06:56:08 | | | |

Service 7 Victoria has already been dealt with... So **Service8 Victoria P11 Out** Stopping Passenger has been placed on London Victoria Platform 13 and is a six car train.

| | | Destination | Arrival Time | Departure time | | | |
|---|---|---|---|---|---|---|---|
| | 👮 | Service8 Victoria P11 Out | --:--:-- | 06:52:30 | | | |
| ☐ | 🔶 | Twickenham Fast Lines | 07:02:50 | 07:02:58 | | | |

F2 save the scenario and now you can run the scenario.

If you have followed this tutorial the scenario is now playable and you should not have any issues. Congratulations and thank you for reading this tutorial. However, it is not quite over yet. For those that want to share their work in future you will need to know how to pack your scenario for others to use.
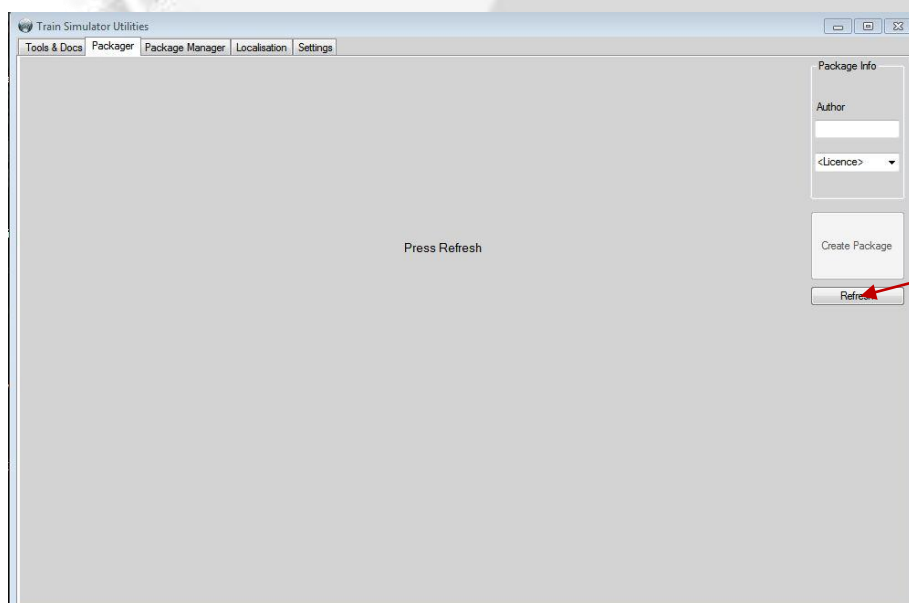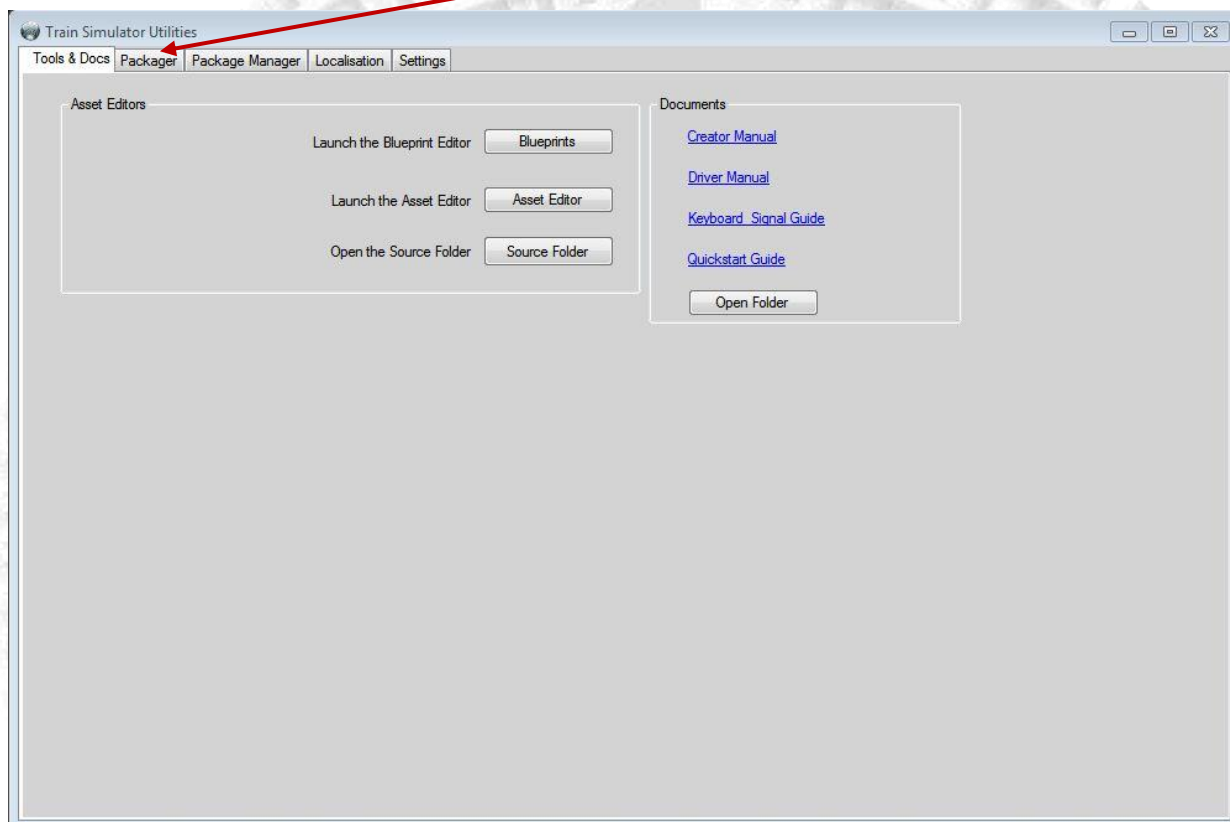
# Package your scenario

Once you have made a scenario and tested it you may want to share it with others. To do that you will need to use the Utilities program that comes with TS2013.

Exit TS2013.

Navigate to your train simulator installation folder with in *Steam; Steam\steamapps\common\railworks* and double click the  Utilities.exe

The Utilities Screen will open. Select the Packager Tab





Not a lot will happen, the screen will subtly change, click on the refresh button .
Depending on the size of installation your TS2013 is, your screen will update with Route and Asset information.

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http://www.railworks.marleyman.co.uk/store/

Eventually you will get this screen. Now you must navigate through the list on the left by expanding the Route section until you find Your Scenario within the route you created it on.
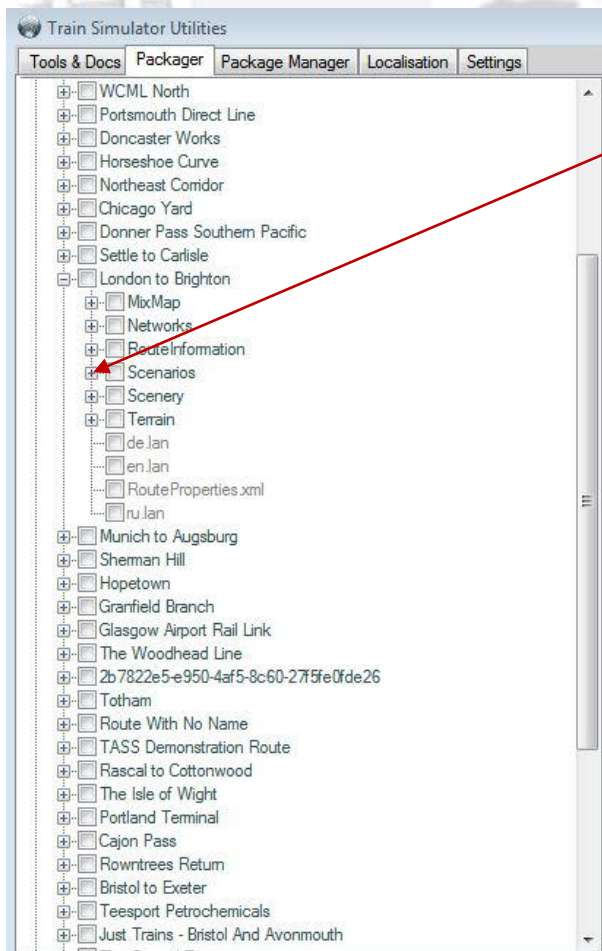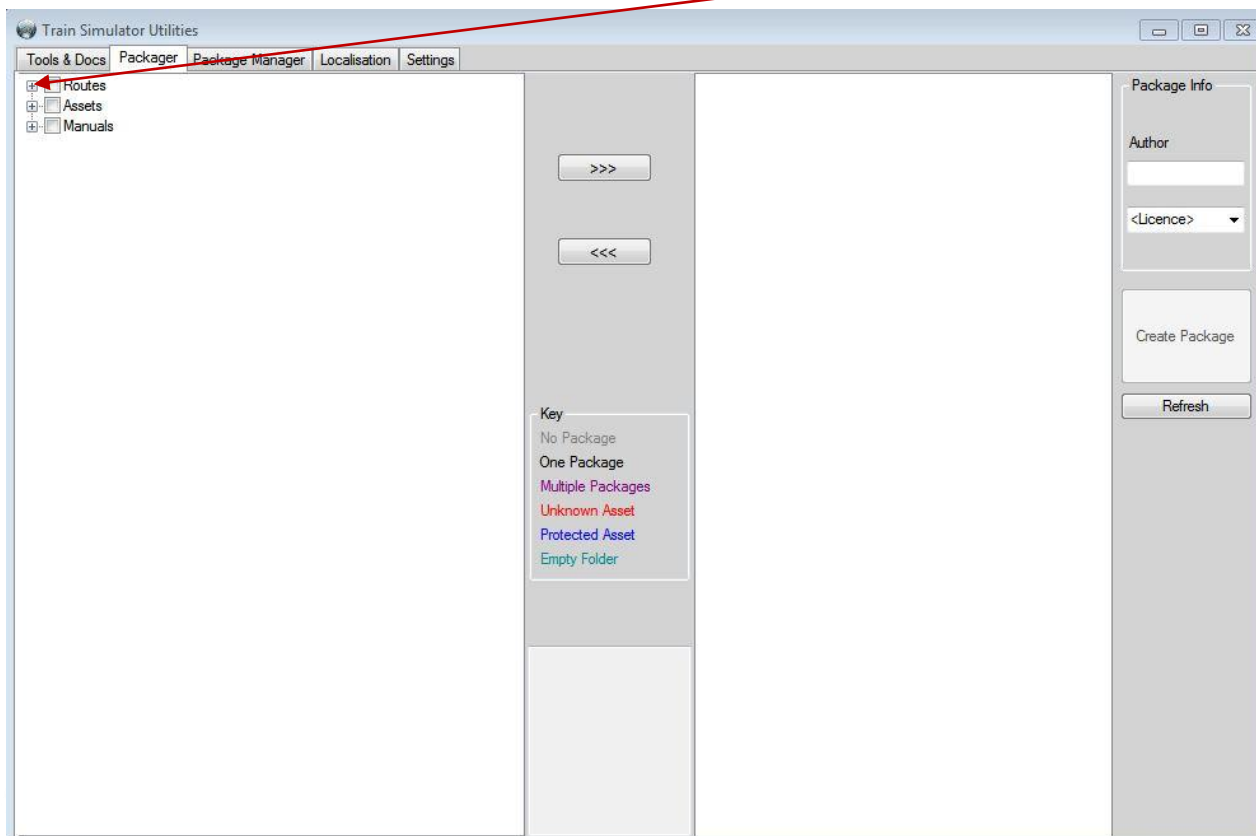


Here is the London To Brighton folder expanded to the Scenario directory. Drill into this further to find the scenario you created.
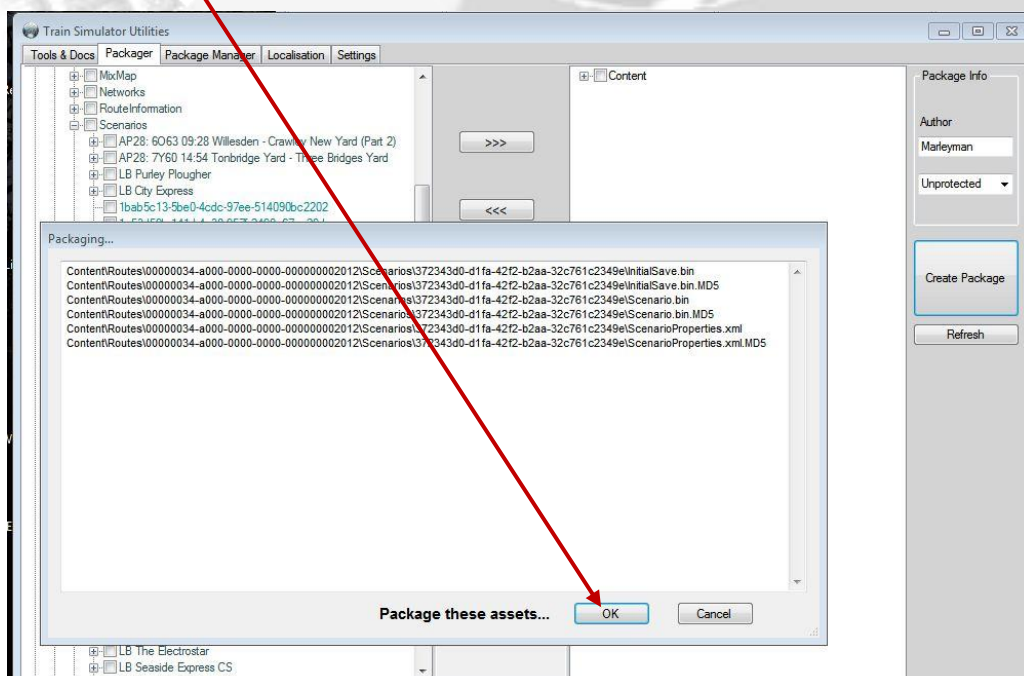
Train Simulator Scenario Creation Tutorial by Marleyman
http://www.railworks.marleyman.co.uk/store/

When you find your scenario place a tick in the box and then move it to the right hand window by clicking here
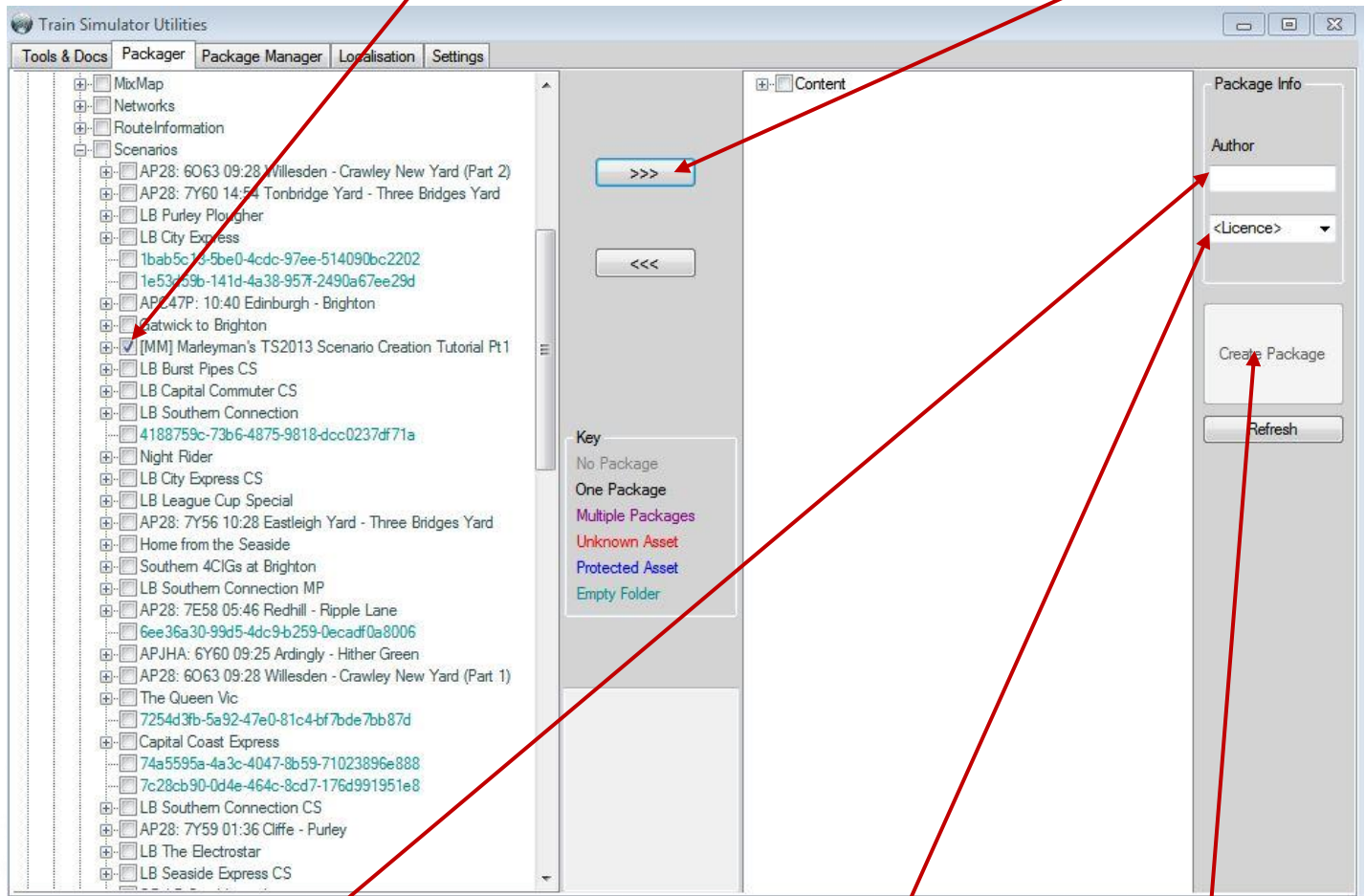


You can then type the Authors name, you, or your nickname, change the Licence to unprotected, and select the Create Package button.

The Packaging Window will open and you can select a location on your Hard Disk to save the scenario to after you give it a file name. Click OK , name the file and select where you will save this rwp file.

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Your scenario (or scenarios), because you can pack more than one from more than one route at a time, will be packaged together if you wish. Just keep moving any scenarios you want to pack over to the right hand side before you select Create Package.

Name it here, this does not need to be the scenario name. It could be six scenarios with a common theme so the name can be anything you wish. Then click save
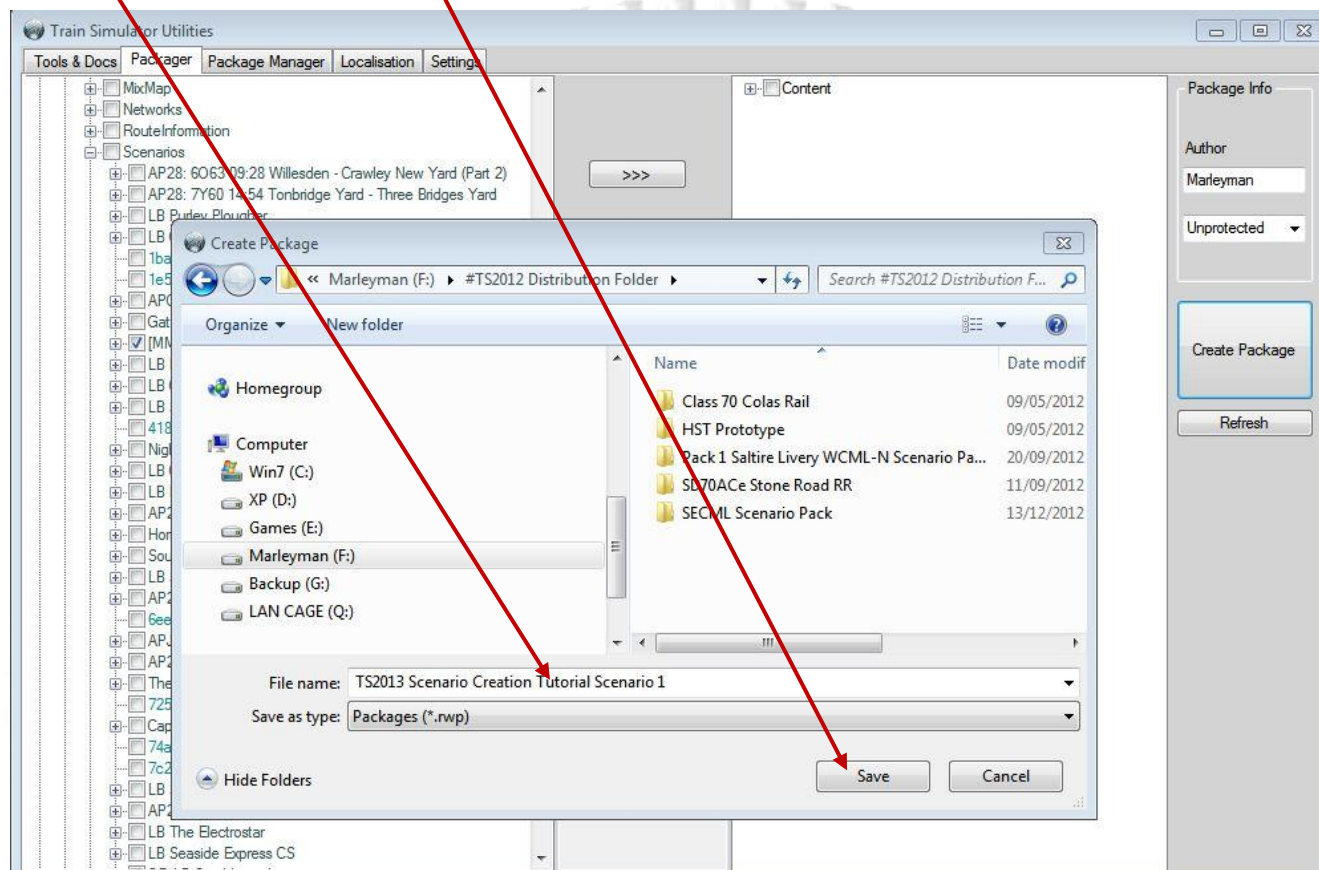


Your scenario can now be e-mailed to friends or stored on a server for download and loaded by others using the TS2013 Utilities.

Please consider using Marleyman as a host. I will host any scenarios for free and you will have your own 'developers' page should you want to host many scenarios. My store keeps a record of downloads, uses unrestricted, free, fast bandwidth to deliver content and users only require a valid e-mail address to create an account.

There is also a Facebook page to announce any content you want hosted.

Train Simulator Scenario Creation Tutorial by Marleyman
http://www.railworks.marleyman.co.uk/store/

## Special Notes:

Make frequent backups. Save often (F2), Exit and Save, use the 'scenario packager' to offload a backup of your scenario as you build it. If the scenario gets corrupted and it can do, you will be glad of those half build rwp packages.

Play your scenario frequently to check all is OK. You can have the AI run your train in accelerated time mode, very useful for scenario designers. To do this, do the following;
On your Steam Library page right click on the Train Simulator 2013 game title, the same one you normally verify the game files with. Click on the Launch Options and type;

EnableAsyncKeys -followaitrain
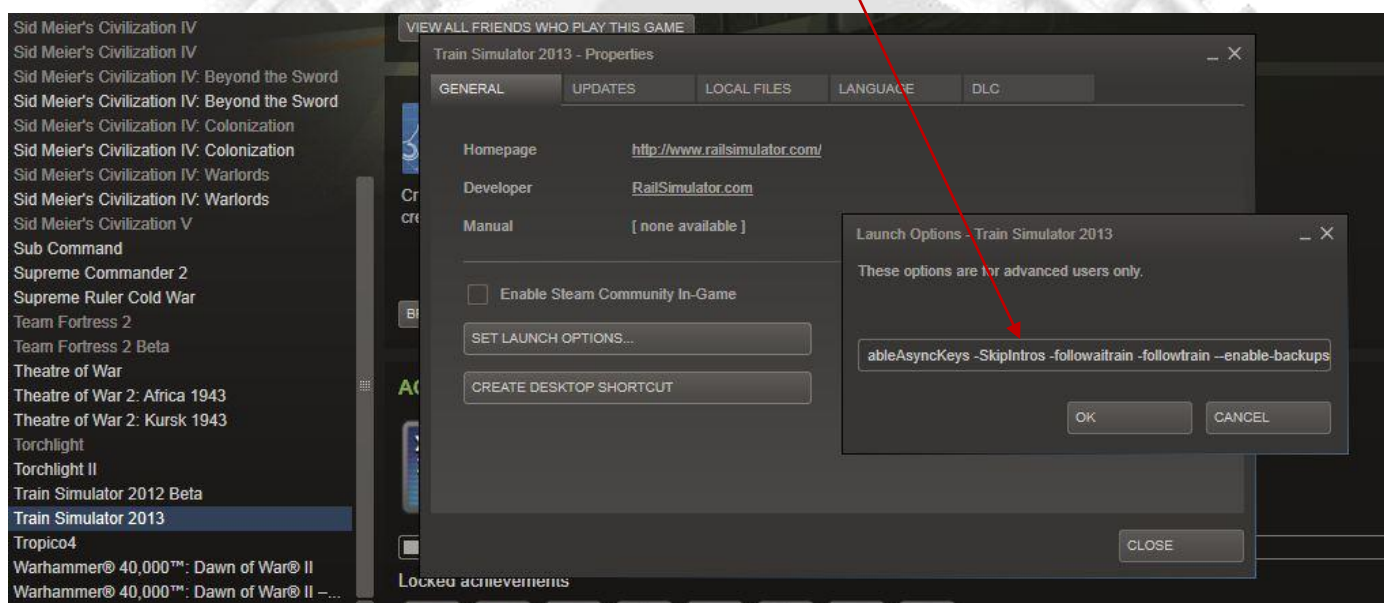


Select OK then close the Properties box. Then open your scenario and Ctrl+Click the Player Train at scenario beginning. The AI will now take over, Ctrl Click the train a second time to 'follow' the train. You can also speed up time with CTRL+Shift+5 (for five times faster ride).

You can also use CTRL+SHIFT plus keys 1, 2, 3, 4 or 5 to accelerate the game to 1x through 5x speed. This time acceleration will work even if you are driving the train.

You can have the Editor run a test on your scenario and check what is happening from the 2D window.

Train Simulator Scenario Creation Tutorial by Marleyman
http://www.railworks.marleyman.co.uk/store/

# Testing a scenario inside the editor



Press 9 to bring up the 2D view and navigate to your train. Now Read this whole section before doing anything else because this is the part where all you work can be destroyed. Thirty hours of scenario building can be wasted if you get this wrong. In fact, **I would recommend you just don't use this**. However, the facility exists and forewarned is better than finding out the hard way.



Use this 'Player' tool to start the scenario running. Just click on the play button. The welcome note you wrote will pop up and the train will start to move.

You can zoom in and out of the display but you can't close that pop up message. You can use the x2, x4, x8, x16 and x32 buttons to accelerate time. You can scroll the map to keep the train in view, if there were any AI trains, they would follow their instructions too.

You can do this in the 3D view as well, you just have to fly alongside the train if you want to follow it.
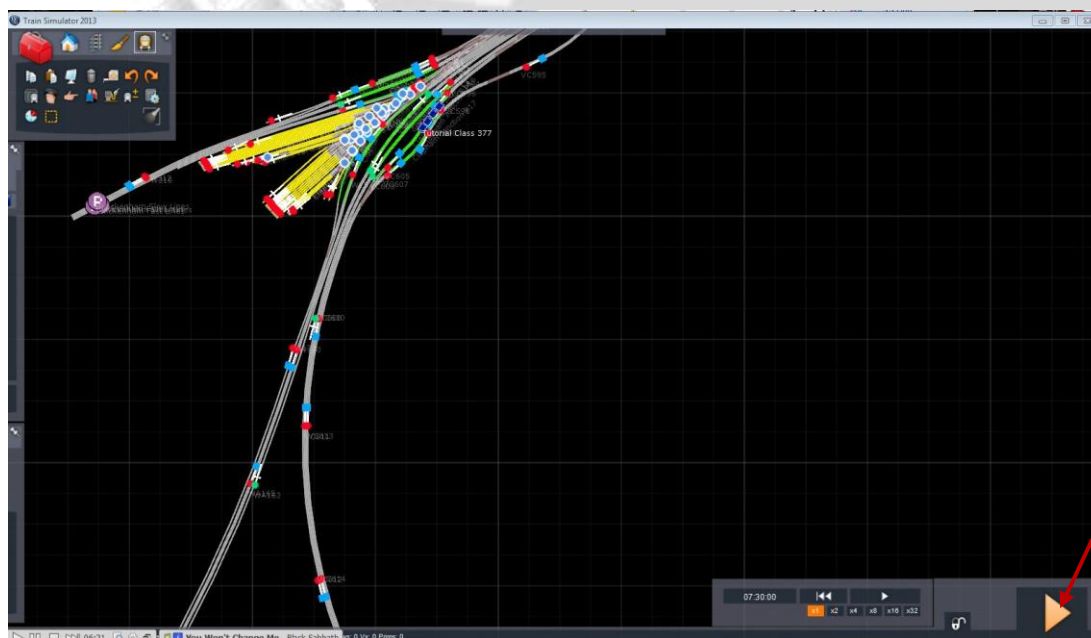


**WARNING!** **To Exit this mode and preserve all your work you must reset the** *player* **to the scenario start time. To do that click here on the Jump Back button. If you do not reset to the scenario start time and you exit and save with that timer at the end of the scenario, for example. Then that is where your scenario will now start, at the end, totally ruined.**

This is worth repeating!

So whilst the tool is useful I would advise just not using it. Much better and safer to F2 Save a scenario and click the Drive button here and use the followtrain and accelerate time options for tests.

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There is also useful information at the RailWorks wiki
http://www.railsimdownloads.com/wiki/tiki-index.php?page=Section+6+Scenario+Editor
And in the Scenario section of the RailWorks Creator manual which you should read in conjunction with this.

This concludes Part Two.  Play through your First Scenario then come back for more.
Part three includes Freight Operation, adding scenery, Load and unload cargo, marshalling, designer added markers and perhaps more tea.

Thanks,
Marleyman