Chapter 1 – Setting Up the Railroad

Tombstone Data

The first thing that needs to be done is to set up the ‘tombstone data’ – the information that never, or at least very infrequently, needs changing.

Once ProTrak has loaded you can start to setup a new railroad. In order to create a new railroad you must have the ProTrak CD available.

1. On the ProTrak toolbar, click on “File” then choose “New Home Railroad…” from the dropdown list (1). This will bring up the window shown in Figure 1-1.

![Figure 1-1](image)

2. The program will search for a moment or two trying to find your CD drive. If the correct drive is not the one displayed in the “CDROM drive”

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(1) It is important that you do not edit the data in the sample railroad as this data is used to establish any new railroads that you may set up. In addition, if for some reason there is a need to re-install ProTrak, the data for the sample railroad will be overwritten. For your information, the data for the sample railroad is stored in the “ES” directory in ProTrak.
data field, use the arrow beside the data field to display the drives and change the selection. Once you have the correct drive selected, click on “OK” and you will be presented with the first of two windows where you will record information about the railroad. Figure 1-2 shows this window.

3. Only the first three items in this window are going to be changed:
   a. Railroad Initials PRO
   b. Railroad Name ProTrak Demonstrator
   c. Folder/directory PRO

   To make the changes, highlight the existing data and type the new data over it.

4. Figure 1-3 below shows what the window should look like after you’ve made your changes.
5. Go in and have a look at both Region and Operating Year, but for now we’ll leave them unchanged. We'll discuss Operating Year later.
6. At this point in time, ProTrak treats the Region selection as a purely cosmetic feature. If you wish you can change the Region however it will not have any impact on the way ProTrak operates\(^2\).

7. Once the changes described in step 3 have been made, click on “OK”. At this point you will see that some action is taking place and a progress bar will be displayed at the bottom of the window. This is ProTrak copying files that will be used by your new railroad. Once all the files have been copied you will see the second window (see Figure 1-4) where you will select the Railroad you just created to be the railroad you’re operating on.

![Figure 1-4](image)

8. You will notice that there are only two railroads listed here, ES\(^3\) and PRO. ES is the sample railroad that is provided with ProTrak. If you previously have started to create a railroad, that railroad may also be displayed. In any case, the railroad we want to work with is PRO so first click on the line showing the ProTrak Demonstrator railroad - line 2 in this case (see Figure 1-5).

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\(^2\) Here’s a condensed version of Jim’s comments on the “Region” data field: The “region of North America” setting is used to give a “relative perspective” of where the home road is. The map of connections for routing an empty foreign-road car looks different if you are in the southwest, rather than the northeast. These two would essentially be “backwards from each other. Similarly, from California, all empty cars would be routed “eastwards”.

\(^3\) This may show as either ES or NSOU depending on whether you’ve looked at the data in the sample railroad or not.
Once the appropriate line is highlighted, you will notice that the “Change to this railroad” button at the bottom left of the window had been enabled. Click on this button to change the home railroad to PRO.

You may now get a message indicating that there is a problem with the default yard. For now we’ll ignore the problem as we’ll clear that issue up later. To close the window just click on “Yes”.

The message displayed in Figure 1-6 will now appear confirming that we are now working with the ProTrak Demonstrator Railroad.

9. Click on the “OK” button to continue; the message window will close.
At this point, the basics of your new railroad has been set up, however there are a few more general items that need to be taken care of before we start to enter the information about stations, cars, etc.

1. On the ProTrak toolbar, click on “Administration” then select “Core Segment Notes” (note that this may also show as “Middle Notes”) from the dropdown list. The window shown in Figure 1-7 allows you set up some more of the ‘tombstone’ data for the railroad.

   a) If the “Railroad Timetable directions” (the second item in the window) isn’t already set to East/West we need to change it. Click on the “East/West” radio button in the “Railroad Timetable directions” section to change it from “North/South”.

   b) While we’re not changing it, the “Name of core segment” could be changed to reflect the name that you use for your main subdivision.

Figure 1-7
c) The “Vertical clearance is based on clearance plate…” \(^{(4)}\) selection will be important on your own railroad. On your railroad you will need to find the location which has the smallest vertical clearance between the top of the rail and the bottom of anything which crosses the track. Things that cross the rails may be a bridge or it may be another piece of material, such as a sub-roadbed which crosses overhead. Once you have this measurement (in scale feet) you need to choose the plate which will accommodate that measurement. Initially, we’ll set this (or leave this set) to “U” (the largest clearance) to keep things simple. Note that if you change the “Vertical Clearance” setting, the height value displayed in the green background area below which starts “Cars over...” may change accordingly \(^{(5)}\).

This is a good place to discuss tool tips. If you ‘hover’ your mouse pointer over the “Vertical Clearance” data field you will see a box with a line of text which reads “Sets Clearance Plate for Railroad #1”. These tool tips occur quite frequently in ProTrak either to help us understand what data to put into a specific data field, or to give us a better understanding of the purpose of that data field. When a tool tip is known to be available, it will be indicated by “\((tt)\)” in the text where the value for the data field is being discussed.

d) You can also change the weight for the “Heaviest car allowed...” \((tt)\), and the type of rail (the “Middle rail is” \((tt)\) section). Keep in mind that both of these should be viewed in relation to the operating year. If you’re modeling in the 1940’s for instance, welded rail was not in use, so it is really not appropriate to choose that option. For our purposes we’ll leave the values as defaulted – “220,000 lbs” for the heaviest car and “bolted rail” for the rail type.

e) The “Model scale of railroad is” \((tt)\) can be changed to reflect what your railroad actually is and the “Minimum Middle radius is” \((tt)\) can also be changed to reflect what the sharpest curve on the core segment of your railroad is. This means that while the mainline may have 30” radius curves as a minimum, the branch line or the sidings may have curves that are much sharper. As with the Clearance Plate settings, changing the minimum radius will affect the value displayed in the green background area below. Again, for

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\(^{(4)}\) See “Clearance Plate” in the definitions in Appendix A.
\(^{(5)}\) Currently, only Plate B has a height of 15’1”; all other Plates have a height of 15’6” thus you may not see a change to the height if you change the Clearance Plate value.
our purposes we’ll leave the settings at “HO 87” for the scale and “30” for the minimum radius.

f) Since we currently have no other subdivisions, we need not go into the “Middle Subdivisions” section, but let’s have a quick look in there. Once you click on the “Middle Subdivisions” (tt) you will be asked about saving the Middle Subdivision Notes (see Figure 1-8). Note that you will be asked this question if any of the data has been changed, regardless of whether you went into the “Middle Subdivisions” section. Clicking on the “Middle Subdivisions” button also closes the “Middle characteristics” window.

A note about the terms ‘Core Segment’ and ‘Middle Subdivision’ If there is a subdivision name entered for the core segment, the name of the segment is used, otherwise the term ‘core segment is used’. Since the sample railroad comes with a subdivision name for the core segment (Middle), the term ‘Middle Subdivision’ will be used.

![Save Subdivision Notes](image)

Figure 1-8

g) Click on “Yes” to choose to view the subdivisions on Middle; the window displayed in Figure 1-9 will appear.
h) Exit from here (click on either “OK” or “Cancel”), and for now, you’ve completed all of the ‘tombstone’ data changes. Later we’ll have to do some more.

A word of warning. Once you have the initial setup completed, if you exit the program and come back in at a later time, you may be faced with a window warning that you have engines that need servicing. You may either click on “Close” or, preferably, click on “Reset Hours”. If you choose to click on “Close”, you will receive the warning window every time you exit the program and restart it so it is recommended that you click on “Reset Hours”.

Program Options Settings

Within ProTrak, there are a number of settings which can be changed to suit the user. Some of these change the names displayed on the ProTrak toolbars, the individual items within a dropdown list and/or the headings on printed documents. We’ll look at a few of these, but within this manual, we will normally always use the default settings i.e. the settings that were there when ProTrak was loaded. If in doubt as to what the default settings are, refer to Appendix H.

The first group of items we’ll look at is shown in the “Definitions and Terminology” window.
1. On the ProTrak toolbar, click on “Administration”, then choose “Definitions and Terminology” from the dropdown list. A window like the one shown in Figure 1-10 will appear.

![Definitions and Terminology](image)

**Figure 1-10**

2. The upper part of the window contains the panel labeled “Terminology” and we need to look at that area. Unless otherwise indicated, we’ll leave the fields set to the ProTrak default setting.
   a. The first item, “The local switching zone...” shows “Switching Zone” in the associated data field. If you click on the dropdown arrow beside the data field, you will see you have five options. The ProTrak default is ‘Switching Zone’.
   b. The second item, “Standing position...” shows ‘SPOT’ in the associated data field. Again clicking on the arrow beside the data field shows that you have four options. The ProTrak default is ‘SPOT’.
c. The third item, “The track SPOT...” also shows ‘SPOT’ in the associated data field. You have five options with ‘SPOT’ being the ProTrak default.

d. The fourth item, “Conductor’s Train Journal...” shows ‘Switchlist’ in the associated data field. You have eight options here with ‘Switchlist’ being the ProTrak default. Changing this setting will alter the toolbar that is displayed when an operating session is run. The fourth item displayed on the toolbar while in operations mode will be “Switchlist” and that is the term that will be used in this manual.

e. The fifth item, “Yardmaster’s switchlist...” shows ‘Workorder’ in the associated data field. You have two options with ‘Workorder’ being the ProTrak default.

f. The sixth item, “The caboose...” shows ‘Cabin’ in the associated data field. You have eight choices with ‘Cabin’ being the ProTrak default. This item is printed on the form which the conductor uses to manage his/her train. In our case this is called the ‘Switchlist’ (see sub-para ‘d’ above).

3. The lower part of the window contains a panel labeled “Definitions”. For now we will ignore that area.

If any of the items shown in your window do not match those shown in Figure 1-10, change the item to bring it into line with what we will be using.

If any changes have been made the “Apply” button needs to be pressed to force the changes to take effect. The “Cancel” button, when pressed, simply exits the window without making any changes.

As we work though the balance of the manual remember that if you come across a menu selection or a header on a printed document that does not match the one shown in this manual, a program default may have been altered. In that case please review Appendix H for possible causes and what the default setting is.
Summary

In Chapter 1 you have done the following:
• Created a new railroad;
• Changed to the railroad you just created thus making it your home railroad, and
• Set up basic ‘tombstone’ data for your new railroad.

You have learned about the following:
• The railroad “region”;
• What clearance plates are and how they affect the railroad;
• What tool tips are and how to use them; and
• What the default program options settings are and how to change them

You should see:
• Using Windows Explorer, you should see a directory named PRO in the ProTrak directory; and
• Using the ProTrak toolbar, click on “File” then “Change home railroad”. In this listing you should see the new railroad – ProTrak Demonstrator – listed.

We’ve now set up some of the ‘tombstone’ data for the new railroad and can move on to Chapter 2 where we’ll enter the data for the stations on our railroad.