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Version 3.0



8/6/2012

JMRI® Operations User's Guide Version 3.0

Revised 1/5/2013

Preface

JMRI is a Java-based cross-platform application for model railroaders. JMRI® contains applications for:

The programming of Digital Command Control (DCC) decoders, (DecoderPro®).

Programming decoders and using throttle run trains, DecoderPro3®

Drawing computer based panels for depicting a model railroad layout , (PanelPro®).

Controlling the layout , (Layout Editor).

Creating train manifests for duplicating railroad operations, Operations

Controlling the signals on the layout

Controlling lighting and sound in the room, and so forth. (SoundPro®)

All this capability is contained in one program (JMRI) which has several "start-up" screens for the various applications.

The JMRI® Operations Program is contained within the DecoderPro® and PanelPro® Programs and accessible through their main menu.

JMRI® can run on any computer system that will run Java 1.6.0 or later, whether it is Macintosh, Windows, or Linux based. It does require that Java be installed on the computer. You can get Java as a free (but very large...) download at:

<http://java.sun.com/getjava/>

If this is your first visit to our manual we suggest that you take the Decoder Pro® tour at

<http://jmri.sourceforge.net/help/en/html/apps/DecoderPro/Tour.shtml>

to get an overview of what we're about to cover..

Note: All screen shots in this manual are from a Windows machine using the "Metal" User Interface option . While your screens will probably differ in some layout details, they will be essentially the same. All programming examples shown are with Digitrax PR3(MS100 mode) connected to Digitrax Super Chief Radio Command Station. Most of the decoders in locomotive samples will be Digitrax, except for sound examples.

Note: This entire manual has been updated to correspond to DecoderPro 3.0 and the HTML verified using HTML4 and Cascading Style Sheets. If the formatting looks odd, you probably need to update your browser.

Revisions

Version	Revision Date	Editors	Major Revisions
3.0	1/5/2013	Dale A. Tripp Bruce Shanks	Updated from JMRI 2.14.1 and removed from DecoderPro® as separate Guide

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Installing JMRI®

Preparing to Install JMRI®

The JMRI software package includes:

- DecoderPro
- DecoderPro 3
- PanelPro
- SoundPro
- Operations is embedded in DecoderPro3® and PanelPro®

There are always two versions of the software available:

- Production Version: The current stable version that is fixed in design and for general use. If just starting, this is the version for you.
- Development Version: The version that is under development for testing and is used to validate new features and changes to existing features. If you are familiar with JMRI and want to help in the validation and testing process, then use this version.

Supported systems (check [supported hardware](http://www.jmri.org/help/en/html/hardware/index.shtml) systems.) <http://www.jmri.org/help/en/html/hardware/index.shtml>

Prior to installing JMRI, you must download the correct version for your computer system.

<http://www.jmri.org/download/>

- Windows
- Mac OS X
- Linux

Installing JMRI software

After downloading the JMRI file, now install using the appropriate Installation guide:

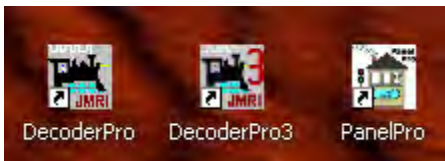
- [Windows Installation Guide](http://www.jmri.org/install/WindowsNew.shtml) <http://www.jmri.org/install/WindowsNew.shtml>
- [Mac OS X Installation Guide](http://www.jmri.org/install/MacOSX.html) <http://www.jmri.org/install/MacOSX.html>
- [Linux Installation Guide](http://www.jmri.org/install/Linux.html) <http://www.jmri.org/install/Linux.html>
 - [Ubuntu GNU/Linux](http://www.jmri.org/install/Ubuntu.shtml) <http://www.jmri.org/install/Ubuntu.shtml>
 - [Xubuntu](http://www.jmri.org/install/decTop.shtml) <http://www.jmri.org/install/decTop.shtml>
 - [OpenSuSe linux](http://www.jmri.org/install/OpenSUSE.shtml) <http://www.jmri.org/install/OpenSUSE.shtml>

Starting Operations Program

The Operations Program is run from the DecoderPro® Menu

which is activated in the Preferences.

Once you have downloaded the DecoderPro® software and installed it, simply open the program in the usual manner for your operating system, windows will show icon on desktop. (for details refer to DecoderPro® User's Guide.



Double click on the icon for the program to open, in this case we will open DecoderPro®

This dialog will appear briefly as the program is loading.



You should see this or a similar opening screen displayed after program starts:

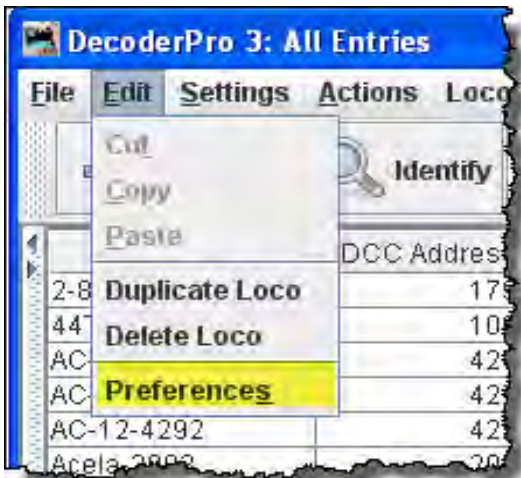


It may take a while for this screen to come up, especially on older and slower computers. Remember that you are essentially running the program on a Java emulator over your native operating system software. New computers can do this fairly quickly, but older ones will feel like they're taking forever. **Be patient** - it will come up eventually! Even on older computers, once the program is up the response time is quite good.

If this is the first time you have run the program after you installed the software, the **Preferences** screen will come up automatically to allow you to set up the system for your particular configuration. Also if you change your system configuration, OR if you have your laptop away from the railroad, but you want to play with JMRI there is a simulator mode you may want to try. So click next, and we'll have a look at preferences.

How do I set up my preferences?

From the Edit menu in DecoderPro3 select **Preferences** option:



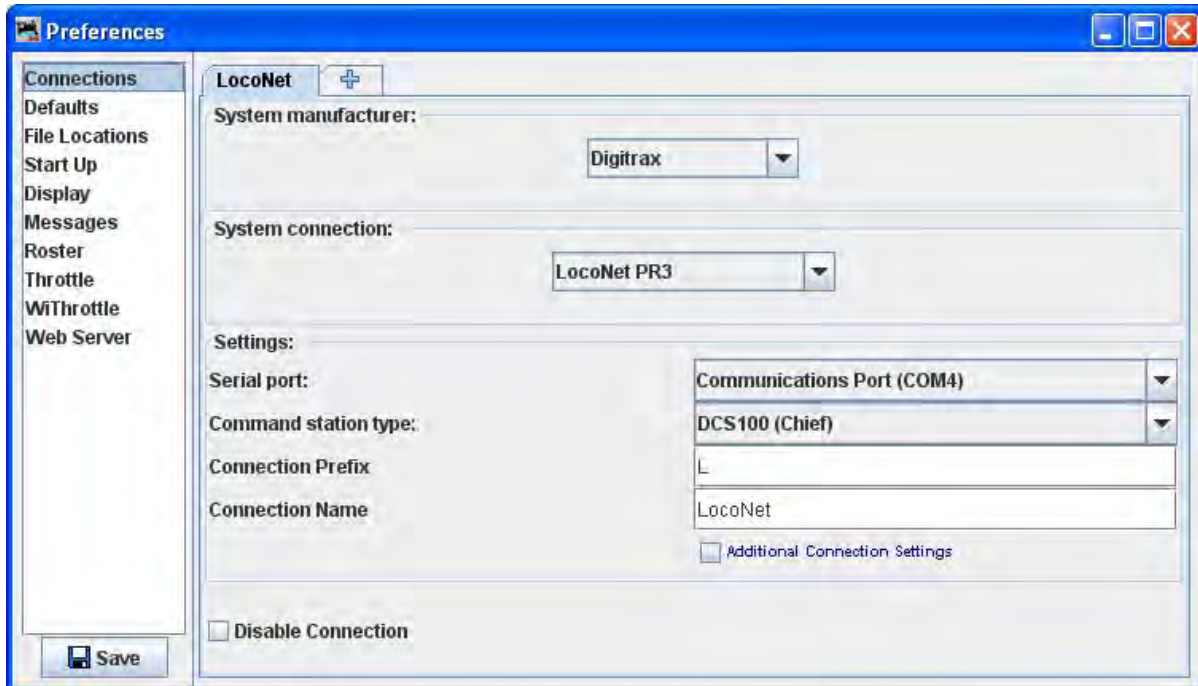
(This window may open automatically the first time you run the program.)

As a first time user the most important information is the **Connections** screen where you describe how the computer will talk to the command station. Most of rest you can leave at the initial or “default” settings until you find a need to change things to suit your fancy.

Most importantly, you must click to finalize your settings and then re-start the program to have them take effect.

The Preferences window provides access to the basic configuration information to connect your computer to your DCC system. You will be using that system to actually program and operate trains equipped with DCC decoders. An important concept to keep in mind is that JMRI is nothing more than a very smart throttle. If you can do something with your throttle you can probably do it faster and easier with JMRI. However, if your system can’t do what you want, either because your system is not connected properly (it’s broken) or the system manufacturer did not incorporate that capability, then JMRI will not be able to do it either. In the latter case JMRI will probably give you an error message or have the command “greyed out” to help you identify why it can’t accomplish your request.

The window is split into two panes, on the left side is a list of preference groups that may be set. Clicking on one of the items opens the options that may be set in the right side pane. No selection have been made



Connections	Allows you to select the system connection that you are using for controlling DCC and the connection to your computer. This is the only required preferences to define your DCC system. The rest of the features are used to customize your specific system.
Defaults	Shows system default settings
File Locations	Set default location for saving User files and Script Files
Start Up	Allows you to set Actions, Buttons, Files and Scripts that run at Start Up
Display	Allows you to select your computer display mode
Messages	Set default actions for system message when displayed
Roster	Allows you to set your default Programmer and roster location
Throttle	Allows you to set up you Throttle preferences
Wi Throttle	Allows you to set up a Wi Throttle settings
Web Server	Sets up the Decoder Pro® miniServer

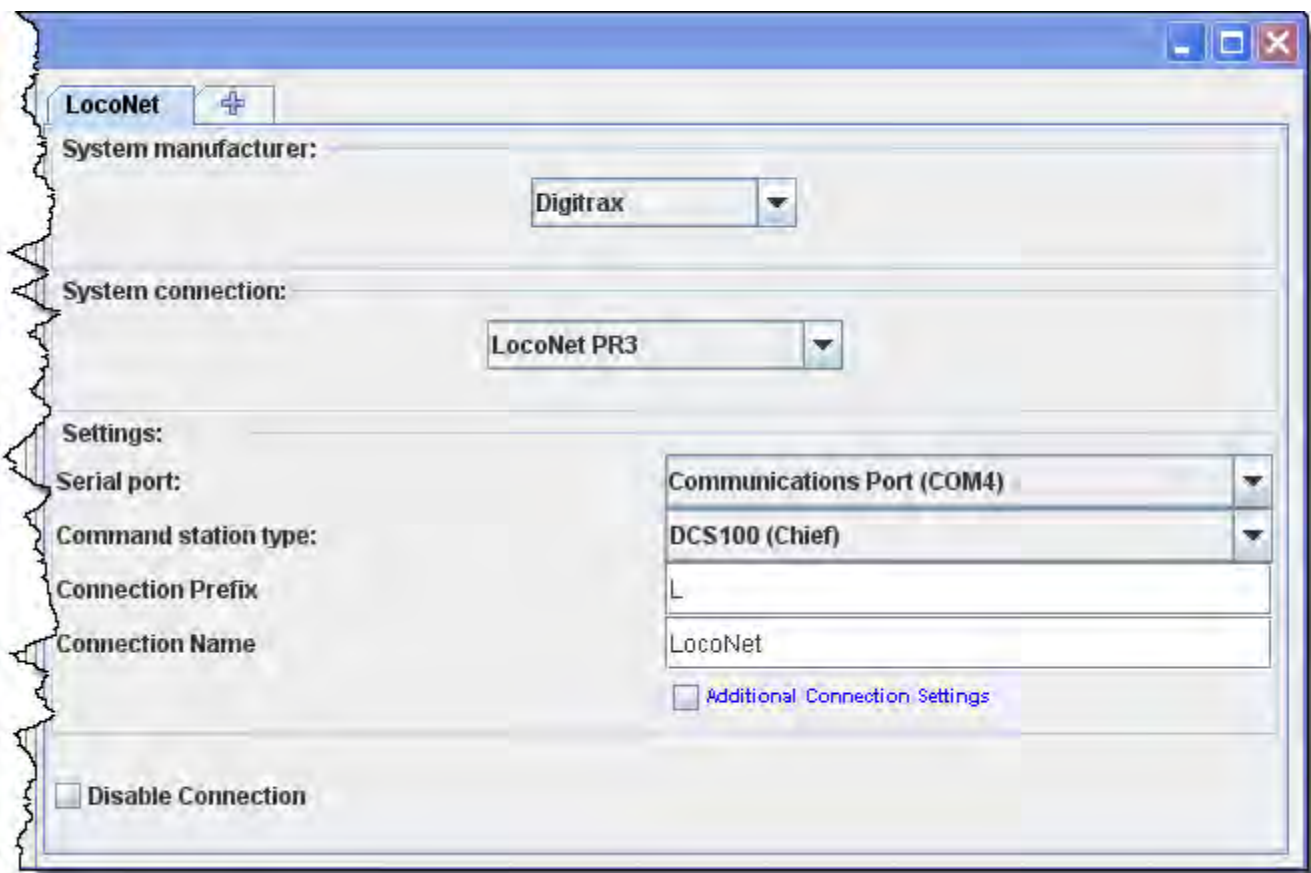
Now we will set up preferences for the JMRI environment with your command station.

I am using a Digitrax Super Chief Command Station (radio) interfaced to the computer via loconet, PR3 (MS100 mode) and USB port. I keep master roster on the System Drive.;

Connections Pane

(TABS are configured to the system your selected)

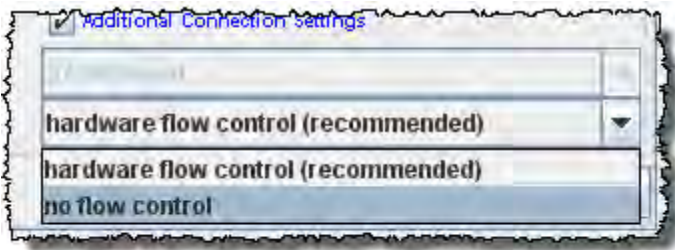
Now select Connections and connection options display in right pane. After saved and restarted, the TAB will read LocoNet. This the set up for Digitrax Chief system with PR3 interface.



System manufacturer:	Drop-down list with all the supported DCC manufacturers, select the manufacturer of your system.
System connection:	Drop-down list with all of the supported DCC system interfaces supported by the manufacturer that you selected, select the interface that you are using.

Settings:	Serial Port:	Drop-down list to select the serial port to which your DCC interface is connected. If you do not know, check your system hardware configuration manual. A second drop-down list may include a selection if there are more than one possibility. Possibility Drop-down list to select the serial port to which your DCC interface is connected. If you do not know, check your system hardware configuration manual. A second drop-down list may include a selection if there are more than one possibility
	Command station type:	Drop-down list to select the command station type that JMRI will be using to send your DCC commands.
	Connection prefix	Include the prefix for your connection, in the case shown the "L" is default
	Connection name	Should default to the connection used

Additional Connection Settings, if checked:



Disable Connection

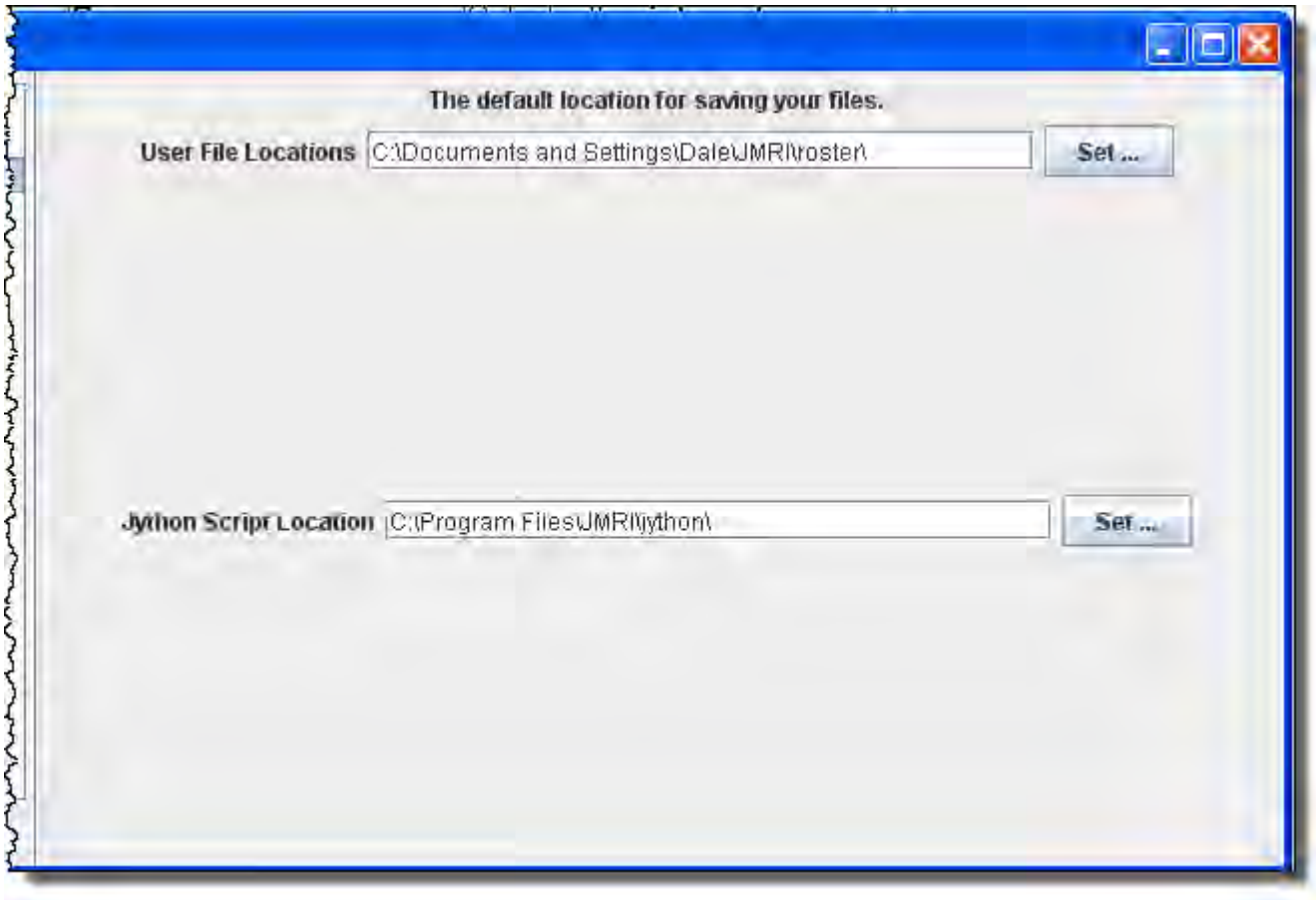
will disable all the connection settings.

Defaults Pane



Shows the default settings which will depend upon the system used.


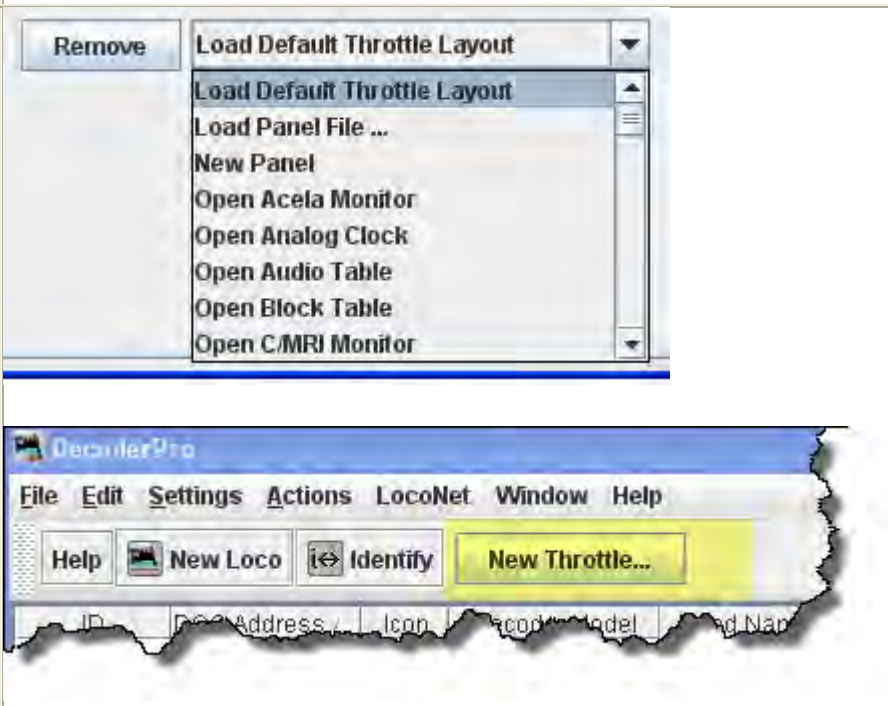
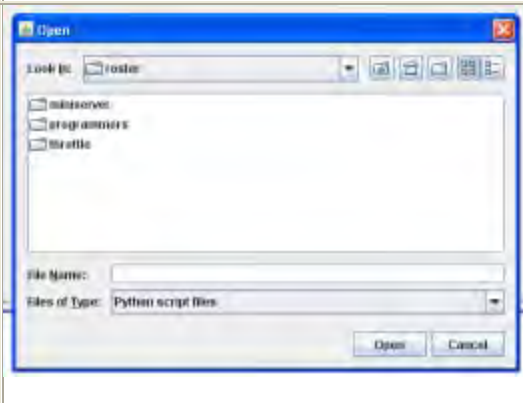
File locations Pane

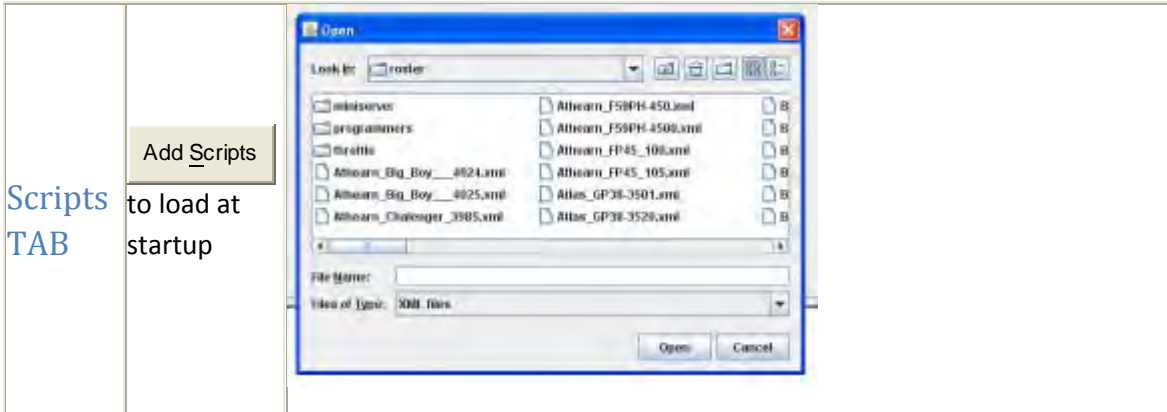


User File Locations	Select the location for your user files on your system
Jython Script Location	Set the location of Jython Script files

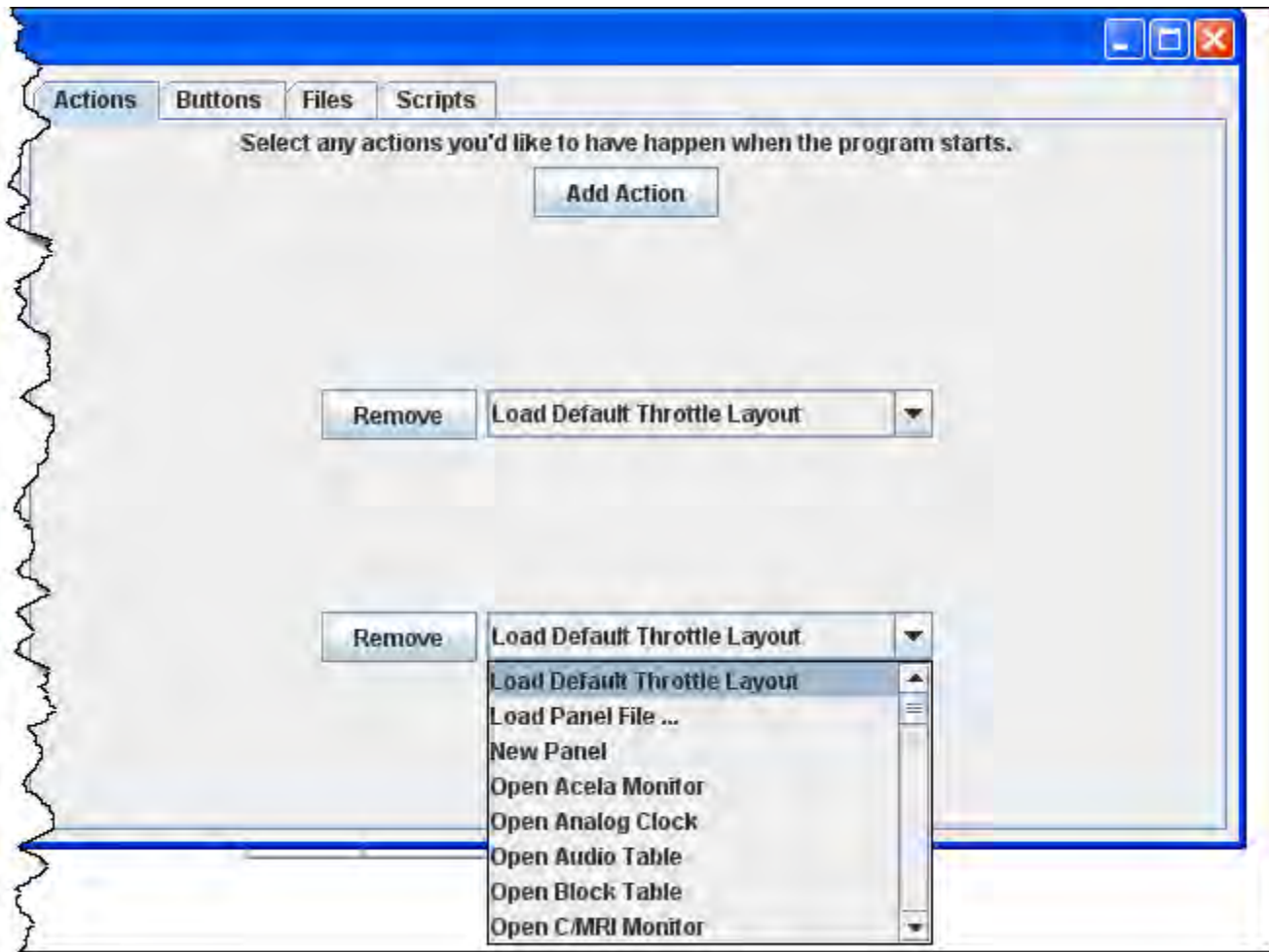
Start Up Pane



<p>Actions TAB</p>	<p>Add Action to set up a Startup action</p>	
<p>Buttons TAB</p>	<p>Add Button to the toolbar of DecoderPro3</p>	
<p>Files TAB</p>	<p>Add Files that you want to load at startup</p>	



You may add as many items as you want to open on start up. Example of **Actions**



Remove removes the item from the Start Up sequence. All of the panes are of the same format.

Display Panes

GUI TAB



Select your preferred appearance for buttons, menus, etc.

Metal

Windows Classic

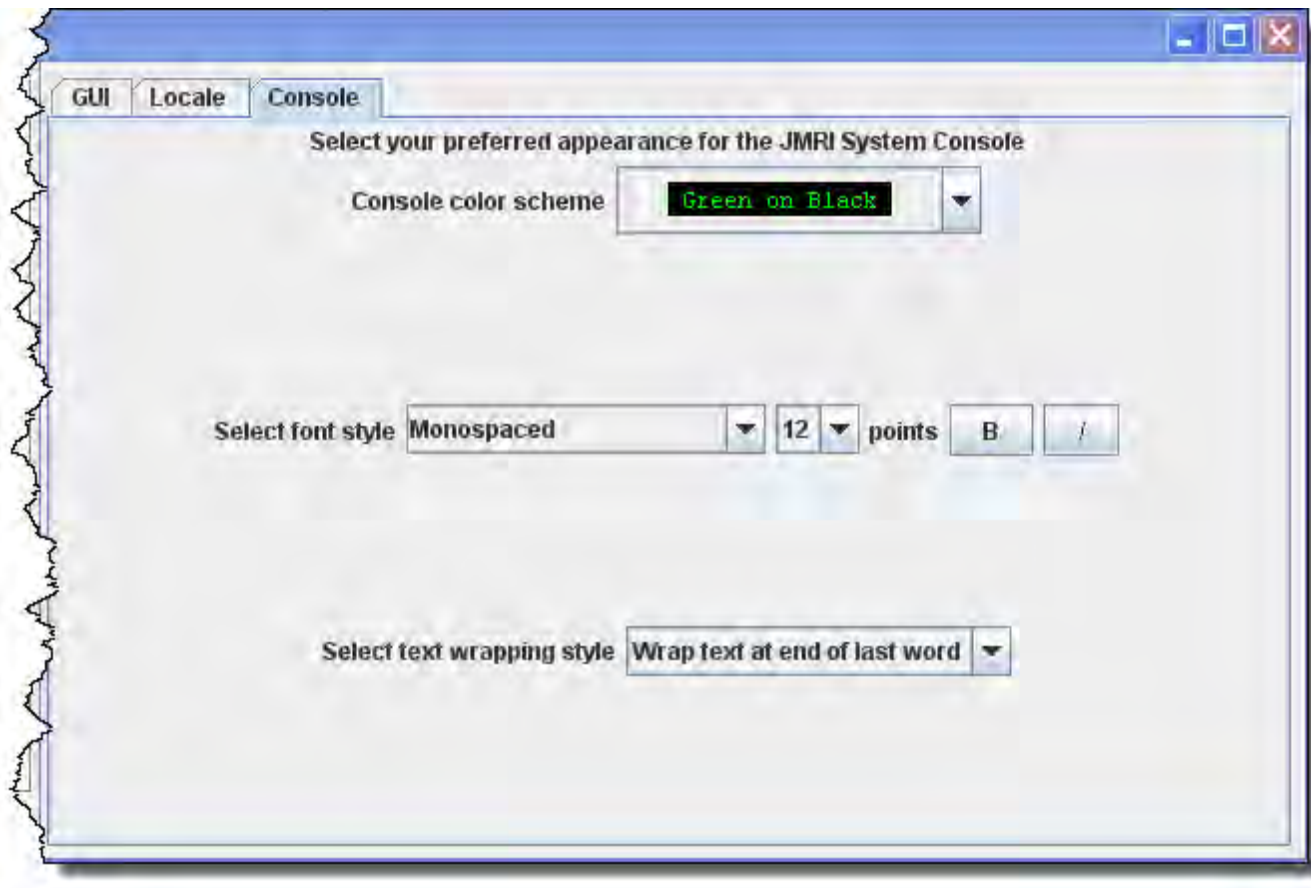
	<input type="checkbox"/> CDEMotif
	<input type="checkbox"/> Windows
	<input type="checkbox"/> Nimbus
Select font size in points	<input type="text"/> select font size
<input type="checkbox"/> Use non-standard release event for mouse click?	

Locale TAB



Drop-down list to select your location and language

Console TAB



Display settings for the JMRI system console.

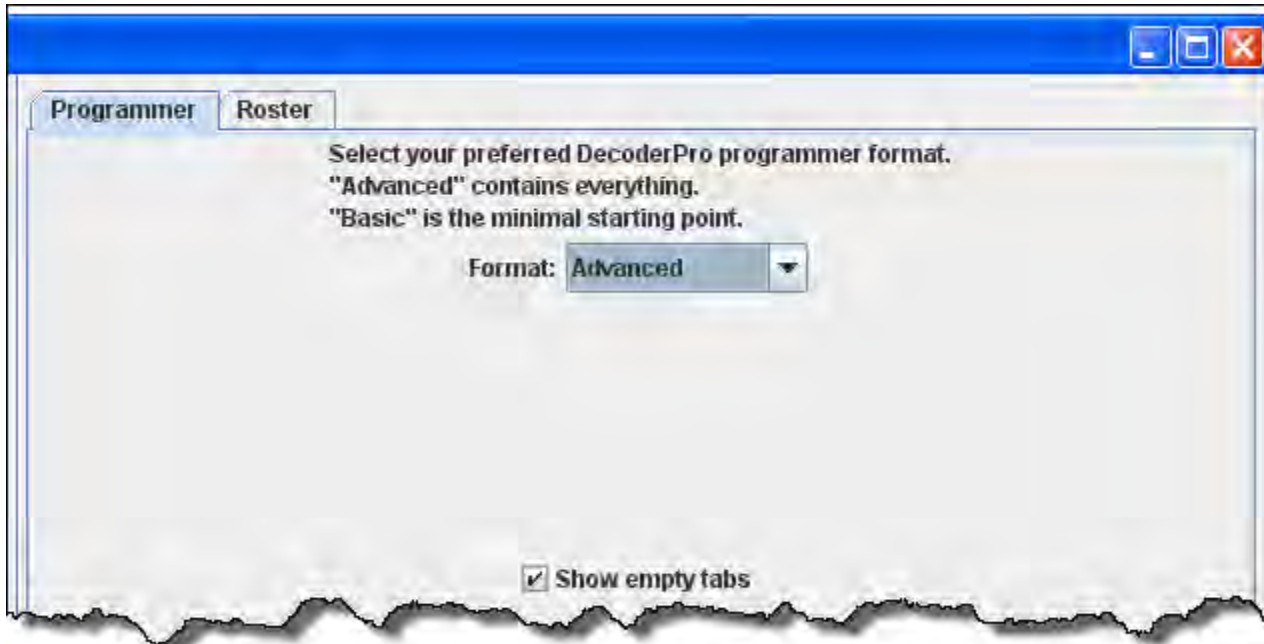
Messages Panes

TABS and selections can be used to set how and when messages are displayed.

Roster Panes

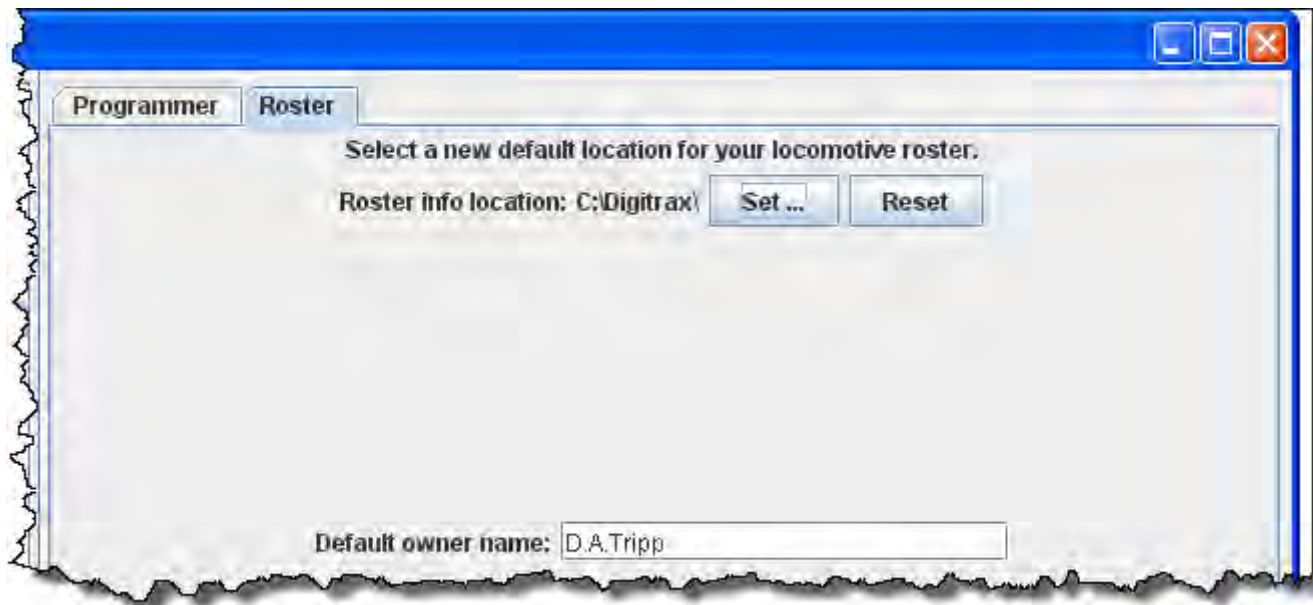
Programmer TAB

Used to set the preferred decoder programmer.



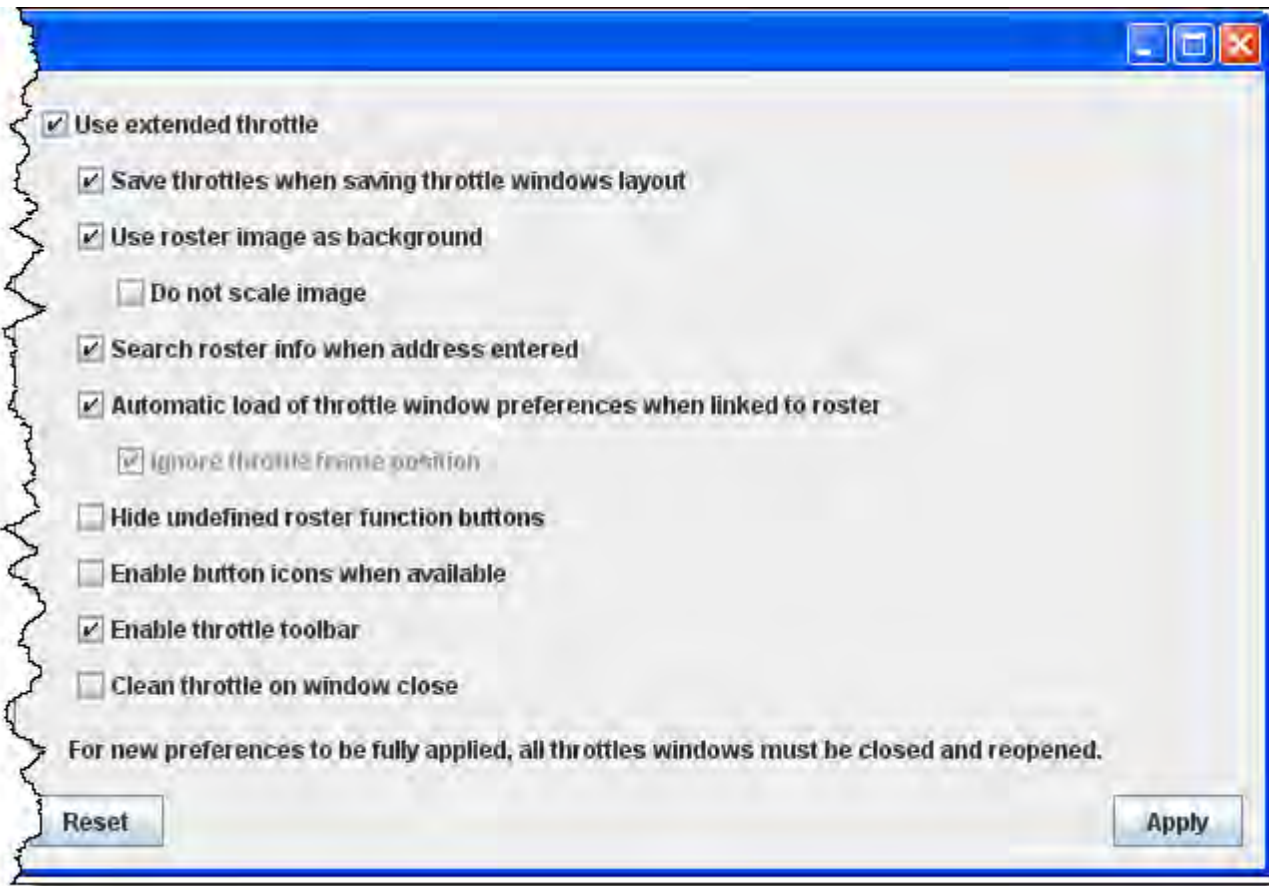
Roster TAB

You may set the default location of the locomotive roster and the default owners name.



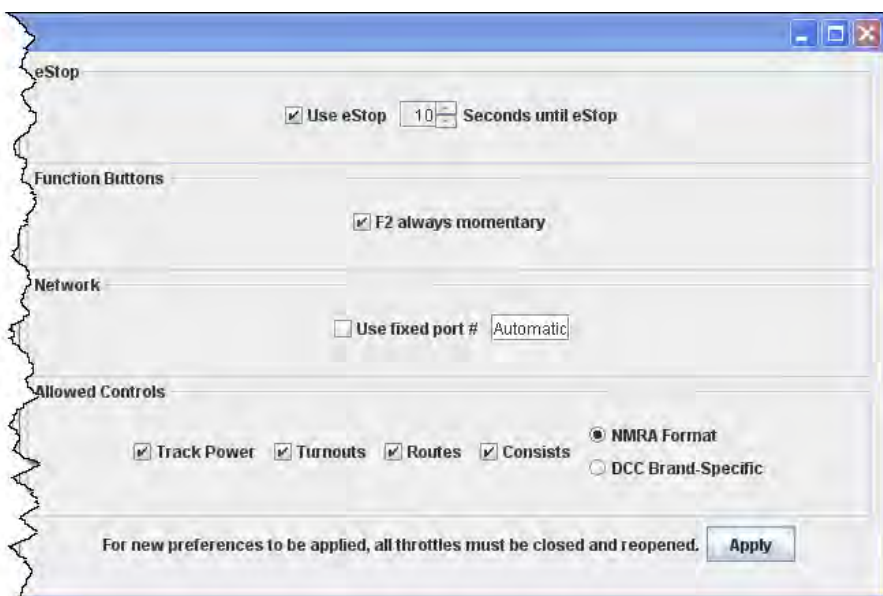
Throttle Pane

Select throttle startup conditions, shown are defaults, but you may change the settings.



WiThrottle Pane

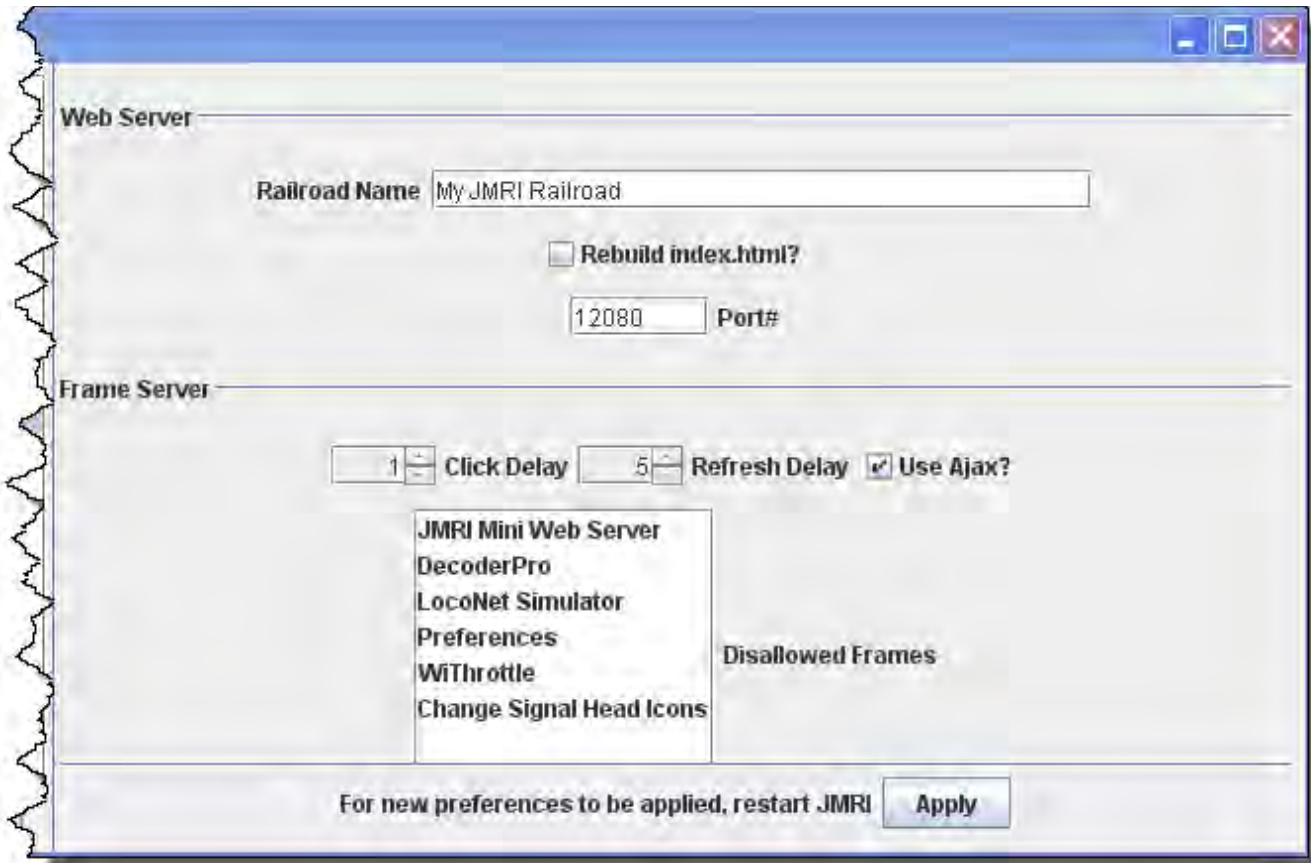
This pane allows WiThrottle users to customize the setup.



Web Server Pane

Use this pane to setup MinServer if you are using it.

Ajax is now in use for smoother image refresh and clicking. For older browser you may want to unselect Ajax.



Before you exit the preferences, Click on  button to save all your selections.

You must restart DecoderPro for preferences to take effect

Main Window Overview

When you start Decoder Pro, the DecoderPro window is displayed. All of the JMRI functions including the Operations Program can be accessed via the menu bar on the DecoderPro® window, additional menus are added when functions are selected, example below with added operations menu(selected on operations setup window), which is also in the tools menu.



After initial setup of preferences, you may have added buttons at the bottom of the screen to open various tools that you may want to use. These buttons will vary to match your preferences, I have setup buttons for **New Throttle**, **Power Control** and **Monitor Loconet**.



Menu Bar

Contains the menus that allows you to access all the features and tools in JMRI

DecoderPro® icon and DecoderPro® version information is displayed. The version of Java installed and in use is also shown

Tools

- *Operations* ▾

- [Settings](#)

- [Locations](#)

- [Cars](#)

- [locomotives](#)

- [Routes](#)

- [Trains](#)

Settings Window

Menus



Tools

Options

- The Options window allows you to set several options that can be modified.



Normal Aggressive

There are two build train options, normal and aggressive. Normal is recommended when you are beginning, as Normal builds guarantee that when a car is delivered(set out) by a train that there will be track space available for the car.

Aggressive builds makes the car's track space available as soon as a car is scheduled for a pickup.

Note that once you've built a train, the build option can not be changed until all trains are terminated or reset.

Switcher Service

This set of options controls the local car movements. Normally, it is better not to allow a car to

move from one spur directly to another spur in the same location. This type of move is very unrealistic. If you need these types of moves, select the appropriate checkbox.



Staging

Enable Type, Road and Load Restrictions into Staging

This option restricts trains to staging tracks that only accept the train's rolling stock type, road and load names. This is useful when you want trains delivered to staging tracks based on the train's rolling stock restrictions. However, if you want certain car types, car loads, or road name to be transported by a train, but not delivered to staging, deselect this feature

Make departure track available after train is built (Greyed out in Normal mode)

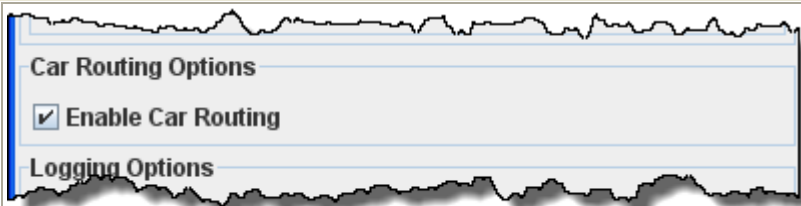
When selected the departure track in staging becomes available for other trains immediately after the departure train is built. For trains that return to same staging location, this option allows the train to return to the same track it departed on. This option is only available when using the aggressive mode for building trains.

Prompt for Departure Track from Staging

If you would like the program to ask you which track a train should depart from staging during the train build, select this option. Normally, during the train build the program would select the least recently used track when determining the track to depart from. Note that the program will only prompt you if there are two or more trains available in staging that meet the train's requirements.

Prompt for Arrival Track from Staging

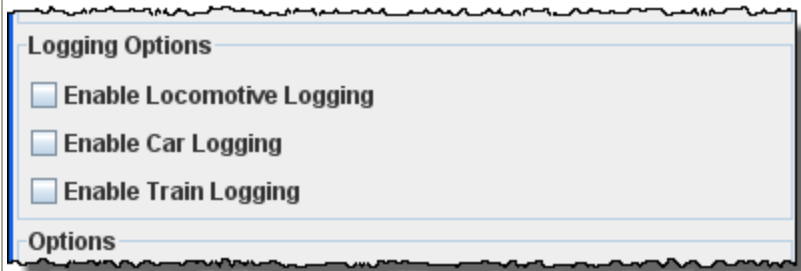
If you would like the program to ask you which track a train should arrive to staging during the train build, select this option. Normally, during the train build the program would select the least recently used track when determining the track to arrive on. Note that the program will only prompt you if there are two or more trains available in staging that meet the train's requirements.



Car Routing Options

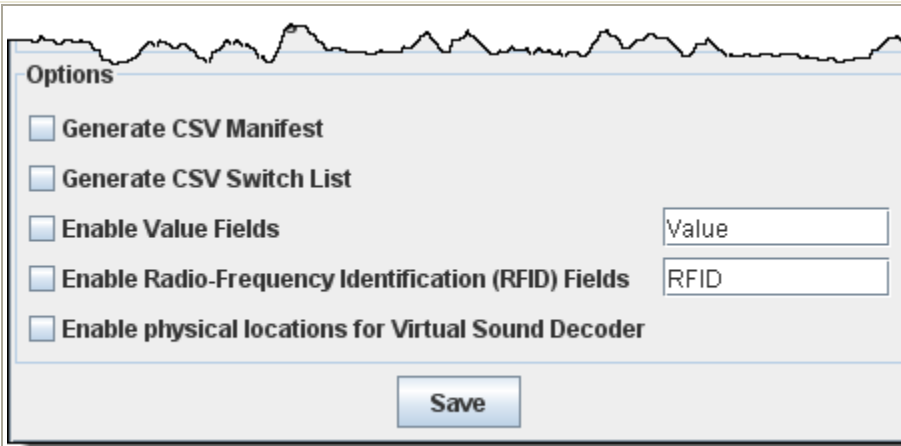
Enable Car Routing

When car routing is enabled, the program will use multiple trains to deliver a car to its final destination. It is recommended that you leave the option enabled. With car routing enabled, you can use a **Schedule** to deliver a car to a specific location. The car routing algorithm will search for the most efficient route for the car to travel. The algorithm will try to find a route using a maximum of five trains to complete the car move. Note that the program never gives up trying to route a car. If a car has been assigned a "Final Destination" the program will try and route the car after every move.



Logging Options

If you want the operations program to log your locomotive, car, or train movements to file, select the appropriate checkboxes. The program will create a new directory called logger in the operations directory. For each day's session the program will create a new file(.csv) using the day's date.



To create your own custom manifest using a comma separated value (.csv) file, select this option. You can use a program like Excel to create a manifest to your liking. The manifest is located in the operations directory in a directory called **csvManifests**. Each line of the file starts with a two or three letter code, followed by the code's description, and then any parameters associated with the code.

- Enable Radio-Frequency Identification (RFID) Fields** - This option allows the RFID to be renamed to anything you like and set the values that you want.
- Enable physical locations for Virtual Sound Decoder** -

Code	Description	Parameters
AH	Add Helpers	
AT	Arrival Time	Time
CC	Change Locos and Caboose	
CL	Change Locos	
DT	Departure Time	Time
DTR	Departure Time Route	Time
LC	Location Comment	Comment

LN	Location Name	Name	
NW	No Work		
PC	Pick up car	See below	
PL	Pick up loco	See below	
RC	Route Comment	Comment	
RH	Remove Helpers		
RN	Railroad Name	Name	
SC	Set out car	See below	
SL	Set out loco	See below	
TC	Train Comment	Comment	
TD	Train Departs	Name	
TL	Train Length	Length	
TM	Train Manifest Description	Description	
TN	Train Name	Name	
TW	Train Weight	Weight	
TT	Train Terminates	Name	
VT	Valid	Month/Day, Year Time	
<p>Time uses the format Hour Minute</p> <p>The car parameters for pick up car (PC) and set out car (SC) are road, number, type, length, load, color, location name, track name, destination name, destination track name, owner name, kernel name, car comment, pick up comment, set out comment, C, F, H, RFID. Where C =</p>			

Caboose, F = FRED, and H = Hazardous.

The loco parameters for pick up (PL) and set out loco (SL) are road, number, model, length, type, hp, location name, track name, destination name, destination track name, owner name, consist name, car comment, RFID.


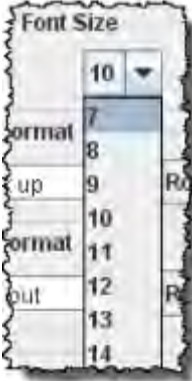
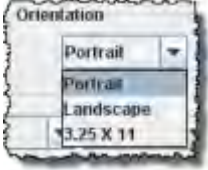

[Examples of custom manifests](#) (requires that you have Yahoo ID and Password to JMRI Groups)



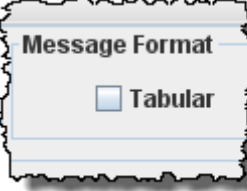
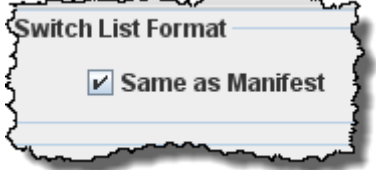
Print Options

The screenshot shows the 'Print Options' dialog box with the following settings:

- Font: SansSerif
- Font Size: 10
- Orientation: Portrait
- Pick Up Text Color: Blue
- Set Out Text Color: Red
- Local Move Text Color: Black
- Message Format: Tabular
- Switch List Format: Same as Manifest
- Pick Up Locomotive Message Format: Pick up, Road, Number, Model, Location, Comment
- Set Out Locomotive Message Format: Set out, Road, Number, Model, Destination, Comment
- Pick Up Car Message Format: Pick up, Road, Number, Type, Length, Color, Load, Hazardous, Location, Comment, Pickup Msg
- Set Out Car Message Format: Set out, Road, Number, Type, Length, Color, Load, Hazardous, Destination, Comment, SetOut Msg
- Local Move Message Format: Move, Road, Number, Type, Length, Color, Load, Hazardous, Location, Destination, Comment
- Manifest Options: Print Valid, Location, Route, Loads and Empties, 12hr Format, Show Timetable, Truncate
- Logo: Add Logo
- Misplaced Cars Comment: The following cars are currently misplaced, please contact the dispatcher if found
- Hazardous Comment: (Hazardous)
- Switch List Options: All Trains, Page per Train, Real Time
- Manifest Preview: Use Text Editor
- Build Report Options: Minimal, Normal, Detailed, Very Detailed, Use Text Editor to Preview Build Reports

You can modify how the program prints the train manifests and the amount of detail that the build report provides.

			
<p>Select the desired Font, Size and page Orientation</p>			<p>Assign manifest print color for car or locomotive Pick Up</p>

			
<p>Assign manifest print color for car or locomotive Set Out</p>	<p>Assign manifest print color when the operation is to move a car from one track to another at same location</p>	<p>Select if you want manifest printed in tabular format. It works best with mono-spaced fonts, Courier or Monospaced</p>	<p>Select if you want the Switch List in the same format as the Manifest</p>

Pick Up Locomotive Message Format	<p>You may customize the messages for your manifest and switch list printing. Select formats from dropdown menus. To remove an attribute select blank. The Prefixes in the text boxes may be edited. If you want to use the text color options, the set out, pick u and move prefixes must be unique.</p>
Set Out Locomotive Message Format	
Pick Up Car Message Format	
Set Out Car Message Format	
Local Mover Message Format	

Manifest Options

Each location can have an optional comment. You can print these comments on your manifest if they are selected.

- Print Valid Prints the time of the train build, not the time the manifest was printed.
- Location. allows location comment for each car is selected
- Route allows comments about location for each car if selected
- Loads and Empties to show how many car loads and empties are in the train.
- 12hr Format default is 24 hr clock
- Show Timetable show which timetable was used when train build was made.
- Truncate Reduces the amount of information at a location that has a separate switch list.

Logo

Add Logo button allows you to add a logo in the top right hand corner of your manifests and switch lists, press Add Logo button and select a file with the image you want to display. Each train in your roster may have a different logo, this is set in **Trains Setup**

Misplaced Cars Comment

Allows you to add a notification for operators to be looking for cars that have been misplaced

Switch List Options

- All Trains
- Page per Train
- Real Time

Manifest Preview

- Use Text Editor

Build Report Options

Detail Level You can adjust the amount of information that the build report will show. Select one of the four levels. The program when generating the build reports stores the **Very Detailed** information to disk.

- Minimal** -- provides the least amount of information. Can provide information when train build is not completed.

-
- Normal -- setting shows which engines and cars are being excluded from the train, and which engines and cars are being picked up and dropped.
 - Detailed -- setting will generate quite a few pages depending on the size of your railroad. It will show all available cars and engines, and a bit how the program finds destinations for the cars and engines.
 - Very Detailed -- setting produces the most pages, and will show why cars are not picked up or dropped.
 - Use Text Editor to Preview Build Reports

Backup

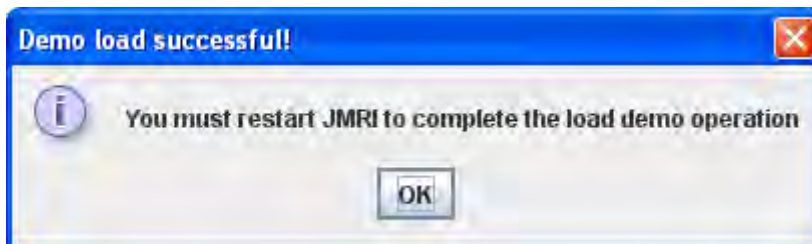
Opens the system **Save** dialog

Restore

Opens the system **Open** dialog

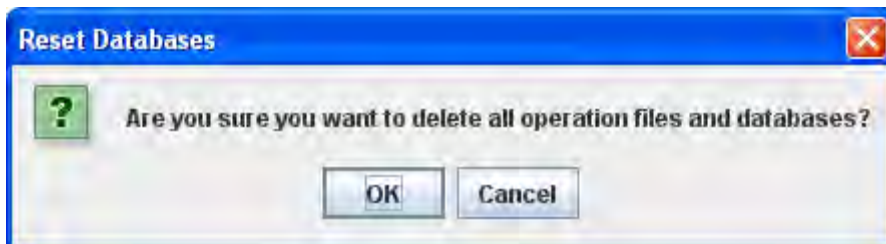
Load Demo Files

Opens the **Demo load successful** dialog box



Reset Databases

Opens the **Reset Databases** dialog box



Operations

Windows

JMRI normal window menu

Help

JMRI normal help menu

The screenshot shows the 'Operations Settings' dialog box with the following fields and options:

- Railroad Name:** JMRI Operations Demo Railroad
- Trains Travel:** North/South, East/West
- Scale:** Radio buttons for Z, N, TT, HO_n3, OO, HO (selected), Sn3, S, On3, O, G.
- Maximum Train Length:** 900
- Maximum Locos per Train:** 3
- Switch Time (minutes):** 3
- Travel Time (minutes):** 4
- Car Types:** Descriptive, AAR Codes
- Unit of Length:** Feet, Meters
- Optional Year Modeled:** [Empty text box]
- Options:** Add Operations Menu to Main Menu, Close Windows on Save, Auto Save, Auto Backup
- Panel Options:** Create Train Icons on Panel (use panel name): Operations Demo Panel
- Icon Options:** Append Loco Number, Enable Train Icon SetX&Y
- Icon Colors:** Eastbound Train Icon Color (White), Westbound Train Icon Color (Green), Switcher Icon Color (Blue), Terminated Train Icon Color (Gray)

Buttons at the bottom: Restore, Backup, Save.

Railroad Name

Enter the name of your railroad. This name will show up on your manifests. You may use a different name for every train in your roster. See Train Options for details.

Trains Travel North/South East/West

If your railroad depicts trains traveling north and south select the "North/South" box, if your trains travel east and west select the "East/West" box. You must select at least one direction, and can if desired select both.

Scale

Select the radio button for the scale of your railroad. This will be used in calculating scale feet when you enter actual inches. Select the scale you are modeling. This is useful when you enter the length of cars and tracks. You can enter the number of actual inches and the program will convert to scale feet. Append a double quote to the length when entering actual inches. The program will also automatically assign the proper NMRA weight for a car based on scale and length.

Maximum Train Length(ft)

This field provides the maximum default train length between cities. Later you can override this length if you wish a shorter train between any two locations. A 1000 foot train can carry approximately 20 cars, and is of course dependent on the car lengths assigned to the train

Maximum Locos per Train

Now set the maximum number of locomotives that you want the program to assign to a train. If you don't want the program assigning engines, set this value to 0.

Switch Time (minutes)

Travel Time (minutes)

The program when generating switch lists for the various locations on your railroad, will estimate the arrival times for your trains based on the train's departure time and the switch and travel times. Enter the average number of minutes it takes to drop or pickup a car on your railroad. Then enter the average amount of time in minutes it takes to travel from one location to the another. Later when you create a **route** you will be able to increase or decrease the train's travel time between any two locations

Car Types

Descriptive AAR Codes

The program has two sets of car types for you to use. **Descriptive** provides type names like **Boxcar** and **Tank car**, and **AAR** provides type names like **XM** and **T** for boxcars and tank cars respectively. Select the one that you prefer.

Unit of Length Feet Meters

Optional Year Modeled

You can optionally enter the year you want printed on your train manifest.

Options

Add Operations Menu to Main Menu

When selected, and saved, the operations menu will be added to the main menu bar the next time you start JMRI.. To remove it go through the same procedure... in the Settings window uncheck the box, "Save" the change and restart DecoderPro®.



With the box checked, the next time you open DecoderPro® the Operations drop down will appear

Close Windows on Save

Auto Save

Auto Backup

Panel options will not be covered in this manual at this time. Panels are normally created as a part of PanelPro®

Icon Colors Not covered here and normally used with PanelPro®

Restore button will prompt you to select which set of backup files you wish to use to recover your operation files. You must quit and restart DecoderPro® to complete the restoration of the operation files.

Backup button will store a copy of the operation files in a new directory in operations called **backups**, and then stores the operation files in a directory that is based on the day you created the backup. For example, if today was November 21, 2008, the program will create a backup directory named **2008_11_21**.

Save button When you're finished with the settings window, press the save button to store the setting in a file called **Operations.xml**. You can find this file in your JMRI directory in a folder called **operations**. The program will also create a backup file each time you press the Save button

Locations Window

The Operations Tool, Locations opens the Locations window as shown. Locations are places on your railroad that trains visit to pickup or drop off cars and engines. Locations can be cities, towns, or just places where trains need to work cars. To enter a new location press, **Add** button which will open the **Add Location** window which we will discuss in a moment. But first let's discuss the "Locations" window itself.



menu bar

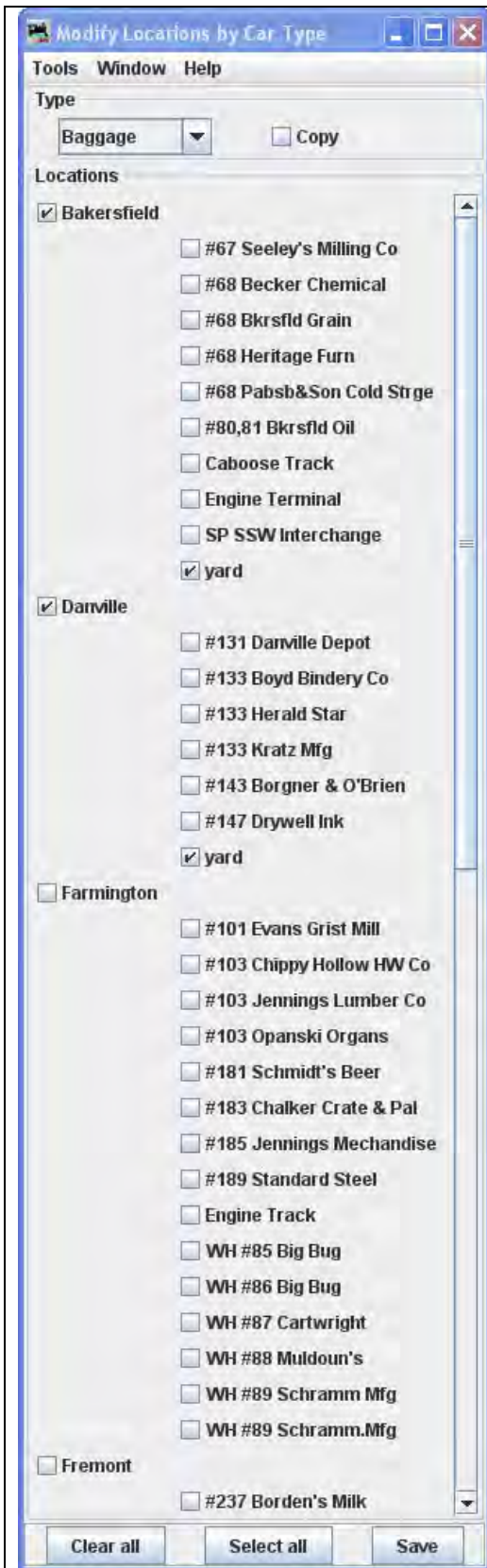
Tools

[Schedules](#)

Opens the **Schedules** panel. If you would like to see cars delivered in a particular sequence, or with a specific load for delivery or shipping, the program allows you to apply a schedule to a siding. This is an optional feature and shouldn't be used until you become very familiar with how the program generates manifests and switch lists.

[Modify Locations by Car Type](#)

This tool can opens from the **Locations** window **Tool** menu. Use this tool to quickly modify the type of cars your locations and tracks will service. Very useful when adding a new car type to your roster.



Menu Bar

Print Locations by Car Type

Opens system printer dialog

Preview Locations by Car Type

Opens the list in printer preview window

Window

Help

First select the car type you wish to modify from the drop-down list. When the type is selected notice that all cars of that type at the locations selected will be checked.

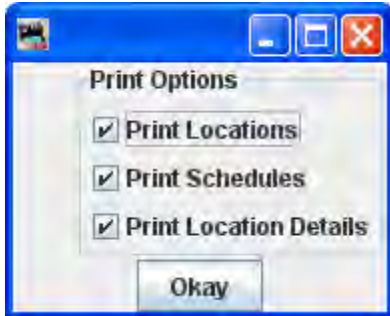
Select or deselect the locations and tracks you want to service, and press Save button to modify your locations and tracks

You can also **Copy** how an existing car is serviced by your locations and apply those rules to another car. To make a car behave like another, first select the car you would like to copy, then select the **Copy**, the car type will now appear to the right of the checkbox, then select the type of car you want to modify, and press to have both car types serviced by the same locations and tracks.

[Show Cars](#)

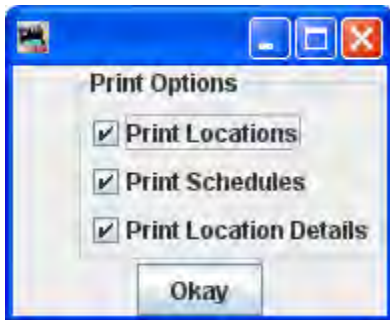
Opens Cars window which lists cars for this location

[Print](#)



Click **OK** button on opens system printer dialog.

[Preview](#)



Click Okay button opens the print preview window showing Location information.

Operations

Window

Help

At the bottom of the window you may select Sort order of the locations

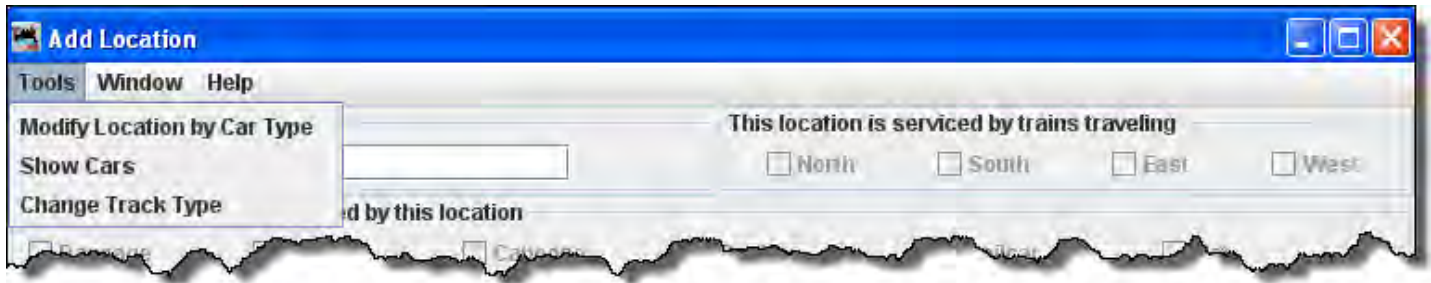
Sort by Name Id Sets the sort order for the locations

Add button Press to add a location

The **Add Location** window is opened. At this point only the Location Name and the type operation at this location entries are active.

Name The location name must be unique; the program will not allow two locations with identical names. However, if you want more than one location to have the same name for your manifests and switch lists, add a hyphen and a number to the locations name. For example, **Boston-1** and **Boston-2** will print as **Boston**. The program will remove the hyphen and number when printing manifests and switch lists.

Add Location Menu



Tools

[*Modify Locations by Car Type*](#)

[*Show Cars*](#)

[*Change Track Type*](#)

Press the Add Location button at the bottom of the panel. The various fields that were disabled should be enabled.

Add Location

Tools Window Help

Name:

This location is serviced by trains traveling

East West

Select the rolling stock serviced by this location

Baggage Boxcar Caboose Coal Coilcar Flat Flat Timber
 FlatBH FlatBHPP FlatBHWd FlatTimb FlatTrail FlatWood Flatcar
 Gon-pipe Gon-scrap Gondola HopChem HopCmnt HopCoal HopCoal-E
 HopGrain HopSand Hopper MOW MOWBox Passenger Reefer
 Reefer Milk Reefer,Meat ReeferIce Stock Tank Chem Tank Corn Sy Tank Food
 TankGas TankKero TankOil TankVeg Diesel Steam

Clear all Select all Auto Select

Operations at this location

Spurs Yards Interchange Staging only

Id	Spur Name	Length	Used	Reserved	Cars	Locos	Pick ups	Set outs

Add Spur Track

Comment

Delete Location Add Location Save Location

Each location can have several yard, spurs, interchange or staging tracks. Yards are where cars and engines are placed for temporary storage. A spur can be an industry or any place where a car is loaded or unloaded. For a train to service a location, there must be at least one track for that location. See below how to add tracks to your location.

Select the rolling stock serviced by this location

The tables show the length of the tracks, the amount of track that is occupied (Used) by cars and engines, the total number of cars and engines (Rolling Stock) at each location, the number of cars and engines that will be picked up (Pickups) by trains, and the number of cars and engines that will be delivered (Drops) by trains.

This Location is Serviced by Trains Traveling North South East West

You can decide which train direction the location can service. For example, if only south bound trains can access the location select South and deselect the other directions. This can be useful if you want to only support trailing point switching for a given location. If a location can support multiple directions then select the ones that are appropriate.

Operations at this location **Spurs** **Yards** **Interchange** **Staging only**

To add a location, press the "Add ... Track" button. Now enter the name of the location along with the length of the track in scale feet or in actual inches. Append a double quote (") to the length when entering actual inches and the program will convert the length into scale feet. Append cm if you want to convert from centimeters to meters. Press the "Add ... Track" button at the bottom of the panel and the disabled fields should now appear.

The **Add** button at the bottom of the window will change corresponding to the location you want to add.

Add Spurs, Yards, Interchange, or Staging Only(corresponding to the present task)

To add a location , press the "Add ...(location)" button.

Add Spur Track button [Add Spur Track](#)

Add Yard Track [Add Yard Track](#)

Add Interchange Track [Add Classification Interchange Track](#)

Add Staging Only Track [Add Staging Only Track](#)

Each of these buttons opens a corresponding dialog to describe its function.

Save --- Track

Press the **Save** button to save your work. The program will create a file (OperationsLocationRoster.xml) in your JMRI directory in a folder called "operations". The program will also create a backup file containing the last settings for all of your locations.

Spurs are very similar to **Yards**, so see above for more information. You can if you wish schedule the order that cars will be delivered to a spur. See **Schedules** below for more information.

Add Spurs

A spur is used to service an industry. To add a spur, press **Add Spur** button. Spurs are very similar to [Yards](#) . You can if you with schedule the order that cars will be delivered to a spur, or demand cars with certain loads using [Schedules](#).

When a car is placed at a spur the car's load status is modified. The program provides two load names for all cars. The default **Empty** or **E** and the default **load** or **L**. If a car has one of these loads when it arrives at a spur, the load will change to the other, i.e. **E** becomes **L** and **L** becomes **E**.

To add a location as a spur, in the **Add Location** window, type the **Name** of the spur location, note most of the window is greyed out until the location is added. The location name must be unique; the program will not allow two locations with identical names. However, if you want more than one location to have the same name for your manifests and switch lists, add a hyphen and a number to the locations name. For example, "Boston-1" and "Boston-2" will print as "Boston". The program will remove the hyphen and number when printing manifests and switch lists.

Now select **Operations at this location**  **Spurs**, then press the **Add Location** button at the bottom of the window.

A siding can be an industry or any place where a car is loaded or unloaded. For a train to service a location, there must be at least one track for that location.

This opens the **Add Location** window with all the options enabled.

Add Spur Track [Minimize] [Maximize] [Close]

Tools Window Help

Name: Length: This spur is serviced by trains traveling East West

Select the rolling stock serviced by this spur

<input type="checkbox"/> Baggage	<input type="checkbox"/> Boxcar	<input type="checkbox"/> Caboose	<input type="checkbox"/> Coal	<input type="checkbox"/> Coilcar	<input type="checkbox"/> Flat
<input type="checkbox"/> Flat Timber	<input type="checkbox"/> FlatBH	<input type="checkbox"/> FlatBHPP	<input type="checkbox"/> FlatBHWd	<input type="checkbox"/> FlatTimb	<input type="checkbox"/> FlatTrail
<input type="checkbox"/> FlatWood	<input type="checkbox"/> Flatcar	<input type="checkbox"/> Gon-pipe	<input type="checkbox"/> Gon-scrap	<input type="checkbox"/> Gondola	<input type="checkbox"/> HopChem
<input type="checkbox"/> HopCmrt	<input type="checkbox"/> HopCoal	<input type="checkbox"/> HopCoal-E	<input type="checkbox"/> HopGrain	<input type="checkbox"/> HopSand	<input type="checkbox"/> Hopper
<input type="checkbox"/> MOW	<input type="checkbox"/> MOWBox	<input type="checkbox"/> Passenger	<input type="checkbox"/> Reefer	<input type="checkbox"/> Reefer Milk	<input type="checkbox"/> Reefer,Meat
<input type="checkbox"/> ReeferIce	<input type="checkbox"/> Stock	<input type="checkbox"/> Tank Chem	<input type="checkbox"/> Tank Corn Sy	<input type="checkbox"/> Tank Food	<input type="checkbox"/> TankGas
<input type="checkbox"/> TankKero	<input type="checkbox"/> TankOil	<input type="checkbox"/> TankVeg	<input type="checkbox"/> Diesel	<input type="checkbox"/> Steam	

Select the roads serviced by this track

Accept all Accept only Exclude

Select loads serviced by this track

Accept all Accept only Exclude

Select trains or routes for car set outs

Any Trains Routes Exclude Trains Exclude Routes

Select trains or routes for car pick ups

Any Trains Routes Exclude Trains Exclude Routes

Optional Schedule

Comment

Add Spur Menu

Add Spur Track [Minimize] [Maximize] [Close]

Tools Window Help

Show Cars
Track Pools
Alternate Track
Change Track Type
Planned Pick Ups

Name: Length: This spur is serviced by trains traveling East West

Select the rolling stock serviced by this spur

<input type="checkbox"/> Boxcar	<input type="checkbox"/> Caboose	<input type="checkbox"/> Coal	<input type="checkbox"/> Coilcar	<input type="checkbox"/> Flat
<input type="checkbox"/> FlatBH	<input type="checkbox"/> FlatBHPP	<input type="checkbox"/> FlatBHWd	<input type="checkbox"/> FlatTimb	<input type="checkbox"/> FlatTrail
<input type="checkbox"/> FlatWood	<input type="checkbox"/> Flatcar	<input type="checkbox"/> Gon-pipe	<input type="checkbox"/> Gon-scrap	<input type="checkbox"/> Gondola
<input type="checkbox"/> HopCmrt	<input type="checkbox"/> HopCoal	<input type="checkbox"/> HopCoal-E	<input type="checkbox"/> HopGrain	<input type="checkbox"/> HopSand
<input type="checkbox"/> MOW	<input type="checkbox"/> MOWBox	<input type="checkbox"/> Passenger	<input type="checkbox"/> Reefer	<input type="checkbox"/> Reefer Milk
<input type="checkbox"/> ReeferIce	<input type="checkbox"/> Stock	<input type="checkbox"/> Tank Chem	<input type="checkbox"/> Tank Corn Sy	<input type="checkbox"/> Tank Food
<input type="checkbox"/> TankKero	<input type="checkbox"/> TankOil	<input type="checkbox"/> TankVeg	<input type="checkbox"/> Diesel	<input type="checkbox"/> Steam

Tools

[Show Cars](#)

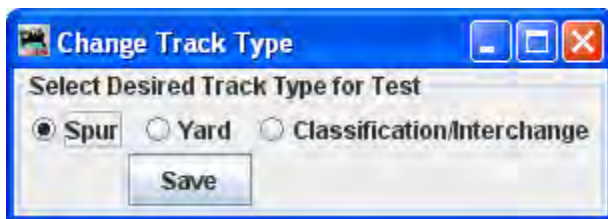
[Track Pools](#)

Spurs may be combined and the their lengths combined.

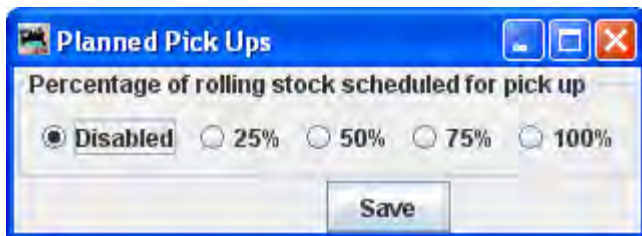
[Alternate Track](#)



[Change Track Type](#)



[Planned Pick Ups](#)



You may select **This location is serviced by trains traveling**, select at least or any number of the directions depending on access to your siding. We have selected East and West

You can decide which train direction the location can service. For example, if only south bound trains can access the location select "South" and deselect the other directions. This can be useful if you want to support only trailing point switching for a given location. If a location can support multiple directions then select the ones that are appropriate.

Local Switcher: If you want only a local switcher to service a siding, deselect all of the direction boxes for that siding. The program will only allow a train that has one location in its route (local switcher) to service the

siding. This would be useful if you wanted your trains to pick up and drop cars to a yard, and then have a local switcher move them to the town's sidings.

Next **Select the rolling stock serviced by this location**, note the **Clear All** button and **Select All** button may be used to select. We have used the **Clear All** button and then selected **Boxcar** and **Gondola** for this location.

You can control the rolling stock a location can service. Push **Clear All** button to deselect all types, or **Select All** button to select all types, then select or deselect the rolling stock you wish the location to accept.

Since the **Operations at this location** is a **Spurs** the **I Add Spurs Track** is now enabled near the bottom of the window.

We also have the option to **Delete Location** button or **Save Location** button.

Press **Add Spur Track** button then the **Add Spur Track** window is displayed, so that you can detail the spur

In **Name** type the specific siding track to be serviced at this location.

Length of the siding track in scale feet. You may enter the measurement in actual inches as and the program will convert to the scale feet that you select during setup.

Press **Add Spur Track** button the siding track is added and the greyed out features are activated.

Add Spur Track window now displays with all options active to let you detail the spur.

Add Spur Track

Tools Window Help

Name: Length: This spur is serviced by trains traveling East West

Select the rolling stock serviced by this spur

<input checked="" type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input checked="" type="checkbox"/> Caboose	<input checked="" type="checkbox"/> Coal	<input checked="" type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat
<input checked="" type="checkbox"/> Flat Timber	<input checked="" type="checkbox"/> FlatBH	<input checked="" type="checkbox"/> FlatBHPP	<input checked="" type="checkbox"/> FlatBHWd	<input checked="" type="checkbox"/> FlatTimb	<input checked="" type="checkbox"/> FlatTrail
<input checked="" type="checkbox"/> FlatWood	<input checked="" type="checkbox"/> Flatcar	<input checked="" type="checkbox"/> Gon-pipe	<input checked="" type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input checked="" type="checkbox"/> HopChem
<input checked="" type="checkbox"/> HopCmnt	<input checked="" type="checkbox"/> HopCoal	<input checked="" type="checkbox"/> HopCoal-E	<input checked="" type="checkbox"/> HopGrain	<input checked="" type="checkbox"/> HopSand	<input checked="" type="checkbox"/> Hopper
<input checked="" type="checkbox"/> MOW	<input checked="" type="checkbox"/> MOWBox	<input checked="" type="checkbox"/> Passenger	<input checked="" type="checkbox"/> Reefer	<input checked="" type="checkbox"/> Reefer Milk	<input checked="" type="checkbox"/> Reefer,Meat
<input checked="" type="checkbox"/> ReeferIce	<input checked="" type="checkbox"/> Stock	<input checked="" type="checkbox"/> Tank Chem	<input checked="" type="checkbox"/> Tank Corn Sy	<input checked="" type="checkbox"/> Tank Food	<input checked="" type="checkbox"/> TankGas
<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input checked="" type="checkbox"/> TankVeg	<input checked="" type="checkbox"/> Diesel	<input checked="" type="checkbox"/> Steam	

Select the roads serviced by this track

Accept all Accept only Exclude

Select loads serviced by this track

Accept all Accept only Exclude

Select trains or routes for car set outs

Any Trains Routes Exclude Trains Exclude Routes

Select trains or routes for car pick ups

Any Trains Routes Exclude Trains Exclude Routes

Optional Schedule

Comment

Select the rolling stock serviced by this spur

Only those items selected in the previous location window will be displayed. The program uses those that are checked. **Clear All** button Unchecks all rolling stock. Now you may select any you require or press the **Select All** button to check all the rolling stock.

We are setting up a spur for Oil Co. so we will clear all the select Tank for oil, kerosene and gas.

Select the roads serviced by this track

Accept all

Default accepts rolling stock from any railroad.

Accept only

Allows you to list the railroads whose rolling stock you will accept.



Road you want to add from drop-down List the press **Add Road** button repeat for each Road you would like to service this Spur. To remove Road form the Spur select from the drop-down list then press **Delete Road** button

Exclude

Similar to Accept only but creates a list of Roads that you do not want to service this location.

Select loads serviced by this track

Accept all

Default accepts any load

Accept only

Allows you to list the loads that this location will accept.



type of load from first drop-down list (Based on the type of rolling stock accepted). From second drop-down list select either Empty or Load, the press **Add Load** button to list of acceptable loads. Repeat as necessary. Select a load then press **Delete Load** button to remove that load. You may remove all loads by pressing the **Delete All** button

Exclude

Similar to Accept only but creates a list of acceptable loads that can be serviced by this location.

Select trains or routes for car set outs

any

Default cars may be set out by any Train or Route

Select trains or routes for car set outs

Any Trains Routes Exclude Trains Exclude Routes

This screenshot shows a light gray rectangular box with a title bar that reads "Select trains or routes for car set outs". Below the title bar, there are five radio button options: "Any" (which is selected), "Trains", "Routes", "Exclude Trains", and "Exclude Routes".

Trains

Select trains or routes for car set outs

Any Trains Routes Exclude Trains Exclude Routes

▼

This screenshot shows a light gray rectangular box with a title bar that reads "Select trains or routes for car set outs". Below the title bar, there are five radio button options: "Any", "Trains" (which is selected), "Routes", "Exclude Trains", and "Exclude Routes". Below the radio buttons, there is a text input field followed by a downward-pointing arrow, and two buttons labeled "Add" and "Delete".

Select Train form the drop-down List then press **Add** button to add train that may set out cars at this location. To remove Train from list press **Delete** button.

Routes

Similar to Trains except you select a Route to add or remove to determine routes that may set out cars at this location.

Select trains or routes for car set outs

Any Trains Routes Exclude Trains Exclude Routes

▼

This screenshot shows a light gray rectangular box with a title bar that reads "Select trains or routes for car set outs". Below the title bar, there are five radio button options: "Any", "Trains", "Routes" (which is selected), "Exclude Trains", and "Exclude Routes". Below the radio buttons, there is a text input field followed by a downward-pointing arrow, and two buttons labeled "Add" and "Delete".

Exclude Trains

Select trains or routes for car set outs

Any
 Trains
 Routes
 Exclude Trains
 Exclude Routes

▼

Exclude Routes

Select trains or routes for car set outs

Any
 Trains
 Routes
 Exclude Trains
 Exclude Routes

▼

Select trains or routes for car pick ups

This option is almost identical to car set outs except now car pick up options are selected.

Optional Schedule

Optional Schedule

▼

Comment

Optionally, a schedule may be selected from the drop-down list. Press to open Add Schedule for Spur Tank Facility.

Schedule

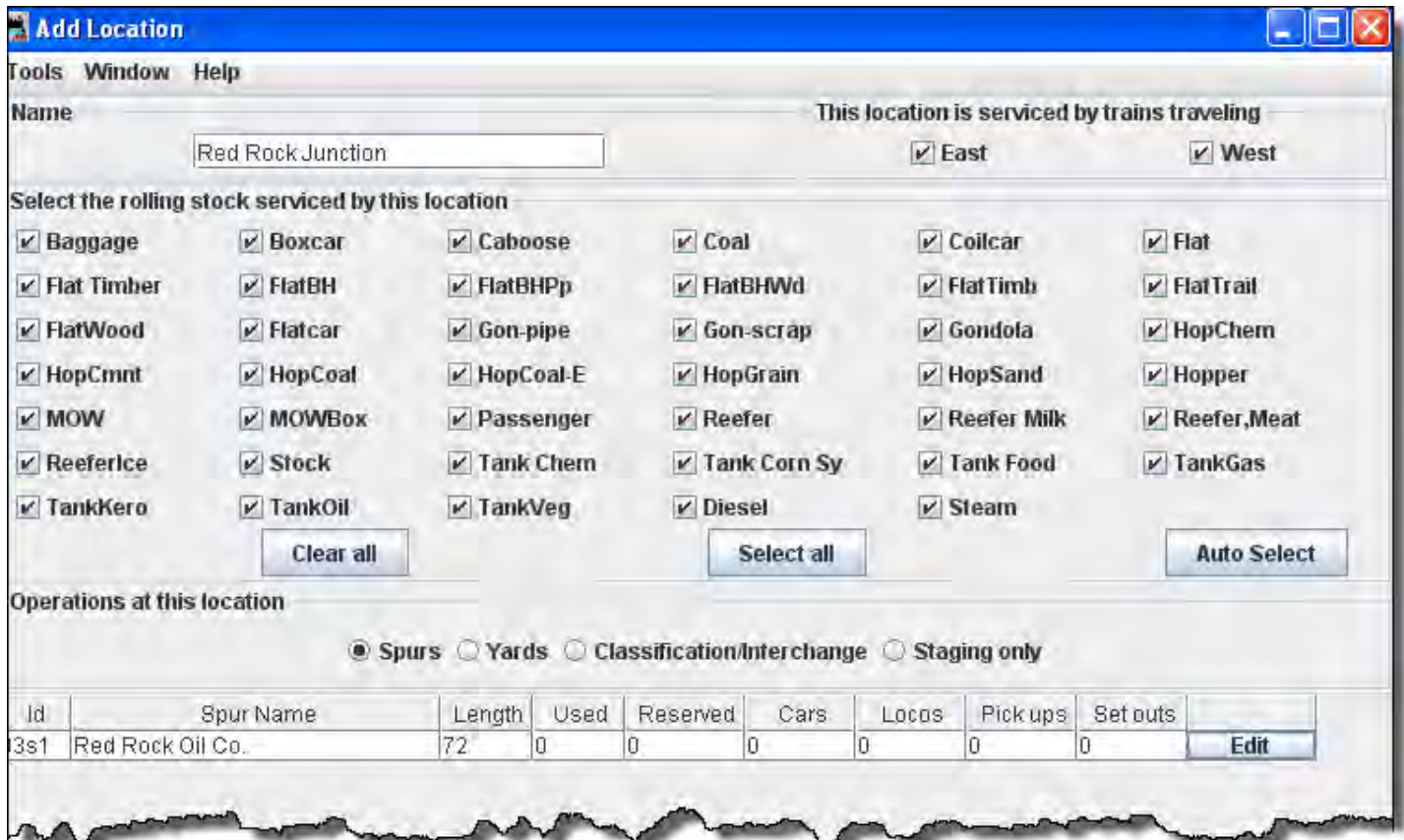
Comment

You may now press Save Spur Track button to add to the location or press Delete Spur Track button if you do not want to store the track.

If you want to add another track to this siding location, then enter new data and Press Add Spur Track button to add the track.

Close the window when done with this location.

The **Add Location** window shows one siding track at the Tank Facility in Red Rock Oil.



If you want to change information for any track entry, press and the **Edit Spur Track** window will open.

Edit Spur Track

Tools Window Help

Name: Red Rock Oil Co. Length: 200 This spur is serviced by trains traveling: East West

Select the rolling stock serviced by this spur

<input type="checkbox"/> Baggage	<input type="checkbox"/> Boxcar	<input type="checkbox"/> Caboose	<input type="checkbox"/> Coal	<input type="checkbox"/> Coilcar	<input type="checkbox"/> Flat
<input type="checkbox"/> Flat Timber	<input type="checkbox"/> FlatBH	<input type="checkbox"/> FlatBHPP	<input type="checkbox"/> FlatBHWD	<input type="checkbox"/> FlatTimb	<input type="checkbox"/> FlatTrail
<input type="checkbox"/> FlatWood	<input type="checkbox"/> Flatcar	<input type="checkbox"/> Gon-pipe	<input type="checkbox"/> Gon-scrap	<input type="checkbox"/> Gondola	<input type="checkbox"/> HopChem
<input type="checkbox"/> HopCmnt	<input type="checkbox"/> HopCoal	<input type="checkbox"/> HopCoal-E	<input type="checkbox"/> HopGrain	<input type="checkbox"/> HopSand	<input type="checkbox"/> Hopper
<input type="checkbox"/> MOW	<input type="checkbox"/> MOWBox	<input type="checkbox"/> Passenger	<input type="checkbox"/> Reefer	<input type="checkbox"/> Reefer Milk	<input type="checkbox"/> Reefer,Meat
<input type="checkbox"/> ReeferIce	<input type="checkbox"/> Stock	<input type="checkbox"/> Tank Chem	<input type="checkbox"/> Tank Corn Sy	<input type="checkbox"/> Tank Food	<input checked="" type="checkbox"/> TankGas
<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input type="checkbox"/> TankVeg	<input type="checkbox"/> Diesel	<input type="checkbox"/> Steam	

Clear all Select all

Select the roads serviced by this track: Accept all Accept only Exclude

Select loads serviced by this track: Accept all Accept only Exclude

Select trains or routes for car set outs: Any Trains Routes Exclude Trains Exclude Routes

Select trains or routes for car pick ups: Any Trains Routes Exclude Trains Exclude Routes

Optional Schedule: [Dropdown] Edit

Comment: [Text Area]

Delete Spur Track Add Spur Track Save Spur Track

Note that it is identical to the Add Siding Track except for the title. Change any of the entries that you want to edit and then press the **Save Spur Track** button to save the changes. You may also **Delete Spur Track** button from your data base.

Note we changed the length of the spur to 200 scale feet.

When done with editing close the window.

The Locations window shows all the locations in your database.

You may Edit any one of them, which opens the **Edit Location** window, which is the same as the [Add Location](#) window except it contains the info for the location you are editing.



The screenshot shows a window titled "Locations" with a menu bar containing "Tools", "Window", and "Help". Below the menu bar is a table with the following data:

Id	Name	Length	Used	Rolling Stock	Pick ups	Set outs	
78	Bakersfield	6813	1832	35	7	32	Edit
80	Danville	2540	669	18	18	16	Edit
6	Farmington	1981	44	1	1	1	Edit
89	Fremont	715	515	12	3	3	Edit
83	Hillsboro	2157	650	14	5	5	Edit
92	Lakeview	7800	2458	53	53	52	Edit
84	Port Arthur	1697	1406	30	13	14	Edit
93	Red Rock Junction	0	0	0	0	0	Edit
94	Red Valley	72	0	0	0	0	Edit
91	Susanville	3200	2077	43	18	12	Edit


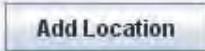
At the bottom of the window, there is a "Sort by" section with radio buttons for "Name" (selected) and "Id", and an "Add" button.

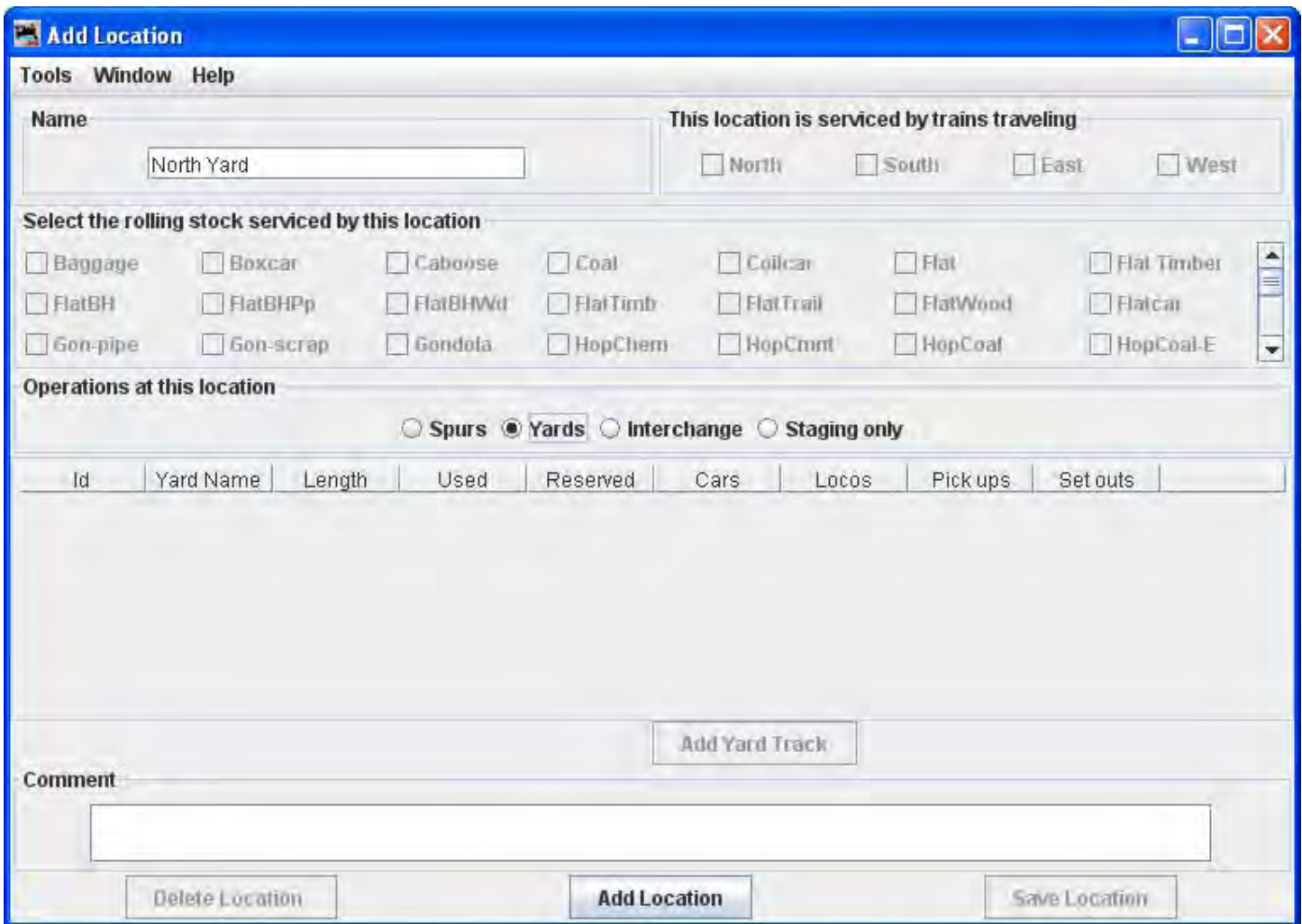
You may add as many locations and track as you need to complete the description of your layout.

Add Yard

Add [Location as Yards](#) and the **Add Location** window for Yards is opened from Add Location window.

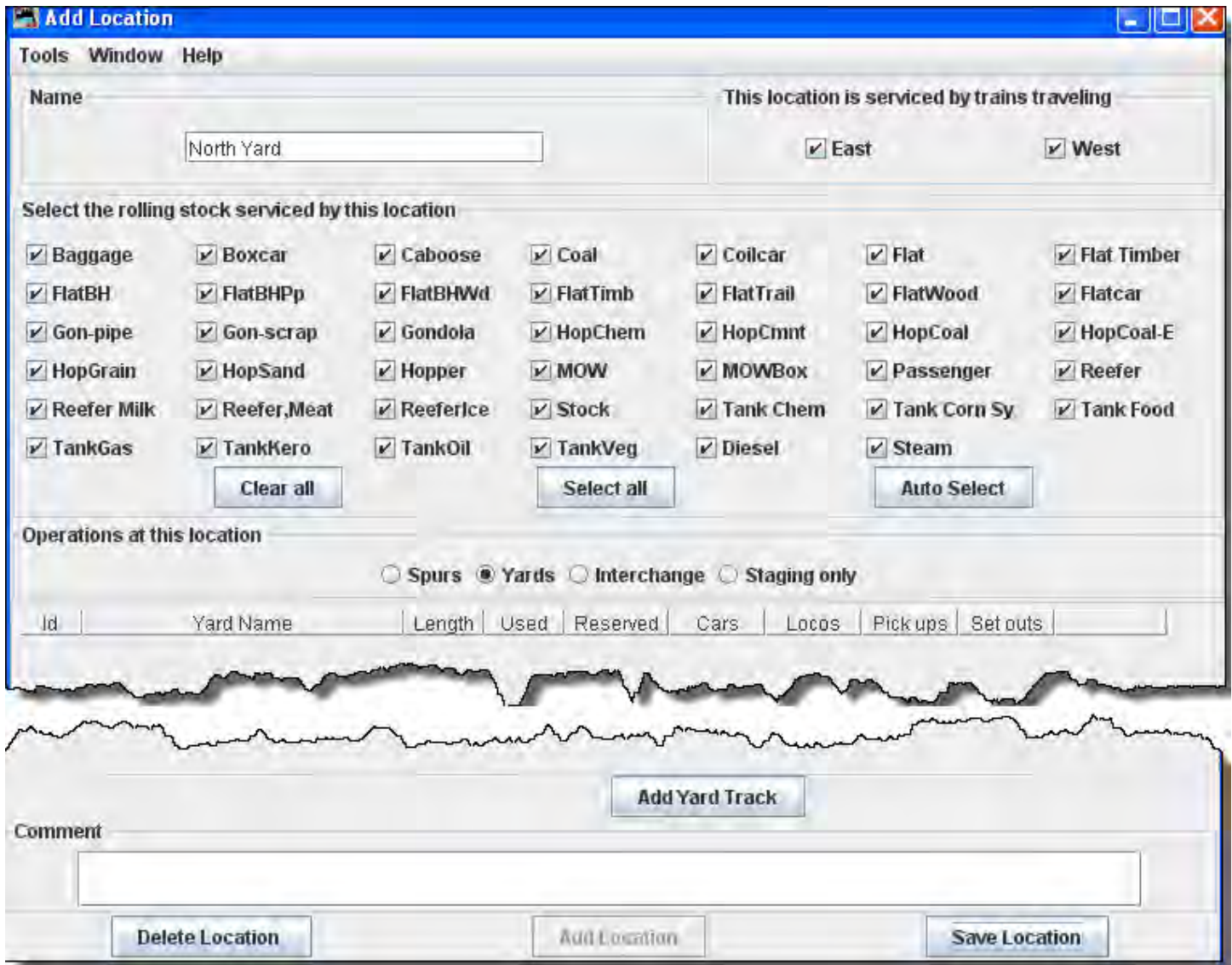
To add a location as a Yard: in the **Add Location** window, type the **Name** of the Yard location, note most of the window is greyed out until the location is added. The location name must be unique; the program will not allow two locations with identical names. However, if you want more than one location to have the same name for your manifests and switch lists, add a hyphen and a number to the locations name. For example, "Boston-1" and "Boston-2" will print as "Boston". The program will remove the hyphen and number when printing manifests and switch lists.

Select **Operations at this location**  **Yards**, then press the  at the bottom of the window.



Id	Yard Name	Length	Used	Reserved	Cars	Locos	Pick ups	Set outs
----	-----------	--------	------	----------	------	-------	----------	----------

Opens the **Add Location** window with options activated.



A **classification yard** (US and Canada) or **marshalling yard** (UK and Canada)(including **hump yards**) is a railroad yard found at some freight stations, used to separate railroad cars on to one of several tracks. First the cars are taken to a track, sometimes called a **lead** or a **drill**. From there the cars are sent through a series of switches called a **ladder** onto the classification tracks. Larger yards tend to put the lead on an artificially built hill called a **hump** to use the force of gravity to propel the cars through the ladder.

Freight trains that consist of isolated cars must be made into trains and divided according to their destinations. Thus the cars must be shunted several times along their route in contrast to a unit train, which carries, for example, automobiles from the plant to a port or coal from a mine to the power plant. This shunting is done partly at the starting and final destinations and partly (for long-distance-hauling) in classification yards.

A yard will contain several tracks that must be defined.

Now after selecting all of the options for the yard, click on **Add Yard Track** button and the **Add Yard Track** window opens.

In **Name** type the specific siding track to be serviced at this location.

Length of the Yard track in scale feet. You may enter the measurement in actual inches as and the program will convert to the scale feet that you select during setup.

Press **Add Yard Track** button the siding track is added and the greyed out features are activated.

Add Yard Track [Minimize] [Maximize] [Close]

Tools Window Help

Name: Length: This yard is serviced by trains traveling: East West

Select the rolling stock serviced by this yard

<input checked="" type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input checked="" type="checkbox"/> Caboose	<input checked="" type="checkbox"/> Coal	<input checked="" type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> Flat Timber
<input checked="" type="checkbox"/> FlatBH	<input checked="" type="checkbox"/> FlatBHPP	<input checked="" type="checkbox"/> FlatBHWD	<input checked="" type="checkbox"/> FlatTimb	<input checked="" type="checkbox"/> FlatTrail	<input checked="" type="checkbox"/> FlatWood	<input checked="" type="checkbox"/> Flatcar
<input checked="" type="checkbox"/> Gon-pipe	<input checked="" type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input checked="" type="checkbox"/> HopChem	<input checked="" type="checkbox"/> HopCmnt	<input checked="" type="checkbox"/> HopCoal	<input checked="" type="checkbox"/> HopCoal-E
<input checked="" type="checkbox"/> HopGrain	<input checked="" type="checkbox"/> HopSand	<input checked="" type="checkbox"/> Hopper	<input checked="" type="checkbox"/> MOW	<input checked="" type="checkbox"/> MOWBox	<input checked="" type="checkbox"/> Passenger	<input checked="" type="checkbox"/> Reefer
<input checked="" type="checkbox"/> Reefer Milk	<input checked="" type="checkbox"/> Reefer,Meat	<input checked="" type="checkbox"/> ReeferIce	<input checked="" type="checkbox"/> Stock	<input checked="" type="checkbox"/> Tank Chem	<input checked="" type="checkbox"/> Tank Corn Sy	<input checked="" type="checkbox"/> Tank Food
<input checked="" type="checkbox"/> TankGas	<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input checked="" type="checkbox"/> TankVeg	<input checked="" type="checkbox"/> Diesel	<input checked="" type="checkbox"/> Steam	

Select the roads serviced by this track

Accept all Accept only Exclude

Select loads serviced by this track

Accept all Accept only Exclude

Select pick up car order

Normal First In First Out (FIFO) Last In First Out (LIFO)

Comment

Select the roads serviced by this track

Accept all

Default accepts rolling stock from any railroad.

Accept only



Allows you to list the railroads whose rolling stock you will accept.

Exclude



Accept all rolling stock except from those railroads that are excluded.

Select loads serviced by this track

We will use the default.

Accept all

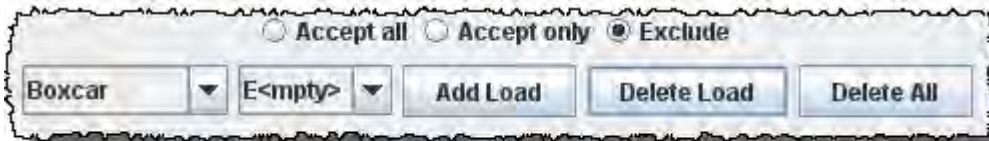
Default accepts all loads.

Accept only



Allows you to list the loads you will accept.

Exclude



Accept all loads except from those loads that are excluded.

Select pick up car order

- Normal
- First In First Out (FIFO)
- Last in First Out (LIFO)

You may enter a **Comment** for the track.

You may now press **Save Yard Track** button to add to the location or press **Delete Yard Track** button if you do not want to store the track.

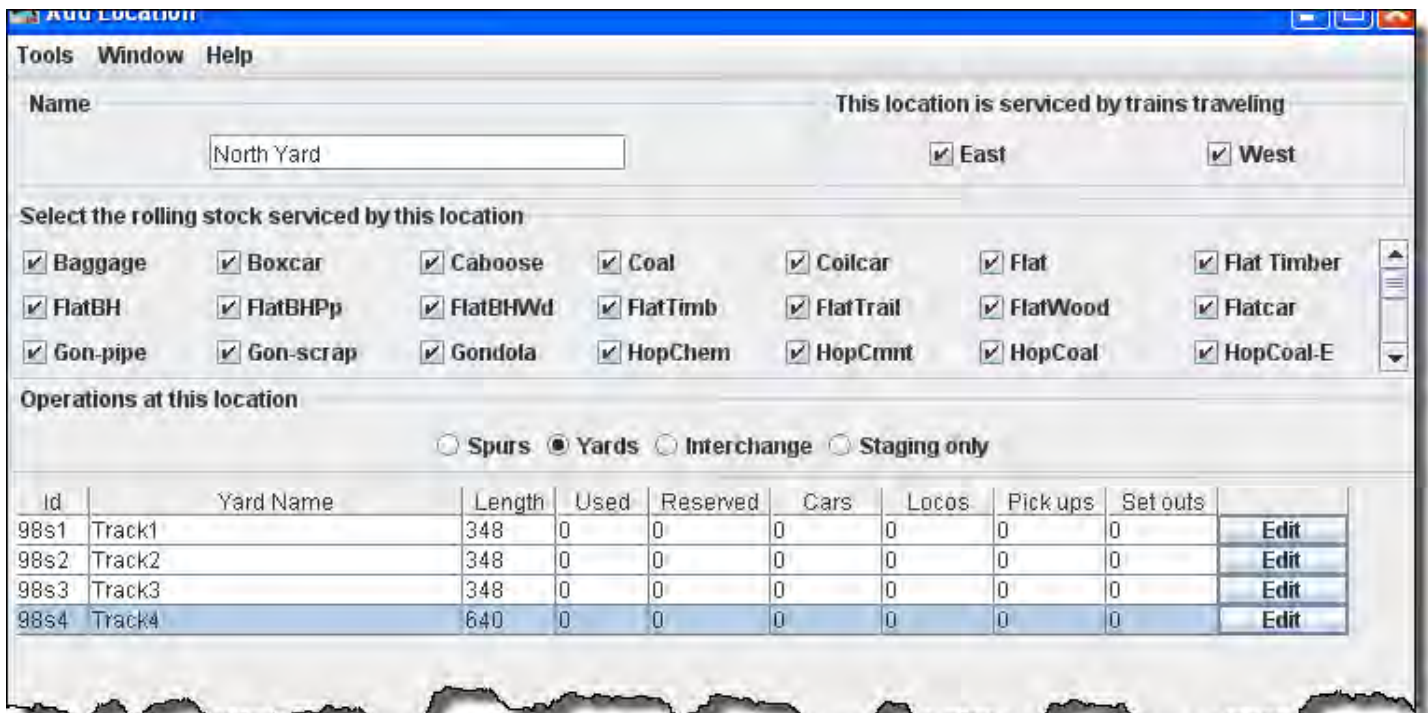
If you want to add another track to this yard location, then enter new data and Press **Save Yard Track** to add the track.

Close the window when done with this location.

The **Add Location** window shows one Yard track at the North Yard.

Id	Yard Name	Length	Used	Reserved	Cars	Locos	Pick ups	Set outs	
98s1	Track1	348	0	0	0	0	0	0	Edit

Let's add some more tracks to the yard.



If you want to change information for any track entry, press **Edit** button and the **Edit Siding Track** window will open

Note that it is identical to the Add Yard Track except for the title.

Change any of the entries that you want to edit and then press the Save Yard Track button to save the changes.

You may also Delete Yard Track button from your data base.

When done with editing close the window.

The **Locations** window shows all the locations in your database.

You may Edit any one of them, which opens the **Edit Location** window, which is the same as the [Add Location](#) window except it contains the info for the location you are editing.

The screenshot shows a window titled 'Locations' with a menu bar containing 'Tools', 'Window', and 'Help'. Below the menu bar is a table with the following data:

Id	Name	Length	Used	Rolling Stock	Pick ups	Set outs	
78	Bakersfield	6813	2626	52	0	0	Edit
80	Danville	2540	669	18	0	0	Edit
6	Farmington	1981	44	1	0	0	Edit
89	Fremont	715	515	12	0	0	Edit
83	Hillsboro	2157	650	14	0	0	Edit
92	Lakeview	7800	2458	53	0	0	Edit
98	North Yard	1684	0	0	0	0	Edit
84	Port Arthur	1697	612	13	0	0	Edit
93	Red Valley	900	0	0	0	0	Edit
91	Susanville	3200	2077	43	0	0	Edit

At the bottom of the window, there is a 'Sort by' section with two radio buttons: 'Name' (which is selected) and 'Id'. To the right of the sort options is an 'Add' button.

You may add as many locations and track as you need to complete the description of your layout.

Add Classification Interchange

Add Location as Interchange and the **Add Location** window is used to add and Interchange.

Add Location

Tools Window Help

Name: SP interchange

This location is serviced by trains traveling

North South East West

Select the rolling stock serviced by this location

Baggage Boxcar Caboose Coal Etc Flat Flat Timber

FlatBH FlatBHPP FlatBHWI FlatTomb FlatTrail FlatWood Flatcar

Gon-pipe Gon-scrap Gondola HopChem HopEmint HopCoal HopCoal E

HopGrain HopSand Hopper MOW MOWBox Passenger Reefer

Reefer Milk Reefer,Meal Reesterice Stock Tank Chem Tank Corn Sy Tank Food

TankGas TankKero TankOil TankVeij Diesel Steam

Clear all Select all Auto Select

Operations at this location

Spurs Yards Interchange Staging only

Id	Interchange...	Length	Used	Reserved	Cars	Locos	Pick ups	Set outs

Add Interchange Track

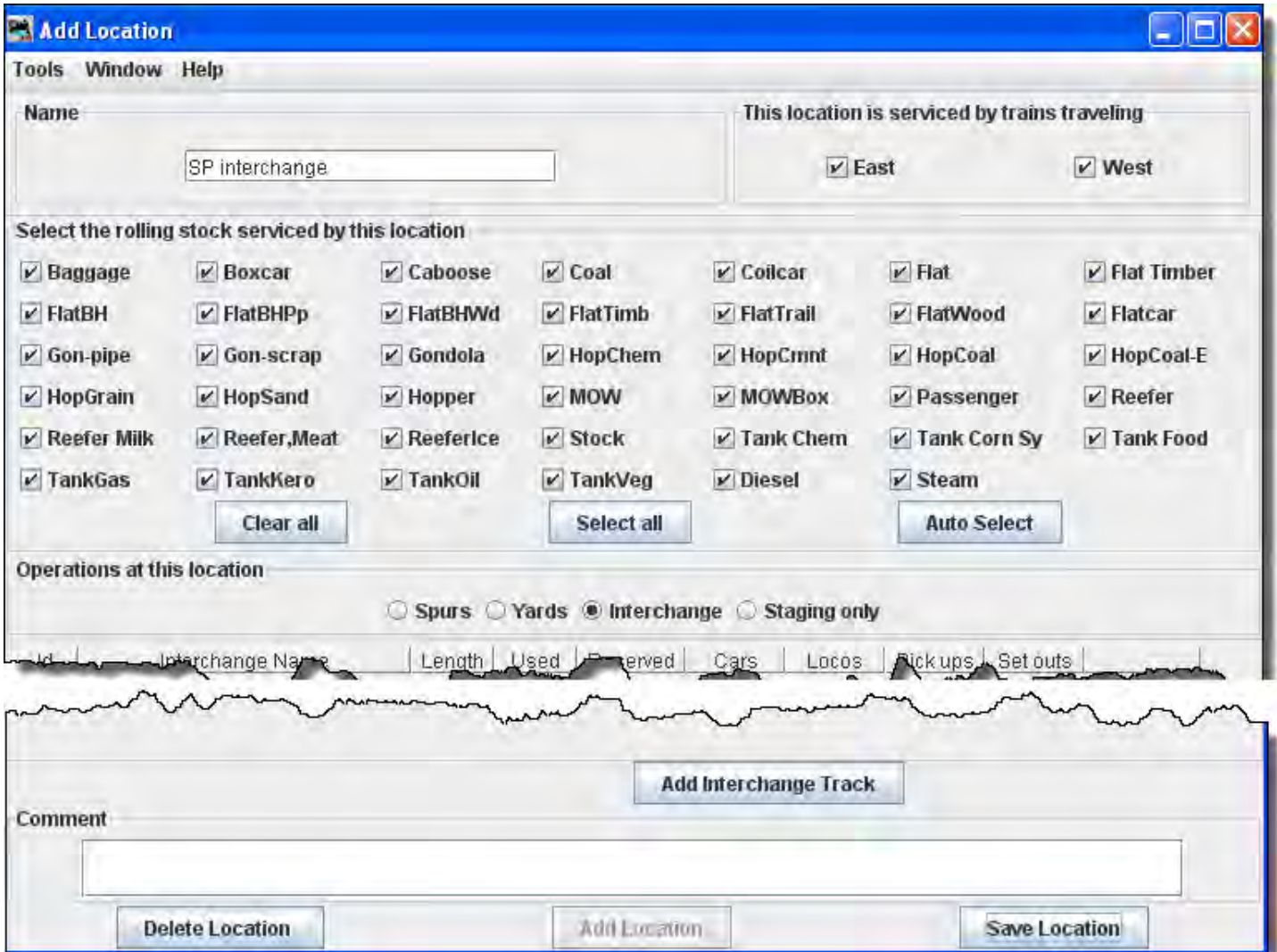
Comment

Delete Location Add Location Save Location

To add a location as an Interchange: in the **Add Location** window, type the **Name** of the Interchange location, note most of the window is greyed out until the location is added. The location name must be unique; the program will not allow two locations with identical names. However, if you want more than one location to have the same name for your manifests and switch lists, add a hyphen and a number to the locations name. For example, "Boston-1" and "Boston-2" will print as "Boston". The program will remove the hyphen and number when printing manifests and switch lists.

Select **Operations at this location** **Interchange**, then press the **Add Location** button at the bottom of the window.

This opens the **Add Location** window with all the options enabled. Now you will want to add the tracks to the interchange.



You may select **This location is serviced by trains traveling**, select at least one or any number of the directions depending on access to your interchange. We have selected **East** **West** for this interchange.

For example, if only south bound trains can access the location select "South" and deselect the other directions. This can be useful if you want to support only trailing point switching for a given location.

Next **Select the rolling stock serviced by this location**, you can control the rolling stock a location can service. Push the **Clear All** button to deselect all types, or **Select All** button to select all types, then select or deselect the rolling stock you wish the location to accept.

Since the **Operations at this location** is a **Interchange** the **Add Interchange Track** button is now enabled near the bottom of the window.

We also have the option to **Delete Location** button or **Save Location** button

Press **Add Interchange Track** button then the **Add Interchange Track** window is displayed, so you can detail the siding.

Add Interchange Track

Tools Window Help

Name: Track1 Length: 1500

This interchange track is serviced by trains traveling: East West

Select the rolling stock serviced by this interchange track

<input type="checkbox"/> Baggage	<input type="checkbox"/> Boxcar	<input type="checkbox"/> Caboose	<input type="checkbox"/> Coal	<input type="checkbox"/> Coilcar	<input type="checkbox"/> Flat	<input type="checkbox"/> Flat Timber
<input type="checkbox"/> FlatBH	<input type="checkbox"/> FlatBHPp	<input type="checkbox"/> FlatBHWd	<input type="checkbox"/> FlatTimb	<input type="checkbox"/> FlatTrail	<input type="checkbox"/> FlatWood	<input type="checkbox"/> Flatcar
<input type="checkbox"/> Gon-pipe	<input type="checkbox"/> Gon-scrapp	<input type="checkbox"/> Gondola	<input type="checkbox"/> HopChem	<input type="checkbox"/> HopCrmt	<input type="checkbox"/> HopCoal	<input type="checkbox"/> HopCoal-E
<input type="checkbox"/> HopGrain	<input type="checkbox"/> HopSand	<input type="checkbox"/> Hopper	<input type="checkbox"/> MOW	<input type="checkbox"/> MOWBox	<input type="checkbox"/> Passenger	<input type="checkbox"/> Reefer
<input type="checkbox"/> Reefer Milk	<input type="checkbox"/> Reefer.Meat	<input type="checkbox"/> ReeferIce	<input type="checkbox"/> Stock	<input type="checkbox"/> Tank Chem	<input type="checkbox"/> Tank Corri Sy	<input type="checkbox"/> Tank Food
<input type="checkbox"/> TankGas	<input type="checkbox"/> TankKere	<input type="checkbox"/> TankOil	<input type="checkbox"/> TankVeg	<input type="checkbox"/> Diesel	<input type="checkbox"/> Steam	

Clear all Select all

Select the roads serviced by this track

Accept all Accept only Exclude

Select loads serviced by this track

Accept all Accept only Exclude

Select pick up car order

Normal First in First Out (FIFO) Last in First Out (LIFO)

Select trains or routes for car set outs

Any Trains Routes

Select trains or routes for car pick ups

Any Trains Routes

Comment

Delete Interchange Track Add Interchange Track Save Interchange Track

In **Name** type the specific track to be serviced at this location.

Length of the Yard track in scale feet. You may enter the measurement in actual inches as and the program will convert to the scale feet that you select during setup.

Press **Add Interchange Track** button the siding track is added and the greyed out features are activated.

Add Interchange Track

Tools Window Help

Name: Length:

This interchange track is serviced by trains traveling: East West

Select the rolling stock serviced by this interchange track

<input checked="" type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input checked="" type="checkbox"/> Caboose	<input checked="" type="checkbox"/> Coal	<input checked="" type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> Flat Timber
<input checked="" type="checkbox"/> FlatBH	<input checked="" type="checkbox"/> FlatBHPP	<input checked="" type="checkbox"/> FlatBHWD	<input checked="" type="checkbox"/> FlatTimb	<input checked="" type="checkbox"/> FlatTrail	<input checked="" type="checkbox"/> FlatWood	<input checked="" type="checkbox"/> Flatcar
<input checked="" type="checkbox"/> Gon-pipe	<input checked="" type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input checked="" type="checkbox"/> HopChem	<input checked="" type="checkbox"/> HopCmnt	<input checked="" type="checkbox"/> HopCoal	<input checked="" type="checkbox"/> HopCoal-E
<input checked="" type="checkbox"/> HopGrain	<input checked="" type="checkbox"/> HopSand	<input checked="" type="checkbox"/> Hopper	<input checked="" type="checkbox"/> MOW	<input checked="" type="checkbox"/> MOWBox	<input checked="" type="checkbox"/> Passenger	<input checked="" type="checkbox"/> Reefer
<input checked="" type="checkbox"/> Reefer Milk	<input checked="" type="checkbox"/> Reefer,Meat	<input checked="" type="checkbox"/> ReeferIce	<input checked="" type="checkbox"/> Stock	<input checked="" type="checkbox"/> Tank Chem	<input checked="" type="checkbox"/> Tank Corn Sy	<input checked="" type="checkbox"/> Tank Food
<input checked="" type="checkbox"/> TankGas	<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input checked="" type="checkbox"/> TankVeg	<input checked="" type="checkbox"/> Diesel	<input checked="" type="checkbox"/> Steam	

Select the roads serviced by this track

Accept all Accept only Exclude

Select loads serviced by this track

Accept all Accept only Exclude

Select pick up car order

Normal First In First Out (FIFO) Last In First Out (LIFO)

Select trains or routes for car set outs

Any Trains Routes

Select trains or routes for car pick ups

Any Trains Routes

Comment

You may **Select the roads serviced by this track**

Accept all

Default accepts rolling stock from any railroad.

Accept only



Allows you to list the railroads whose rolling stock you will accept.

Exclude



Accept all rolling stock except from those railroads that are excluded.

We will use the default. If you want to edit the roads accepted go to [Add Cars](#) then Edit Roads to add a road that is not in the drop-down list.

Select the loads serviced by this track

Accept all

Default accepts any load.

Accept only



Allows you to list the loads you will accept.

Exclude



Accept all loads except from those

that are excluded.

Select pick up car order

Normal

Default

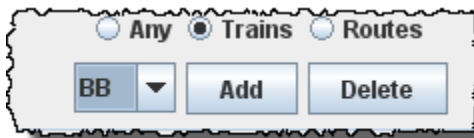
First In First Out (FIFO)

Last In First Out (LIFO)

Select trains or routes for car set outs

Any -- default

Trains



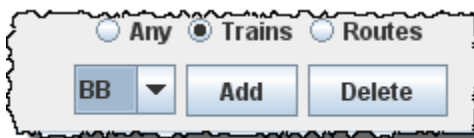
Routes



Select trains or routes for car pick ups

Any -- default

Trains





We will use the default go to links to setup Trains or Routes. The Trains and Routes must be created prior to selecting.

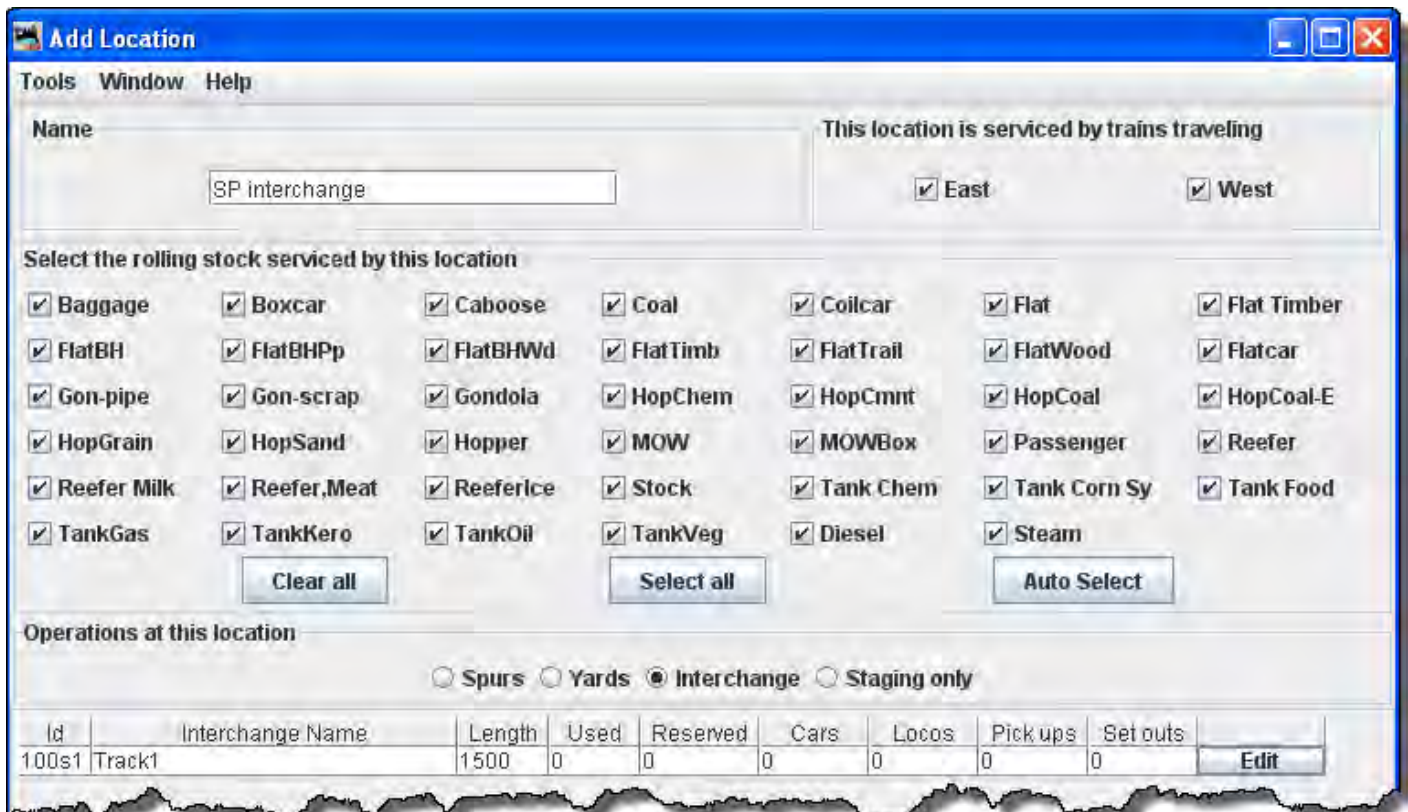
You may enter a **Comment** for the track.

You may now press **Save Interchange Track** button to add to the location or press **Delete Interchange Track** button if you do not want to store the track.

If you want to add another track to this interchange location, then enter new data and Press Save Interchange Track button to add the track.

Close the window when done with this location.

The **Add Location** window shows one Interchange track at the SP interchange



You may add as many tracks as required for the Interchange.

If you want to change information for any track entry, press the **Edit** button and the **Edit Interchange Track** window will open.

Edit Interchange Track

Tools Window Help

Name: Length: This interchange track is serviced by trains traveling in the following directions: East West

Select the rolling stock serviced by this interchange track

<input checked="" type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input checked="" type="checkbox"/> Caboose	<input checked="" type="checkbox"/> Coal	<input checked="" type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> Flat Timber
<input checked="" type="checkbox"/> FlatBH	<input checked="" type="checkbox"/> FlatBHPP	<input checked="" type="checkbox"/> FlatBHWD	<input checked="" type="checkbox"/> FlatTimb	<input checked="" type="checkbox"/> FlatTrail	<input checked="" type="checkbox"/> FlatWood	<input checked="" type="checkbox"/> Flatcar
<input checked="" type="checkbox"/> Gon-pipe	<input checked="" type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input checked="" type="checkbox"/> HopChem	<input checked="" type="checkbox"/> HopCmnt	<input checked="" type="checkbox"/> HopCoal	<input checked="" type="checkbox"/> HopCoal-E
<input checked="" type="checkbox"/> HopGrain	<input checked="" type="checkbox"/> HopSand	<input checked="" type="checkbox"/> Hopper	<input checked="" type="checkbox"/> MOW	<input checked="" type="checkbox"/> MOWBox	<input checked="" type="checkbox"/> Passenger	<input checked="" type="checkbox"/> Reefer
<input checked="" type="checkbox"/> Reefer Milk	<input checked="" type="checkbox"/> Reefer,Meat	<input checked="" type="checkbox"/> ReeferIce	<input checked="" type="checkbox"/> Stock	<input checked="" type="checkbox"/> Tank Chem	<input checked="" type="checkbox"/> Tank Corn Sy	<input checked="" type="checkbox"/> Tank Food
<input checked="" type="checkbox"/> TankGas	<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input checked="" type="checkbox"/> TankVeg	<input checked="" type="checkbox"/> Diesel	<input checked="" type="checkbox"/> Steam	

Select the roads serviced by this track

Accept all Accept only Exclude

Select loads serviced by this track

Accept all Accept only Exclude

Select pick up car order

Normal First In First Out (FIFO) Last In First Out (LIFO)

Select trains or routes for car set outs

Any Trains Routes

Select trains or routes for car pick ups

Any Trains Routes

Comment

Note that it is identical to the Add Interchange Track except for the title.

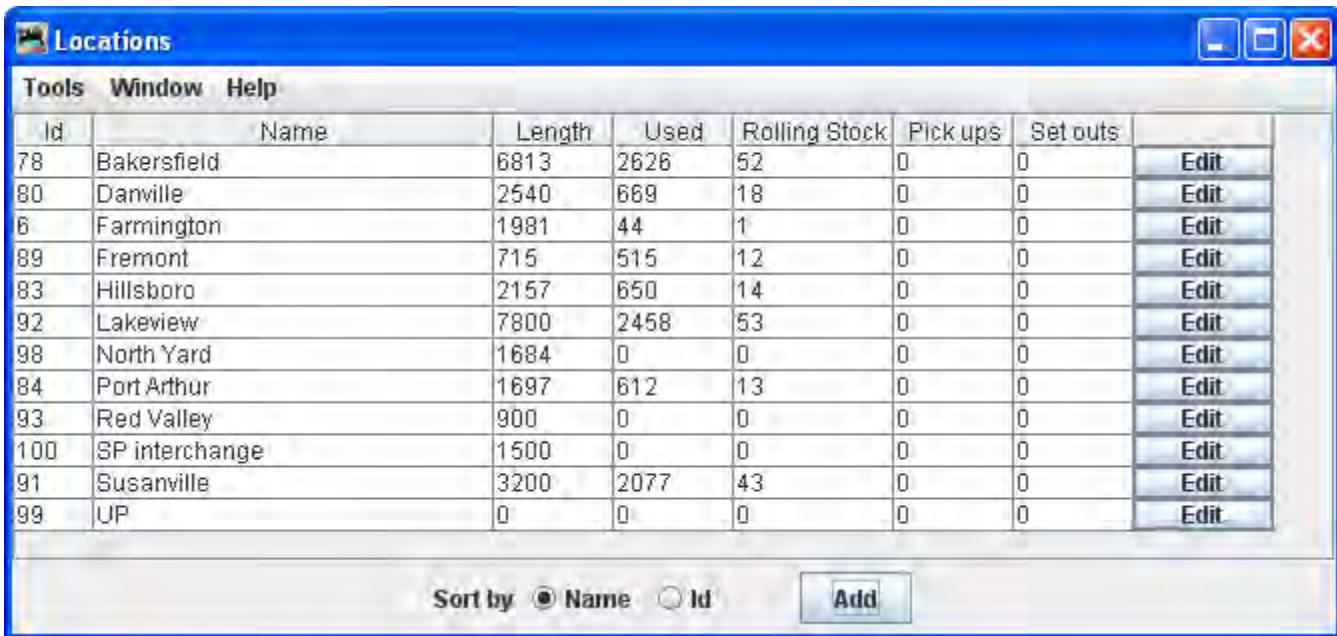
Change any of the entries that you want to edit and then press the **Save Interchange Track** button to save the changes.

You may also **Delete Interchange Track** button from your data base.

When done with editing close the window.

The Locations window shows all the locations in your database.

You may Edit any one of them, which opens the **Edit Location** window, which is the same as the [Add Location](#) window except it contains the info for the location you are editing.



Id	Name	Length	Used	Rolling Stock	Pick ups	Set outs	Edit
78	Bakersfield	6813	2626	52	0	0	Edit
80	Darville	2540	669	18	0	0	Edit
6	Farmington	1981	44	1	0	0	Edit
89	Fremont	715	515	12	0	0	Edit
83	Hillsboro	2157	650	14	0	0	Edit
92	Lakeview	7800	2458	53	0	0	Edit
98	North Yard	1684	0	0	0	0	Edit
84	Port Arthur	1697	612	13	0	0	Edit
93	Red Valley	900	0	0	0	0	Edit
100	SP interchange	1500	0	0	0	0	Edit
91	Susanville	3200	2077	43	0	0	Edit
99	UP	0	0	0	0	0	Edit

Sort by Name Id

You may add as many locations and track as you need to complete the description of your layout.

Add Staging Only

Add [Location as Staging Only](#) and the **Add Location** window will be displayed with Staging only selected.

Add Location

Tools Window Help

Name:

This location is serviced by trains traveling

North South East West

Select the rolling stock serviced by this location

Baggage Boxcar Caboose Coal Coilcar Flat Flat Timber

FlatBH FlatBHPP FlatBHWd FlatTimb FlatTrail FlatWood Flatcar

Gon-pipe Gon-scrap Gondola HopChem HopGrnit HopCoal HopCoal-E

HopGrain HopSand Hopper MOW MOWBox Passenger Reefer

Reefer Milk Reefer,Meat ReeferIce Stock Tank Chem Tank Corn Sy Tank Food

TankGas TankKero TankOil TankVeg Diesel Steam

Clear all Select all Auto Select

Operations at this location

Spurs Yards Interchange Staging only

Id	Staging Na...	Length	Used	Reserved	Cars	Locos	Pick ups	Set outs
----	---------------	--------	------	----------	------	-------	----------	----------

Add Staging Track

Comment

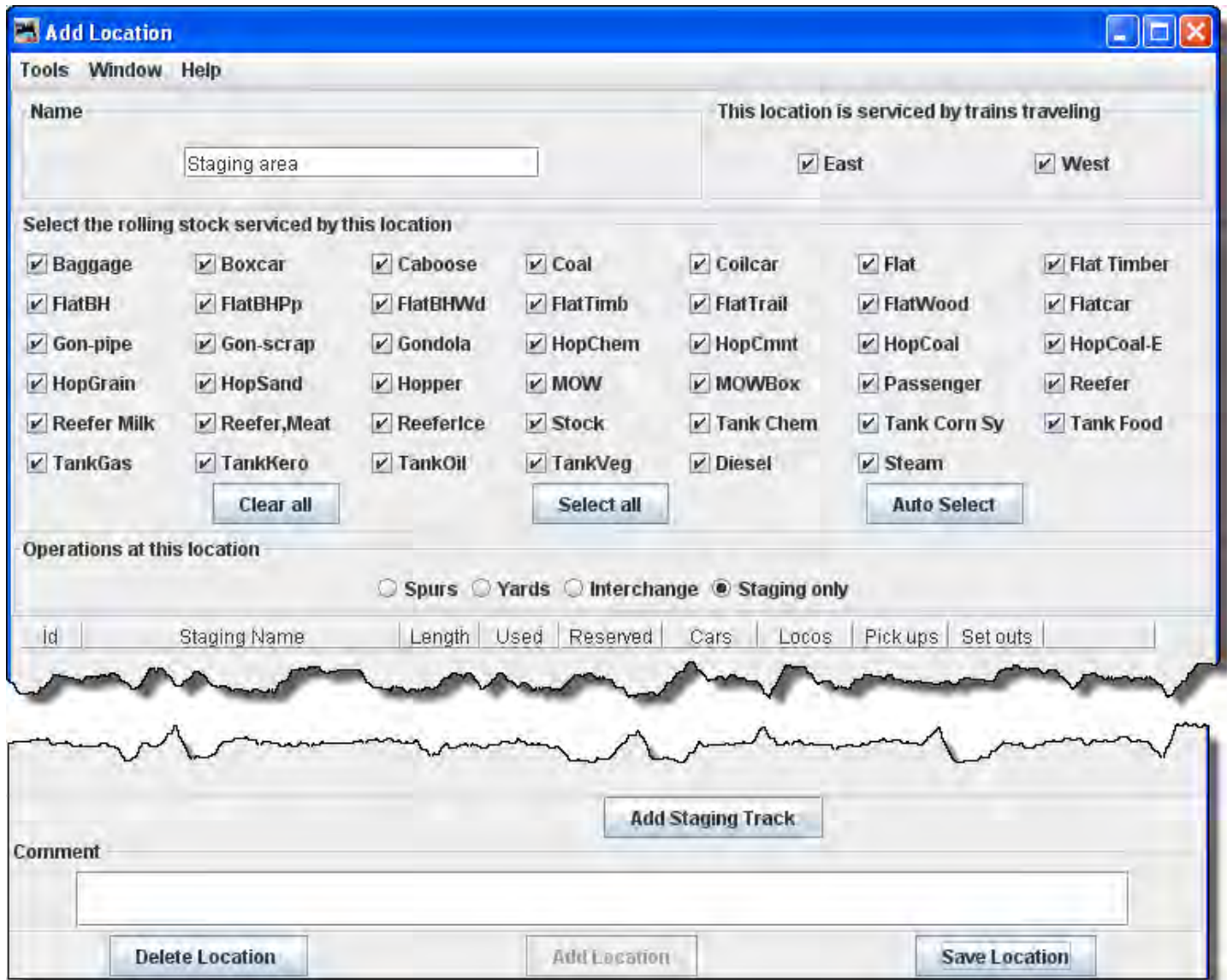
Delete Location Add Location Save Location

To add a location as a Staging Only: in the **Add Location** window, type the **Name** of the Staging Only location, note most of the window is greyed out until the location is added. The location name must be unique; the program will not allow two locations with identical names. However, if you want more than one location to have the same name for your manifests and switch lists, add a hyphen and a number to the locations name. For example, "Boston-1" and "Boston-2" will print as "Boston". The program will remove the hyphen and number when printing manifests and switch lists.

Select **Operations at this location** **Staging Only**, then press the Add Location button at the bottom of the window.

A Staging Only area may contain several tracks that must be defined.

This opens the **Add Location** window with all the options enabled.



You may select **This location is serviced by trains traveling**, select at least one or any number of the directions depending on access to your staging. We have selected All directions, for this staging.

You can decide which train direction the location can service. For example, if only south bound trains can access the location select "South" and deselect the other directions. This can be useful if you want to support only trailing point switching for a given location. If a location can support multiple directions then select the ones that are appropriate.

Next **Select the rolling stock serviced by this location**, you can control the rolling stock that a location can service. Push **Clear All** button to deselect all types, or **Select All** button to select all types, then select or deselect the rolling stock you wish the location to accept.

Since the **Operations at this location** is a  **Staging Only** the **Add Staging Track** button is now enabled near the bottom of the window.

We also have the option to **Delete Location** button or **Save Location** button

Press **Add Staging Track** then the **Add Staging Track** window is displayed, so that you can detail the siding.

Add Staging Track

Tools Window Help

Name **Length** **This staging track is serviced by trains traveling**
 East West

Select the rolling stock serviced by this staging track

<input type="checkbox"/> Baggage	<input type="checkbox"/> Boxcar	<input type="checkbox"/> Caboose	<input type="checkbox"/> Coal	<input type="checkbox"/> Coilcar	<input type="checkbox"/> Flat	<input type="checkbox"/> Flat Timber
<input type="checkbox"/> FlatBH	<input type="checkbox"/> FlatBHPP	<input type="checkbox"/> FlatBHWD	<input type="checkbox"/> FlatTimb	<input type="checkbox"/> FlatTrail	<input type="checkbox"/> FlatWood	<input type="checkbox"/> Flatcar
<input type="checkbox"/> Gon-pipe	<input type="checkbox"/> Gon-scrap	<input type="checkbox"/> Gondola	<input type="checkbox"/> HopCherr	<input type="checkbox"/> HopCrrnl	<input type="checkbox"/> HopCoal	<input type="checkbox"/> HopCoal-E
<input type="checkbox"/> HopGrain	<input type="checkbox"/> HopSand	<input type="checkbox"/> Hopper	<input type="checkbox"/> MOW	<input type="checkbox"/> MOWBox	<input type="checkbox"/> Passenger	<input type="checkbox"/> Reefer
<input type="checkbox"/> Reefer Milk	<input type="checkbox"/> Reefer,Meal	<input type="checkbox"/> ReeferIce	<input type="checkbox"/> Stock	<input type="checkbox"/> Tank Chem	<input type="checkbox"/> Tank Corrt Sy	<input type="checkbox"/> Tank Food
<input type="checkbox"/> TankGas	<input type="checkbox"/> TankKero	<input type="checkbox"/> TankOil	<input type="checkbox"/> TankVeg	<input type="checkbox"/> Diesel	<input type="checkbox"/> Steam	

Select the roads serviced by this track
 Accept all Accept only Exclude

Select loads serviced by this track
 Accept all Accept only Exclude

Select trains or routes for arrivals
 Any Trains Routes

Select trains or routes for departures
 Any Trains Routes

Optional car load controls
 Swap default loads and empties
 Empty cars with default loads

Optional custom car load controls
 Empty cars with custom loads
 Generate custom loads for spurs serviced by this train
 Generate custom loads for any spur (multiple trains)

Comment

In **Name** type the specific track to be serviced at this location.

Length of the Staging track in scale feet. You may enter the measurement in actual inches as and the program will convert to the scale feet that you select during setup.

Press Add Staging Track button the staging track is added and the greyed out features are activated.

Add Staging Track

Tools Window Help

Name: Track1 Length: 1000 This staging track is serviced by trains traveling: East West

Select the rolling stock serviced by this staging track

<input checked="" type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input checked="" type="checkbox"/> Caboose	<input checked="" type="checkbox"/> Coal	<input checked="" type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> Flat Timber
<input checked="" type="checkbox"/> FlatBH	<input checked="" type="checkbox"/> FlatBHPP	<input checked="" type="checkbox"/> FlatBHWD	<input checked="" type="checkbox"/> FlatTimb	<input checked="" type="checkbox"/> FlatTrail	<input checked="" type="checkbox"/> FlatWood	<input checked="" type="checkbox"/> Flatcar
<input checked="" type="checkbox"/> Gon-pipe	<input checked="" type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input checked="" type="checkbox"/> HopChem	<input checked="" type="checkbox"/> HopCmnt	<input checked="" type="checkbox"/> HopCoal	<input checked="" type="checkbox"/> HopCoal-E
<input checked="" type="checkbox"/> HopGrain	<input checked="" type="checkbox"/> HopSand	<input checked="" type="checkbox"/> Hopper	<input checked="" type="checkbox"/> MOW	<input checked="" type="checkbox"/> MOWBox	<input checked="" type="checkbox"/> Passenger	<input checked="" type="checkbox"/> Reefer
<input checked="" type="checkbox"/> Reefer Milk	<input checked="" type="checkbox"/> Reefer,Meat	<input checked="" type="checkbox"/> ReeferIce	<input checked="" type="checkbox"/> Stock	<input checked="" type="checkbox"/> Tank Chem	<input checked="" type="checkbox"/> Tank Corn Sy	<input checked="" type="checkbox"/> Tank Food
<input checked="" type="checkbox"/> TankGas	<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input checked="" type="checkbox"/> TankVeg	<input checked="" type="checkbox"/> Diesel	<input checked="" type="checkbox"/> Steam	

Clear all Select all

Select the roads serviced by this track: Accept all Accept only Exclude

Select loads serviced by this track: Accept all Accept only Exclude

Select trains or routes for arrivals: Any Trains Routes

Select trains or routes for departures: Any Trains Routes

Optional car load controls: Swap default loads and empties Empty cars with default loads

Optional custom car load controls: Empty cars with custom loads Generate custom loads for spurs serviced by this train Generate custom loads for any spur (multiple trains)

Comment: [Text Box]

Delete Staging Track Add Staging Track Save Staging Track

You may **Select the roads serviced by this track**

Accept all

Default accepts rolling stock from any railroad.

Accept only



A screenshot of a control panel with a torn paper edge. At the top, there are three radio buttons: 'Accept all' (unselected), 'Accept only' (selected), and 'Exclude' (unselected). Below the radio buttons is a dropdown menu showing 'AA' with a downward arrow. To the right of the dropdown are two buttons: 'Add Road' and 'Delete Road'.

Allows you to list the railroads whose rolling stock you will accept.

Exclude



A screenshot of a control panel with a torn paper edge. At the top, there are three radio buttons: 'Accept all' (unselected), 'Accept only' (unselected), and 'Exclude' (selected). Below the radio buttons is a dropdown menu showing 'AA' with a downward arrow. To the right of the dropdown are two buttons: 'Add Road' and 'Delete Road'.

Accept all rolling stock except from those railroads that are excluded.

We will use the default. If you want to edit the roads accepted go to [Add Cars](#) then Edit Roads, to add another selection to the drop-down list.

Select the loads serviced by this track

Accept all

Default accepts any load

Accept only



A screenshot of a control panel with a torn paper edge. At the top, there are three radio buttons: 'Accept all' (unselected), 'Accept only' (selected), and 'Exclude' (unselected). Below the radio buttons are two dropdown menus: the first shows 'Boxcar' and the second shows 'E<empty>'. To the right of the dropdowns are three buttons: 'Add Load', 'Delete Load', and 'Delete All'.

Allows you to select the loads you will accept.

Exclude



Allows you to exclude any load you do not want service by this track.

Select trains or routes for arrivals

any

Default

Trains



Routes



Optional car load controls

Swap default loads and empties

Empty cars with default loads

Optional custom car load controls

Empty cars with custom loads

Generated custom loads for spurs serviced by this train

Generate custom loads for any spur (multiple trains)

You may enter a **Comment** for the track.

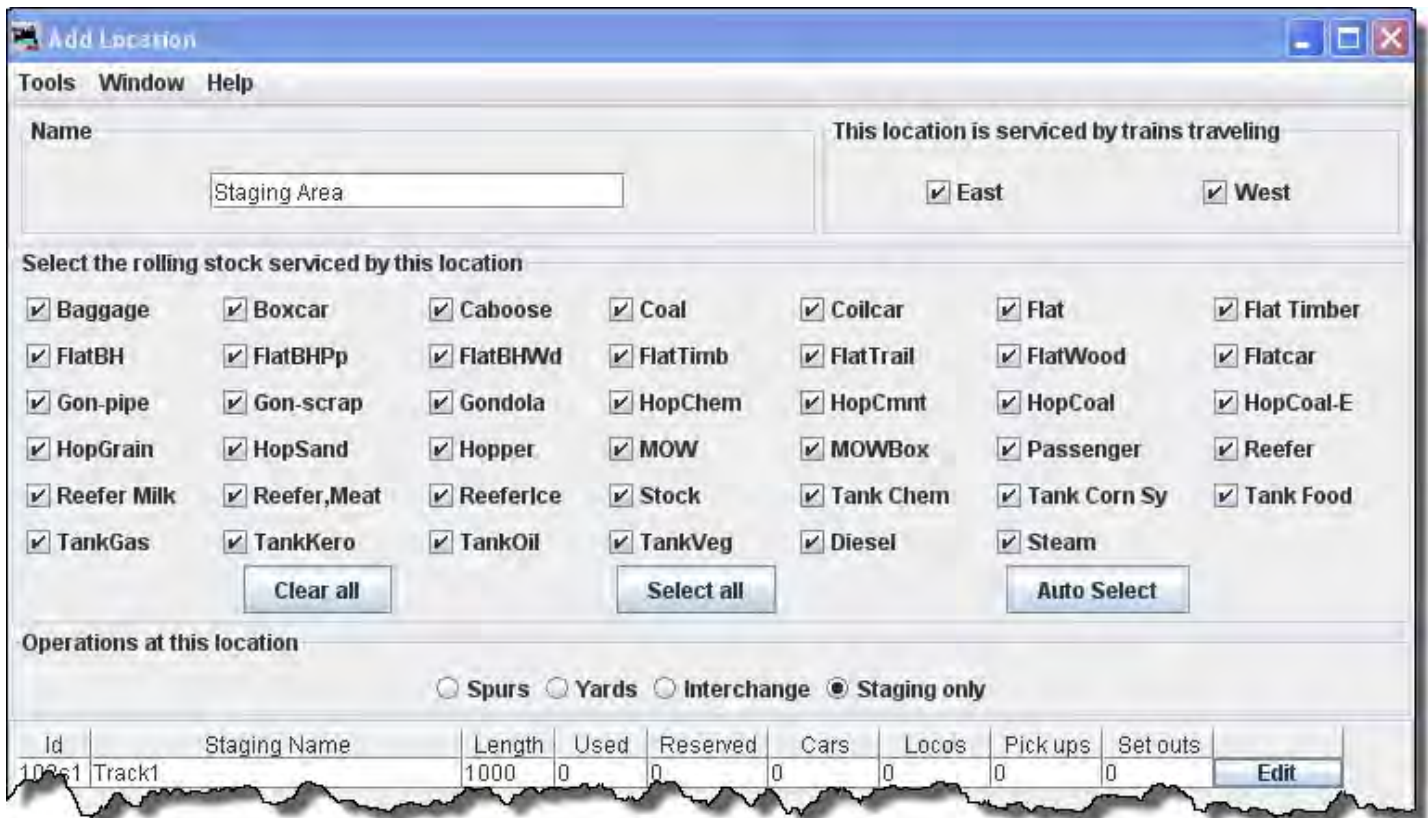
You may now press **Save Staging Track** button to add to the location or press **Delete Staging Track** button if you do not want to store the track.

If you want to add another track to this interchange location, then enter new data and Press **Save Staging Track** button to add the track.

Note if you are running a train to and from the same staging location, you must define two staging tracks for the program, one to depart and one to return on. Physically, the tracks can be the same track.

Close the window when done with this location.

The **Add Location** window shows one Staging track.



You may add as many tracks as required for the Staging area.

If you want to change information for any track entry, press **Edit** button and the **Edit Staging Track** window will open.

Edit Staging Track

Tools Window Help

Name: Track1 Length: 1000 This staging track is serviced by trains traveling: East West

Select the rolling stock serviced by this staging track

<input checked="" type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input checked="" type="checkbox"/> Caboose	<input checked="" type="checkbox"/> Coal	<input checked="" type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> Flat Timber
<input checked="" type="checkbox"/> FlatBH	<input checked="" type="checkbox"/> FlatBHPP	<input checked="" type="checkbox"/> FlatBHWD	<input checked="" type="checkbox"/> FlatTimb	<input checked="" type="checkbox"/> FlatTrail	<input checked="" type="checkbox"/> FlatWood	<input checked="" type="checkbox"/> Flatcar
<input checked="" type="checkbox"/> Gon-pipe	<input checked="" type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input checked="" type="checkbox"/> HopChem	<input checked="" type="checkbox"/> HopCmnt	<input checked="" type="checkbox"/> HopCoal	<input checked="" type="checkbox"/> HopCoal-E
<input checked="" type="checkbox"/> HopGrain	<input checked="" type="checkbox"/> HopSand	<input checked="" type="checkbox"/> Hopper	<input checked="" type="checkbox"/> MOW	<input checked="" type="checkbox"/> MOWBox	<input checked="" type="checkbox"/> Passenger	<input checked="" type="checkbox"/> Reefer
<input checked="" type="checkbox"/> Reefer Milk	<input checked="" type="checkbox"/> Reefer,Meat	<input checked="" type="checkbox"/> ReeferIce	<input checked="" type="checkbox"/> Stock	<input checked="" type="checkbox"/> Tank Chem	<input checked="" type="checkbox"/> Tank Corn Sy	<input checked="" type="checkbox"/> Tank Food
<input checked="" type="checkbox"/> TankGas	<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input checked="" type="checkbox"/> TankVeg	<input checked="" type="checkbox"/> Diesel	<input checked="" type="checkbox"/> Steam	

Select the roads serviced by this track

Accept all Accept only Exclude

Select loads serviced by this track

Accept all Accept only Exclude

Select trains or routes for arrivals

Any Trains Routes

Select trains or routes for departures

Any Trains Routes

Optional car load controls

Swap default loads and empties

Empty cars with default loads

Optional custom car load controls

Empty cars with custom loads

Generate custom loads for spurs serviced by this train

Generate custom loads for any spur (multiple trains)

Comment

Note that it is identical to the Add Interchange and Yard Track except for the title.

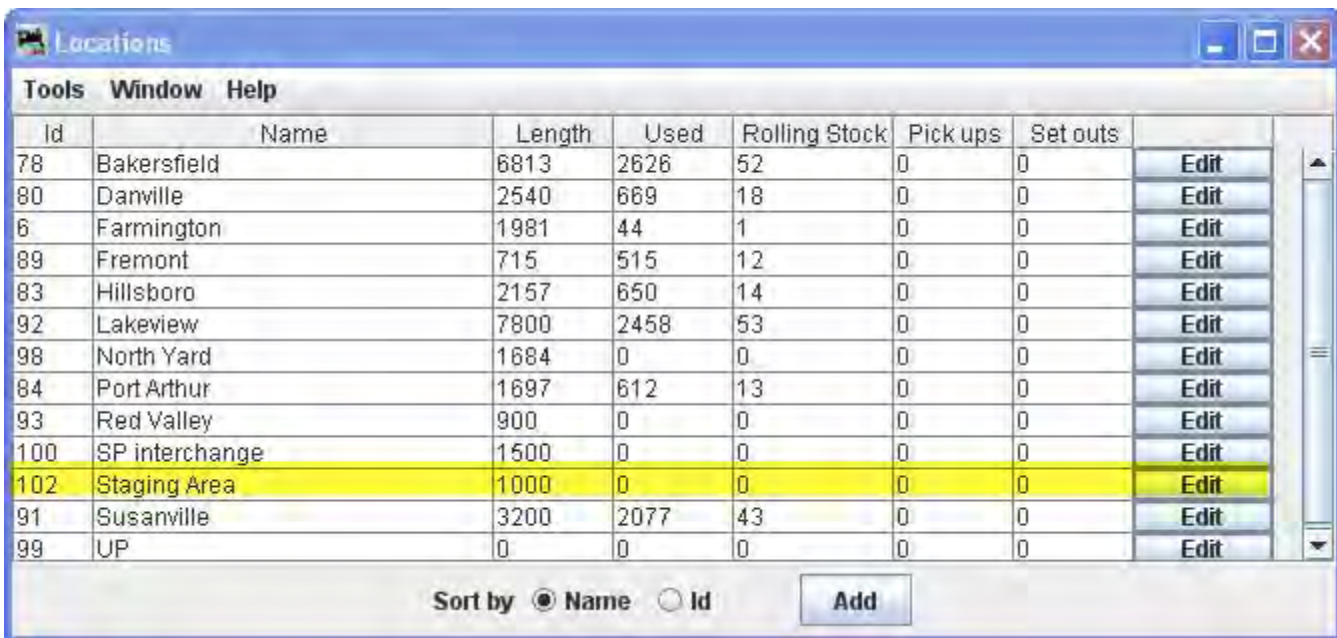
Change any of the entries that you want to edit and then press the **Save Staging Track** button to save the changes.

You may also **Delete Staging Track** button from your data base.

When done with editing close the window.

The Locations window shows all the locations in your database.

You may Edit any one of them, which opens the **Edit Location** window, which is the same as the [Add Location](#) window except it contains the info for the location you are editing.



Id	Name	Length	Used	Rolling Stock	Pick ups	Set outs	
78	Bakersfield	6813	2626	52	0	0	Edit
80	Danville	2540	669	18	0	0	Edit
6	Farmington	1981	44	1	0	0	Edit
89	Fremont	715	515	12	0	0	Edit
83	Hillsboro	2157	650	14	0	0	Edit
92	Lakeview	7800	2458	53	0	0	Edit
98	North Yard	1684	0	0	0	0	Edit
84	Port Arthur	1697	612	13	0	0	Edit
93	Red Valley	900	0	0	0	0	Edit
100	SP interchange	1500	0	0	0	0	Edit
102	Staging Area	1000	0	0	0	0	Edit
91	Susanville	3200	2077	43	0	0	Edit
99	UP	0	0	0	0	0	Edit

Sort by Name Id

You may add as many locations and track as you need to complete the description of your layout.

Cars Window

This window is opened from the DecoderPro® Tools Menu, or Operations Menu; and alternatively from **Location Window Tools** menu, **Show Cars:** and various **Windows Operations Menus**.

Number	Road	Type	Len	Color	Kernel	Location	Destination	Train	Moves	Set	Edit
12	VN	Boxcar	40	Yellow		Bakersfield (yard)			23	Set	Edit
40	SSW	Caboose...	36	Tuscan		Susanville (#84 Yard Track)			25	Set	Edit
45	SSW	Caboose...	36	Tuscan		Lakeview (#97 Yard Track)			28	Set	Edit
46	SSW	Caboose...	36	Black		Lakeview (#99 Yard Track)			8	Set	Edit
101	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
102	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
104	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
105	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
208	VTR	Boxcar	40	Green		Susanville (#82 Yard Track)			3	Set	Edit
259	SP	Caboose...	36	Tuscan		Lakeview (#98 Yard Track)			29	Set	Edit
352	SIX	TankOil	40	Black		Susanville (#84 Yard Track)			15	Set	Edit
401	BM	Caboose...	34	Blue		Bakersfield (Caboose Track)			27	Set	Edit
442	G&F	Boxcar	50	Green		Port Arthur (#153 Zane Mercantile)			15	Set	Edit
462	C&EI	Boxcar	40	Tuscan		Bakersfield (yard)			25	Set	Edit
500	MNS	Boxcar	50	Brown		Lakeview (#99 Yard Track)			16	Set	Edit
505	RUT	HopCmnt	36	Gray		Lakeview (#99 Yard Track)			16	Set	Edit
508	RUT	HopCmnt	36	Gray		Hillsboro (yard)			24	Set	Edit
606	TP&W	Boxcar	40	Green		Susanville (#83 Yard Track)			22	Set	Edit
607	TP&W	Boxcar	40	Green		Susanville (#83 Yard Track)			15	Set	Edit
681	NH	Caboose...	34	Black		Bakersfield (Caboose Track)			25	Set	Edit
752	SP	Caboose...	36	Brown		Susanville (#83 Yard Track)			26	Set	Edit
812	GARE	Reefer Milk	38	Green		Lakeview (#99 Yard Track)			12	Set	Edit
948	PFE	ReeferIce	40	Green		Lakeview (#98 Yard Track)			23	Set	Edit
1087	BCK	Boxcar	40	Tuscan		Lakeview (#98 Yard Track)			19	Set	Edit

Sort by Number Road Type Color Load Kernel Location Destination FD RWE Train Moves Built Owner

210 cars

The cars window allows you to edit your car roster. or add a car by entering a car's number, road, type, length. The program will automatically calculate the car's weight based on length and the scale you are modeling. Optionally the car's color, build date, load and owner can be added. You may want to switch a group of cars as a unit, then you may create a "kernel". You can assign any number of cars to a kernel but the type of the first car assigned will be used by the program to determine if the kernel is allowed at a location. The entire length of the kernel is used to determine if the cars in the kernel will fit. Note that the program also includes space for the car's couplers when calculating the length of a kernel.(group of similar cars)

The complete roster of cars is displayed. At the bottom of the page is a series of radio buttons that allow you to select the sort order.

Add button -- Opens the **Add Car** window and allows you to add a new car.

The 'Add Car' window is a standard Windows-style application window with a blue title bar and window control buttons. It contains several sections for data entry:

- Road:** A dropdown menu showing 'AA' and an 'Edit' button.
- Road Number:** An empty text input field and a 'Clear' button.
- Type:** A dropdown menu showing 'Baggage' and an 'Edit' button. Below it are four checkboxes: 'Passenger', 'Caboose', 'FRED', and 'Utility'. A tooltip 'Add haz' is visible over the 'Utility' checkbox. There is also a 'Hazardous' checkbox.
- Length:** A dropdown menu showing '22' and an 'Edit' button.
- Weight:** Two text input fields labeled 'Ounces' and 'Tons', a 'Calculate' button, and a checked 'Auto' checkbox.
- Location and Track:** Two dropdown menus, one of which is empty, and an unchecked 'Auto' checkbox.
- Optional:**
 - Color:** A dropdown menu showing 'Black' and an 'Edit' button.
 - Load:** A dropdown menu showing 'E<empty>' and an 'Edit' button.
 - Kernel:** A dropdown menu and an 'Edit' button.
- Built:** An empty text input field.
- Owner:** A dropdown menu and an 'Edit' button.
- Comment:** A large empty text input field.

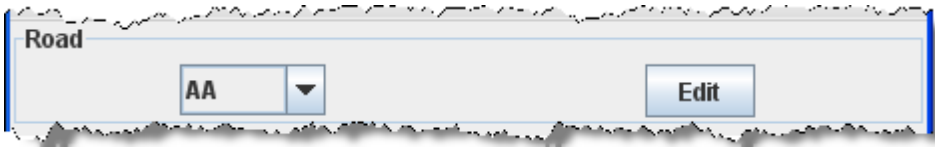
At the bottom of the window are three buttons: 'Delete', 'Add', and 'Save'.

Menu

Window – standard JMRI® menu

Help – same as other JMRI® menu

Road



Select **Road** if your road is not listed then press **Edit** button and the Edit Car Road dialog box will display. Here is a reference for the [Railroad Reporting Marks](#).

Road Number



Enter the car's Road Number . The program requires a unique road name and road number for each car. If you have cars with identical roads and numbers, simply add a -1, -2, etc. to each of the car numbers. The program when printing out the manifest or switch list will drop the -1, -2, etc. from the car's road number.

Type



Type from drop-down list. if your type is not listed then press **Edit** button and the Edit Car Type dialog box will display.

The program supports the ability to add a subType to your car types. Adding a "-subType" to your car type will create a new type of car. The "-subType" is not printed on the manifest or switch lists. For example you might have coal cars with loads and coal cars that are empty. If you enter the car type as HopCoal-C for your cars with coal, and HopCoal-E for the empties, the program can use this information to assign and deliver cars to their appropriate trains and locations respectively.

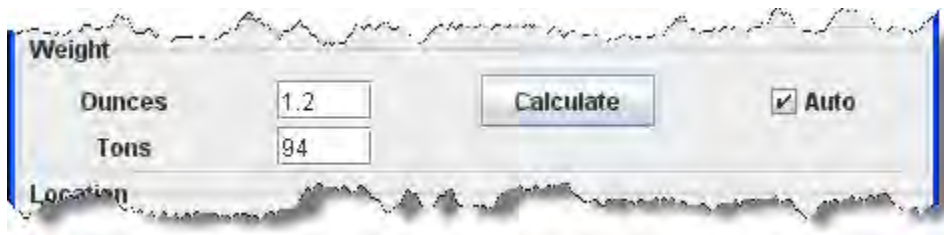
f the car is a **Caboose**, has a **FRED** (Flashing Rear End Device), or is **Hazardous**, select the proper box. The program uses the caboose and FRED functions to place the car at the end of a train when the train requires a caboose or car with FRED. The hazardous checkbox will cause the program to add a note to the switch list that the car is transporting hazardous materials. Your railroad's policy regarding hazardous materials can then be applied to this car!

Length



Select the car's **Length** if your length is not listed then press and the dialog box will display.

Weight



The car **Weight** is automatically calculated when the **Auto** is selected based on car's length, but you can enter a different weight if necessary. If the **Auto** is not checked then you may use the **Calculate** button to calculate the weight. When entering the length of a car, enter the length of the body and not the total length. For example, a forty foot boxcar has a length of 40 feet. The program when calculating lengths will add two feet to each end of a car for the couplers. Therefore when you place a forty foot car at a siding, it will consume 44 feet of track.

Location and Track



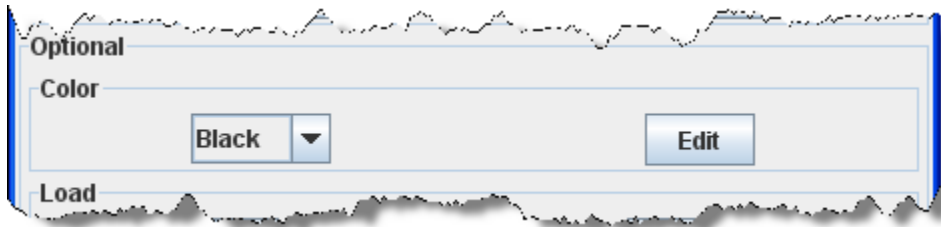
Now you select the cars **Location and Track from drop-down lists**. The first selection is the location, city, yard etc. that was created in the [Locations](#).

The second selection Food Depot from drop-down list is based on the first and only has entries if there is more than one track at this location

If the car is off the layout, set the location to none (blank space)

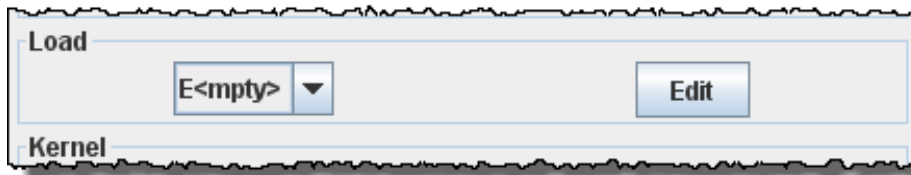
Auto selection

Optional



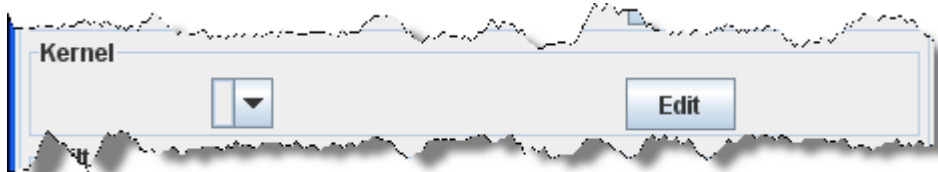
Select the car's **Color** if your color is not listed then press **Edit** button and the Edit Color dialog box will display.

Load



You can optionally set the **Load** state of the car. Select E for empty or L for loaded. Press **Edit** button to create your own car loads, but there are restrictions. Only sidings with [Schedules](#) can load or unload cars with loads that you've created. It is also suggested that you use a format similar to L(commodity) to describe your loads. For example a load of tools could be entered as L(Tools).

Kernel



If wish this car to be part of a kernel which is a group of cars that you want to switch as one unit, select kernel from drop-down list. If the kernel you want is not there press and enter a kernel name. to add to the list. Then select the kernel from the Drop-down list.

Built

A screenshot of a form field labeled "Built". It consists of a text input box with a small rectangular cursor inside. The field is part of a larger form with a blue border and a light gray background.

Optional Built you may enter the build date.

Owner

A screenshot of a form field labeled "Owner". It features a dropdown menu with a downward-pointing arrow and an "Edit" button to its right. The field is part of a larger form with a blue border and a light gray background.

You may optionally select an **Owner** or press **Edit** button to enter an [owner](#). Then select owner from the menu box.

Comment

A screenshot of a form field labeled "Comment". It includes a dropdown menu with a downward-pointing arrow and an "Edit" button to its right. Below the dropdown is a text input box. The field is part of a larger form with a blue border and a light gray background.

Comment for this car.

Bottom of Window

A screenshot of the bottom of a window. It shows three buttons: "Delete", "Add", and "Save", arranged horizontally. The buttons are light blue with dark text. Above the buttons is a text input box.

Add button -- add another car.

Delete -- delete a car.

Save -- to store the car's settings. The program will create a file (OperationsCarRoster.xml) in your JMRI directory in a folder called "operations". A backup file with the last settings for all of your cars is also created each time the **Save** button is pressed.

Save button -- Saves the car roster to disk.

Find button Used to find a car by its road number. The wild card may be used "*" when entering a car number. for example, if you want to find all the cars with a number ending in 345 , enter *345 then press each time pressed the next car with the 345 ending will be displayed..

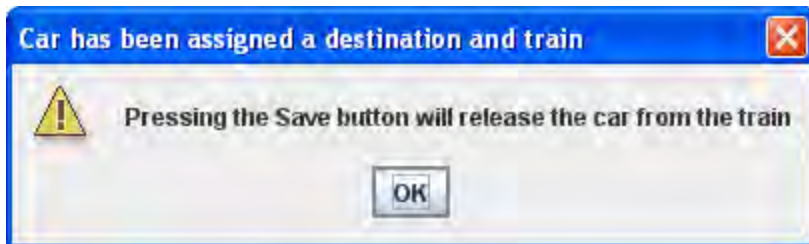
To the right of each car entry:

Set button opens the [Set Car Location](#) Window.

Set Cars Window

You can select the **Set Cars** from the [Cars](#) window **Tools** menu. This allows you to change the location, destination, status, or train assignment for a group of cars. This tool works the same as the **Set Car Location** tool as described below, except that multiple cars are modified. Select the cars you want in the table and then select **Set Cars**. The first selected car becomes the default, and if you press **Change** button, all of the other selected cars will have the same settings as the default car. Be sure to **Save** button in the [Cars](#) window if you want to keep your changes.

Displays when **Set Cars** window opens. This warns that when you Save the changes from the **Set Cars** window those cars are no longer part of a train.



The screenshot shows the 'Set Car' window with the following details:

- Car:** SKX 352
- Type:** TankOil
- Status:**
 - Location Unknown
 - Out of Service
- Location:**
 - Name: Susanville
 - Track: #84 Yard Track
 - Auto
- Optional Return When Empty:**
 - Name: (empty)
 - Track: (empty)
 - Auto
- Load:**
 - E<empty>
 - Edit
- Optional -- Normally Set by Program --**
 - Destination:**
 - Name: (empty)
 - Track: (empty)
 - Auto
 - Final Destination:**
 - Name: (empty)
 - Track: (empty)
 - Auto
 - Train:**
 - (empty)
 - Auto
- Save** button at the bottom.

Status

Location Unkown results in: program will ignore the car when building a new train; on manifests and switch lists, the program will list the car as misplaced. This selection disables all other selections in this window.

Out of Service when selected instructs the program to ignore the car when building new trains. Many operators have a RIP (Repair in Place) track and use this feature to hold the care there until repairs have been completed.

Location

Use the location set to place the car on the layout.

Return When Empty

Enter location to return the car to when empty. **Auto shows** valid track for a given location.

Load

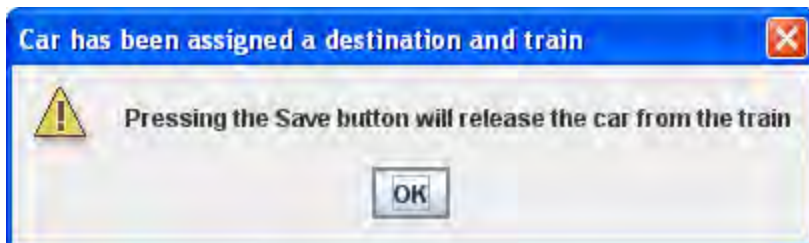
You may also change the cars load.

Optional--Normally Set by Program

See window help

After creating a car, you can set the car's location, and optionally the car's destination and train by using the **Set** button found for each car in the [Cars](#) window. Normally the car's destination and assigned train are generated by the program, but you can use this window and its options to force a car to specific location using a specified train.

Displays when **Set Cars Location** window opens. This warns that when you Save the changes from the **Set Cars Location** window those cars are no longer part of a train.



Set Car Location

Window Help

Car: MNS 500 Type: Boxcar Status: Location Unknown
 Out of Service

Location: Name: Lakeview Track: #99 Yard Track Auto

Optional Return When Empty: Name: Track: Auto

Load: L<oad> Edit

Optional -- Normally Set by Program --

Destination: Name: Susarville Track: #85 Yard Track Auto

Final Destination: Name: Track: Auto

Train: LS Auto

Save

Status

Location Unkown results in: program will ignore the car when building a new train; on manifests and switch lists, the program will list the car as misplaced. This selection disables all other selections in this window.

Out of Service when selected instructs the program to ignore the car when building new trains. Many operators have a RIP (Repair in Place) track and use this feature to hold the care there until repairs have been completed.

Location

Use the location set to place the car on the layout.

Return When Empty

Enter location to return the car to when empty. **Auto shows** valid track for a given location.

Load

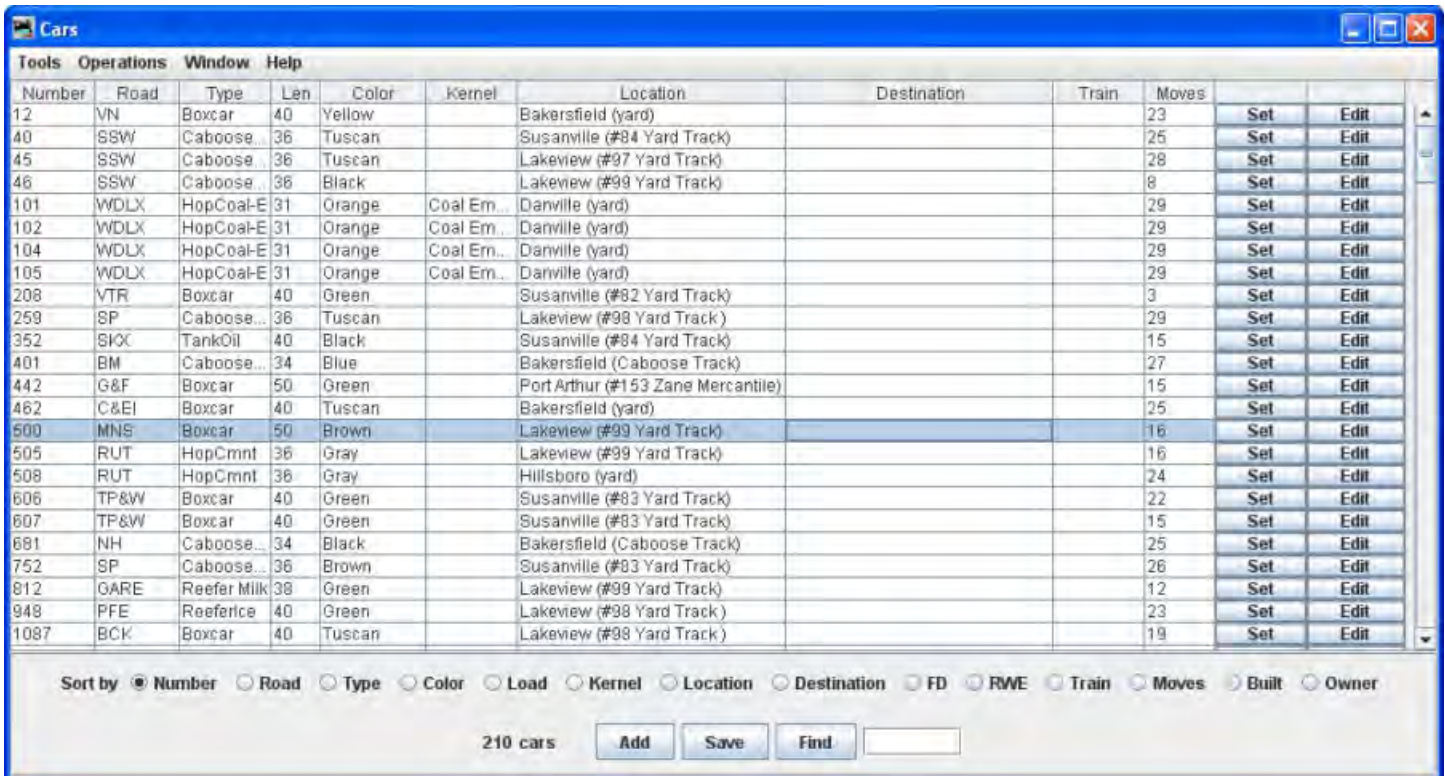
You may also change the cars load.

Optional--Normally Set by Program

See window help

Edit

Edit button opens the Edit Car window, similar to the **Add Car Window**



The screenshot shows a window titled "Cars" with a menu bar (Tools, Operations, Window, Help) and a table of car data. The table has columns for Number, Road, Type, Len, Color, Kernel, Location, Destination, Train, Moves, Set, and Edit. Below the table is a "Sort by" section with radio buttons for Number, Road, Type, Color, Load, Kernel, Location, Destination, FD, RWE, Train, Moves, Built, and Owner. At the bottom, it displays "210 cars" and buttons for "Add", "Save", and "Find".

Number	Road	Type	Len	Color	Kernel	Location	Destination	Train	Moves	Set	Edit
12	VN	Boxcar	40	Yellow		Bakersfield (yard)			23	Set	Edit
40	SSW	Caboose...	36	Tuscan		Susanville (#84 Yard Track)			25	Set	Edit
45	SSW	Caboose...	36	Tuscan		Lakeview (#97 Yard Track)			28	Set	Edit
46	SSW	Caboose...	36	Black		Lakeview (#99 Yard Track)			8	Set	Edit
101	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
102	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
104	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
105	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
208	VTR	Boxcar	40	Green		Susanville (#82 Yard Track)			3	Set	Edit
259	SP	Caboose...	36	Tuscan		Lakeview (#98 Yard Track)			29	Set	Edit
352	SIX	TankOil	40	Black		Susanville (#84 Yard Track)			15	Set	Edit
401	BM	Caboose...	34	Blue		Bakersfield (Caboose Track)			27	Set	Edit
442	G&F	Boxcar	50	Green		Port Arthur (#153 Zane Mercantile)			15	Set	Edit
462	C&E1	Boxcar	40	Tuscan		Bakersfield (yard)			25	Set	Edit
600	MNS	Boxcar	50	Brown		Lakeview (#99 Yard Track)			16	Set	Edit
505	RUT	HopCmnt	36	Gray		Lakeview (#99 Yard Track)			16	Set	Edit
508	RUT	HopCmnt	36	Gray		Hillsboro (yard)			24	Set	Edit
606	TP&W	Boxcar	40	Green		Susanville (#83 Yard Track)			22	Set	Edit
607	TP&W	Boxcar	40	Green		Susanville (#83 Yard Track)			15	Set	Edit
681	NH	Caboose...	34	Black		Bakersfield (Caboose Track)			25	Set	Edit
752	SP	Caboose...	36	Brown		Susanville (#83 Yard Track)			26	Set	Edit
812	GARE	Reefer Milk	38	Green		Lakeview (#99 Yard Track)			12	Set	Edit
948	PFE	ReeferIce	40	Green		Lakeview (#98 Yard Track)			23	Set	Edit
1087	BCK	Boxcar	40	Tuscan		Lakeview (#98 Yard Track)			19	Set	Edit

Menu Bar

Tools

- **Roster -->**

- **Import from File**

Opens the **Open** dialog box, to import a roster of cars if you already have a list of cars in a database. The import function requires an ASCII text file, with one line for each car. The car import requires four attributes and the order is car number, road name, type, and length. An example of a correct format:

336 GCR Flat 40

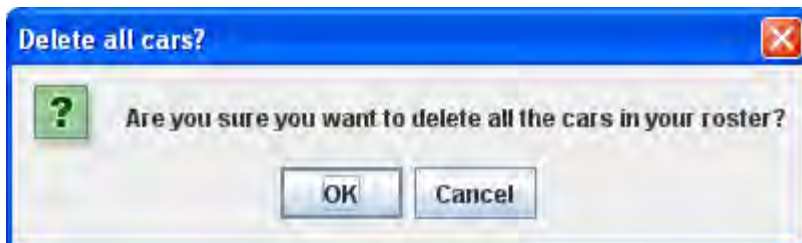
655579 UP Boxcar 40

Optionally you may include additional attributes in the following order: weight, color, owner name, date built, and location. Check the Windows help file for further information.

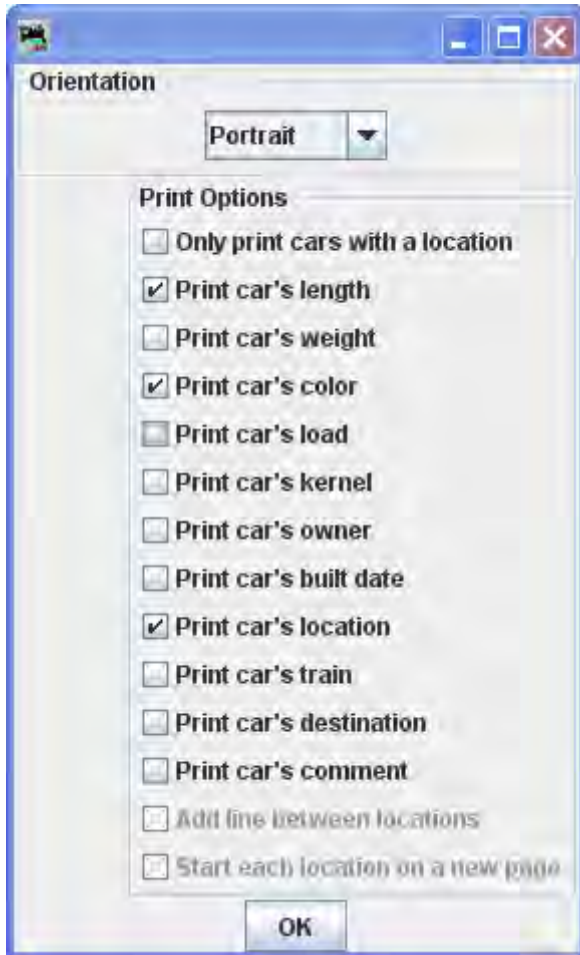
- **Export to File**



- **Delete all Cars**



- **Print**



- 1 - January 6, 2013 2:07 AM

Number	Road	Type	Len	Color	Location
12	VN	Boxcar	40	Yellow	Bakersfield - yard
40	SSW	Caboose	36	Tuscan	Susanville - #84 Yard Track
45	SSW	Caboose	36	Tuscan	Lakeview - #97 Yard Track
46	SSW	Caboose	36	Black	Lakeview - #99 Yard Track
101	WDLX	HopCoal-E	31	Orange	Danville - yard
102	WDLX	HopCoal-E	31	Orange	Danville - yard
104	WDLX	HopCoal-E	31	Orange	Danville - yard
105	WDLX	HopCoal-E	31	Orange	Danville - yard
208	VTR	Boxcar	40	Green	Susanville - #82 Yard Track
259	SP	Caboose	36	Tuscan	Lakeview - #98 Yard Track
352	SKX	TankOil	40	Black	Susanville - #84 Yard Track
401	BM	Caboose	34	Blue	Bakersfield - Caboose Track
442	G&F	Boxcar	50	Green	Port Arthur - #153 Zane Mercantile

- **Print Preview**

Print options dialog displays, **OK** button opens output in printer preview window.

Print Preview: Car Roster

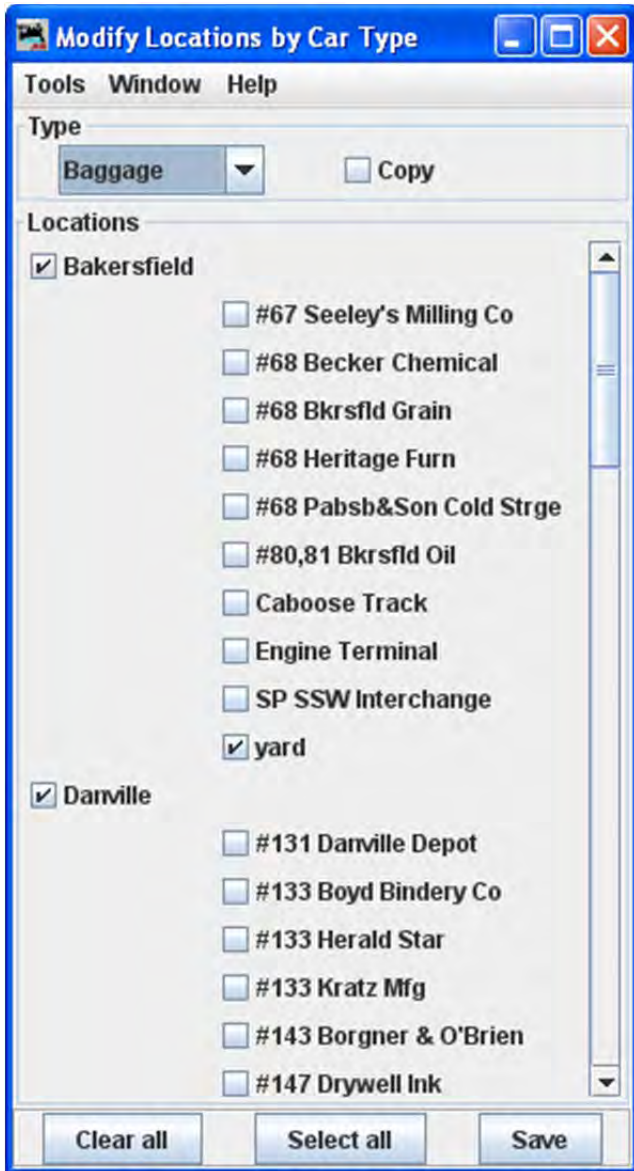
Previous Page Next Page Page 1 of 5 Close

Car Roster - 1 - January 6, 2013 2:05 AM

Number	Road	Type	Len	Color	Location
12	VN	Boxcar	40	Yellow	Bakersfield - yard
40	SSW	Caboose	36	Tuscan	Susanville - #84 Yard Track
45	SSW	Caboose	36	Tuscan	Lakeview - #97 Yard Track
46	SSW	Caboose	36	Black	Lakeview - #99 Yard Track
101	WDLX	HopCoal-E	31	Orange	Danville - yard
102	WDLX	HopCoal-E	31	Orange	Danville - yard
104	WDLX	HopCoal-E	31	Orange	Danville - yard
105	WDLX	HopCoal-E	31	Orange	Danville - yard
208	UTR	Boxcar	40	Green	Susanville - #82 Yard Track
259	SP	Caboose	36	Tuscan	Lakeview - #98 Yard Track
352	SKX	TankOil	40	Black	Susanville - #84 Yard Track
401	BM	Caboose	34	Blue	Bakersfield - Caboose Track
442	G&F	Boxcar	50	Green	Bort. & Thur. - #152 Tano Mercantile

Modify Locations by Car Type

This tool can open from the **Locations** window **Tool** menu. Use this tool to quickly modify the type of cars your locations and tracks will service. Very useful when adding a new car type to your roster.



Menu Bar

Tool

- **Print Locations by Car Type**
Opens system printer dialog
- **Preview Locations by Car Type**
Opens the list in printer preview window

Window

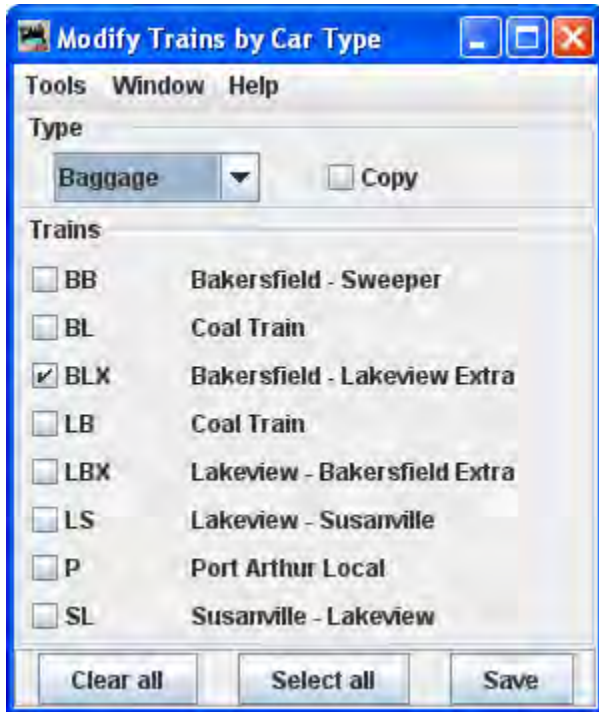
Help

First select the car type you wish to modify from the drop-down list. When the type is selected notice that all cars of that type at the locations selected will be checked.

Select or deselect the locations and tracks you want to service, and press **Save** button to modify your locations and tracks.

You can also **Copy** how an existing car is serviced by your locations and apply those rules to another car. To make a car behave like another, first select the car you would like to copy, then select the **Copy**, the car type will now appear to the right of the checkbox, then select the type of car you want to modify, and press **Save** button to have both car types serviced by the same locations and tracks.

Modify Trains by Car Type



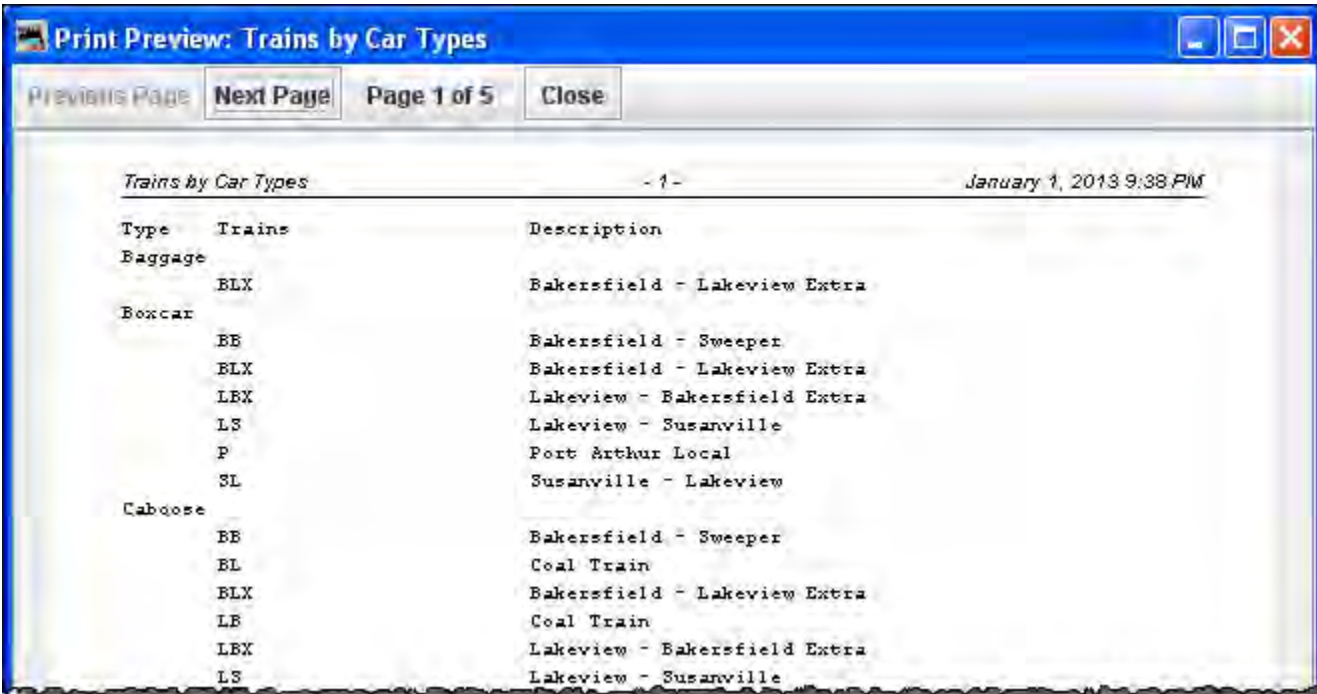
Tools main



Print Trains by Car Types

<i>Trains by Car Types</i>		- 1 -	<i>January 1, 2013 9:30 PM</i>
Type	Trains	Description	
Baggage	BLX	Bakersfield - Lakeview Extra	
Boxcar	BB	Bakersfield - Sweeper	
	BLX	Bakersfield - Lakeview Extra	
	LBX	Lakeview - Bakersfield Extra	
	LS	Lakeview - Susanville	
	P	Port Arthur Local	
	SL	Susanville - Lakeview	
Caboose	BB	Bakersfield - Sweeper	
	BL	Coal Train	
	BLX	Bakersfield - Lakeview Extra	
	LB	Coal Train	
	LBX	Lakeview - Bakersfield Extra	
	LS	Lakeview - Susanville	
	SL	Susanville - Lakeview	

Preview Trains by Car Types



-
- [Set Cars](#)

Operations

Window

Help

Locomotive Window

The Locomotives window allows you to edit your engine roster. You can enter an engine's number, road, model, type, and length. You can optionally add the engine's build date and owner. If you want a group of engines to be assigned as a unit, you can create a "consist". The engine type is used by the program to determine where engines are picked up and or stored at the various locations on your layout. Some of default engine types are electric, diesel, gas turbine, and steam.

The screenshot shows the 'Locomotives' window with a menu bar (Tools, Operations, Window, Help) and a table of engine data. Below the table is a 'Sort by' section with radio buttons for various attributes, and a status bar showing '19 locomotives' with 'Add', 'Save', and 'Find' buttons.

Number	Road	Model	Type	Len.	Consist	Location	Destination	Train	Moves	Set	Edit
1017	SP	SW1 200	Diesel	45		Bakersfield (Engine Terminal)			18	Set	Edit
1019	SP	SW1 200	Diesel	45		Bakersfield (Engine Terminal)			18	Set	Edit
1633	C&O	Allegheny	Steam	125		Bakersfield (Engine Terminal)			0	Set	Edit
1641	C&O	Allegheny	Steam	125		Bakersfield (Engine Terminal)			0	Set	Edit
3023	SP	TRAINMA...	Diesel	66	nce_106	Bakersfield (Engine Terminal)			38	Set	Edit
3029	SP	TRAINMA...	Diesel	66	nce_106*	Bakersfield (Engine Terminal)			38	Set	Edit
4501	SSW	GP35	Diesel	56	SSW 1*	Susanville (#84 Yard Track)			7	Set	Edit
4503	SSW	GP35	Diesel	56	SSW 1	Susanville (#84 Yard Track)			7	Set	Edit
4545	SSW	GP35	Diesel	56	SSW 2*	Lakeview (#99 Yard Track)			11	Set	Edit
4546	SSW	GP35	Diesel	56	SSW 2	Lakeview (#99 Yard Track)			11	Set	Edit
4802	SP	TRAINMA...	Diesel	66	nce_118	Lakeview (#97 Yard Track)			49	Set	Edit
4805	SP	TRAINMA...	Diesel	66	nce_118*	Lakeview (#97 Yard Track)			49	Set	Edit
5010	SP	GP30	Diesel	56		Port Arthur (#165 Service)			23	Set	Edit
5151	SP	RS18	Diesel	52	nce_127	Susanville (#83 Yard Track)			17	Set	Edit
5160	SP	RS18	Diesel	52	nce_127*	Susanville (#83 Yard Track)			17	Set	Edit
5162	SP	RS18	Diesel	52	RS18s*	Lakeview (#98 Yard Track)			20	Set	Edit
5166	SP	RS18	Diesel	52	RS18s	Lakeview (#98 Yard Track)			20	Set	Edit
5294	SP	RSD4	Diesel	52	nce_115*	Bakersfield (Engine Terminal)			29	Set	Edit
5307	SP	RSD4	Diesel	52	nce_115	Bakersfield (Engine Terminal)			29	Set	Edit

Sort by: Number Road Model Consist Location Destination Train Moves Built Owner

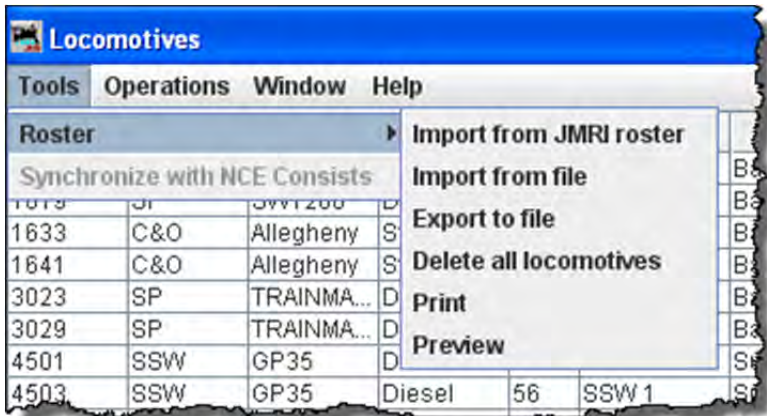
19 locomotives Add Save Find

Menu Bar

This image shows a close-up of the 'Locomotives' window's menu bar and the first few columns of the table. The menu bar includes 'Tools', 'Operations', 'Window', and 'Help'. The table header shows 'Number', 'Road', 'Model', and 'Type'.

Number	Road	Model	Type
1017	SP	SW1 200	Diesel
1019	SP	SW1 200	Diesel

Tools

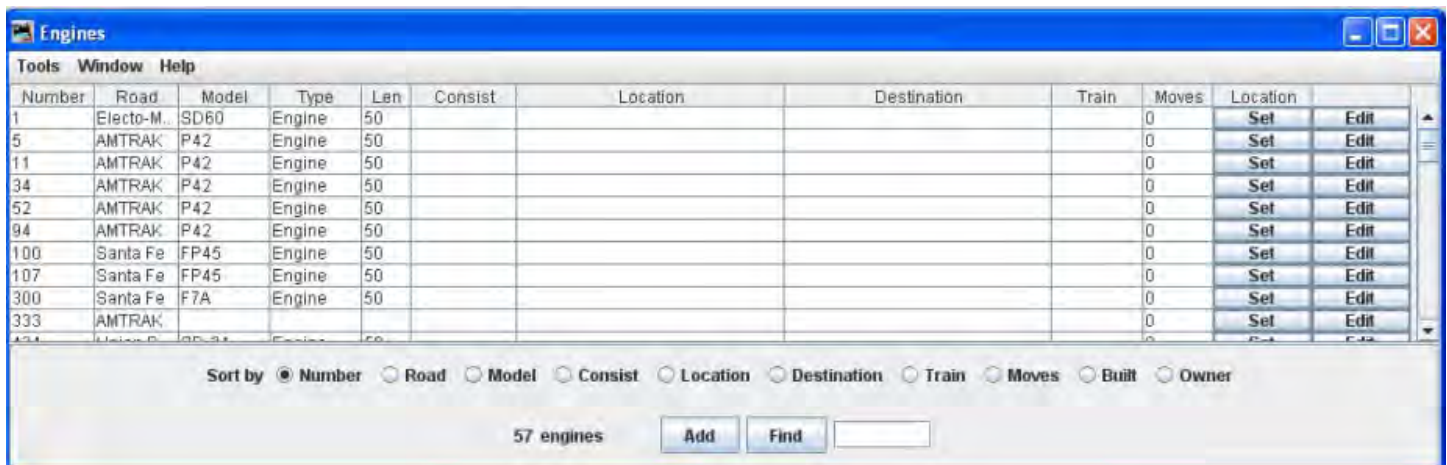


Roster

- Import from JMRI roster

If you already have a [DecoderPro® roster](#) created when programming decoders, you may import them into the Operations program. All locomotives that are not already in your Operations roster will be imported and a message will be displayed informing you of how many locomotives were imported. This way you can use this tool any time you add locomotives to your DecoderPro® locomotive roster. The DecoderPro® locomotive roster doesn't have the locomotives length, so a default length is entered for you. You should correct the locomotive length if you want the program to correctly calculate your train lengths.

Now we should have imported your programming engine roster into the Operations Engine roster you will need to edit the entries to add the attributes that are required for operations but were not needed in the Engine Roster file when you programmed the recorders.



These engines were imported from JMRI Roster, so we will need to edit them to set the correct length, Consist, Location as required.

Press **Edit** button to the right of the engine that you wish to edit and the **Edit Engine** window is opened

The screenshot shows the 'Edit Locomotive' window with the following fields and values:

- Road:** SP (dropdown menu)
- Road Number:** 5307 (text input)
- Model:** RSD4 (dropdown menu)
- Type:** Diesel (dropdown menu)
- Length:** 52 (dropdown menu)
- Location and Track:** Port Arthur (dropdown menu)
- Optional:** (empty dropdown menu)
- Weight Tons:** 179 (text input)
- Horsepower:** 1600 (text input)
- Consist:** nce_115 (dropdown menu)
- Built:** (empty text input)
- Owner:** (empty dropdown menu)
- Comment:** (empty text input)

Buttons at the bottom: Delete, Add, Save.

I now edit the **Road** to UP using drop-down list was in the roster as Union Pacific

Road Number was imported correctly.

Model was imported correctly

Type was not in Roster so set to Diesel from drop-down list.

Length was set to default in drop-down list so edit to 95 which is the correct length of body not including couplers.

Horsepower was not imported, so set to 5000 as this model was basically two 2500 HP units on a single frame.

Location is not imported from the Roster, So I located the locomotive at North Yard using the drop down list and set on Track2 using drop-down list.

Optional

Consist not set.

Built not entered

Owner is not imported, so selected Dale Tripp from drop-down list

No **Comment** for this locomotive

Now to store press **Save** button and this will add the edits to any edited menu item.

Add button updates your Operations Locomotive Roster.

Take a look at the Edited Operations Locomotive Roster, note the highlighted entry which we just edited.

Number	Road	Model	Type	Len	Consist	Location	Destination	Train	Moves	Location	
6018	Souther...	E8/9A	Engine	50					0		Set Edit
6046	Souther...	E8/9A	Engine	50					0		Set Edit
6340	BNSF	SD40-2	Engine	50					0		Set Edit
6365	Santa Fe	B23-7	Engine	50					0		Set Edit
6390	Santa Fe	B23-7	Engine	50					0		Set Edit
6514	BNSF St.	SD45-2	Engine	50					0		Set Edit
6932	UP	DD40X	Diesel	95		North Yard (Track2)			0		Set Edit
7412	Santa Fe	Dash 8-4...	Engine	50					0		Set Edit
7428	Santa Fe	Dash 8-4...	Engine	50					0		Set Edit
8017	Santa Fe	C30-7	Engine	50					0		Set Edit

Sort by Number Road Model Consist Location Destination Train Moves Built Owner

57 engines

The **Set** button to the right of selected locomotive, when pressed, opens the Set Locomotive Location window and allows you to override the program and set an locomotive at a location that is defined in your Operations data base. Dialog proceeds the Set Locomotive window



Locomotive	Type	Status
SP 5151	Diesel	<input type="checkbox"/> Out of Service
Location		
Name Susanville	Track #83 Yard Track	<input type="checkbox"/> Auto
Optional -- Normally Set by Program --		
Destination		
Name Lakeview	Track #94 Yard Track	<input type="checkbox"/> Auto
Train		
SL		
<input type="button" value="Save"/>		

Menu is standard for DecoderPro®.

Locomotive displays the selected engine.

Type is displayed

Status

Out of Service

Takes the Locomotive out of service and will not be assigned by the build program

Location

Name selected from drop-down list and **Track is selected from drop-down list** you can set the locomotive at any defined location on your layout.

Auto limits selections to valid locations

Optional--Normally Set by Program--

Destination optionally set the **Name** of location from drop-down list and the **Track** from drop-down list.

Train from drop-down list optionally set the train.

Save button press to save the locomotive locations that you have set.

Close the window when completed

- Import from file

The import from file function requires an ACSII text file, with one line for each locomotive. The import order is locomotive number, locomotive road name, locomotive model, and locomotive length. The following shows two examples of the correct format:

```
236 UP RS4 40
5578 SP SW1200 42
```

Each line can start with a space and multiple spaces between fields is okay. Optionally you can include additional information in the following order, owner name, date built, and location. The location can have two fields, the location name followed by the location's siding or yard name separated by a hyphen. The following shows two examples of the correct format:

```
236 UP RS4 40 AT 1930 Home Town USA - locomotive Terminal
5578 SP SW1200 42 DB 1934 York - York locomotive Yard
```

If you prefer to use comma delimiters instead of spaces, place the word "comma" at the start of your import file and use commas instead of spaces. The following are two examples of importing locomotives with comma delimiters.

comma

236,UP,RS 4,40,AT,1930,Home Town USA,-,locomotive Terminal
5578,SP,SW 1200,42,DB,1934,Town of York,-,York locomotive Yard

You need to be very careful with spaces when importing a comma delimited file. The program will include leading and trailing spaces if they exist between the commas.

Note that the program will only add locomotives that don't exist in the program's locomotive roster. If the locomotive already exists, it will be skipped by the program.

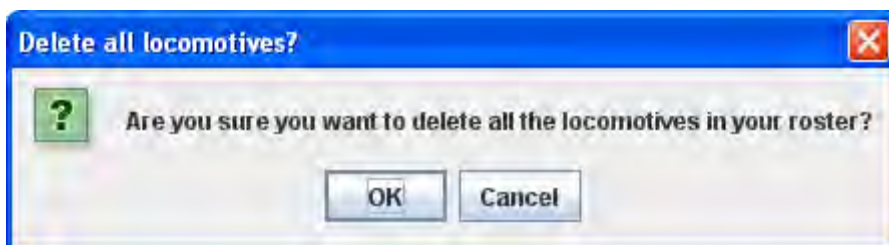
After importing your locomotives, you must save them if you want to keep them as part of your roster then edit them as you done for imports from the programming roster above.. Select any locomotive in the **locomotive** window by pressing and then press **Save** button that can be found at the bottom right of the **Edit locomotive** window

- Export to file

Displays the Export complete dialog. The file is exported automatically as a .csv file.



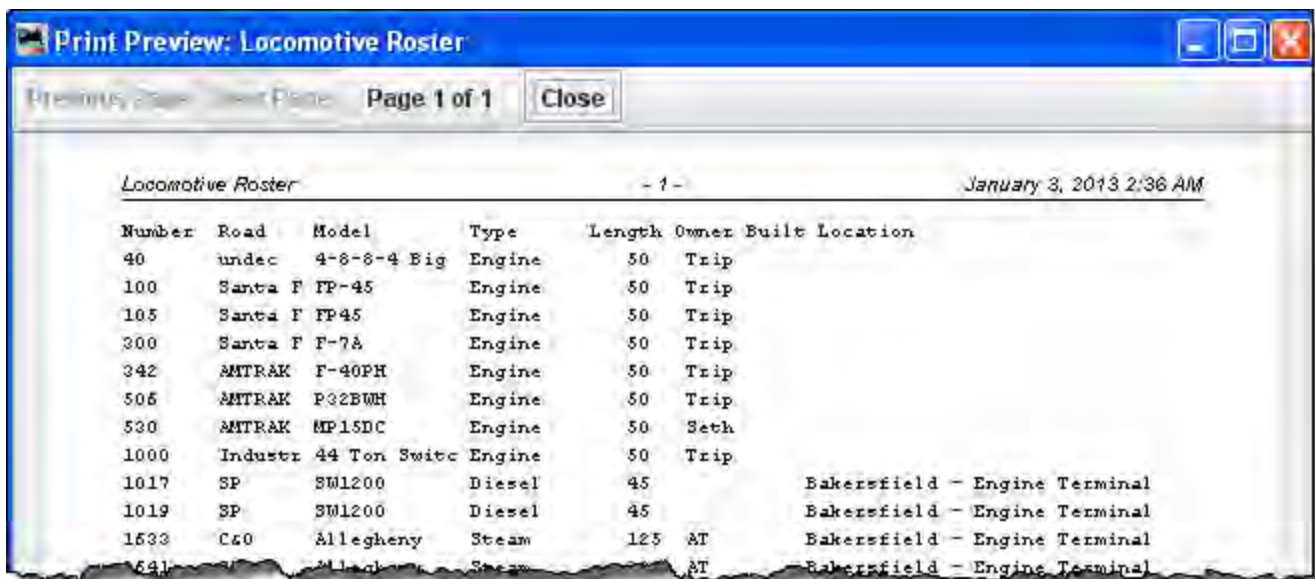
- **Delete all locomotives** -- Opens the **Delete all locomotives?** OK will delete all locomotives in the Operations Roster, cancel will abort the deletion.



- **Print** -- Opens your computers **Print** window and will print your locomotive roster

Locomotive Roster								- 1 -	January 3, 2013 2:32 AM
Number	Road	Model	Type	Length	Owner	Built	Location		
40	undec	4-8-8-4 Big	Engine	50	Trip				
100	Santa F	FP-45	Engine	50	Trip				
105	Santa F	FP45	Engine	50	Trip				
300	Santa F	F-7A	Engine	50	Trip				
342	AMTRAK	F-40PH	Engine	50	Trip				
506	AMTRAK	P32BWH	Engine	50	Trip				
530	AMTRAK	MP15DC	Engine	50	Seth				
1000	Industr	44 Ton Switc	Engine	50	Trip				
1017	SP	SW1200	Diesel	45			Bakersfield - Engine Terminal		
1019	SP	SW1200	Diesel	45			Bakersfield - Engine Terminal		
1633	C&O	Allegheny	Steam	125	AT		Bakersfield - Engine Terminal		
1641	C&O	Allegheny	Steam	125	AT		Bakersfield - Engine Terminal		
1792	Santa F	USRA 2-8-8-2	Engine	50	Trip				
2003	AMTRAK	Acela	Engine	50	Trip				
3023	SP	TRAINMASTER	Diesel	66	AT		Bakersfield - Engine Terminal		
3029	SP	TRAINMASTER	Diesel	66			Bakersfield - Engine Terminal		

- **Preview** -- Opens your computers **Print Preview** window and shows the preview of your locomotive roster.



Synchronize with NCE Consists

If you are using NCE as your DCC command station, you can have the program synchronize your consist numbers with your locomotives. The program will read all of the consists out of the NCE system and then will search for matching locomotives in your operations roster. The program will assign the consist name nce_xxx where xxx is the consist number. To synchronize your consists, select "Synchronize with NCE Consists" under the "Tools" menu

Operations -- same as DecoderPro® Operations menu

Window -- same as other JMRI® menus.

Help -- same as other JMRI® menus.

Body of window

Locomotives are listed in table, each Locomotive has a Set and Edit button on the right side

Set Locomotive Location

Set Locomotive Location

Window Help

Locomotive	Type	Status
SP 5010	Diesel	<input type="checkbox"/> Out of Service

Location

Name	Track	
Port Arthur	#165 Service	<input type="checkbox"/> Auto

Optional -- Normally Set by Program --

Destination

Name	Track	
Port Arthur	#165 Service	<input type="checkbox"/> Auto

Train

P

Save

Edit Locomotive

The screenshot shows a software window titled "Edit Locomotive" with a menu bar containing "Window" and "Help". The window is organized into several sections, each with a label and a corresponding input field or button:

- Road:** A dropdown menu showing "SSW" and an "Edit" button.
- Road Number:** A text input field containing "4501" and a "Clear" button.
- Model:** A dropdown menu showing "GP35" and an "Edit" button.
- Type:** A dropdown menu showing "Diesel" and an "Edit" button.
- Length:** A dropdown menu showing "56" and an "Edit" button.
- Location and Track:** Two dropdown menus, the first showing "Susanville" and the second showing "#84 Yard Track".
- Optional:**
 - Weight Tons:** A text input field containing "130".
 - Horsepower:** A text input field containing "2500".
- Consist:** A dropdown menu showing "SSW 1" and an "Edit" button.
- Built:** An empty text input field.
- Owner:** A dropdown menu with an empty selection and an "Edit" button.
- Comment:** A large empty text area.

At the bottom of the window, there are three buttons: "Delete", "Add", and "Save".

Similar to Add Locomotive window.

Sort by -- select the radio button for the attribute you wish to sort by.

Add button when selected opens the **Add Locomotive** window.

Add Locomotive

The Add Engine window is displayed.



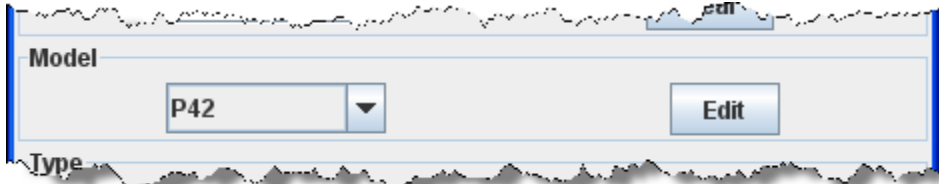
The Add Locomotive's Window and Help menus are the standard JMRI® menus used on most windows



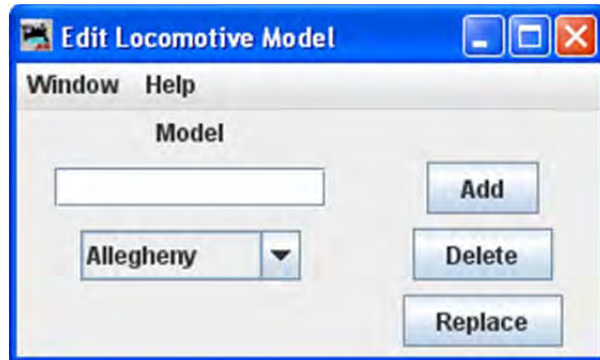
Select the Road for the engine from drop-down list. If the desired road doesn't exist, press **Edit** button Opens the **Edit Locomotive Attributes** dialog for Road.



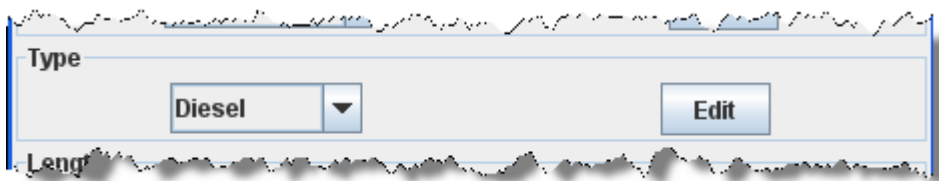
Type the Locomotive's Road Number use **Clear** button to remove your entry if you make a typing error.



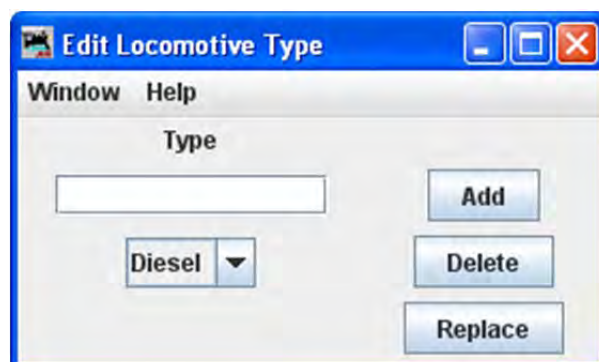
Select the Model if the model you need is not in the list then press **Edit** button and the **Edit Locomotive Attributes** dialog for Model will open.



The program allows you organize your engines by model. Each model can only have one engine type, length, weight and horsepower rating associated with it. For example, if you assign the model name "RS11" to a set of locomotives, when you change the length of one of the "RS11"s, the length will also change for the others

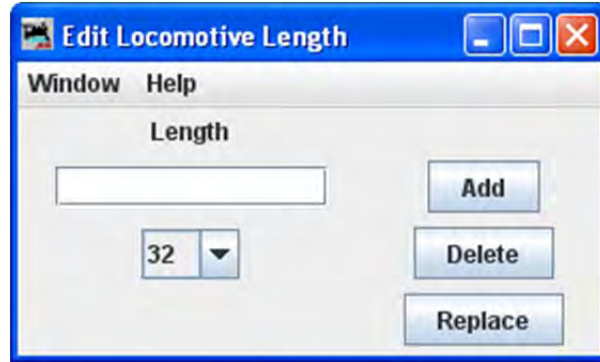


Now select the locomotive's **Type** if the type you need is not in the list then press and the **Edit Locomotive Attributes** dialog for type will open.

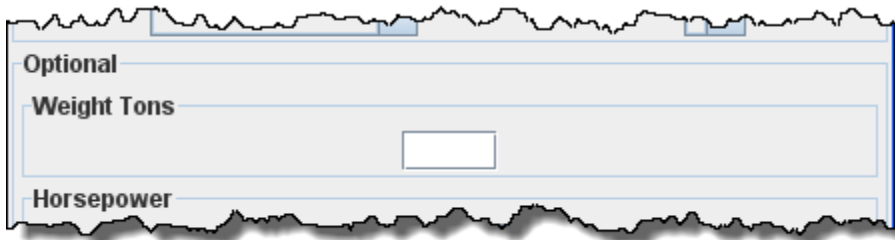




Now select the locomotive's **Length** if the length you need is not in the list then press and the **Edit Locomotive Attributes** dialog for Length will open.



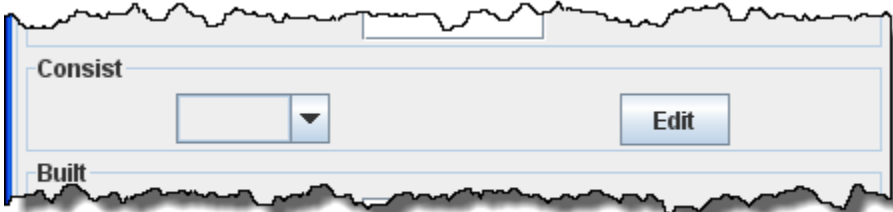
Select the locomotive's location and the locomotive's track



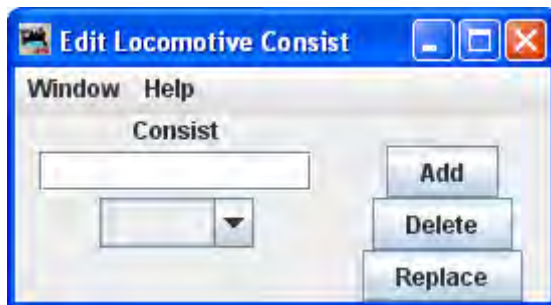
Optional: Enter the weight of the locomotive in tons



Now enter the engine's **Horsepower** . The locomotive's horsepower, the train's weight, and track grade is used by the program to calculate how many engines are required when using the "Auto" feature when building trains.



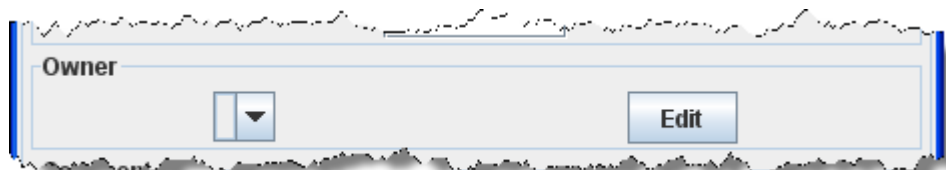
If wish this locomotive to be part of an **Optional Consist** , press Edit button which opens the



where you may enter a consist name. Then select the consist name from the drop-down List.



You may enter the optional **Built** date



Owner , if the owner's name is not in the list press which opens



where you may enter the owner's name. Then select the Owner name from the drop-down list.



Type your **Comment**



Add button -- add another engine.

Delete button --delete an engine.

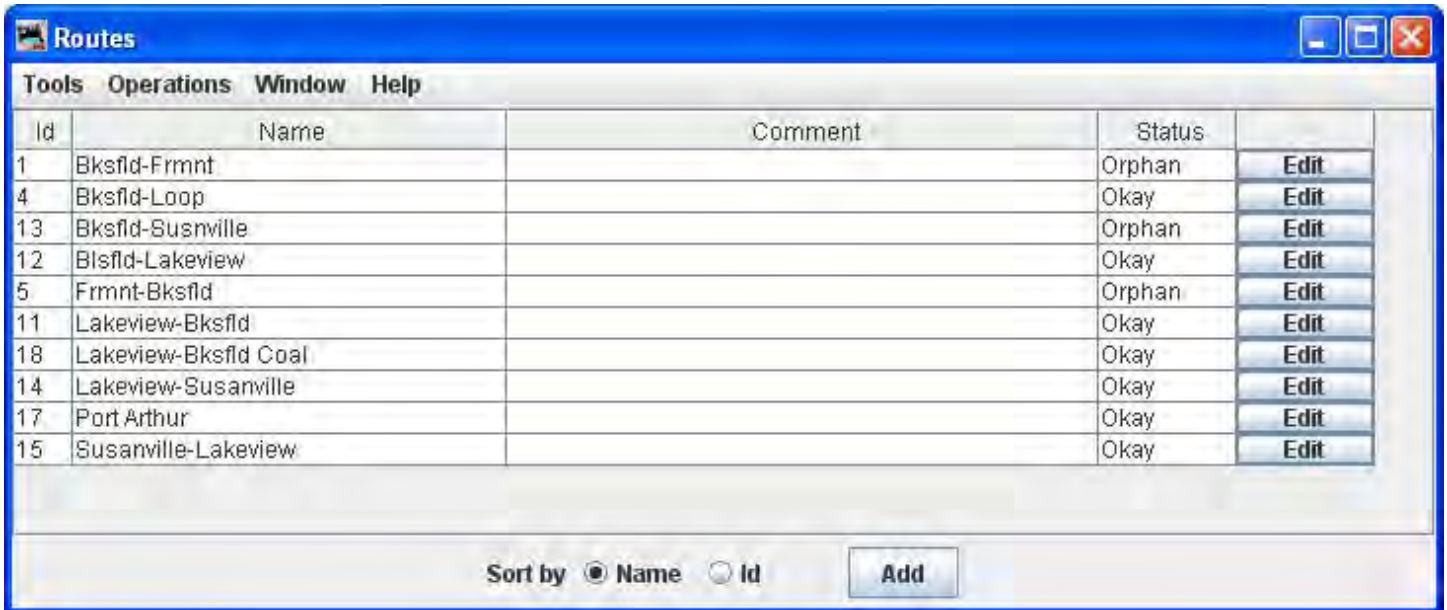
Save button -- to store the engine's settings. The program will create a file (OperationsEngineRoster.xml) in your JMRI directory in a folder called "operations". A backup file with the last settings for all of your engines is also created each time the **Save** button is pressed.

Save button saves the locomotive roster to disk.

Find button Locate a locomotive in your roster, when you type the road number into the text box.

Routes Window

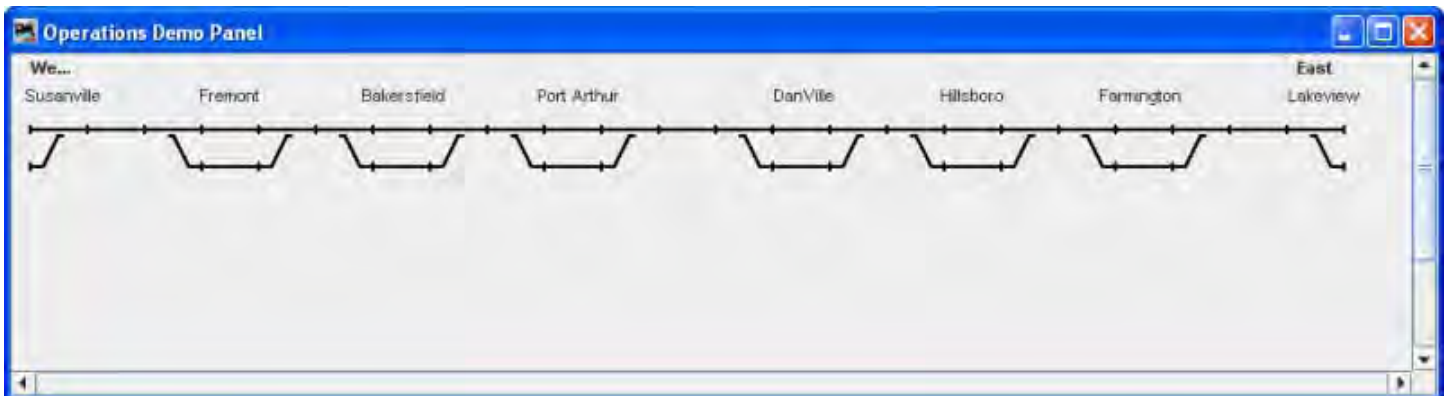
A route is a list of locations that a train will visit. Later you can decide if the train stops at a location for work. Routes can be point to point or out and back. The current Routes are shown in the **Routes** window with their status, i.e. Orphan means it has not been assigned to a train.



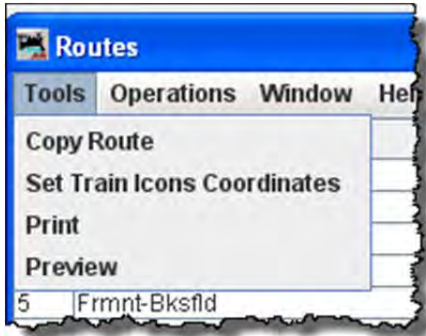
Id	Name	Comment	Status	Edit
1	Bksfld-Frmnt		Orphan	Edit
4	Bksfld-Loop		Okay	Edit
13	Bksfld-Susnville		Orphan	Edit
12	Blsfld-Lakeview		Okay	Edit
5	Frmnt-Bksfld		Orphan	Edit
11	Lakeview-Bksfld		Okay	Edit
18	Lakeview-Bksfld Coal		Okay	Edit
14	Lakeview-Susanville		Okay	Edit
17	Port Arthur		Okay	Edit
15	Susanville-Lakeview		Okay	Edit

Sort by Name Id

Panel showing possible routes that are in the Routes table.

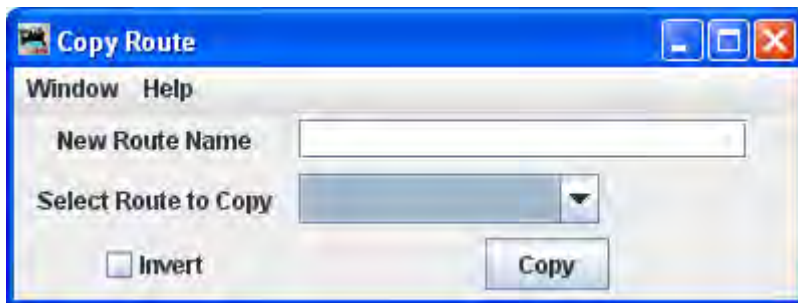


Menu Bar



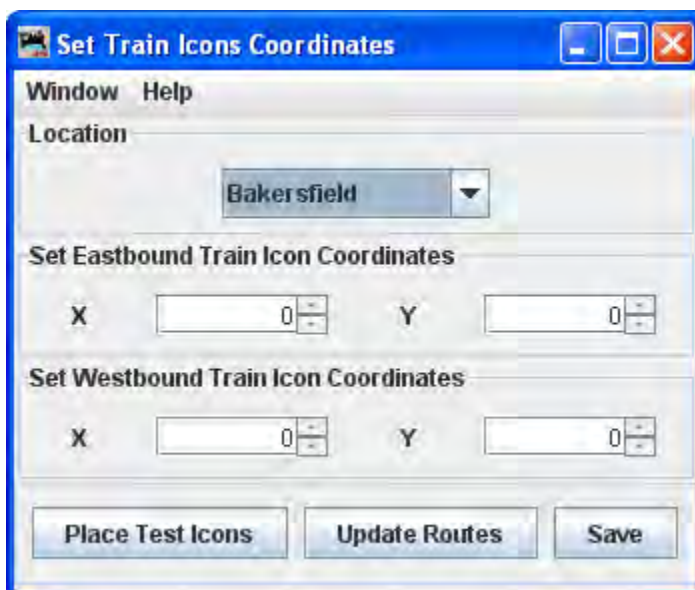
Tools

- **Copy Route** opens the **Route Copy** dialog. This allows you to copy an existing route.



Set Train Icons Coordinates

This tool is used to set the default X and Y coordinates of your train icons for each location. The tool allows you to specify the icon coordinates based on the trains direction. You can also update all of your existing routes and locations with these new coordinates. As an alternative, you can use a route's **Tools-->Set Train Icon Coordinates for this Route** to create coordinates unique to a specific route.



Bksfld-Frmnt

Location	Direction	Moves	Pick ups?	Set outs?	Wait	Length	Grade	X	Y
Port Arthur	East	5	yes	yes	0	1200	0.0	0	0
Bakersfield	East	12	yes	yes	0	1200	0.0	0	0
Danville	East	5	yes	yes	0	1200	0.0	0	0
Hillsboro	East	5	yes	yes	0	1200	0.0	0	0
Farmington	East	5	yes	yes	0	1200	0.0	0	0
Fremont	East	5	yes	yes	0	1200	0.0	0	0

Location	Departure Time	Comment
Port Arthur		
Bakersfield		
Danville		
Hillsboro		
Farmington		
Fremont		

Preview

Print Preview: Routes

Previous Page Next Page Page 1 of 10 Close

Routes - 1 - January 6, 2013 7:53 PM

Bksfld-Frmnt

Location	Direction	Moves	Pick ups?	Set outs?	Wait	Length	Grade	X	Y
Bakersfield	East	12	yes	yes	0	1200	0.0	0	0
Port Arthur	East	5	yes	yes	0	1200	0.0	0	0
Danville	East	5	yes	yes	0	1200	0.0	0	0
Hillsboro	East	5	yes	yes	0	1200	0.0	0	0
Farmington	East	5	yes	yes	0	1200	0.0	0	0
Fremont	East	5	yes	yes	0	1200	0.0	0	0

Location Departure Time Comment

Bakersfield

Port Arthur

Danville

Hillsboro

Farmington

Fremont

Operations (Same as Main Operations menu)

Window -- Standard JMRI® window menu.

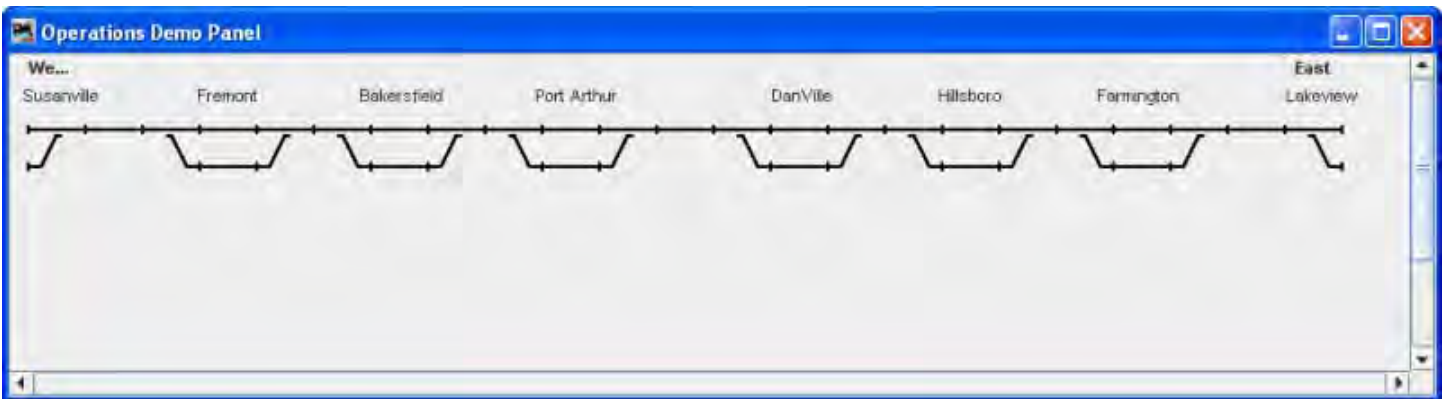
Help -- Standard JMRI® Help menu.

Body of window –Route List

Lists routes **Id, Name, Comment, Status** and [Edit Route button](#)

Edit Route Window

Panel showing possible routes that are available on your railroad. We are going to edit the Bakerfield to Fremont Route..

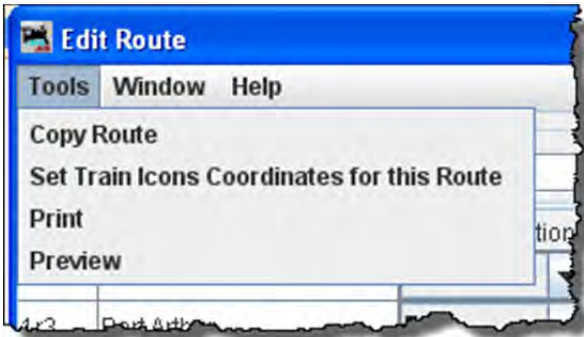


The Edit Route window displays a table of routes and control buttons. The table has the following columns: Id, Location, Train Direction, Moves, Pick ups?, Set outs?, Wait, Max Length, Grade, X, Y, Comment, Up, Down, and Delete. The data in the table is as follows:

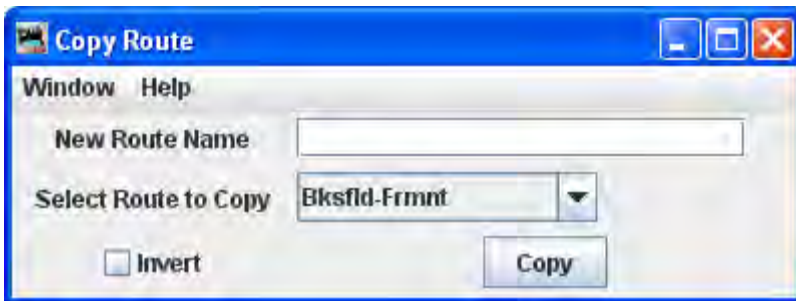
Id	Location	Train Direction	Moves	Pick ups?	Set outs?	Wait	Max Length	Grade	X	Y	Comment	Up	Down	Delete
1r3	Port Arthur	East	5	yes	yes	0	1200	0.0	0	0	Add	Up	Down	Dele...
1r1	Bakersfield	East	12	yes	yes	0	1200	0.0	0	0	Add	Up	Down	Dele...
1r4	Danville	East	5	yes	yes	0	1200	0.0	0	0	Add	Up	Down	Dele...
1r5	Hillsboro	East	5	yes	yes	0	1200	0.0	0	0	Add	Up	Down	Dele...
1r6	Farmington	East	5	yes	yes	0	1200	0.0	0	0	Add	Up	Down	Dele...
1r12	Fremont	East	5	yes	yes	0	1200	0.0	0	0	Add	Up	Down	Dele...

Below the table, there are control buttons: Location (dropdown), Add Location, Add location at start (radio), Add location at end (radio), Display (radio), Wait (radio), Departure Time (radio), Delete Route, Add Route, and Save Route.

Menu Bar

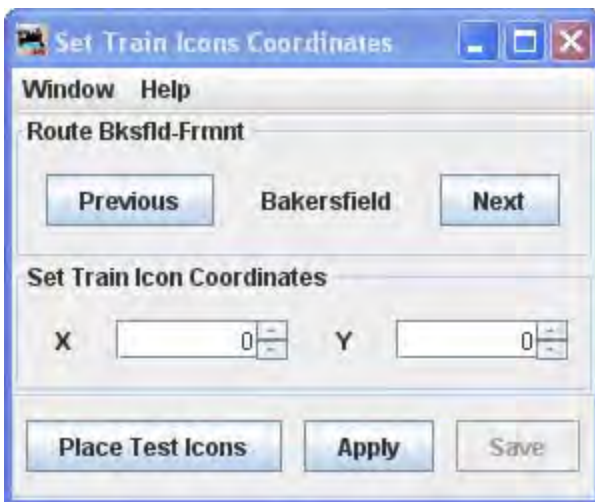


Copy Route opens the **Route Copy** dialog. This allows you to copy an existing route.



Set Train Icons Coordinates

This tool is used to set the default X and Y coordinates of your train icons for each location. The tool allows you to specify the icon coordinates based on the trains direction. You can also update all of your existing routes and locations with these new coordinates. As an alternative, you can use a route's **Tools-->Set Train Icon Coordinates for this Route** to create coordinates unique to a specific route.

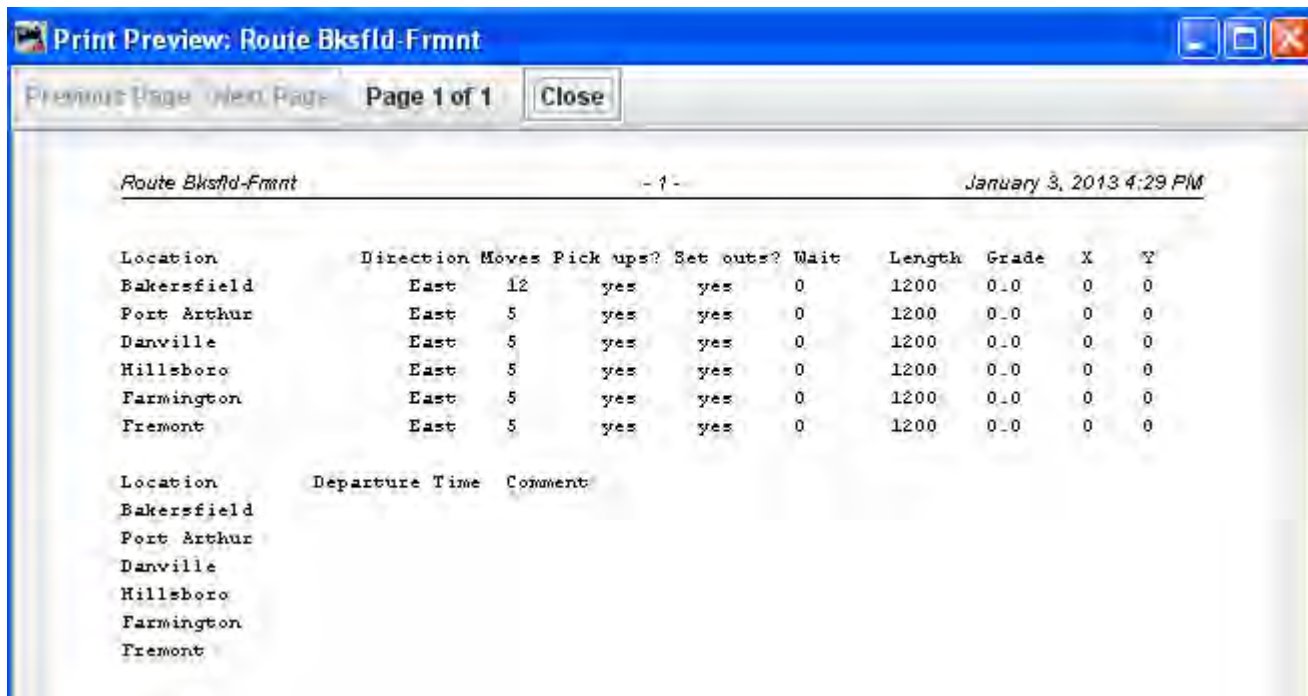


Print

Location	Direction	Moves	Pick ups?	Set outs?	Wait	Length	Grade	X	Y
Bakersfield	East	12	yes	yes	0	1200	0.0	0	0
Port Arthur	East	5	yes	yes	0	1200	0.0	0	0
Danville	East	5	yes	yes	0	1200	0.0	0	0
Hillsboro	East	5	yes	yes	0	1200	0.0	0	0
Farmington	East	5	yes	yes	0	1200	0.0	0	0
Fremont	East	5	yes	yes	0	1200	0.0	0	0

Location	Departure Time	Comment
Bakersfield		
Port Arthur		
Danville		
Hillsboro		
Farmington		
Fremont		

Preview



Window -- Standard JMRI® window menu.

Help -- Standard JMRI® Help menu.

Route Table - The stops and location on the route

Id	Location	Train Direction	Moves	Pick ups?	Set outs?	Wait	Max Length	Grade	X	Y	Comment	Up	Down	Delete
1r1	Bakersfield	East	12	yes	yes	0	1200	0.0	0	0	Add	Up	Down	Dele...
1r3	Port Arthur	East	5	yes	yes	0	1200	0.0	0	0	Add	Up	Down	Dele...

Location -- as defined in locations

Train Direction -- change using drop-down list.

Moves -- number of moves required for route

Pick ups? -- change using drop-down list.

Set outs? -- change using drop-down list

Wait -- Time to wait

Max Length -- Length of spur

Grade -- Percent of grade at location

X -- Coordinate

Y-- Coordinate

Comment -- Add if desired

Up -- Change position in the route. move up the list. moves one position each click

Down -- Change position in the route move down the list, moves one position each click

Delete -- Deletes the location from the route.

Bottom of window

Add Location button --add the location to the route



Add location at start -- add the location to the start of the route



Add location at end -- add the location to the end of the route

Display



Wait



Departure Time

Delete Route button -- deletes the route

Add Route button -- adds route, greyed out

Save Route -- saves the route file after editing.

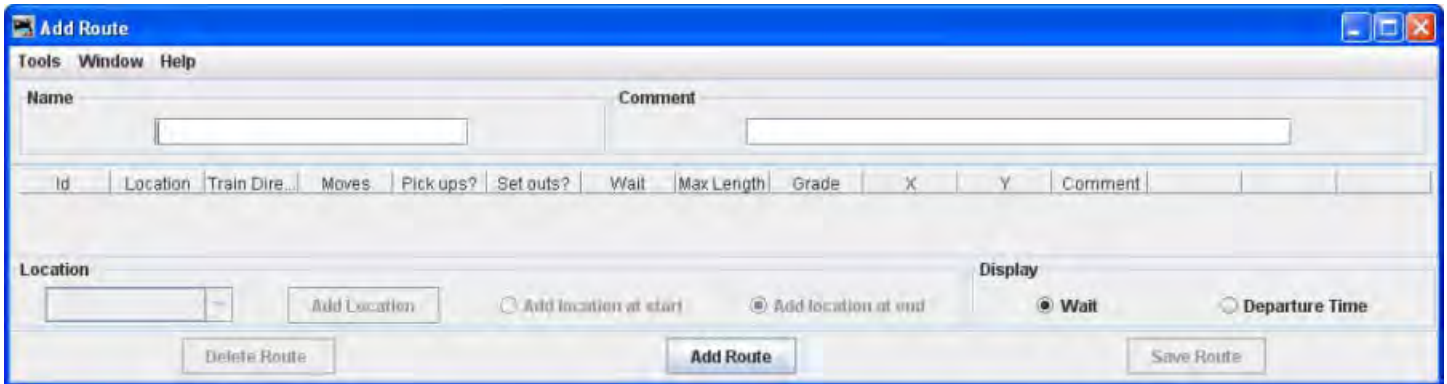
Bottom of Locomotive Window below Route List

Sort by Name Id establishes the sort order of the routes.

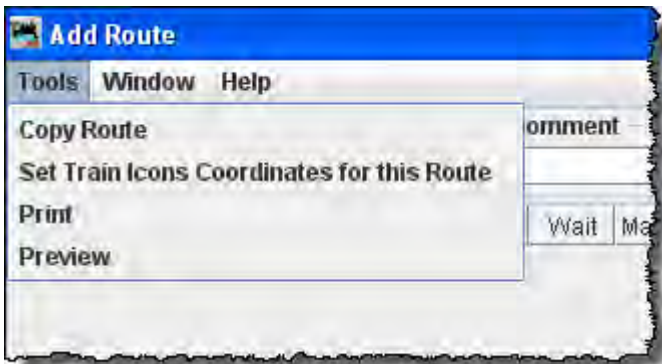
Add button opens the [Add Routes](#) window to allow you to add routes to your Operations data base.

Add Route Window

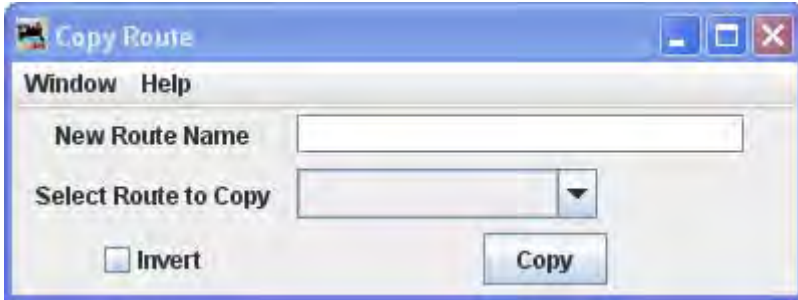
The **Add Route** Window opens and now you can add a route to your Operations data base.



Menu Bar



Copy Route



Set Train Icons Coordinates for this Route



Print -- Prints your Routes.

Preview -- Lets you preview the Routes prior to printing.

Operations (Same as Main Operations menu)

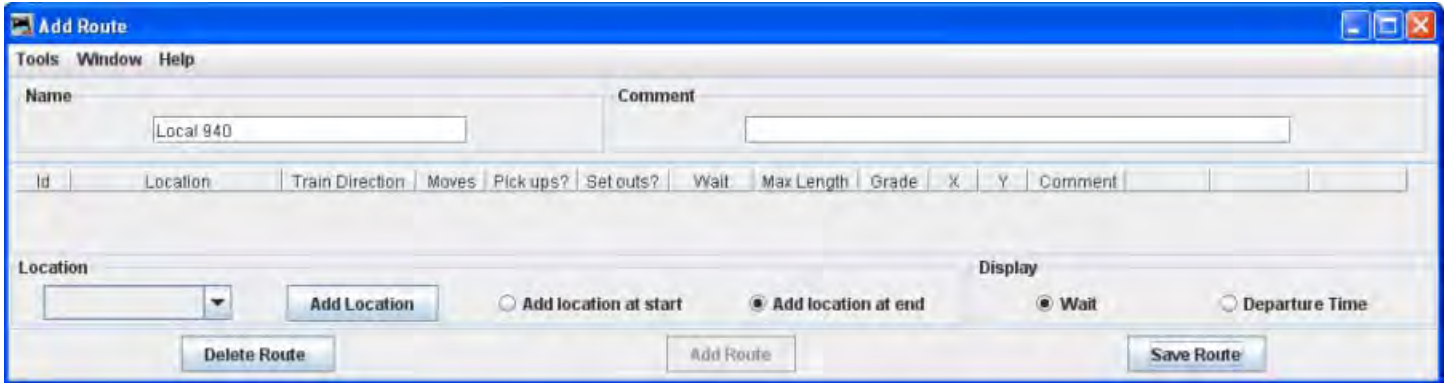
Window-- Standard DecoderPro® window menu.

Help -- Standard DecoderPro® window menu.

Now to add a route:

Type the route **Name** . Each route must have a unique name.

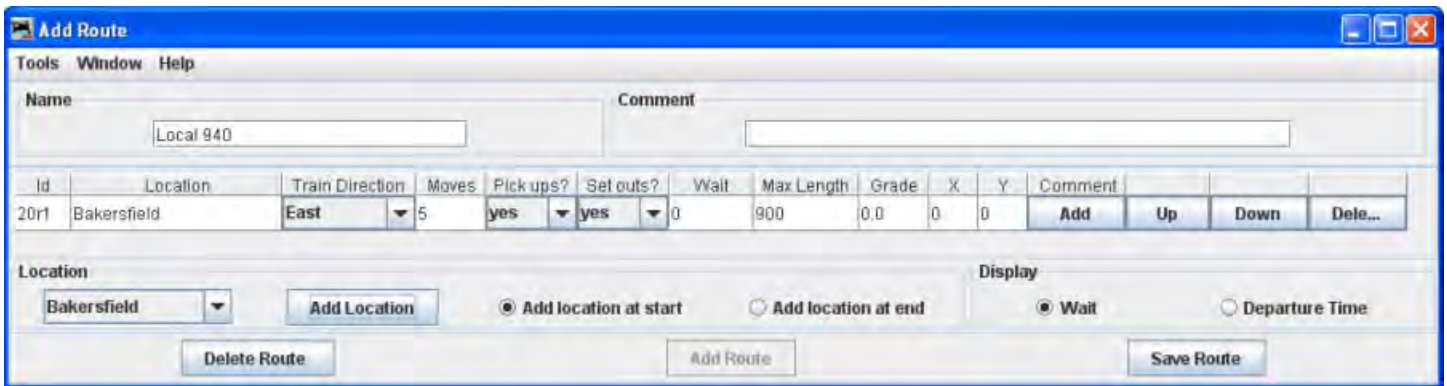
Then press Add button located at the bottom of the window. The Add Route window now activates the attributes required to enter the route.



Now select the location from drop-down list which the train will depart by selecting the location located at the left bottom side of the window.

Select Add location to start Add location at end

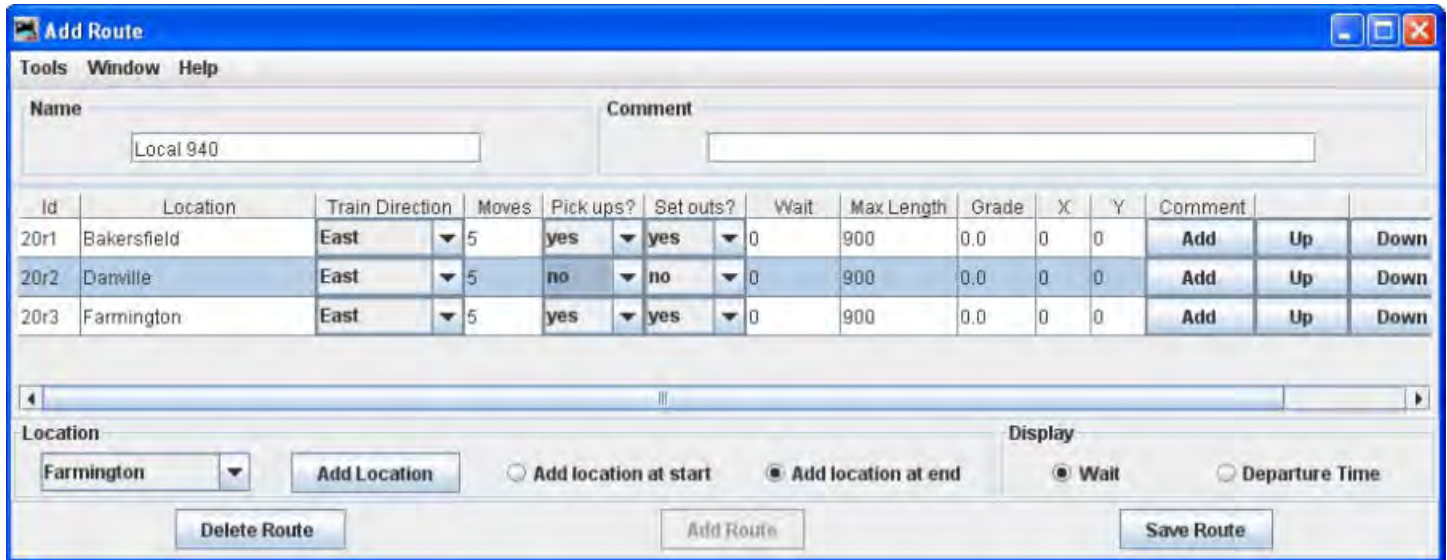
Press Add location button .Updated Add Route window will be displayed with all the attributes required active. Repeat until all stops are entered for the route.



Now build your route by selecting the next location the train will visit, select all locations that the train will pass through even if the train will not work the location. This way your train's engineer will know when reading his manifest the towns he will be traveling through. Each time you add a location to the route, the table shows the order in which the train will visit. You can move a location up or down in the sequence if needed.

We will now add all the locations to the route. Now make sure that **Add location at end** is selected to add after the first location.

Make sure you press Save Route button when you are done with entering the locations.



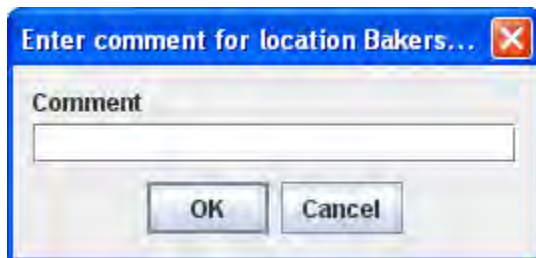
Each **Location** has the train's departure direction(**Train Direction**), number of desired car **Moves**, and whether car **Pickups?** and or car Drops? are allowed at that location.

You can also adjust the maximum train length (**Max Length**) that can depart that location. A car move can be a car pickup or car drop at that location. For example, 5 moves can be 5 pickups or 5 drops or any combination of 5 pickups or drops.

The **Grade** is used to determine how many engines the train will require for that segment. The **X** and **Y** are the coordinates on your dispatcher's panel for the optional train icon. You can set the coordinates here, or use the "SetX&Y" train icon popup menu to teach the program where you want the train icon placed when the train is at the specified location. Leave the X and Y coordinates at zero if you want to manually move the icon or you're not using the icon feature. After setting the number of moves, maximum length, or coordinates, click on the table to make sure it is recognized by the program.

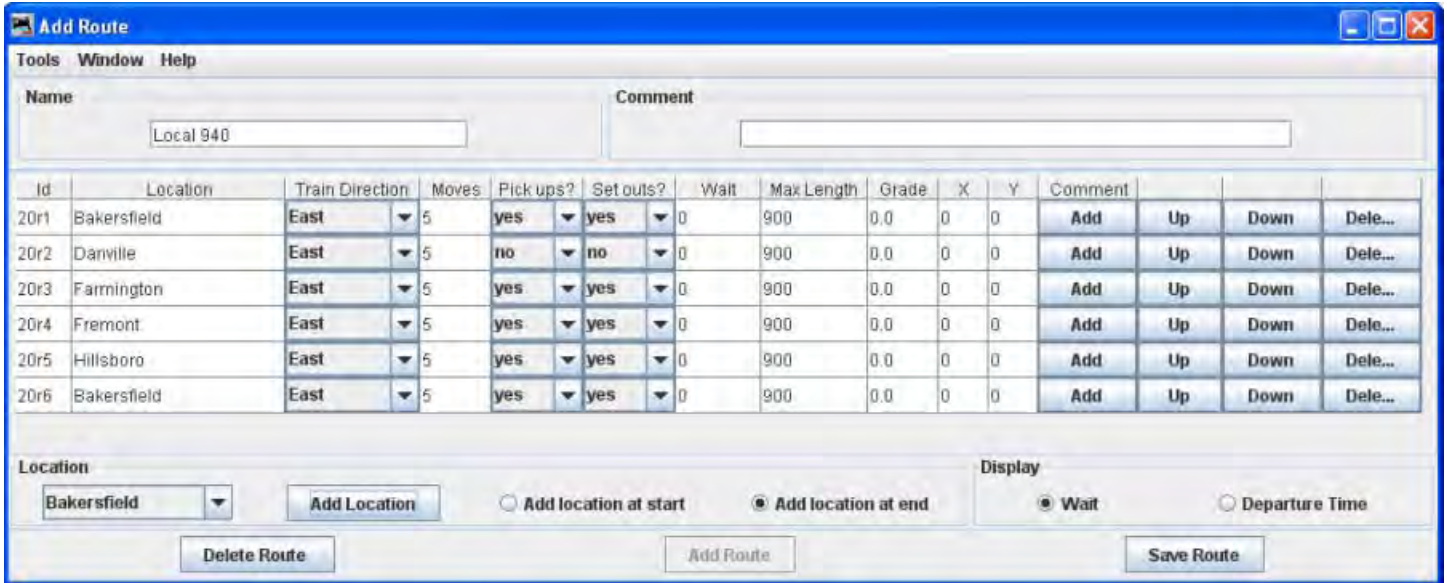
You may move the selected location UP or Down to change position in list.

You may add a comment for each location. press Comment Add button



Press Save Route button which save your route. The program will create a file (OperationsRouteRoster.xml) in your JMRI directory in a folder called "operations". A backup file with the last settings for all of your routes is also created each time Save Route button pressed.

Now we have our first route set up.

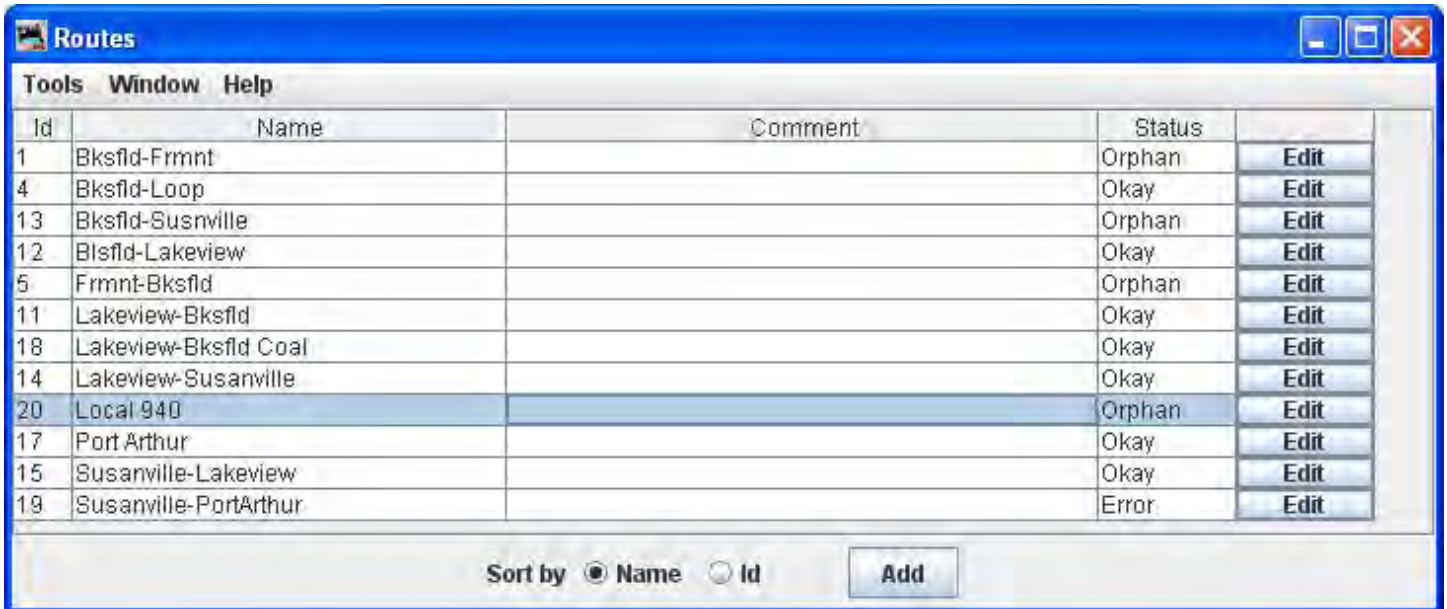


You may start a new route using the Add Route window and entering a new route name and repeat this process for each route.

Now back to the Route window, which will show us a list of all the routes.

You may start a new route using the Add Route window and entering a new route name and repeat this process for each route.

Now back to the Route window, which will show us a list of all the routes.



Note that you may press Edit on any route and the **Edit Route** window opens which is similar to the **Add Route** window.

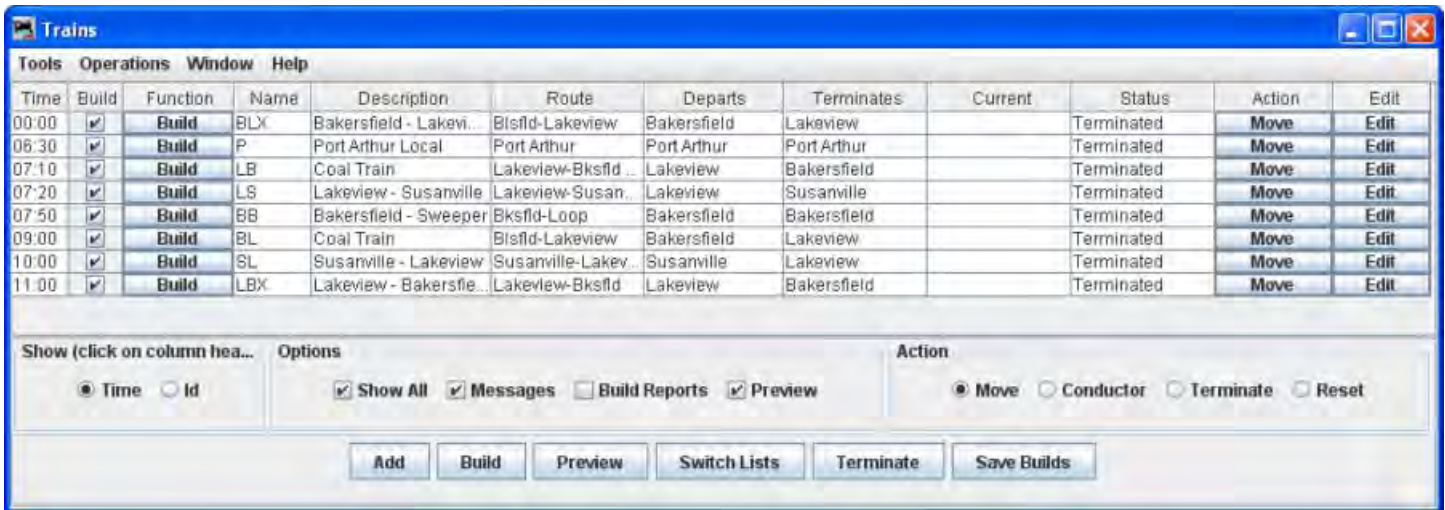
You may now press Add button to add another route, repeating the process just completed.

Now that we have routes setup we need to set up some **Trains**.

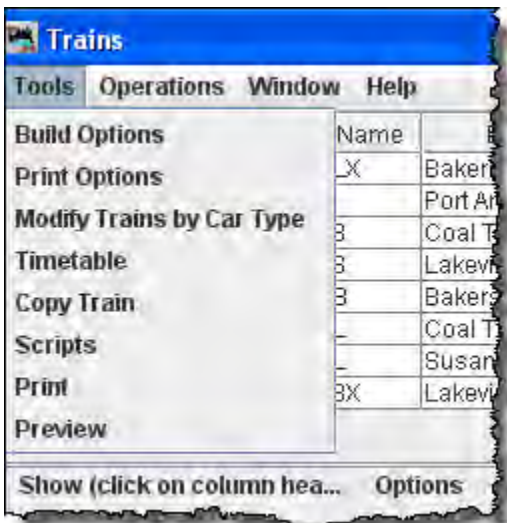
Trains Window

The **Trains** window opens which allows you to build trains to run on your layout. This window is selected from the DecoderPro® or PanelPro® main page from **Tools-->Operations-->Trains** menu or if enabled **Operations-->Trains** menu.

At the bottom of the window is a series of buttons, at this time press to open the [Add Train](#) window.



Menu Bar

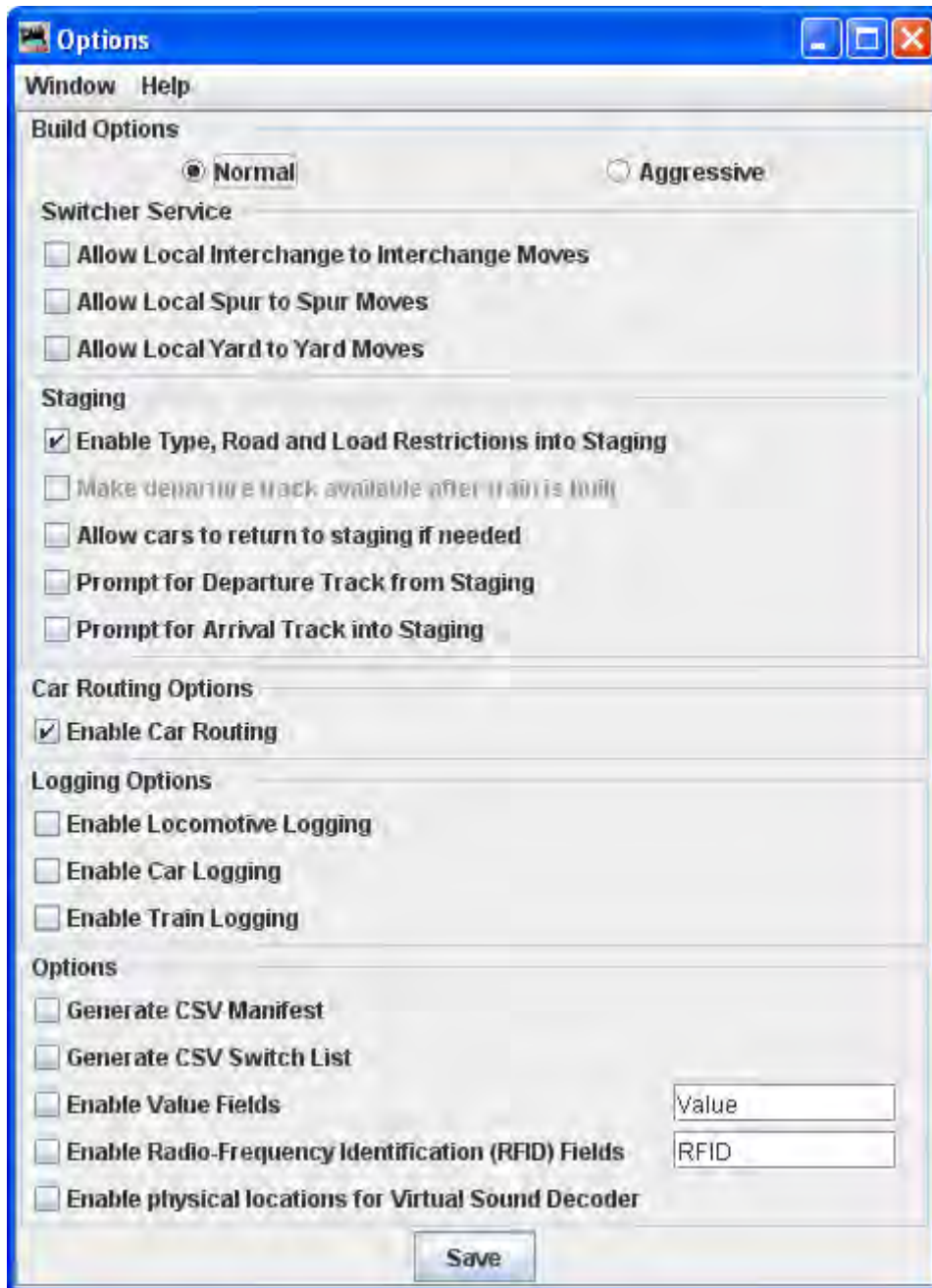


Tools

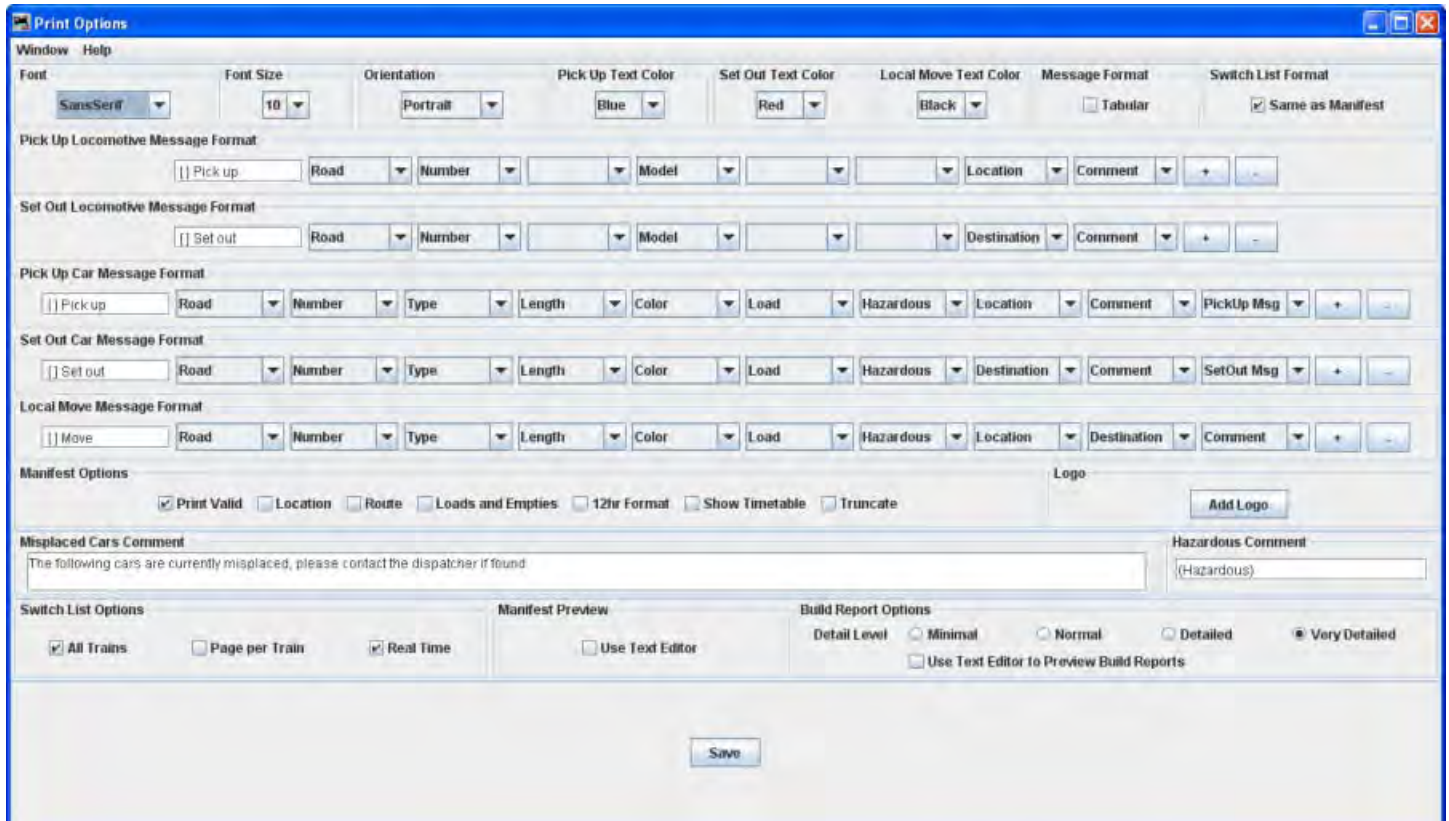
- **Build Options**- Opens the Options window.


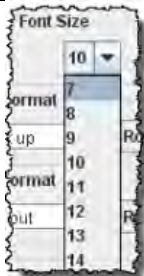
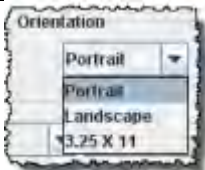




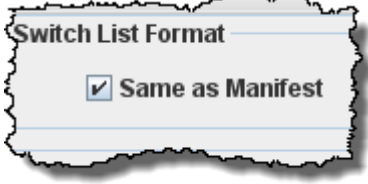
Build Options for Trains

The **Options** window is opened from the **Trains** window **Tools** menu.



- [Print Options](#)-- opens **Print Options** window that lets you set up your manifest printing.



			
<p>Select the desired Font, Size and page Orientation</p>			<p>Assign manifest print color for car or locomotive Pick Up</p>
			
<p>Assign manifest print color for car or locomotive Set Out</p>	<p>Assign manifest print color when the operation is to move a car from one track to another at same location</p>	<p>Select if you want manifest printed in tabular format. It works best with mono-spaced fonts, Courier or Monospaced</p>	<p>Select if you want the Switch List in the same format as the Manifest</p>

Pick Up Locomotive Message Format	You may customize the messages for your manifest and switch list printing. Select formats from dropdown menus. To remove an attribute select blank. The Prefixes in the text boxes may be edited. If you want to use the text color options, the set out, pick u and move prefixes must be unique.
Set Out Locomotive Message Format	
Pick Up Car Message Format	
Set Out Car Message Format	
Local Mover Message Format	

Manifest Options

Each location can have an optional comment. You can print these comments on your manifest if they are selected.

- Print Valid** Prints the time of the train build, not the time the manifest was printed.
- Location.** allows location comment for each car is selected
- Route** allows comments about location for each car if selected
- Loads and Empties** to show how many car loads and empties are in the train.
- 12hr Format** default is 24 hr clock
- Show Timetable show which timetable was used when train build was made.**
- Truncate** Reduces the amount of information at a location that has a separate switch list.

Logo

Add Logo button allows you to add a logo in the top right hand corner of your manifests and switch lists, press Add Logo button and select a file with the image you want to display. Each train in your roster may have a different logo, this is set in [Trains Setup](#)

Misplaced Cars Comment

Allows you to add a notification for operators to be looking for cars that have been misplaced

Switch List Options

- All Trains
- Page per Train
- Real Time

Manifest Preview

Use Text Editor

Build Report Options

Detail Level You can adjust the amount of information that the build report will show. Select one of the four levels. The program when generating the build reports stores the **Very Detailed** information to disk.

Minimal -- provides the least amount of information. Can provide information when train build is not completed.

Normal -- setting shows which engines and cars are being excluded from the train, and which engines and cars are being picked up and dropped.

Detailed -- setting will generate quite a few pages depending on the size of your railroad. It will show all available cars and engines, and a bit how the program finds destinations for the cars and engines.

Very Detailed -- setting produces the most pages, and will show why cars are not picked up or dropped.

Use Text Editor to Preview Build Reports

Be sure and press Save button after changing the build report selections.

- [Modify Trains by Car Type](#)-- opens **Modify by Car Type** window to allow you to modify a train.

Modify Trains by Car Type Window

Opened from **Trains** window **Tools** menu Use this tool to quickly modify the type of cars your train will service. Very useful when adding a new car type to your roster.

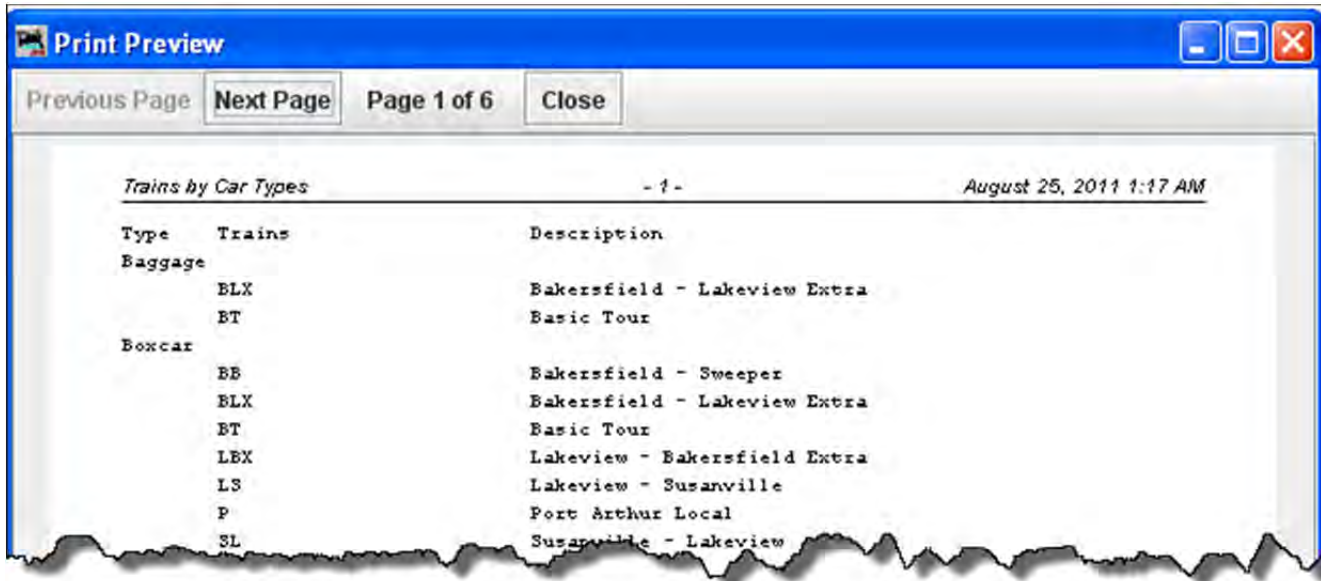


Print Train by Car Types

- 1 - August 25, 2011 1:07 AM

Type	Trains	Description
Baggage	BLX	Bakersfield - Lakeview Extra
	BT	Basic Tour
Boxcar	BB	Bakersfield - Sweeper
	BLX	Bakersfield - Lakeview Extra
	BT	Basic Tour
	LBX	Lakeview - Bakersfield Extra
	LS	Lakeview - Susanville
	P	Port Arthur Local
	SL	Susanville - Lakeview
Caboose	BB	Bakersfield - Sweeper
	BL	Coal Train
	BLX	Bakersfield - Lakeview Extra
	BT	Basic Tour

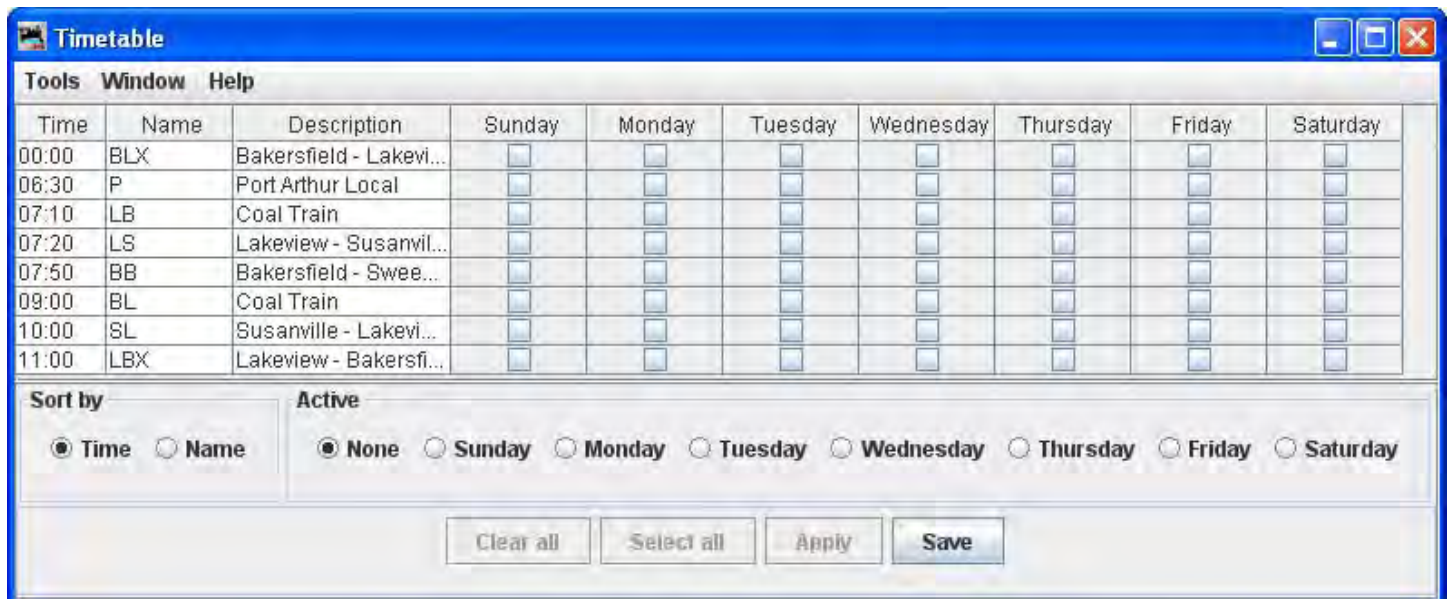
Preview Train by Car Types



- **Timetable** - opens the **Timetable** window.

Timetable

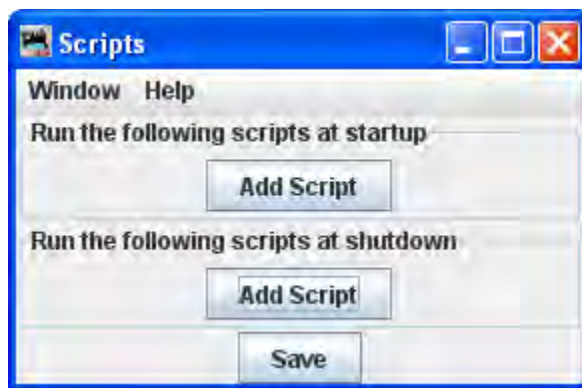
Opened from the **Trains Window Tool** menu. The Timetable tool allows you to define which trains will run on any given day



- **Copy Train** - Copy Train dialog opens.



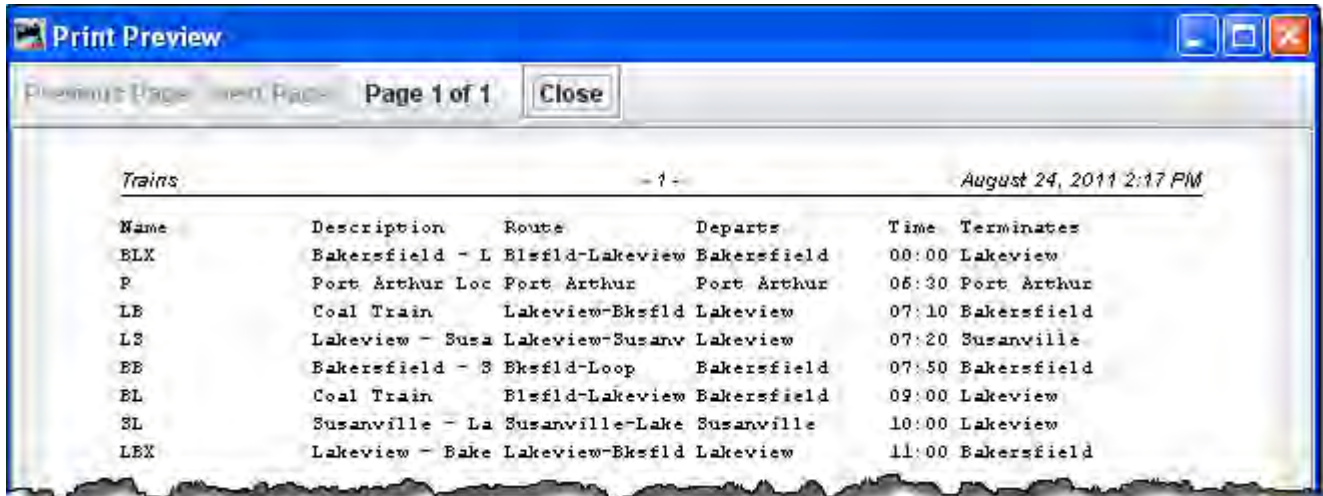
- **Scripts**- Opens the Scripts dialog



- **Print** -- opens printer dialog for your default printer and prints the list of Trains

<i>Trains</i>					
- 1 -					
<i>August 24, 2011 2:11 PM</i>					
Name	Description	Route	Departs	Time	Terminates
BLX	Bakersfield - L	Blsfld-Lakeview	Bakersfield	00:00	Lakeview
P	Port Arthur Loc	Port Arthur	Port Arthur	06:30	Port Arthur
LB	Coal Train	Lakeview-Bksfld	Lakeview	07:10	Bakersfield
LS	Lakeview - Susa	Lakeview-Susanv	Lakeview	07:20	Susanville
BB	Bakersfield - S	Bksfld-Loop	Bakersfield	07:50	Bakersfield
BL	Coal Train	Blsfld-Lakeview	Bakersfield	09:00	Lakeview
SL	Susanville - La	Susanville-Lake	Susanville	10:00	Lakeview
LBX	Lakeview - Bake	Lakeview-Bksfld	Lakeview	11:00	Bakersfield

- **Preview** -- opens default printer preview window.



- **Operations** -- (Same as Main DecoderPro® menu)
- **Windows** -- standard JMRI® format.
- **Help** -- standard JMRI® format.

The main body displays the list of all the trains that have been built. Each train has a Preview, Move and Edit button associated with it.

Time	Build	Function	Name	Description	Route	Departs	Terminates	Current	Status	Action	Edit
00:00	<input checked="" type="checkbox"/>	Build	BLX	Bakersfield - Lakevi...	Blsfld-Lakeview	Bakersfield	Lakeview		Terminated	Move	Edit
06:30	<input checked="" type="checkbox"/>	Build	P	Port Arthur Local	Port Arthur	Port Arthur	Port Arthur		Terminated	Move	Edit
07:10	<input checked="" type="checkbox"/>	Build	LB	Coal Train	Lakeview-Bksfld...	Lakeview	Bakersfield		Terminated	Move	Edit
07:20	<input checked="" type="checkbox"/>	Build	LS	Lakeview - Susanville	Lakeview-Susan...	Lakeview	Susanville		Terminated	Move	Edit
07:50	<input checked="" type="checkbox"/>	Build	BB	Bakersfield - Sweeper	Bksfld-Loop	Bakersfield	Bakersfield		Terminated	Move	Edit
09:00	<input checked="" type="checkbox"/>	Build	BL	Coal Train	Blsfld-Lakeview	Bakersfield	Lakeview		Terminated	Move	Edit
10:00	<input checked="" type="checkbox"/>	Build	SL	Susanville - Lakeview	Susanville-Lakev...	Susanville	Lakeview		Terminated	Move	Edit

Time or Id (depends upon show option at bottom of window) column shows the departure time of the train
Build column is checked to include in current build
Function column, Click on the Build button and Preview button is displayed in Function, click on function button and it opens the [Print Preview](#) window showing the trains Manifest.

Print Preview: Train Manifest Bakersfield - Lakeview Extra

Previous Page Next Page Page 1 of 1 Close

Train Manifest Bakersfield - Lakeview Extra - 1 - January 4, 2013 4:00 AM

JMRI Operations Demo Railroad

Manifest for train (BLX) Bakersfield - Lakeview Extra
 Valid 1/4/2013 01:30
 Does not service coal cars

Scheduled work at Bakersfield, departure time 00:00

- [] Pick up SP 5294 RSD4 from Engine Terminal
- [] Pick up SP 5307 RSD4 from Engine Terminal
- [] Pick up CNW 1555 Boxcar 40' Tuscan L<oad> from #68 Bkrsfld Grain
- [] Pick up SP 490118 HopGrain 36' Gray E<mpty> from #68 Bkrsfld Grain
- [] Pick up MEC 6198 Boxcar 40' Green L<oad> from #68 Heritage Furn
- [] Pick up KOTX 8279 TankKero 38' Silver L<oad> from #80,81 Bkrsfld Oil
- [] Pick up SSW 77167 HopCmnt 36' Gray E<mpty> from SP SSW Interchange
- [] Pick up SP 163025 Boxcar 40' Silver E<mpty> from SP SSW Interchange
- [] Pick up GATX 15418 TankVeg 33' Silver E<mpty> from yard
- [] Pick up C&JM 16648 Boxcar 40' Green L<oad> from yard
- [] Pick up CNW 39610 Coilcar 53' Gray E<mpty> from yard
- [] Pick up MKT 46132 Boxcar 50' Tuscan L<oad> from yard
- [] Pick up LN 88044 Stock 40' Tuscan L<oad> from yard
- [] Pick up SQD 137764 Boxcar 40' Brown L<oad> from yard
- [] Pick up GTW 315079 HopGrain 36' Blue E<mpty> from yard
- [] Pick up UP 499087 Boxcar 50' Yellow L<oad> from yard
- [] Pick up SP 1341 Caboose 40' Tuscan from Caboose Track

Train departs Bakersfield Eastbound with 15 cars, 784 feet, 1206 tons

No work at Port Arthur
 No work at Danville
 No work at Hillsboro
 No work at Farmington

Scheduled work at Lakeview, estimated arrival time 00:20

- [] Set out CNW 1555 Boxcar 40' Tuscan L<oad> to #95 Yard Track
- [] Set out SP 490118 HopGrain 36' Gray E<mpty> to #95 Yard Track
- [] Set out MEC 6198 Boxcar 40' Green L<oad> to #95 Yard Track
- [] Set out KOTX 8279 TankKero 38' Silver L<oad> to #95 Yard Track
- [] Set out SSW 77167 HopCmnt 36' Gray E<mpty> to #95 Yard Track
- [] Set out SP 163025 Boxcar 40' Silver E<mpty> to #95 Yard Track
- [] Set out GATX 15418 TankVeg 33' Silver E<mpty> to #95 Yard Track
- [] Set out C&JM 16648 Boxcar 40' Green L<oad> to #95 Yard Track

Name column shows train name

Description column describes the trains routing

Route column shows actual train route

Departs column shows location of departure

Terminates column shows the terminal location

Current column shows current location

Status column shows status of train

Action column shows move button, Each time pressed advances one location on the trains route until it will be finally terminated.

Edit column contains the Edit button which opens the **Edit Train** window

Edit Train

The Edit Train window is opened from the Trains Window using Edit button for any train in the list

Edit Train

Tools Window Help

Name <input style="width: 95%;" type="text" value="BLX"/>	Description <input style="width: 95%;" type="text" value="Bakersfield - Lakeview Extra"/>
---	---

Departure Time (hh:mm) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 50%;"> <input style="width: 20px;" type="text" value="00"/> ▾ </td> <td style="text-align: center; width: 50%;"> <input style="width: 20px;" type="text" value="00"/> ▾ </td> </tr> </table>	<input style="width: 20px;" type="text" value="00"/> ▾	<input style="width: 20px;" type="text" value="00"/> ▾	Route <input style="width: 80%;" type="text" value="Blsfld-Lakeview"/> ▾ <input style="margin-left: 20px;" type="button" value="Edit"/>
<input style="width: 20px;" type="text" value="00"/> ▾	<input style="width: 20px;" type="text" value="00"/> ▾		

This train services the following locations

- Bakersfield
- Port Arthur
- Darville
- Hillsboro
- Farmington
- Lakeview

Select car types serviced by this train

<input checked="" type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input checked="" type="checkbox"/> Caboose	<input type="checkbox"/> Coal	<input checked="" type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat
<input checked="" type="checkbox"/> Flat Timber	<input checked="" type="checkbox"/> FlatBH	<input checked="" type="checkbox"/> FlatBHPp	<input checked="" type="checkbox"/> FlatBHWD	<input checked="" type="checkbox"/> FlatTimb	<input checked="" type="checkbox"/> FlatTrail
<input checked="" type="checkbox"/> FlatWood	<input checked="" type="checkbox"/> Flatcar	<input checked="" type="checkbox"/> Gon-pipe	<input checked="" type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input checked="" type="checkbox"/> HopChem
<input checked="" type="checkbox"/> HopCmnt	<input type="checkbox"/> HopCoal	<input type="checkbox"/> HopCoal-E	<input checked="" type="checkbox"/> HopGrain	<input checked="" type="checkbox"/> HopSand	<input checked="" type="checkbox"/> Hopper
<input checked="" type="checkbox"/> MOW	<input checked="" type="checkbox"/> MOWBox	<input checked="" type="checkbox"/> Passenger	<input checked="" type="checkbox"/> Reefer	<input checked="" type="checkbox"/> Reefer Milk	<input checked="" type="checkbox"/> Reefer,Meat
<input checked="" type="checkbox"/> ReeferIce	<input checked="" type="checkbox"/> Stock	<input checked="" type="checkbox"/> Tank Chem	<input checked="" type="checkbox"/> Tank Corn Sy	<input checked="" type="checkbox"/> Tank Food	<input checked="" type="checkbox"/> TankGas
<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input checked="" type="checkbox"/> TankVeg			

Select locomotive types serviced by this train

Diesel
 Steam

Optional train requirements

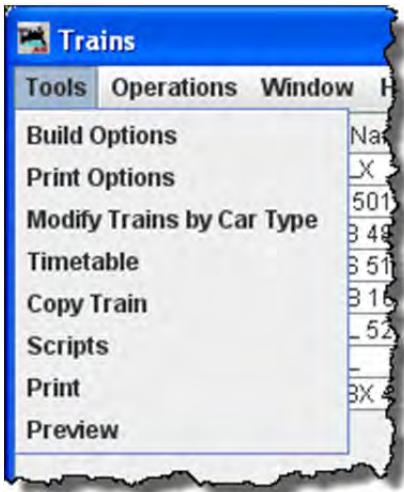
Locomotives	2 ▾	Model	▾	Road	▾
	<input type="radio"/> None		<input type="radio"/> FRED	<input checked="" type="radio"/> Caboose	▾

Comment

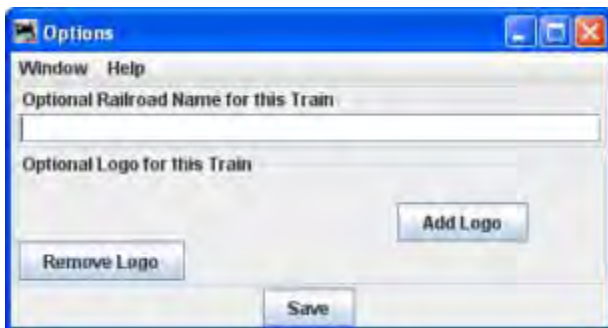
Does not service coal cars

<input type="button" value="Delete Train"/>	<input type="button" value="Reset Train"/>	<input type="button" value="Add Train"/>	<input type="button" value="Save Train"/>
---	--	--	---

Menu Bar



Options



Train Build Options

Script -- Opens the Scripts window allow scripts to be added to the build

Show Car Types Serviced

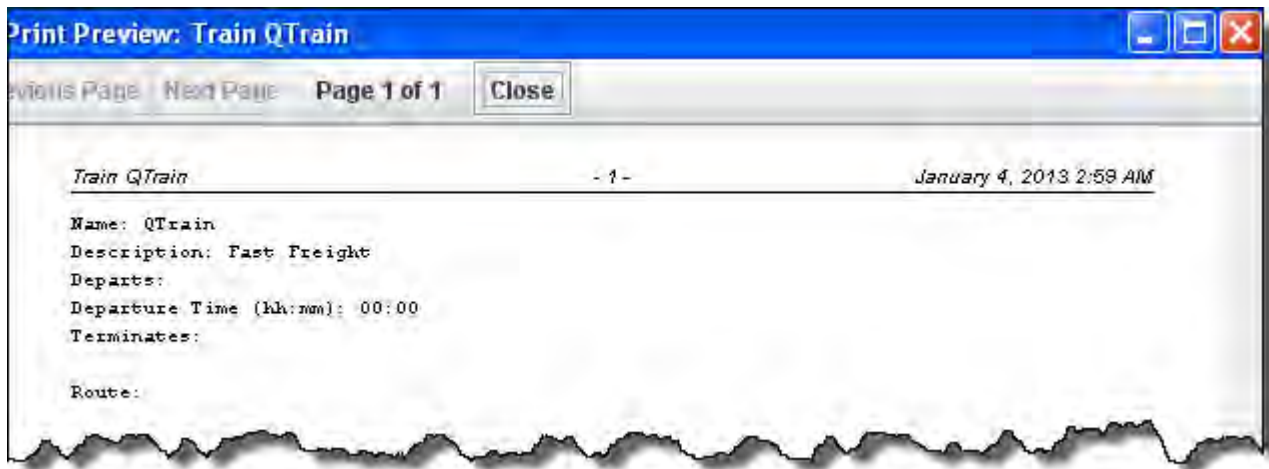


Print

Name: QTrain
Description: Fast Freight
Departs:
Departure Time (hh:mm): 00:00
Terminates:

Route:

Preview



Print Manifest --

Preview Manifest --

Print Build Report --

Preview Build Report --

In the body of the window

Name Description

Type in train name and optional description, then press Add Train button .

Both will show up on the train's manifest. The train's name will also show up on the train icon, so short names work best.

Add Train
_ □ ×

Tools Window Help

Name

Description

Departure Time (hh:mm)

▾

▾

Route

This train services the following locations

Select car types serviced by this train

<input checked="" type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input checked="" type="checkbox"/> Caboose	<input checked="" type="checkbox"/> Coal	<input checked="" type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat
<input checked="" type="checkbox"/> Flat Timber	<input checked="" type="checkbox"/> FlatBH	<input checked="" type="checkbox"/> FlatBHPP	<input checked="" type="checkbox"/> FlatBHWd	<input checked="" type="checkbox"/> FlatTimb	<input checked="" type="checkbox"/> FlatTrail
<input checked="" type="checkbox"/> FlatWood	<input checked="" type="checkbox"/> Flatcar	<input checked="" type="checkbox"/> Gon-pipe	<input checked="" type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input checked="" type="checkbox"/> HopChem
<input checked="" type="checkbox"/> HopCmnt	<input checked="" type="checkbox"/> HopCoal	<input checked="" type="checkbox"/> HopCoal-E	<input checked="" type="checkbox"/> HopGrain	<input checked="" type="checkbox"/> HopSand	<input checked="" type="checkbox"/> Hopper
<input checked="" type="checkbox"/> MOW	<input checked="" type="checkbox"/> MOWBox	<input checked="" type="checkbox"/> Passenger	<input checked="" type="checkbox"/> Reefer	<input checked="" type="checkbox"/> Reefer Milk	<input checked="" type="checkbox"/> Reefer,Meat
<input checked="" type="checkbox"/> ReeferIce	<input checked="" type="checkbox"/> Stock	<input checked="" type="checkbox"/> Tank Chem	<input checked="" type="checkbox"/> Tank Corn Sy	<input checked="" type="checkbox"/> Tank Food	<input checked="" type="checkbox"/> TankGas
<input checked="" type="checkbox"/> TankKero	<input checked="" type="checkbox"/> TankOil	<input checked="" type="checkbox"/> TankVeg			

Select locomotive types serviced by this train

Diesel
 Steam

Optional train requirements

Locomotives ▾

Model

Road

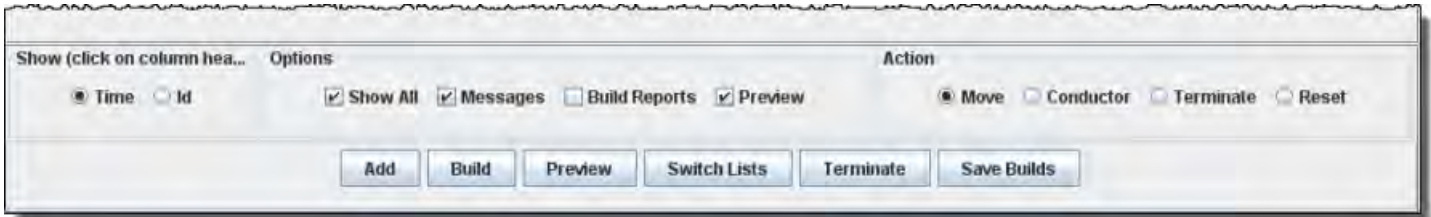
Road

None
 FRED
 Caboose

Comment

Now all the options are activated and you can complete the train.

Bottom of Trains window (continue)



Show selects if time or Id is shown in first column.
(click on column header for sort by sequence)

Options (selects the options desired for the train list)

Show All Messages Build Reports Preview Manifests

Action

Move Conductor Terminate Reset

Add button -- opens the [Add Train](#) window

Add Train

The Add Train window is opened from the Trains Window.

Add Train
_ □ ×

Tools Window Help

Name

Description

Departure Time (hh:mm)

00 ▾

00 ▾

Route

Edit

This train services the following locations

Select car types serviced by this train

<input type="checkbox"/> Baggage	<input type="checkbox"/> Boxcar	<input type="checkbox"/> Caboose	<input type="checkbox"/> Coal	<input type="checkbox"/> Coilcar	<input type="checkbox"/> Flat
<input type="checkbox"/> Flat Timber	<input type="checkbox"/> FlatBH	<input type="checkbox"/> FlatBHPp	<input type="checkbox"/> FlatBHWd	<input type="checkbox"/> FlatTimb	<input type="checkbox"/> FlatTrail
<input type="checkbox"/> FlatWood	<input type="checkbox"/> Flatcar	<input type="checkbox"/> Gon-pipe	<input type="checkbox"/> Gon-scrap	<input type="checkbox"/> Gondola	<input type="checkbox"/> HopChem
<input type="checkbox"/> HopCmnt	<input type="checkbox"/> HopCoal	<input type="checkbox"/> HopCoal-E	<input type="checkbox"/> HopGrain	<input type="checkbox"/> HopSand	<input type="checkbox"/> Hopper
<input type="checkbox"/> MOW	<input type="checkbox"/> MOWBox	<input type="checkbox"/> Passenger	<input type="checkbox"/> Reefer	<input type="checkbox"/> Reefer Milk	<input type="checkbox"/> Reefer,Meat
<input type="checkbox"/> ReeferIce	<input type="checkbox"/> Stock	<input type="checkbox"/> Tank Chem	<input type="checkbox"/> Tank Corn Sy	<input type="checkbox"/> Tank Food	<input type="checkbox"/> TankGas
<input type="checkbox"/> TankKero	<input type="checkbox"/> TankOil	<input type="checkbox"/> TankVeg			

Clear all

Select all

Select locomotive types serviced by this train

Diesel
 Steam

Optional train requirements

Locomotives

Model

Road

None

FRED

Caboose

Road

Comment

Delete Train

Reset Train

Add Train

Save Train

Similar to the Edit Train Window

Build button --the selected train is [build](#) and the **Function** column button changes to **Preview** when completed, messages may be displayed if build can not be completed.

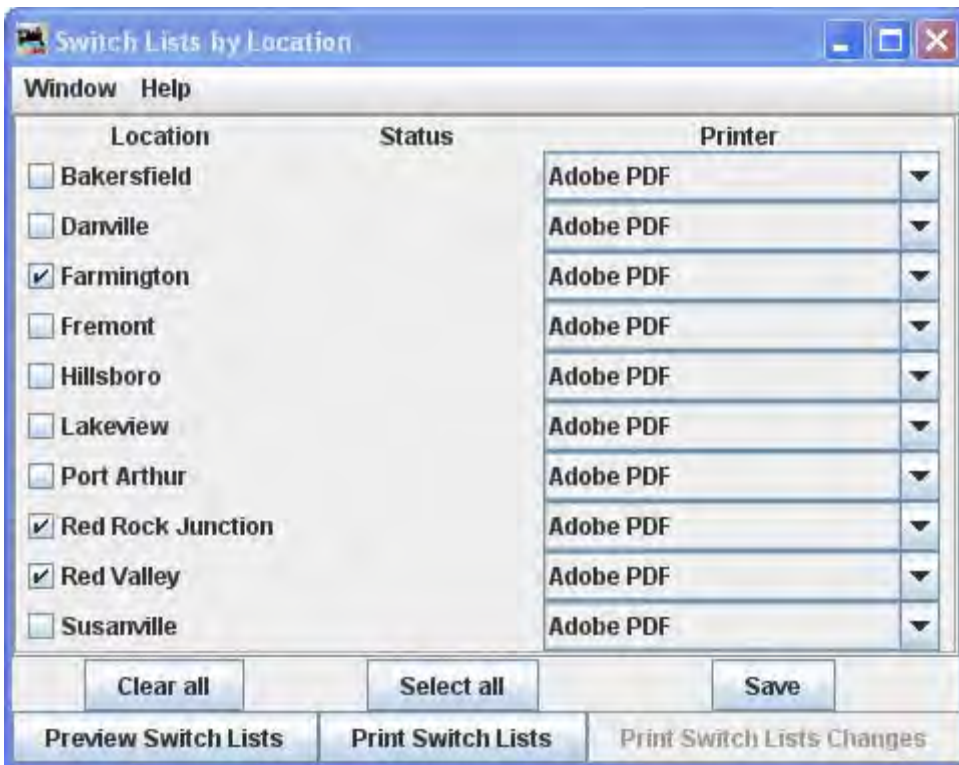
Trains Build

Switch Lists by Location

A switch list shows the work required to service all of the trains visiting that location. Normally a switch list is given to the person in charge of a yard or a location with many spurs or industries.

To Preview or Print Switch Lists, select the location(s) and set printer, then press **Preview Switch Lists** button or **Print Switch Lists** button

Save button will store your selections.



Preview or Printed Switch List

Switch List Bakersfield - 1 - August 24, 2011 4:23 PM

JMRI Operations Demo Railroad

Switch List for Bakersfield
Valid 8/24, 2011 16:23

Scheduled work for train (LS) Lakeview - Susanville
Departs Lakeview at 07:20 expected arrival 08:04, arrives Westbound

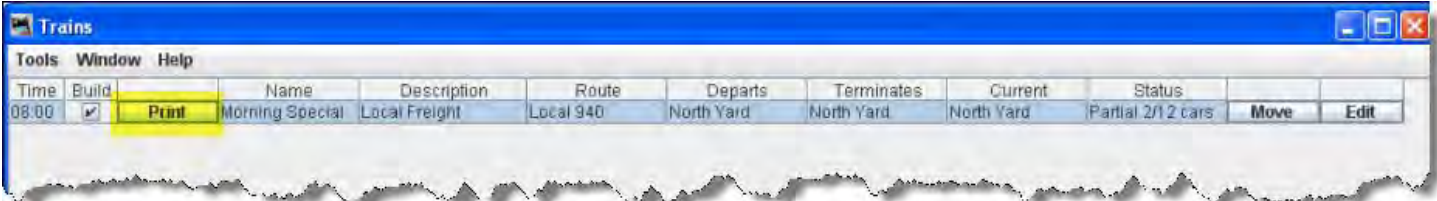
- Pick up ATSF 10407 Boxcar 50' Tuscan L<oad> from yard
- Set out MRL 9089 HopGrain 36' Gray L<wheat> to #68 Bkrsfld Grain
- Set out SOO 177514 Boxcar 50' White L<oad> to #68 Pabsb&Son Cold Strge
- Set out G&F 442 Boxcar 50' Green L<oad> to #68 Pabsb&Son Cold Strge
- Set out GARE 812 Reefer Milk 38' Green E<empty> to yard
- Set out N&W 42120 Boxcar 40' Black L<oad> to yard

Scheduled work for train (BB) Bakersfield - Sweeper
Departs Bakersfield Eastbound at 07:50

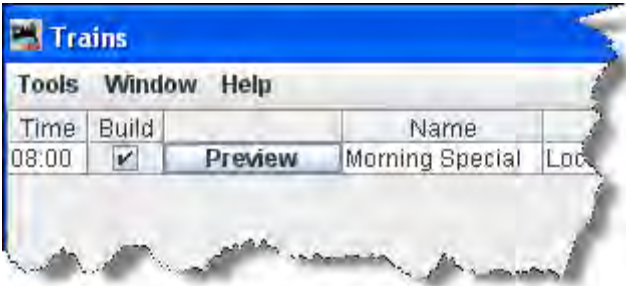
- Pick up SP 1019 SW1200 from Engine Terminal
- Pick up NH 681 Caboose 34' Black from Caboose Track

Building Trains

To build one train, press Build button in the row for the desired train in the **Trains** window. After the train is built /Build button changes to Print button or Preview button .



If you want to review how the train was built, select the **Build Reports** before pressing Preview button for the desired train. If the **Preview Manifest** is selected, the program will generate the build report and manifest and present them in preview windows.



If you want to build several trains without having to press individual buttons for each train, select the trains that you want built in the **Build** column and press Build button found at the bottom of the trains panel. The program will then build manifests for all of the selected trains.

If a train fails to build, the Move button will change its text to Report. Pressing Report button will print or preview the build report for this train. Whenever a train fails to build, a build failure message will appear. If you want to disable this feature deselect the checkbox **Build Messages**.

With [Preview Manifest](#) press Preview button and the Train Manifest is displayed using your system printer's preview window.

With **Preview Manifest**, [Build Reports](#) and **Build Messages** selected, press Preview button and all the Reports and Train Manifest are previewed, then you may print the desired reports or manifest using your system print dialog.

Problems Building Trains

If you have a problem building a train you can select the **Build Reports** checkbox at the bottom of the train panel.

When a build fails for any reason and the **Build Reports** checkbox is selected, the program will send a report to your printer if the **Preview Manifests** isn't selected; or to a preview window if the **Preview Manifests** is selected. The build report can print out different levels of detail, from minimal to very detailed. See the Settings section [Build Report Details](#) for more information on how to change the build report detail level.

The program now confirms during the build that all of the cars in a kernel have the same departure location and track.

The program will wait for the scripts to complete prior to building a train.

Building Multiple Trains for a Session

Most operating sessions require more than one train to keep your operators busy. The correct way to do this is to build and print all of the trains needed before terminating them. So if you need a dozen trains for a session, you must build twelve trains before you terminate any one train. Terminating a train tells the program that the engines and cars in that particular train have been delivered to their final locations and can be used again when building new trains. So always build all, print all, THEN terminate each train after completing its run! It is okay to build all trains, print all train, and then use the Save Builds button and shut down the program. Later you can restart the program and terminate the trains that completed their runs.

The correct time to terminate a train is when the train actually arrives at its destination. Terminating a train before it completes its run means that the operation database believes that the engines and cars have been delivered. It is better to build and print twelve trains and then later find out that only nine trains completed their runs. You would then terminate nine trains, and leave the other three for next time. Or if you wish you could reset any trains that didn't depart from their terminal. Resetting trains really isn't necessary, the trains that didn't run during this session could run during the next session.

An alternate method is to build, print, and use the Move button for each train to track the actual movement of the trains during your session. As long as the trains on your layout match the locations in the program you can build a new train.

Moving Trains

After providing your operators with a printed manifest or location switch list, you must keep the program database synchronized with the actual movement of trains on your layout. This is done by the Move button located on the far right of the train menu. Pressing the Move button will cause the train to depart its current location and move to the next location in the route. The engines and cars assigned to the train will travel to the next location on the railroad. At each location, cars can be picked up or dropped off. You can also move a train by selecting the train's icon and selecting Move from the icon's popup menu. Each press of the Move button moves the train closer to its terminal location. When the train arrives at the last location in the route, the last press of the Move button will terminate the train. Once a train is terminated, you can build it again.

Each time an engine or car is moved a count associated with them is incremented. The program uses this to determine which cars haven't moved recently and tries to select cars with the least number of moves when building new trains. Each time a location has a car picked up or dropped, the program increments a count associated with that location. The program tries to move cars to locations that have experienced the least number of car operations.

Preview button -- shows the manifest in [Preview](#) window

Operations-Add Train - Mozilla Firefox

File Edit View History Bookmarks Tools Help Now: 36°F 39°F Mon: 56°F 37°F Tue: 56°F 36°F Wed: 60°F 43°F

Operations-Add Train

file:///G:/JMRI_SVN/manual/3-0_JMRI_OPS_UsersGuide/Ops_ManifestPreview.shtml

Google Wfargo SantaFe PayPal SMA Quest Walgrn AT&T CLINK NVE RJ DirectTV CT GoDaddy RaceTV eBay

Print Preview: Train Manifest Bakersfield - Lakeview Extra

Previous Page Next Page Page 1 of 1 Close

Train Manifest Bakersfield - Lakeview Extra - 1 - *January 4, 2013 4:00 AM*

JMRI Operations Demo Railroad

Manifest for train (BLX) Bakersfield - Lakeview Extra
Valid 1/4/2013 01:30
Does not service coal cars

Scheduled work at Bakersfield, departure time 00:00

- [] Pick up SP 5294 RSD4 from Engine Terminal
- [] Pick up SP 5307 RSD4 from Engine Terminal
- [] Pick up CNW 1555 Boxcar 40' Tuscan L<oad> from #68 Bkrsfld Grain
- [] Pick up SP 490118 HopGrain 36' Gray E<empty> from #68 Bkrsfld Grain
- [] Pick up MEC 6198 Boxcar 40' Green L<oad> from #68 Heritage Furn
- [] Pick up KOTX 8279 TankKero 38' Silver L<oad> from #80,81 Bkrsfld Oil
- [] Pick up SSW 77167 HopCmnt 36' Gray E<empty> from SP SSW Interchange
- [] Pick up SP 163025 Boxcar 40' Silver E<empty> from SP SSW Interchange
- [] Pick up GATX 15418 TankVeg 33' Silver E<empty> from yard
- [] Pick up C&IM 16648 Boxcar 40' Green L<oad> from yard
- [] Pick up CNW 39610 Coilear 53' Gray E<empty> from yard
- [] Pick up MKT 46132 Boxcar 50' Tuscan L<oad> from yard
- [] Pick up LN 88044 Stock 40' Tuscan L<oad> from yard
- [] Pick up SOO 137764 Boxcar 40' Brown L<oad> from yard
- [] Pick up GTW 315079 HopGrain 36' Blue E<empty> from yard
- [] Pick up UP 499087 Boxcar 50' Yellow L<oad> from yard
- [] Pick up SP 1341 Caboose 40' Tuscan from Caboose Track

Train departs Bakersfield Eastbound with 15 cars, 784 feet, 1206 tons

No work at Port Arthur
No work at Danville
No work at Hillsboro
No work at Farmington

Scheduled work at Lakeview, estimated arrival time 00:20

- [] Set out CNW 1555 Boxcar 40' Tuscan L<oad> to #95 Yard Track
- [] Set out SP 490118 HopGrain 36' Gray E<empty> to #95 Yard Track
- [] Set out MEC 6198 Boxcar 40' Green L<oad> to #95 Yard Track
- [] Set out KOTX 8279 TankKero 38' Silver L<oad> to #95 Yard Track
- [] Set out SSW 77167 HopCmnt 36' Gray E<empty> to #95 Yard Track
- [] Set out SP 163025 Boxcar 40' Silver E<empty> to #95 Yard Track
- [] Set out GATX 15418 TankVeg 33' Silver E<empty> to #95 Yard Track

Switch Lists button -- opens the [Switch Lists by Location](#) window

Preview or Printed Switch List

Switch List Bakersfield *August 24, 2011 4:23 PM*
- 1 -

JMRI Operations Demo Railroad

Switch List for Bakersfield
Valid 8/24, 2011 16:23

Scheduled work for train (LS) Lakeview - Susanville
Departs Lakeview at 07:20 expected arrival 08:04, arrives Westbound

- Pick up ATSF 10407 Boxcar 50' Tuscan L<oad> from yard
- Set out MRL 9089 HopGrain 36' Gray L<wheat> to #68 Bkrsfld Grain
- Set out SOO 177514 Boxcar 50' White L<oad> to #68 Pabsb&Son Cold Strge
- Set out G&F 442 Boxcar 50' Green L<oad> to #68 Pabsb&Son Cold Strge
- Set out GARE 812 Reefer Milk 38' Green E<empty> to yard
- Set out N&W 42120 Boxcar 40' Black L<oad> to yard

Scheduled work for train (BB) Bakersfield - Sweeper
Departs Bakersfield Eastbound at 07:50

- Pick up SP 1019 SW1200 from Engine Terminal
- Pick up NH 681 Caboose 34' Black from Caboose Track

Terminate button terminates all trains that have a build

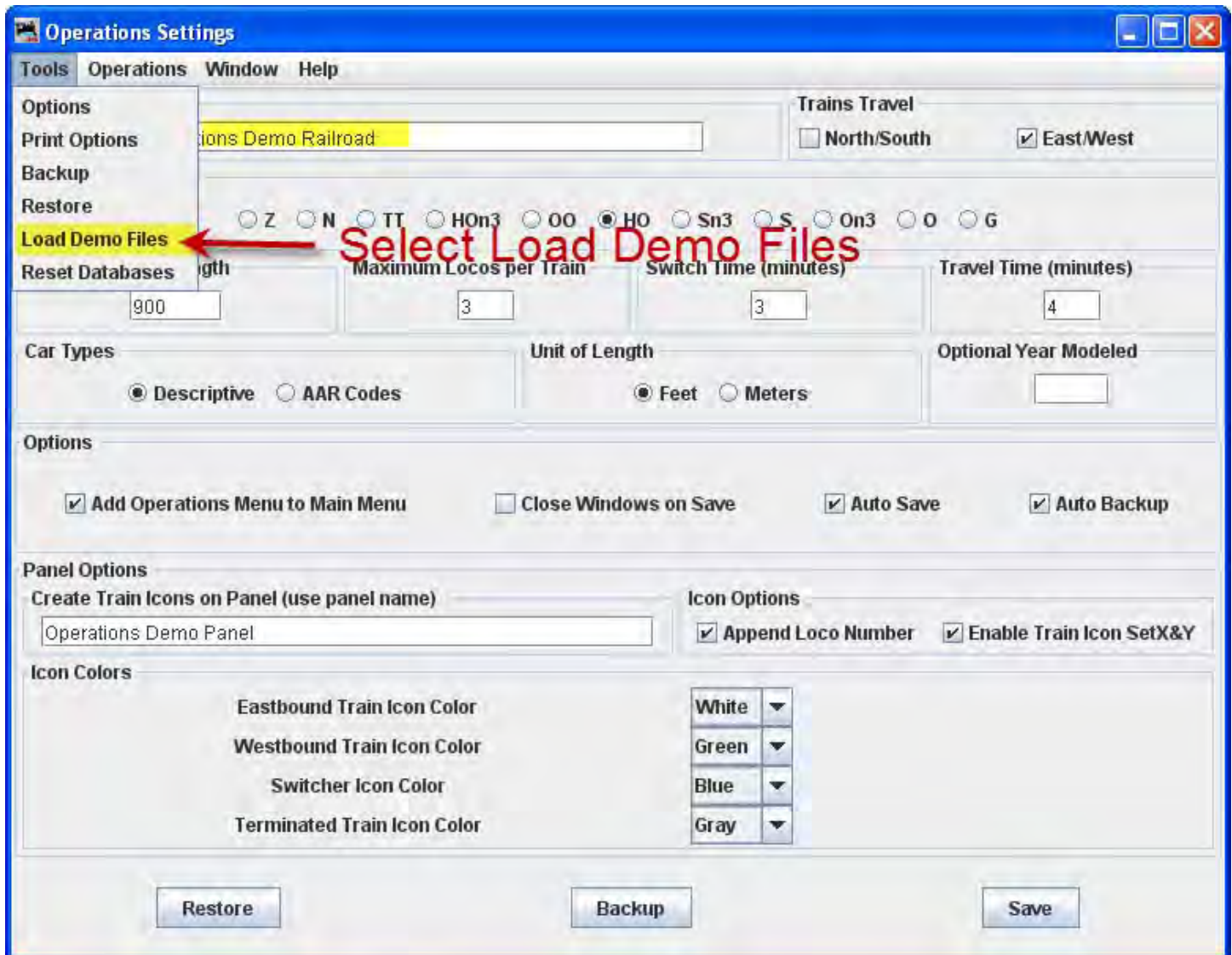
Save Builds -- saves the builds to disk

*

A Trip Through Operations

Well, now that we've had an overview of Operations, let's see if we can make it work. We could sit down and enter a whole bunch of information into the Locations, Cars, Engines, Routes and Trains screens or do it the easy way and use the built-in Demo Railroad. Since this is a training (pun intended) exercise, we'll use the Demo files.

To get the demo files entered, Go to the JMRI main menu and click on Tools, scroll all the way to the bottom to select Operations(or Operations menu is set in Operations settings), and slide sideways to select Settings. On the Operations Settings screen select the Tools menu and then select Load Demo Files. DecoderPro® will need to restart.

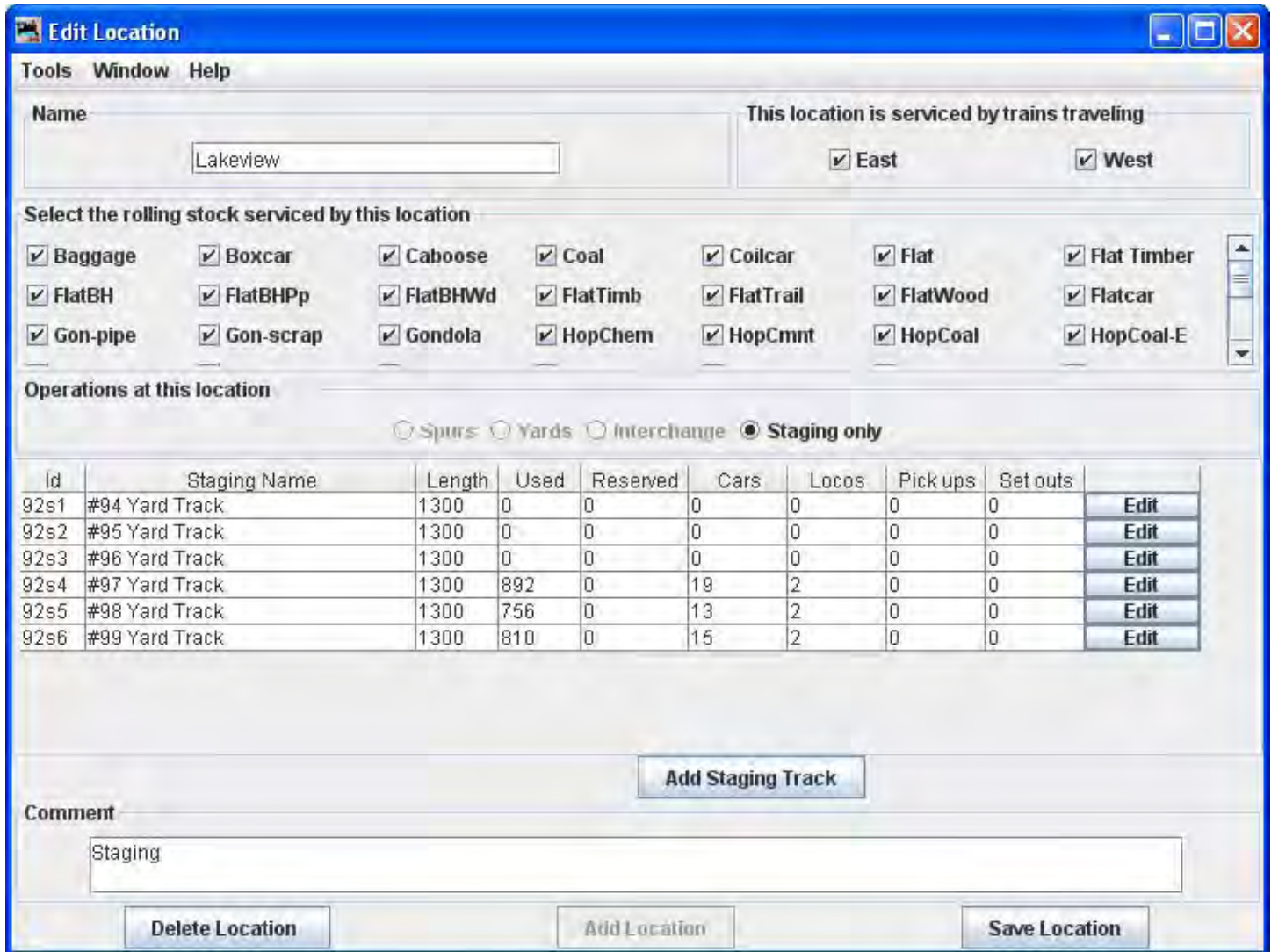


Now go back to the DecoderPro main menu to quit and then re-start the program. This will load the Demo files. When the program presents the main JMRI screen, click on Tools menu, scroll all the way to the bottom to select Operations, and it expands to the Operations menu. Select Locations which opens and displays the Location window as shown below. All of the locations are shown as a list sorted by **Name**.

Id	Name	Length	Used	Rolling Stock	Pick ups	Set outs	
78	Bakersfield	6813	2626	52	0	0	Edit
80	Danville	2540	669	18	0	0	Edit
6	Farmington	1981	44	1	0	0	Edit
89	Fremont	715	515	12	0	0	Edit
83	Hillsboro	2157	650	14	0	0	Edit
92	Lakeview	7800	2458	53	0	0	Edit
84	Port Arthur	1697	612	13	0	0	Edit
91	Susanville	3200	2077	43	0	0	Edit

Sort By Name Id

If you select Lakeview and click on the Edit box way over on the right of the entry for Lakeview, you'll see a screen like that below, Edit Location, showing that Lakeview is a staging area that can accommodate almost any kind of car. This will be the starting point for our mythical trip.



We will now exit **Edit Location** window that describes location Lakeview Staging Area, by clicking the window close icon (red X) in the upper right corner of the window. Also close the **Locations** window in the same manner.

Now, let's take a look at what resources are available to make up our train. Open the Cars window from the Operations menu. The Cars window now lists all the cars that are in the Operations Program database and can be chosen to make up a train, so many that there's a scrollbar on the right to scroll through the list. Again clicking on the Edit box on the right we could see the specifics of any one car and of course Edit the data (if it was our own). We won't bother.

Cars											
Tools Operations Window Help											
Number	Road	Type	Len	Color	Kernel	Location	Destination	Train	Moves	Set	Edit
12	VN	Boxcar	40	Yellow		Bakersfield (yard)			23	Set	Edit
40	SSW	Caboose...	36	Tuscan		Susanville (#84 Yard Track)			25	Set	Edit
45	SSW	Caboose...	36	Tuscan		Lakeview (#97 Yard Track)			28	Set	Edit
46	SSW	Caboose...	36	Black		Lakeview (#99 Yard Track)			8	Set	Edit
101	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
102	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
104	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
105	WDLX	HopCoal-E	31	Orange	Coal Em...	Danville (yard)			29	Set	Edit
208	VTR	Boxcar	40	Green		Susanville (#82 Yard Track)			3	Set	Edit
259	SP	Caboose...	36	Tuscan		Lakeview (#98 Yard Track)			29	Set	Edit
352	SKX	TankOil	40	Black		Susanville (#84 Yard Track)			15	Set	Edit
401	BM	Caboose...	34	Blue		Bakersfield (Caboose Track)			27	Set	Edit
442	G&F	Boxcar	50	Green		Port Arthur (#153 Zane Mercantile)			15	Set	Edit
462	C&EI	Boxcar	40	Tuscan		Bakersfield (yard)			25	Set	Edit
500	MNS	Boxcar	50	Brown		Lakeview (#99 Yard Track)			16	Set	Edit
505	RUT	HopCmnt	36	Gray		Lakeview (#99 Yard Track)			16	Set	Edit
508	RUT	HopCmnt	36	Gray		Hillsboro (yard)			24	Set	Edit
606	TP&W	Boxcar	40	Green		Susanville (#83 Yard Track)			22	Set	Edit
607	TP&W	Boxcar	40	Green		Susanville (#83 Yard Track)			15	Set	Edit
681	NH	Caboose...	34	Black		Bakersfield (Caboose Track)			25	Set	Edit
752	SP	Caboose...	36	Brown		Susanville (#83 Yard Track)			26	Set	Edit
812	GARE	Reefer Milk	38	Green		Lakeview (#99 Yard Track)			12	Set	Edit
948	PFE	ReeferIce	40	Green		Lakeview (#98 Yard Track)			23	Set	Edit

Sort by: Number Road Type Color Load Kernel Location Destination FD RWE Train Moves Built Owner Wait

210 cars

Of course, we'll need Motive Power to pull our train, so let's look at what's in the Locomotive stable.

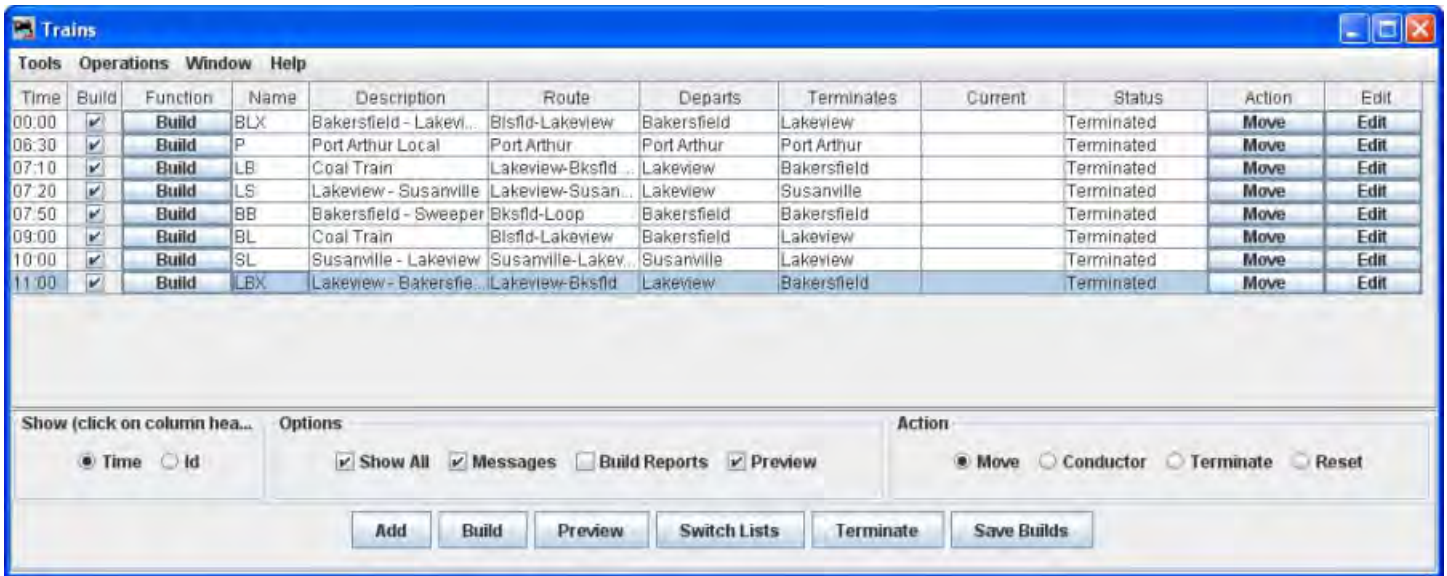
Locomotives											
Tools Operations Window Help											
Number	Road	Model	Type	Len	Consist	Location	Destination	Train	Moves	Set	Edit
1017	SP	SW1200	Diesel	45		Bakersfield (Engine Terminal)			18	Set	Edit
1019	SP	SW1200	Diesel	45		Bakersfield (Engine Terminal)			18	Set	Edit
1633	C&O	Allegheny	Steam	125		Bakersfield (Engine Terminal)			0	Set	Edit
1641	C&O	Allegheny	Steam	125		Bakersfield (Engine Terminal)			0	Set	Edit
3023	SP	TRAINMA	Diesel	66	nce_106	Bakersfield (Engine Terminal)			38	Set	Edit
3029	SP	TRAINMA...	Diesel	66	nce_106*	Bakersfield (Engine Terminal)			38	Set	Edit
4501	SSW	GP35	Diesel	56	SSW 1*	Susanville (#84 Yard Track)			7	Set	Edit
4503	SSW	GP35	Diesel	56	SSW 1	Susanville (#84 Yard Track)			7	Set	Edit
4545	SSW	GP35	Diesel	56	SSW 2*	Lakeview (#99 Yard Track)			11	Set	Edit
4546	SSW	GP35	Diesel	56	SSW 2	Lakeview (#99 Yard Track)			11	Set	Edit
4802	SP	TRAINMA...	Diesel	66	nce_118	Lakeview (#97 Yard Track)			49	Set	Edit
4805	SP	TRAINMA...	Diesel	66	nce_118*	Lakeview (#97 Yard Track)			49	Set	Edit
5010	SP	GP30	Diesel	56		Port Arthur (#165 Service)			23	Set	Edit
5151	SP	RS18	Diesel	52	nce_127	Susanville (#83 Yard Track)			17	Set	Edit
5160	SP	RS18	Diesel	52	nce_127*	Susanville (#83 Yard Track)			17	Set	Edit
5162	SP	RS18	Diesel	52	RS18s*	Lakeview (#98 Yard Track)			20	Set	Edit
5166	SP	RS18	Diesel	52	RS18s	Lakeview (#98 Yard Track)			20	Set	Edit
5294	SP	RSD4	Diesel	52	nce_115*	Bakersfield (Engine Terminal)			29	Set	Edit
5307	SP	RSD4	Diesel	52	nce_115	Bakersfield (Engine Terminal)			29	Set	Edit

Sort by: Number Road Model Consist Location Destination Train Moves Built Owner

19 locomotives

Since we know we're departing from **Lakeview** we probably want to eyeball that pair of **Trainmasters** sitting over on track #97. The Command Station on our Demo railroad is obviously an NCE product because these locos are assigned **NCE consist #118**.

So how does Operations REALLY work?? Well, once you have all the data entered as we've seen above, we can generate a set of manifests for the train operations. To do this we use the Trains window. Select **Trains** from the **Operations** menu and the **Trains** window will display.



Here there are several trains ready to build. The highlighted train is **LBX from Lakeview to Bakersfield**. By putting a check mark in the box under build and then clicking the Build Box at the bottom of the screen we were able to get the manifest built so that we can preview it. It's a short run, but still takes more than one page of fine print instructions for the crew.

JMRI Operations Demo Railroad

Manifest for train (LBX) Lakeview - Bakersfield Extra

Valid 1/5/2013 01:10

Does not service coal cars

Scheduled work at Lakeview, departure time 11:00

- [] Pick up SSW 4545 GP35 from #99 Yard Track
- [] Pick up SSW 4546 GP35 from #99 Yard Track
- [] Pick up MNS 500 Boxcar 50' Brown L<oad> from #99 Yard Track
- [] Pick up GARE 812 Reefer Milk 38' Green E<empty> from #99 Yard Track
- [] Pick up CDLX 1525 TankGas 38' Black E<empty> from #99 Yard Track
- [] Pick up MRL 9089 HopGrain 36' Gray E<empty> from #99 Yard Track
- [] Pick up RPX 2355 TankGas 38' Black L<oad> from #99 Yard Track
- [] Pick up SOO 177514 Boxcar 50' White L<oad> from #99 Yard Track
- [] Pick up PRR 81262 Boxcar 40' Tuscan L<oad> from #99 Yard Track
- [] Pick up SP 97700 Boxcar 40' Black L<oad> from #99 Yard Track
- [] Pick up CTTX 8702 TankOil 38' Silver L<oad> from #99 Yard Track
- [] Pick up SP 65000 Boxcar 50' Tuscan E<empty> from #99 Yard Track
- [] Pick up RUT 505 HopCmnt 36' Gray E<empty> from #99 Yard Track
- [] Pick up WP 4006 Boxcar 50' Brown E<empty> from #99 Yard Track
- [] Pick up C&M 16650 Boxcar 40' Green L<oad> from #99 Yard Track
- [] Pick up SLSF 61672 Gondola 52' Tuscan E<empty> from #99 Yard Track
- [] Pick up SSW 46 Caboose 36' Black from #99 Yard Track

Train departs Lakeview Westbound with 15 cars, 810 feet, 1053 tons

Scheduled work at Farmington, estimated arrival time 11:04

- [] Pick up BAR 2084 Boxcar 40' RED/WHT E<empty> from WH #89 Schramm Mfg
- [] Set out MNS 500 Boxcar 50' Brown L<oad> to #181 Schmid's Beer

Train departs Farmington Westbound with 15 cars, 800 feet, 990 tons

Scheduled work at Hillsboro, estimated arrival time 11:14

- [] Pick up GATX 15437 TankVeg 36' Silver E<empty> from yard
- [] Set out GARE 812 Reefer Milk 38' Green E<empty> to Reefer Service
- [] Set out BAR 2084 Boxcar 40' RED/WHT E<empty> to Temple Stuart

Train departs Hillsboro Westbound with 14 cars, 754 feet, 964 tons

Scheduled work at Danville, estimated arrival time 11:27

- [] Pick up NYC 47523 Boxcar 50' Green L<oad> from #133 Herald Star
- [] Set out CDLX 1525 TankGas 38' Black E<empty> to yard
- [] Set out MRL 9089 HopGrain 36' Gray E<empty> to yard

Train departs Danville Westbound with 13 cars, 726 feet, 1005 tons

Scheduled work at Port Arthur, estimated arrival time 11:40

- [] Pick up GRX 5020 TankOil 33' Blue E<empty> from #163 Siding
- [] Pick up CNJ 23506 Boxcar 40' Tuscan E<empty> from #159 Baron Gould Co
- [] Set out RPX 2355 TankGas 38' Black L<oad> to #163 Siding
- [] Set out NYC 47523 Boxcar 50' Green L<oad> to #427 Majestic HW & Feed
- [] Set out SOO 177514 Boxcar 50' White L<oad> to #45 Port Machine

Train departs Port Arthur Westbound with 12 cars, 657 feet, 804 tons

Scheduled work at Bakersfield, estimated arrival time 11:59

- [] Set out PRR 81262 Boxcar 40' Tuscan L<oad> to #68 Pabsb&Son Cold Strge
- [] Set out SP 97700 Boxcar 40' Black L<oad> to #68 Pabsb&Son Cold Strge
- [] Set out CTTX 8702 TankOil 36' Silver L<oad> to #80,81 Bkrsfld Oil
- [] Set out GRCX 5020 TankOil 33' Blue E<empty> to #80,81 Bkrsfld Oil
- [] Set out SP 65000 Boxcar 50' Tuscan E<empty> to SP SSW Interchange
- [] Set out GATX 15437 TankVeg 36' Silver E<empty> to yard
- [] Set out RUT 505 HopCmnt 36' Gray E<empty> to yard
- [] Set out WWP 4006 Boxcar 50' Brown E<empty> to yard
- [] Set out C&IM 16650 Boxcar 40' Green L<oad> to yard
- [] Set out SLSF 61672 Gondola 52' Tuscan E<empty> to yard
- [] Set out CNJ 23506 Boxcar 40' Tuscan E<empty> to yard
- [] Set out SSW 46 Caboose 36' Black to Caboose Track
- [] Set out SSW 4545 GP35 to Engine Terminal
- [] Set out SSW 4546 GP35 to Engine Terminal

Train terminates in Bakersfield

We pick up our locomotives in Lakeview and head over to the yard to gather up a bunch of cars and a caboose. Then we get ready to depart at 7:10 on the fast clock. We should arrive at Farmington at 7:14, and since there were no Farmington bound cars in Lakeview, and nothing in Farmington bound for Hillsboro or Bakersfield, the program has scheduled no work to do at Farmington. So we'll keep going. When we arrive at Hillsboro (hopefully at 7:18), we have some set-outs and pick-ups to attend to. Then, we're off to Bakersfield, gliding through Danville and Port Arthur on the way. Arriving at Bakersfield right on time at 8:21, we drop the boxcar at Heritage Furniture, the Coalhopper in the yard, and slide the caboose gently into the caboose track. Now we can take the motive power over to the locomotive terminal and call in to Dispatch asking for the trip to be terminated.

The trip is terminated by selecting it in the Trains screen and clicking the terminate button. This would then enter the new locations of the rolling stock into the data screens and release them for the next build.

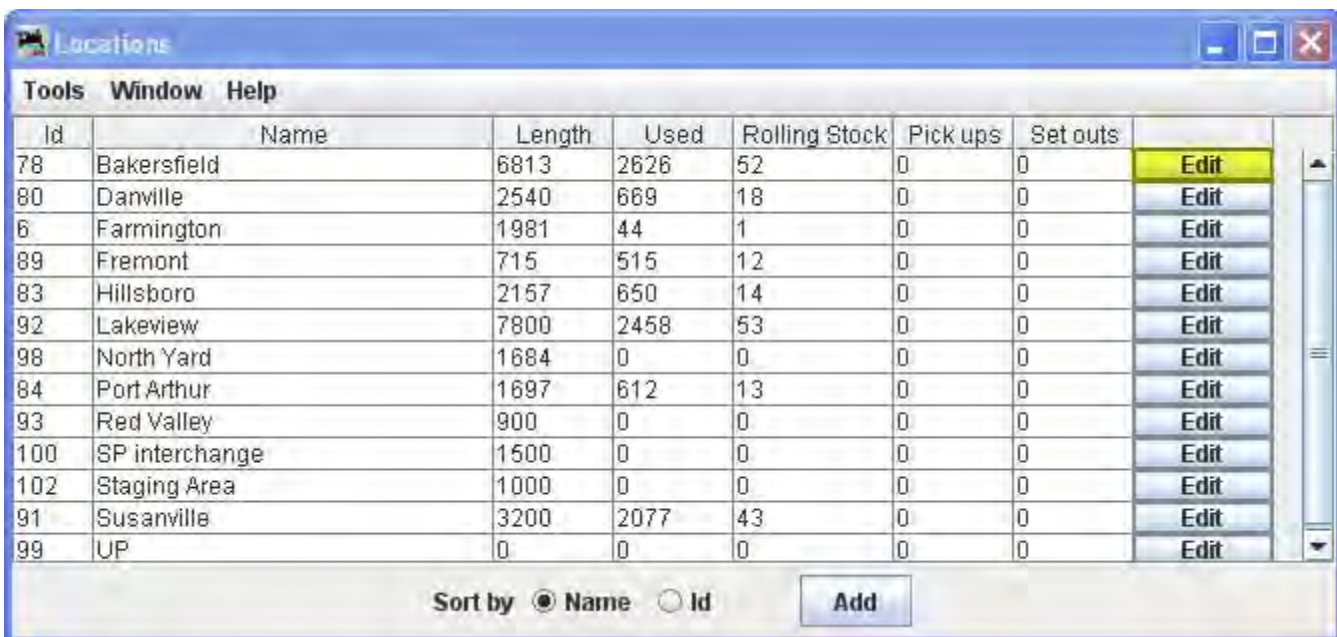
So that wasn't so difficult, was it? Hope you enjoyed your cab ride.

Manifest Schedule

If you would like to see cars delivered in a particular sequence, or with a specific load for delivery or shipping, the program allows you to apply a schedule to a siding. This is an optional feature and shouldn't be used until you become very familiar with how the program generates manifests and switch lists. A schedule provides very fine control on the order types of cars will be delivered to a siding. You can also specify the road name for the type of car delivered. For example, if you wanted two SP boxcars to be delivered followed by a tank car loaded with "Oil", you can create a schedule that will do exactly that.

Creating a Schedule

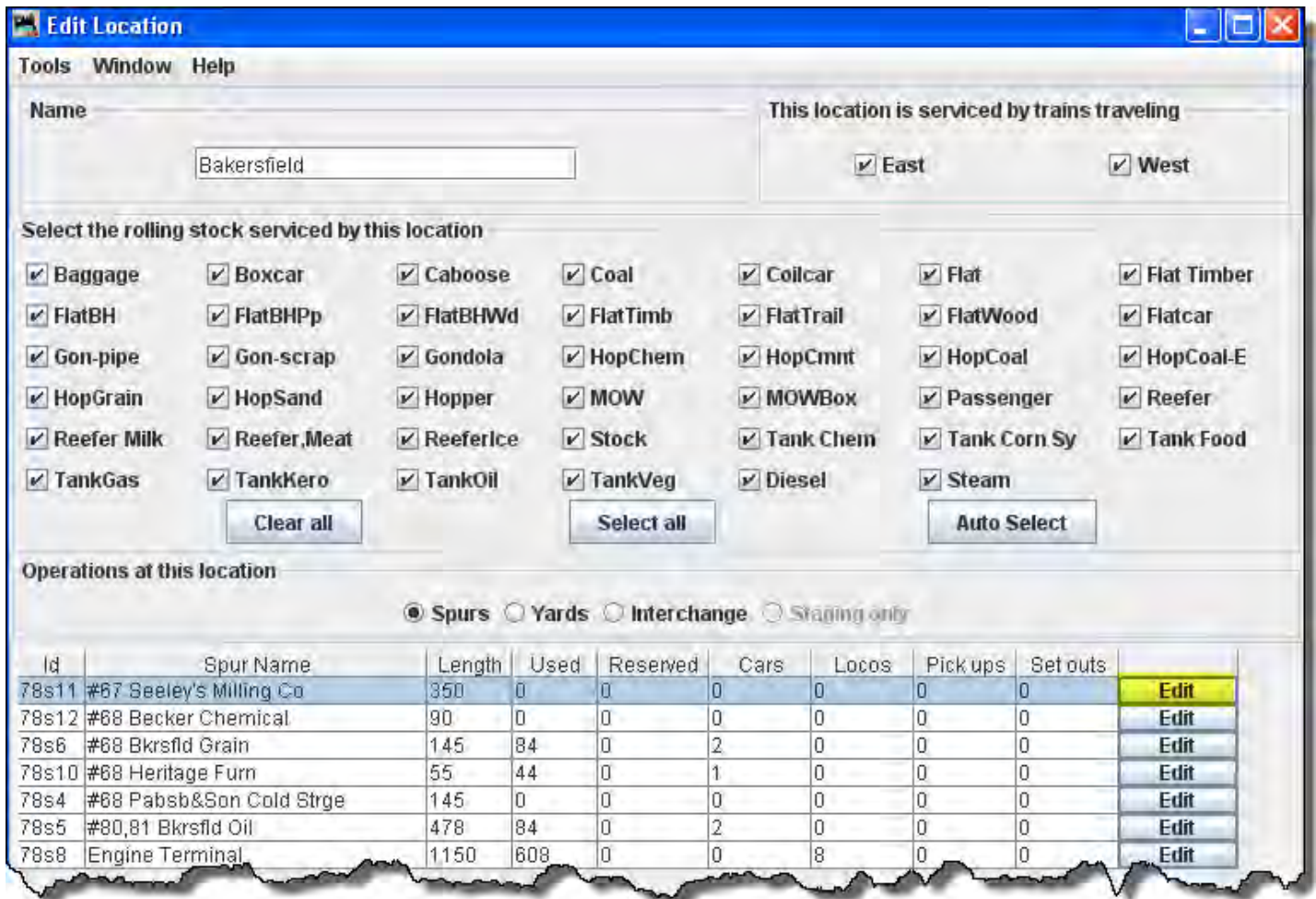
First open the [Locations](#) panel.



Id	Name	Length	Used	Rolling Stock	Pick ups	Set outs	Edit
78	Bakersfield	6813	2626	52	0	0	Edit
80	Danville	2540	669	18	0	0	Edit
6	Farmington	1981	44	1	0	0	Edit
89	Fremont	715	515	12	0	0	Edit
83	Hillsboro	2157	650	14	0	0	Edit
92	Lakeview	7800	2458	53	0	0	Edit
98	North Yard	1684	0	0	0	0	Edit
84	Port Arthur	1697	612	13	0	0	Edit
93	Red Valley	900	0	0	0	0	Edit
100	SP interchange	1500	0	0	0	0	Edit
102	Staging Area	1000	0	0	0	0	Edit
91	Susanville	3200	2077	43	0	0	Edit
99	UP	0	0	0	0	0	Edit

Sort by Name Id

Then press Edit button to the right of the location to open the **Edit Location** panel.



To schedule a location, select Edit button to display the **Edit Spur Track** window.

Edit Spur Track

Tools Window Help

Name: #67 Seeley's Milling Co Length: 350 This spur is serviced by trains traveling: East West

Select the rolling stock serviced by this spur

<input type="checkbox"/> Baggage	<input checked="" type="checkbox"/> Boxcar	<input type="checkbox"/> Caboose	<input type="checkbox"/> Coal	<input type="checkbox"/> Coilcar	<input checked="" type="checkbox"/> Flat	<input type="checkbox"/> Flat Timber
<input type="checkbox"/> FlatBH	<input type="checkbox"/> FlatBHPP	<input type="checkbox"/> FlatBHWD	<input type="checkbox"/> FlatTimb	<input type="checkbox"/> FlatTrail	<input type="checkbox"/> FlatWood	<input type="checkbox"/> Flatcar
<input type="checkbox"/> Gon-pipe	<input type="checkbox"/> Gon-scrap	<input checked="" type="checkbox"/> Gondola	<input type="checkbox"/> HopChem	<input type="checkbox"/> HopCmnt	<input type="checkbox"/> HopCoal	<input type="checkbox"/> HopCoal-E
<input type="checkbox"/> HopGrain	<input type="checkbox"/> HopSand	<input type="checkbox"/> Hopper	<input type="checkbox"/> MOW	<input type="checkbox"/> MOWBox	<input type="checkbox"/> Passenger	<input type="checkbox"/> Reefer
<input type="checkbox"/> Reefer Milk	<input type="checkbox"/> Reefer,Meat	<input type="checkbox"/> ReeferIce	<input type="checkbox"/> Stock	<input type="checkbox"/> Tank Chem	<input type="checkbox"/> Tank Corn Sy	<input type="checkbox"/> Tank Food
<input type="checkbox"/> TankGas	<input type="checkbox"/> TankKero	<input type="checkbox"/> TankOil	<input type="checkbox"/> TankVeg	<input type="checkbox"/> Diesel	<input type="checkbox"/> Steam	

Clear all Select all

Select the roads serviced by this track

Accept all Accept only Exclude

Select loads serviced by this track

Accept all Accept only Exclude

Select trains or routes for car set outs

Any Trains Routes

Select trains or routes for car pick ups

Any Trains Routes

Optional Schedule

Seeley Edit

Comment

This siding uses a schedule for car delivery

Delete Spur Track Add Spur Track Save Spur Track

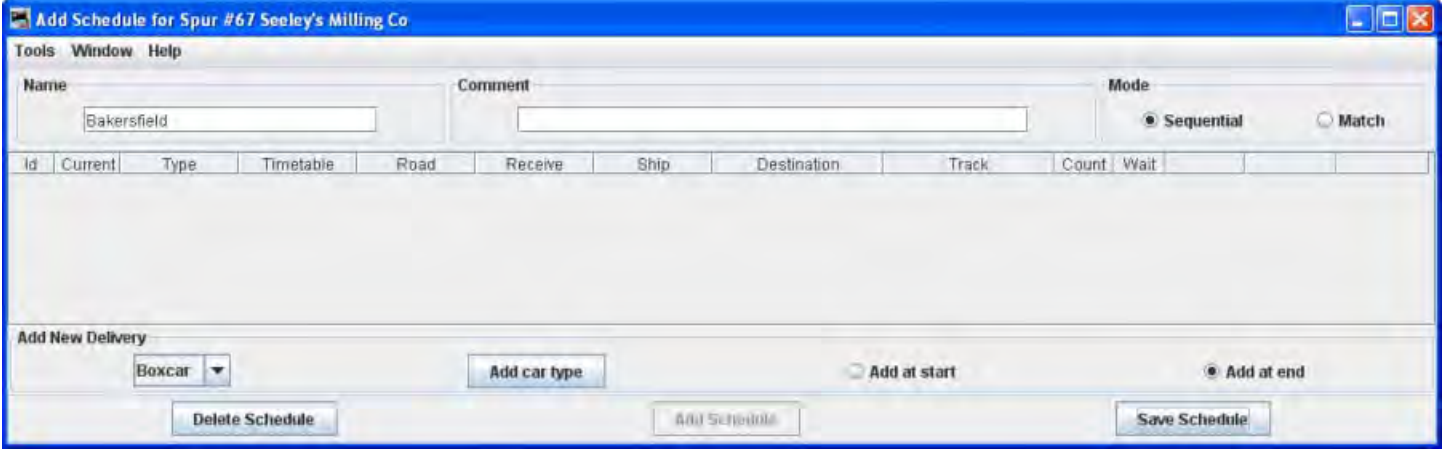
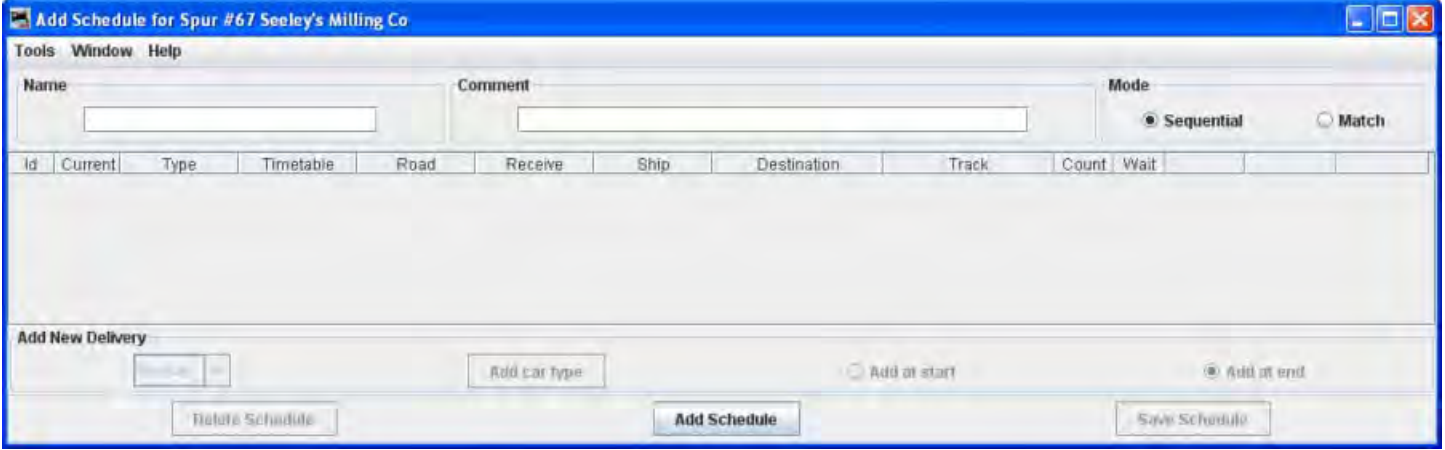
Next to **Optional Schedule** on the **Edit Siding Track** panel. Press Edit button should open the **Add Schedule** panel.

The **Edit Schedule for spur----** window opens if the schedule exists and you want to modify it. If no schedule is selected, then when Edit button is pressed the **Add Schedule for Spur----** window opens.

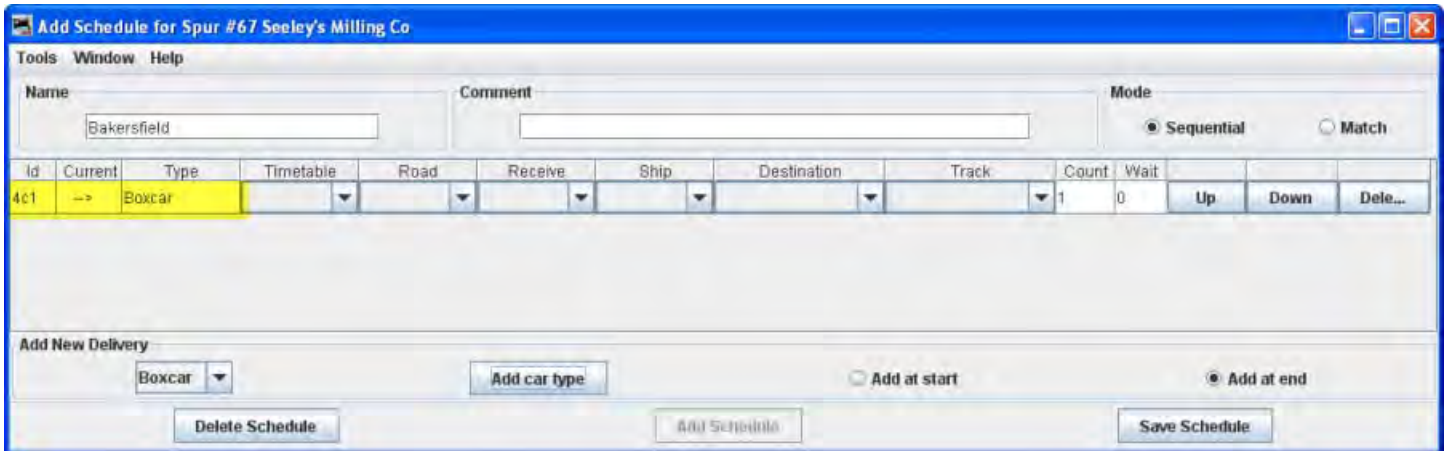


he schedule can operate in two modes, sequential, if you want cars in sequence. Use match mode when you do not care about car order.

Type a **Name** for your schedule and then press Add Schedule on the bottom of the panel. Multiple sidings can use the same schedule as long as the sidings use the same car types and roads.



Now add your first delivery for this siding by selecting a car type then pressing Add car type button A new item should appear in your schedule containing the type of car,



You can if you wish specify a particular road for the type of car you entered, or leave it blank if you don't care about the road name. You can also specify the car load received and shipped. Also a Timetable may be specified. All with the use of the drop-down menus

If you wanted more than one car type to be delivered consecutively, increase the count to the number that you wish. The maximum count is 10 and the minimum is 1. Repeat selecting the car types and pressing Add car types button until you have a delivery schedule you like. Press Save Schedule button and close the schedule panel when you are done.

Note only car types and roads that are accepted by this siding are available. If a car type or road isn't available, check the car types and roads for this siding and location.

If you want a specific load for your cars, you can create them using the [Edit Car Attributes](#) for car **Load**. Each new load is associated with the car type. For example you can have "Screws" for a boxcar, and "Oil" for a tank car. The program will only deliver cars with a "Schedule" load to a spur that has a Schedule that also requests that particular load. However, cars with a Schedule load can still be placed at yards, staging, and interchanges.

You can optionally use your staging tracks to empty cars with a "Schedule" load, and you can also optionally create "Schedule" loads using staging tracks.

You can also access your Schedules from the [Locations Tools menu](#). The Schedules table provides status for each schedule. Since you can assign a schedule to multiple spurs, the table also provides additional status for each of the spurs that use that particular schedule. The table also allows you the edit a schedule once it's been assigned to a spur.

Schedules							
Window Help							
Id	Name	Status	Spurs	Status Spur			
4	Bakersfield	Okay	Bakersfield (#67 Seeley's Milling Co)	Okay	Edit	Delete	
3	Bakersfield Grain	Okay	Bakersfield (#68 Bkrsfld Grain)	Okay	Edit	Delete	
2	Evans Grist Mill	Okay	Farmington (#101 Evans Grist Mill)	Okay	Edit	Delete	
1	Seeley	Okay			Edit	Delete	

Sort by Name Id

Decoder Programmer Common Error Messages

Various things can go wrong when JMRI tries to work with your DCC command station to program a DCC decoder. This page lists the error message that can result, and describes what they mean.

JMRI Error Codes

301 — no locomotive detected

The command station has reported that it doesn't see a locomotive on the programming track.

This can happen if the locomotive isn't making good electrical contact or if there's a wiring fault in the locomotive.

302 — programmer busy

The command station has reported that it's busy doing something else, and can't do any programming right now. This usually means that some other part of the DCC system is doing a programming operation, e.g. a hand-held throttle.

Some DCC systems can't do ops-mode programming (programming on the main) while also using the service mode programming track, in which case they'll return this error message.

303 — requested not implemented in command station

This means that JMRI has requested the command station do something that it doesn't support.

This is not supposed to happen, as JMRI should disable programming modes that the command station can't provide. If you do see this message, please report the circumstances on the jmriusers mailing list.

304 — aborted by user

The user has requested that the read or write operation stop early.

This is considered an error, because the program doesn't know whether the decoder actually saw the operation complete or not.

305 — confirm failed

Some command stations allow you to "confirm" the content of a CV, rather than read the value from it. In general, this is faster than doing a complete read. If the value in the CV doesn't match the expected value, this message is issued. It's considered an error because if the values don't match, we know that we don't know the correct value for the CV contents.

306 — timeout talking to command station

The program did not hear back from the command station when it expected to.

This is by far the most common error message when people first start using JMRI. In that case, it usually means that the connection to the command station isn't correct. This could be a problem with the cable(s) making the connection, or a problem with how the preferences are set. Picking the wrong serial port is particularly common.

Once JMRI is working properly, this error may occasionally happen due to a transient error. DecoderPro generally will retry it successfully in that case.

307 — Unknown error

An error has happened, but JMRI doesn't know enough about it to be able to report more detail.

In general, JMRI is pretty good at deciphering what went wrong, and this message isn't very common. If you do see this message, please report the circumstances on the jmriusers mailing list.

308 — No acknowledge from locomotive

At the end of a CV read or write operation, the locomotive replies ("acknowledges") to the command station using a pulse of current.

If that pulse isn't seen, some command stations provide this error message. It could be due to poor electrical connections to the programming track or within the locomotive. It could also be that the decoder doesn't support readback.

Some decoders, particularly certain sound decoders, draw so much current that the reply pulse isn't detected by the command station. In that case, one of the various "programming boosters" may solve the problem.

309 — Short Circuit on Programming Track

The command station has reported seeing a short circuit on the programming track. That prevents programming operations.

Check the electrical connections to the programming track, and also within the locomotive.

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