JMRI Operations

Dennis Drury



So what is JMRI?

JMRI stands for Java Model Railroad Interface. It includes:

- **DecoderPro**®
- ✓ PanelPro[™]
- " SoundPro
- " And Operations



So what is JMRI Operations?

- A. JMRI Operations is a car forwarding / management system
- B. The operations program will allow you to print out the paperwork that will enable your operating crew to run your layout in a more prototypical manner.
- C. If you have also created a panel for your railroad, the operations program will place icons on it to track the progress of your trains as they run across the railroad.



Sounds great. How do we begin.

The operations program is found in all the JMRI startup applications. Click on Tools then Operations to get started.





Paperwork examples

This is an example of a switchlist for the Klamath Falls switcher. What this list shows is the switcher pulling a cut of cars off the arrival track and sorting them into the correct outbound block. All the crew has to do is follow the list and check off the entries as the work is done.

California Oregon & Western RR

Manifest for train (Klamath Falls Yard-2) Klamath Falls Yard Job 1st Trick Valid February 26, 1984 on duty 08:05 BN 2175

Scheduled work in Klamath Falls

- [] Pickup BN 450657 HopGrain 50' Green Barley from Arrivals
- Pickup SP 674368 Box SPDDFI 51' Red MTY from Arrivals Single Plug Door Damage Free Insulated Boxcar
- [] Pickup UP 31216 Gon 50' Red L from Arrivals
- [] Pickup VCY 25055 Reefer 57' Blue MTY from Arrivals
- Pickup CALX 3010 Tank Asphalt 54' Black MTY (Hazardous) from Arrivals California Railcar 23,500 Gal. Tank Car
- [] Pickup PICK 1954 Boxcar SSD 50' Blue MTY from Arrivals Pickens Railroad
- [] Drop BN 450657 HopGrain 50' Green Barley to Alturas Block
- [] Drop SP 674368 Box SPDDFI 51' Red MTY to Alturas Block
 - Single Plug Door Damage Free Insulated Boxcar
- [] Drop UP 31216 Gon 50' Red L to BN North Block
- [] Drop VCY 25055 Reefer 57' Blue MTY to K Falls Indus Block
- [] Drop CALX 3010 Tank Asphalt 54' Black MTY (Hazardous) to SP West Block California Railcar 23,500 Gal. Tank Car
- [] Drop PICK 1954 Boxcar SSD 50' Blue MTY to Stockton Block Pickens Railroad



California Oregon & Western RR

Manifest for train (WCEUY) West Colton to Eugene Manifest Valid June 21, 1984 14:50 [] Pick up SP 9191 SD45T-2 from West Colton Diesel Shop

[] Pick up SSW 9261 SD45T-2 from West Colton Diesel Shop

[] Pick up SSW 9290 SD45T-2 from West Colton Diesel Shop

Scheduled work in West Colton, departure time 06:20
[] Pick up SSW 88325 FlatBulkHead 60' Red MTY from WC Yard
[] Pick up SSW 48235 Boxcar PSD 50' Red MTY from WC Yard
[] Pick up SSW 67739 Boxcar DSD 51' Red MTY from Sunset Lumber Roller
[] Pick up SP 242030 Boxcar DSD 50' Red MTY from Sunset Lumber Roller
[] Pick up CALX 3042 Tank Asphalt 54' Black MTY (Hazardous) from WC Yard
[] Pick up SP 242530 Boxcar DSD 51' Red MTY from WC Yard
[] Pick up SP 509368 FlatBulkHead 60' Red MTY from WC Yard
[] Pick up SP 699723 Box SPDDFI 51' Red MTY from WC Yard
[] Pick up ACFX 91901 TankKaolin 40' White Kaolin_Load from Engelhard Gordon
[] Pick up SSW 47 Caboose 40' Red from Colton Cab Track
Train departs West Colton Eastbound with 10 cars, 772 feet, 949 tons

Scheduled work in Roseville, estimated arrival time 07:05

 Pick up MOBX 14240 Tank Asphalt 54' Black Asphalt Load (Hazardous) from Martinez Asphalt Loading

[] Pick up BCOL 818519 FlatBulkHead 57' Green MTY from Overland Lumber Roller

[] Pick up SP 621112 Box DPDDFA 60' Red MTY from GM Warm Springs

[] Pick up SSW 67566 Boxcar DSD 50' Red MTY from Overland Lumber Roller

[] Pick up SP 242423 Boxcar DSD 51' Red MTY from Overland Lumber Roller

[] Pick up SP 228021 Box DPDHCP 50' Red MTY from Oakland Tribune Receiving

[] Pick up SP 18971 Boxcar SSD 50' Yellow MTY from Pacific Aluminum

Train departs Roseville Eastbound with 17 cars, 1108 feet, 1192 tons

No work at Dunsmuir

Scheduled work in Klamath Falls, estimated arrival time 08:20

- [] Pick up SP 694579 Box DPDDFI 51' Red Laminates from Eugene Block
- Double Plug Door Damage Free Insulated Boxcar
- Set out MOBX 14240 Tank Asphalt 54' Black Asphalt Load (Hazardous) to Arrivals Mobil Oil 23,500 Gal. Tank Car
- [] Set out BCOL 818519 FlatBulkHead 57' Green MTY to Arrivals
- [] Set out SSW 48235 Boxcar PSD 50' Red MTY to Arrivals Plug Slide Door Boxcar Train departs Klamath Falls Eastbound with 15 cars, 990 feet, 1127 tons

X2011 West

What steps are necessary to set up Operations?

- "Settings
- " Locations
- " Cars
- Locomotives
- " Routes
- " Trains
- Schedules (optional)





Configuring Settings

Here we configure the global settings. We enter things like:

- [©] Railroad Name
- ["] Train direction
- ″ Scale
- " Global maximum values
- Car types
- Optional year modeled
- " Add operations to main menu
- Panel options

Operations Settings	
ools Window Help	
Railroad Name	Trains Travel
California Oregon and Western	Vorth/South East/West
Scale	
OZ ON OTT OHON3 OOO (∋H0 Osn3 Os Oon3 O0 OG
Maximum Train Length (ft) Maximum Engines per Train 2250 S	n Switch Time (minutes) Travel Time (minutes) 5 20
Car Types	Optional Year Modeled
Descriptive AAD Codes	1994
Conscipute Characters	
Options	
Add Operations	s Menu to Main Menu
Panel Options	
Create Train Icons on Panel (use panel name)	Icon Options
My Layout	Append Engine Number 🕑 Enable Train Icon SetX&Y
Icon Colors	
Northbound Train Icon Color	Green 🛩
Southbound Train Icon Color	Green 💙
Eastbound Train Icon Color	Gray 🤟
Westbound Train Icon Color	Gray 💙
Local Train Icon Color	Blue
	Ped V



Adding Locations

Now wege ready to add some locations. Note that not all locations have to be on the layout. The next slide will cover these in more detail.

Tools	Window Help						
Id	Name	Length	Used	Rolling Stock	Pickups	Drops	
20	Alturas	4140	989	17	0	4	Edit
18	Armstrong	0	0	0	0	0	Edit
9	Bend	0	0	0	0	0	Edit
10	Bieber	0	0	0	0	0	Edit
13	Chelsea	2331	1080	20	0	20	Edit
2	Chemult	0	0	0	0	0	Edit
31	Copic	0	0	0	0	0	Edit
4	Dunsmuir	0	0	0	0	0	Edit
1	Eugene	8045	1209	20	7	5	Edit
22	Ewing	0	0	0	0	0	Edit
15	Hatfield	0	0	0	0	0	Edit
19	Juniper	2400	1080	20	20	0	Edit
25	Keddle	0	0	0	0	0	Edit
3	Klamath Falls	11975	1695	29	11	7	Edit
26	Klamath Falls Industries	936	58	1	1	4	Edit
23	Lakeview	1325	208	4	0	0	Edit
28	LAUPT	3400	1031	12	0	0	Edit
24	McArthur	0	0	0	0	0	Edit
14	Merril	400	0	0	0	0	Edit
12	Pasco	6670	628	11	3	0	Edit
30	Portland Union Terminal	4400	0	0	0	0	Edit
5	Roseville	8070	568	10	1	5	Edit
7	Seattle	6658	336	6	2	3	Edit
11	Stockton	10198	922	16	3	5	Edit
17	Tuber	0	0	0	0	0	Edit
16	Tule Lake	0	0	0	0	0	Edit
8	Vancouver	0	0	0	0	0	Edit
21	Weso	0	0	0	0	0	Edit
6	West Colton	8142	1079	18	7	2	Edit



Adding tracks

This is the Edit Location screen. Itos where we start adding tracks to our locations.

Toris Window Help Name	Edit Location										• 6 <u>-</u> 0 ×		
Name Idamath Fails Industries This location is serviced by trains traveling Image: Control of trains traveling Setect the rolling Stock serviced by this location Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of trains traveling Image: Control of t	Tools Window	Help											
Instant Pails inclusions Image: Control Pails inclusions Image: Control Pails inclusions Image: Control Pails inclusions Image: Control Pails inclusions Select the rolling stock serviced by this location Image: Control Pails inclusions	Name						1						
Inits location Inits of colls is serviced by this location Image: Coll Coll Coll Coll Coll Coll Coll Col					Klamath	Falls Industries							
North South East West Baggaga Box OPD007A X Box OPD00F	I his location is s	erviced by trains	traveling	_									
Select the rolling slock serviced by this location Baggage Plasup PODFA <		North		la la	South		V	East		✓ West			
Baggap Øxor.0000FA Øxor.0000F Øxor.0000FA Øxor.000FA Øxor.000FFF Øxor.000FFF Øxor.000FFF <td>Select the rolling</td> <td>stock serviced b</td> <td>y this location</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Select the rolling	stock serviced b	y this location										
Pickocar PSD Pisocar SD Pisocar SOP Caboose Pical Picular Piat/E88 Piat/Eau/Head Piat/Carr P	🔲 Baggage	Box DPDDFA	Box DPDDFI	Box DPDHCP	Box SPDDFI	Boxcar Beer	🗾 Boxcar DD	Boxcar DPD	Boxcar DPDDF	Boxcar DPDHC	Boxcar DSD		
Condola PhopCham PhopCont PhopCont	Boxcar PSD	Boxcar SSD	Boxcar SWPD	Caboose	🖌 Coal	Coilcar	Flat-F6B	✓ FlatBulkHead	✓ Flatcar	🖌 FlatcarEquip	🖌 Gon-scrap		
Reefer RSL Tank Asphati Tank Coem Y Tank Coam	🖌 Gondola	✓ HopChem	🖌 HopCmnt	🖌 HopCoal	🖌 HopGrain	✓ HopSand	Hopper	🖌 Log Car	MOM N	Passenger	🖌 Reefer		
P TankKaolin Woodchip Diesel Engine Clear all Select all Auto Select Operations at this location Idd Siding Name Length Used Vertains at this location Siding Name Length Used Preserved Car Locos Pickups Setouts Setouts	Reefer-R5L	🗹 Tank Asphalt	🗹 Tank Chem	🗹 Tank Food	🖌 Tank Gas	🗹 Tank Oil	🗹 Tank Propane	🗹 Tank-T0G	☑ Tank-T3D	☑ Tank-T3G	🗹 Tank-T9P		
Clear all Select all Auto Select Operations at this location Stiding Name Length Used Reserved Cars Locos Pick ups Set outs Edit 264 Ablina Asphat Co. 180 0 16 0 0 0 Edit 2643 Ablina Asphat Co. 180 0 0 0 0 Edit Edit 263 Corrow Edit 263 Corrow Edit 263 Corrow 10 0 0 0 0 Edit 263 263 Pregon Water Co. 80 0 0 0 0 1 Edit 263 Pregon Water Co. 80 0 0 0 1 Edit 263 Pregon Water Co. 80 0 0 0 1 Edit 263 Pregon Water Co. 80 0 0 0 1 Edit 263 Pregon Water Co. 263 Pregon Water Co. 263 Pregon Water Co. 264 263 263 263	✓ TankKaolin	Woodchip	Diesel	Engine									
Operations at this location Sidings Yards Interchange Staging only 1d 30 ding Name Length Used Reserved Cars Locos Pickups Stading only 2654 Abina Asphalt Co. 180 0 116 0 0 0 2 Edit 2654 Diver Engine Service 172 0 0 0 0 Edit 2655 F5-1 72 0 0 0 0 Edit 2655 F6-2 72 0 0 0 0 Edit 2657 F10 Track 0 0 0 0 Edit 2658 Team Track 0 0 0 0 1 Edit 2658 Team Track 0 0 0 0 1 Edit 2658 Team Track 0 0 0 0 1 Edit 2650 Team Track 0 0		Clear all		Select all		Auto Select	1						
Operations at this location Sidings O Yards O Interchange O Staging only disk Siding Name Langth Used Reserved Cars Locos Pick ups Set outs 2634 Ablina Asphat Co. 180 0 116 0 0 0 2 Edit 2634 Ablina Asphat Co. 180 0 116 0 0 2 Edit 2635 F620 72 0 0 0 0 Edit 2635 Oregon Water Co. 80 0 0 0 0 Edit 2635 Tegon Water Co. 80 0 69 0 0 1 Edit 2636 Tegon Water Co. 80 0 69 0 0 1 Edit 2637 RIP Track 362 0 0 0 1 Edit 2638 Team Track-1 80 0 69 0 0 1 Edit		Ciedi dii		Select di		Auto Sciect]						
Id Stiding Name Locos Pick ups Set uts 2644 Abina Asphati Co. 160 0 10 0 0 2 Edit 2643 COWE Engine Service 90 0 0 0 0 Edit 2651 F5-1 72 0 0 0 0 Edit 2655 Oregon Water Co. 80 0 0 0 0 Edit 2657 RP Track 362 64 0 0 1 Edit 2658 Teson Track-1 80 0 89 0 0 1 Edit	Operations at thi	s location				(arde O Intorab	ange 🔿 Staging o	nhr					
Id Stiding Name Length Used Reserved Cars Locos Pick ups Seturits 2864 Mbina Asphalt Co. 180 0 116 0 0 2 Edit 2863 COW Engine Service 90 0 0 0 0 0 Edit 2861 F5.1 72 0 0 0 0 Edit 2852 F5.2 72 0 0 0 0 Edit 2853 Oregon Water Co. 00 0 0 0 0 Edit 2858 Team Track 362 0 64 0 0 1 Edit 2858 Team Track 362 0 64 0 0 1 Edit 2858 Team Track 362 0 64 0 0 1 Edit 2858 Team Track 362 0 69 0 1 Edit Industry Tracks 1 0 0 1 Edit <td c<="" td=""><td></td><td></td><td>1</td><td></td><td></td><td>arus Untercha</td><td>ange — staging of</td><td>iny</td><td></td><td></td><td></td></td>	<td></td> <td></td> <td>1</td> <td></td> <td></td> <td>arus Untercha</td> <td>ange — staging of</td> <td>iny</td> <td></td> <td></td> <td></td>			1			arus Untercha	ange — staging of	iny				
Add Siding Track Comment Add Siding Track	Id 26c4 Albina Acn	Siding Name	Length	Used Reserved	Cars Lo	cos Pickups	Set outs	-					
Zest FS-1 72 0 0 0 0 Edit Zest FS-2 72 0 0 0 0 0 Edit Zest FS-2 72 0 0 0 0 0 Edit Zest FS-2 72 0 0 0 0 Edit Zest FS-2 72 0 0 0 0 Edit Zest FS-2 72 0 0 0 0 Edit Zest Firstrack 362 0 84 0 0 0 1 Edit Zest Track 362 0 0 0 0 1 Edit Zest Track 362 0 0 0 0 1 Edit Zest Track 80 0 0 0 0 1 Edit Zest Tracks Industry Tracks	26s3 COW Engi	ne Service	90 0	0	0 0	0 0	Edit						
Add Siding Track Comment Add Siding Track	26s1 F5-1		72 0	0	0 0	0 0	Edit						
Z657 RIP Track 362 0 64 0 0 1 Edit 2656 Team Track-1 80 0 69 0 0 1 Edit Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Save Location	26s5 Oregon W	ater Co.	80 0		0 0	0 0	Edit	-					
Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location	26s7 RIP Track		362 0	64	0 0	0 1	Edit						
Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Save Location Save Location	2656 leam Irac	:K-1	80 0	69	0 0	10 11	Εαπ						
Add Siding Track Comment Industry Tracks located within Klamath Falls Pelete Location Save Location													
Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Save Location													
Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Add Siding Track Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location													
Comment Industry Tracks located within Klamath Falls Delete Location Add Location Save Location							I Cidina T						
Industry Tracks located within Klamath Falls Delete Location Add Location Save Location	Commont					Ad	a siding frack						
Delete Location Add Location Save Location	Comment												
Delete Location Save Location			Industry Track	is located within Ki	amatri Falls								
And Fording and Fordin		Delete Lo	cation			Add Locatio	ND .			welecation			
		Delete Lo	cauon			Add Localic	/II		Si				

X2011 West



Yard Tracks

Before we enter any yard tracks we need to understand how the program treats them and how they ge different from interchange tracks. Yard tracks are for storage and interchange tracks are for classification.

📑 Add Ya	ard Trac	k				•								
Tools V	Window	Help												
Name					Length									
		Copic Yard On	e			900								
This yar	d is serv	iced by trains tra	aveling											
	🖌 No	rth	✓ South		🖌 East	✓ West								
Select th	he rolling	stock serviced	by this yard											
🔲 Bagg	jage	Box DPD	DFA 🗾 🗹 Box DP	DDFI 🗾 🗹 Box DI	PDHCP 🗾 Box	x SPDDFI 🛛 🗹 Boxca	ar Beer							
🖌 Boxo	car DD	🖌 Boxcar D)PD 🛛 🗹 Boxcar	DPDDF 🛛 🖌 Boxca	r DPDHC 🛛 🔽 Box	xcar DSD 🛛 🔽 Boxca	ar PSD							
✓ Boxc	ar SSD	Boxcar S	SWPD 🗌 Caboos	e 🖌 Coal	🖌 Coi	ilcar 🔽 Flat-F	6B							
✓ FlatB	BulkHead	🖌 Flatcar	🖌 Flatcar	Equip 🛛 🖌 Gon-se	crap 🔽 Gor	ndola 🛛 🖌 HopC	hem							
✓ HopC	Cmnt	🖌 HopCoal	🖌 HopGra	in 🗾 🗹 HopSa	ind 🔽 Hop	pper 📃 Log C	ar							
	v	Passeng	er 🔽 Reefer	✓ Reefer	r-R5L 🔽 Tar	nk Asphalt 🛛 🗹 Tank	Chem							
🖌 Tank	(Food	🖌 Tank Gas	s 🗾 🗹 Tank O	il 🗾 🗹 Tank F	Propane 🛛 🗹 Tar	nk-TOG 🗾 🗹 Tank-	T3D							
🗹 Tank	-T3G	Z Tank-T9F	P 🗹 TankKa	olin 🔽 Wood	chip 📃 Die	sel 📃 Engin	е							
		Clear	all		S	elect all								
Select th	he roads	serviced by this	track											
			Accept	all 🔾 Accept only 🤇	C Exclude									
Select lo	oads ser	viced by this tra	ck											
			Accept	all 🔾 Accept only 🤇	Exclude									
Select p	ick up ca	ar order												
		۲	🖲 Normal 🔾 First In	First Out (FIFO) 🔾 L	ast In First Out (LIF	0)								
Comment														
	Delet	e Yard Track		Add Yard Track		Save Yard Track								



Interchange Tracks

Interchange tracks

- "Used by the program to move cars from one railroad to another
- Also used to move cars from one train to another
- And interchange tracks are how you set up classification yards.

Sidings are the industry tracks where freight cars are loaded and unloaded during the course of our operating sessions.

Sidings

🚆 Add Siding Track					• 6 _ 0 ×							
Tools Window H	elp											
Name			Lei	ngth								
F	°arr Lumber Company			110								
This siding is servio	ced by trains traveling											
	✓ East			✓ West								
Select the rolling st	ock serviced by this s	siding										
Box DPDDFA	Box DPDDFI	Box DPDHCP	Box SPDDFI	Boxcar Beer	Boxcar DD							
Boxcar DPD	Boxcar DPDDF	Boxcar DPDHC	Boxcar DSD	Boxcar PSD	Boxcar SSD							
Boxcar SWPD	Coal	Coilcar	✓ FlatBulkHead	✓ Flatcar	FlatcarEquip							
Gon-scrap	Gondola	HopChem	HopCmnt	HopCoal	HopGrain							
HopSand	Hopper	🔲 Log Car	MOM	Reefer	Reefer-R5L							
🔲 Tank Asphalt	🔲 Tank Chem	Tank Food	🔲 Tank Gas	🔲 Tank Oil	🔲 Tank Propane							
Tank-T0G	Tank-T3D	Tank-T3G	Tank-T9P	TankKaolin	Woodchip							
	Clear all			Select all								
Select the roads se	erviced by this track											
		Accept all O Acc	ept only 🔾 Exclud	le								
Select loads servic	ed by this track											
		🔾 Accept all 🖲 Acc	ept only 🔾 Exclud	le								
		umber Load 🔻 🗛	d Load Dolot	a Load Delete								
		Ad	Delet	e Load Delete I								
Optional Schedule												
		-	Edit									
Comment												
Delete S	iding Track	Add Sidi	ng Track	Save S	Siding Track							



Staging Tracks

Here is the Add Staging Track screen. As you can see, you have a lot of options to configure the program to manage your car movements.

📇 Add Staging Track	••••×
Tools Window Help Window Help	
Name	Length
Bieber Track One	1350
This staging track is serviced by trains trave	eling
✓ North	▼ South
Select the rolling stock serviced by this stag	jing track
Clear all	Select all
Select the roads serviced by this track	
۲	Accept all O Accept only O Exclude
Select loads serviced by this track	
۲	Accept all O Accept only O Exclude
Select trains or routes for arrivals	
	Anv Trains Routes
Select trains or routes for departures	
	Anv Trains Routes
Optional car load controls	Optional custom car load controls
	Empty cars with custom loads
Swap default loads and empties	
	Generate custom loads for sidings serviced by this train
Empty cars with default loads	Generate custom loads for any siding (multiple trains)
Comment	
I	
Delete Staging Track	Add Staging Track
Delete Staying Hack	Save Staging Hack



Adding Cars

This is the Edit Car window. Here you can input the:

- % Road (reporting marks)
- Car type and category
- [″] Length
- "Weight
- [″] Location
- ["]Color
- ″ Load
- ″ Kernel
- Car owner

🚆 Edit Car			• 6 = 0 :
Window Help			
Road	LX 🔻		Edit
Road Number 910	305		Clear
Type Tank-T9P	•	Edit	✓ Hazardous
Passeng	er	Caboose	FRED
Length 6	3 💌		Edit
Weight			
Ounces Tons	5.3	Calculate	🖌 Auto
Location and Track	,		
	-	-	🔲 Auto
Optional			
Color	ack 🔻		Edit
Load			Edit
Kernel			Edit
Built		04-82	
Owner			
DM	D 🔻		Edit
Comment	G Tank Car		
Delete		0.44	- Com

AAR vs. Descriptive Codes

One of the choices you were given in the Settings screen is whether to use AAR or Descriptive car types. Regardless of which type you choose you can add a modifier that will allow you to fine tune how the program assigns cars to various industry sidings. Wed talk about that in the next slide.

Using the %+function

The dash is an important component in Operations. When you enter or modify a car type, inserting a %+(dash) followed by more text after the car, name the program will use all the text in the name to assign a particular car to an industry, but will only print out the text before the dash in the switchlists and manifests. Examples might be XM-1, XM-2 or XM-3; or Boxcar-1, Boxcar-2 or Boxcar-3.

UMLER codes

UMLER codes are a way to let the program know the difference between cars of the same general type. For example, Boxcar-BEN is a Standard boxcar (B) that is between 50 and 60 feet long with a cushioned under frame (E) and is a double door car. Boxcar-D5C is a DF (Damage Free) boxcar that is between 49 and 58 feet long and has a cushioned under frame.

UMLER Car (odes		NOTE: UML	.ER stand f	or Universa	l Machine Lang	gauge Equip	oment Regis	ster		
		First									
Type of car	Sub-Type	Digit	9	Second Dig	it			Third Digit			
			Inside				Sin	igle Door W	ïdth		Double
			Length	Standard	Cushioned	Capacity	6 feet	8 feet	9 feet	10 feet +	Door
Boxcar	Standard	В	< 50 feet	4	D	< 70 Tons	A	D	G	J	М
			50 blt 60 ft	5	E	70 blt 90 T	В	E	Н	K	N
			60 blt 70 ft	6	F	> 90 Tons	С	F	I	L	0
			> 70 ft	7	G						
			Inside								
			Length								
			< 49 feet	4		Cushioned	С				
Boxcar	DF	D	49 blt 58 ft	5							
			58 blt 70 ft	6		Not Cushion	U				
			> 70 ft	7							
			All Door	A							
			Roof Hatch	Н							
			Inside								
			Length								
Boxcar	DF	l (eye)	< 49 feet	4		Cushioned	С				
	Insulated		49 blt 58 ft	5							
			58 blt 70 ft	6		Not Cushion	U				
			> 70 ft	7							
			Inside								
			Length								
Boxcar	Load	L	< 52 feet	4		Side Filler	S				
	Divider		52 blt 58 ft	5		Air Pack	A				
			58 blt 70 ft	6		Other	0				
			> 70 ft	7							

Adding Locomotives

This is the Add Locomotive screen. You can import the roster information from DecoderPro if youqe already using JMRI or you can enter it manually. You can enter:

- Road
- ″ Number
- ″ Model
- ″ Туре
- ″ Length
- Location and track
- "Weight
- *"* Horsepower
- *"* If the unit is part of a consist
- " Year built
- *Cowner*

Note that many of these fields can be edited.

🛃 Edit Locomotive	• 6 <u>- 0 ×</u>
Window Help	
Road	
cow 💌	Edit
Road Number	
2001	Clear
Model	
GP38 💌	Edit
Туре	
Diesel 🔻	Edit
Length	
59 💌	Edit
Location and Track	
Klamath Falls	math Engine Lead 🔻
Optional	
Weight Tons	
125	
Horsepower	
2000	
Consist	
2003 💌	Edit
Built	
Owner	
DMD	Edit
Comment	
Delete	Save

X2011 West

Routes

📑 Edit	Route																● <u>- □ ×</u>
Tools	Window Help	þ															
Name							C	omm	ent								
	Stockton -> P	asco	_														
				,					· · · ·							0	
ld	Location	Train Direc	tion	Moves	Pick up	is?	Set o	uts?	Wait	Max Length	Grade	Х	Y	Comment			
<u>3r1</u>	Stockton	North	•	18	ves	•	no	-	0	1300	0.0	0	0	Add	Up	Down	Dele
<u>3r2</u>	3r2 Keddie North ▼ 0 no ▼ 0 1300 0.0 0 Add Up Down Dele 2r2 Pieber North ▼ 0 1200 0.0 0 0 Add Up Down Dele															Dele	
<u>3r3</u>	3r3 Bieber North ▼ 0 no ▼ no ▼ 0 1300 0.0 0 0 Add Up Down Dele															Dele	
<u>3r4</u>	3r4 Armstrong North ▼ 0 no ▼ 0 1300 0.0 0 Add Up Down Dele															Dele	
3r5 Tuber North ▼ 0 no ▼ no ▼ 0 1300 0.0 0 0 Add Up Down Dele															Dele		
<u>3r6</u>	Tule Lake	North	0	no	-	no	-	0	1300	0.0	0	0	Add	Up	Down	Dele	
3r7	Hatfield	North	•	0	no	-	no	-	0	1300	0.0	0	0	Add	Up	Down	Dele
3r8	Merrill	North	•	0	no	•	no	-	0	1300	0.0	0	0	Add	Up	Down	Dele
3r9	Klamath Falls	North	•	10	ves	-	ves	-	0	1500	0.0	0	0	Add	Up	Down	Dele
3r10	Chemult	North	•	0	no	-	no	•	0	1500	0.0	0	0	Add	Up	Down	Dele
3r11	Bend	North	•	0	no	•	no	-	0	1500	0.0	0	0	Add	Up	Down	Dele
3r12	Pasco	North	•	18	no	•	ves	-	0	1500	0.0	0	0	Add	Up	Down	Dele
Locati	on													Disp	lay		
		-	,	dd Loc	ation		Add	llocat	tion at	etart 🔘	Add loc	atic	n at	and @	Wait	O Dons	arturo Timo
					auvii	1	J Auu	noca	uon at	start 🐨	Audiou	aut	mat	ena	wwalt	O Debe	
	Del	oto Routo						[Ade	Route					Sau	Route	
	Der	ete noute							Aut	Route					Save	enoute	

This is the Edit Route screen for my Stockton to Pasco route. As you can see it runs northbound from Stockton to Pasco and is the route used by BN train 170.

JMRI Operations

X2011 West

Trains

This is the add / edit train window. Youd enter in the:

- ″ Name
- " Description
- *[″]* Departure time
- *"* Route
- *Car* types
- *[″]* Locomotive type
- Optional info
- *Comments*

Edit Train										<u> </u>
Tools Window	Help									
Name					Description	112				
	BN 170					Stockton to) Pasco			
Departure Time (hh:mm)				Route					
	03 💌		00 💌		Stockto	n -> Pasco	-	Edit		
This train service	es the following l	ocations					-		_	
V Stockton										
Keddie										
Bieber										
Tubor										
Hatfield										
Morrill										
Klamath Falle										
Bend										
Pasco										
Select car types	serviced by this	train								
Baggage	Box DPDDFA	Box DPDDFI	Box DPDHCP	Box SPDDFI	Boxcar Beer	Boxcar DD	Boxcar DPD	Boxcar DPDDF	Boxcar DPDHC	Boxcar
Boxcar PSD	Boxcar SSD	Boxcar SWPD	Caboose	🖌 Coal	Coilcar	Flat-F6B	✓ FlatBulkHead	✓ Flatcar	🖌 FlatcarEquip	Gon-scr
🖌 Gondola	🖌 HopChem	🖌 HopCmnt	🖌 HopCoal	🖌 HopGrain	✓ HopSand	Hopper	📃 Log Car	MOM 🛛	Passenger	Reefer
Reefer-R5L	🖌 Tank Asphalt	🗹 Tank Chem	🖌 Tank Food	🖌 Tank Gas	🖌 Tank Oil	🗹 Tank Propane	🖌 Tank-T0G	🖌 Tank-T3D	Zank-T3G	☑ Tank-T9
🗹 TankKaolin	🖌 Woodchip									
	Clear all			Select all						
Select locomotiv	e types serviced	by this train								
001301100011001	e groo oor noou	ay the train								
✓ Diesel					🖌 En	igine				
Optional train red	quirements									
Locomo	otives	2 🔻		Model		-		Road		-
		O None		○ FRED		Caboose		Road		-
Comment										
oomment										
	Delete Train		R	eset Train		Ade	d Train		Save Train	

JMRI Operations

X2011 West

Schedules

🗮 Edit Schedule for Siding Sotol Tequila Chihuahua 👥 💽 🖸														●▣_□×			
Tools	Fools Window Help																
Name Comment Mode																	
Sotol Tequila Shipping Shipping schedule for the CHP boxcar shipping tequila Sequential N														O Match			
Id Current Type Road Receive Ship Destination Track Count Wait																	
17c1 Boxcar SSD CHP 💌 MTY 💌 Tequila Load 💌 Fugene 🔍 Oregon Liquor Commision-1 💌 1 0 Up Dov													Down	Dele			
17c2		Boxcar SSD	CHP	-	MTY	-	Tequila I oad	-	Seattle	-	Northwest Reverages-1	-	1	0	Up	Down	Dele
17c3	>	Boxcar SSD	CHP	-	MTY	-	Tequila I oad	-	Alturas	•	Modoc-Lassen Beverage	-	1	0	Up	Down	Dele
17c4		Boxcar SSD	CHP	-	MTY	-	Tequila Load	-	Pasco	•	Hill & Mundell Beverages	-	1	0	Up	Down	Dele
Add New Delivery Boxcar SSD Add car type Add at start Add at end Add at end Add at end Add at end 																	
Delete Schedule Add Schedule Save Schedule																	

This is the Edit Schedule window. Here you can enter such data as:

- Name and comments
- Sequential or Match loads
- ["] Type and road of car
- " Receive and Ship
- ["] Destination and track
- Count and Wait



Build Reports

Train (Report BN 138).txt - Notepad	
File Edit Format View Help	
The second secon	



Trains Window

Tools Window Help

Time	Build		Name	Description	Route	Departs	Terminates	Current	Status	Action	
00:05		Build	Klamath Falls Yard-1	Klamath Falls yard engine 1 st	Klamath Falls Yard	Klamath Falls	Klamath Falls		Train reset	Move	Edit
02:00		Prev	Klamath Falls Indus 2002	Klamath Falls Industry Job	Klamath Falls Industry	Klamath Falls	Klamath Falls	Klamath Falls	Partial 5/11 cars	Move	Edit
03:00		Prev	BN 170 3040	Stockton to Pasco	Stockton -> Pasco	Stockton	Pasco	Stockton	Partial 10/23 cars	Move	Edit
04:00		Prev	BN 171 2100	Pasco to Stockton	Pasco -> Stockton	Pasco	Stockton	Pasco	Partial 9/23 cars	Move	Edit
06:20		Prev	WCEUY 8277	West Colton to Eugene Manif	West Colton -> Euge	West Colton	Eugene	West Colton	Partial 12/43 cars	Move	Edit
07:00		Prev	Alturas Switcher-1 2007	Alturas local engine first trick	Alturas Switcher	Alturas	Alturas	Alturas	Partial 2/16 cars	Move	Edit
07:45		Build	Amtrak Train 14	Northbound Coast Starlight	Amtrak Train 14	LAUPT	Portland Union Ter		Terminated	Move	Edit
08:05		Build	Klamath Falls Yard-2	Klamath Falls Yard Engine 2n	Klamath Falls Yard	Klamath Falls	Klamath Falls		Terminated	Move	Edit
09:05		Prev	Alturas Turn 2004	Klamath Falls to Alturas and r	Alturas Turn	Klamath Falls	Klamath Falls	Klamath Falls	Partial 2/21 cars	Move	Edit
11:20		Prev	EUWCY 9290	Eugene to West Colton Manif	Eugene -> West Colt	Eugene	West Colton	Eugene	Partial 15/43 cars	Move	Edit
16:00		Prev	Lake District 1	Lakeview to Alturas Turn	Lake District RR	Lakeview	Lakeview	Lakeview	Partial 2/13 cars	Move	Edit
17:30		Prev	BN 137 2175	Seattle to Stockton Manifest	Seattle -> Stockton	Seattle	Stockton	Seattle	Partial 2/32 cars	Move	Edit
18:20		Prev	RVEUY 9224	Roseville to Eugene Manifest	Roseville -> Eugene	Roseville	Eugene	Roseville	Partial 1/30 cars	Move	Edit
19:00		Build	Klamath Falls Yard-3	Klamath Falls Yard Engine 3r	Klamath Falls Yard	Klamath Falls	Klamath Falls		Terminated	Move	Edit
20:00		Build	COW Log Train	Log Train	Log Train	Klamath Falls	Klamath Falls		Build Failed	Report	Edit
20:10		Prev	BN 138 3053	Stockton to Seattle Manifest	Stockton -> Seattle	Stockton	Seattle	Stockton	Partial 4/32 cars	Move	Edit
20:30		Build	Copic Local	Klamath Falls to Copic and re	Copic Local	Klamath Falls	Klamath Falls		Terminated	Move	Edit
21:00		Prev	Chelsea Turn 2010	K. Falls to Chelsea and return	Chelsea Turn	Klamath Falls	Klamath Falls	Klamath Falls	Partial 2/21 cars	Move	Edit
21:05		Build	Amtrak Train 11	Southbound Coast Starlight	Amtrak Train 11	Portland Union Ter	LAUPT		Terminated	Move	Edit
23:00		Preview	EURVY 8966	Eugene to Roseville Manifest	Eugene -> Roseville	Eugene	Roseville	Eugene	Partial 2/30 cars	Move	Edit

 Sort by
 Options
 Action

 Image: Time One Name Options Opt



X2011 West

Car Report

Tools Window Help											
Number	Road	Туре	Len	Color	Kernel	Location	Destination	Train	Moves		
61050	LPN	FlatBulkHead	60	Orange		Klamath Falls (Chelsea Block)	->Chelsea (Chelsea Track 1 Spot 6)		43	Set	Edit
14240	MOBX	Tank Asphalt (H)	54	Black		Klamath Falls (K Falls Indus Block)	Klamath Falls Industries (Albina Asphalt Co.)	Klamath Falls Indus	40	Set	Edit
782283	MP	Boxcar Beer	65	Brown		Alturas (Alturas -> Lakeview)	->Seattle (Sound Beverage)		124	Set	Edit
819780	MP	Flatcar	60	Red		Klamath Falls (Arrivals)	Klamath Falls Industries (RIP Track)->Stockton (Stockton Yard)		8	Set	Edit
2243	MR	Boxcar DSD	50	White		Pasco (Pasco Yard)	Stockton (Stockton Yard)	BN 171	65	Set	Edit
98051	MTTX	Flatcar	60	Yellow		Klamath Falls (Chelsea Block)	->Chelsea (Chelsea Track 2 Spot 7)		8	Set	Edit
75775	NP	HopCmnt	36	Gray		Klamath Falls (Stockton Block)	Stockton (Stockton Yard)	BN 171	18	Set	Edit
90075	ΟΤΤΧ	Flat-F6B	60	Brown					0	Set	Edit
902	ΟΤΤΧ	Flat-F6B	60	Yellow					0	Set	Edit
452902	PFE	Reefer-R5L	57	Orange					0	Set	Edit
453318	PFE	Reefer-R5L	57	Orange					0	Set	Edit
1954	PICK	Boxcar SSD	50	Blue		Stockton (Stockton Yard)	Klamath Falls (Arrivals)	BN 170	19	Set	Edit
43585	PROX	Tank Propane (H)	54	Black		Alturas (Alturas -> Lakeview)	->Pasco (Canada Gas Supply)		417	Set	Edit
836	RDMX	Reefer	57	Orange		Pasco (Pasco Yard)	Stockton (Stockton Yard)	BN 171	381	Set	Edit
1400	SP	Caboose (C)	40	Red		Eugene (Eugene Cab Track)	Roseville (Roseville Cab Track)	EURVY	469	Set	Edit
1544	SP	Caboose (C)	40	Red		Roseville (Roseville Cab Track)	Eugene (Eugene Cab Track)	RVEUY	470	Set	Edit
18971	SP	Boxcar SSD	50	Yellow		Eugene (Reynolds Aluminum)	Roseville (Pacific Aluminum)->Eugene (Reynolds Aluminum)	EUWCY	97	Set	Edit
215803	SP	Boxcar PSD	51	Red		Alturas (Alturas -> Klamath Falls)	->West Colton (Biagi Brothers-2)		54	Set	Edit
228021	SP	Box DPDHCP	50	Red		Eugene (Int Paper Shipping)	Roseville (Oakland Tribune Receiving)	EUWCY	216	Set	Edit
242030	SP	Boxcar DSD	50	Red		Eugene (Eugene Car Storage)	West Colton (WC Yard)	EUWCY	92	Set	Edit
242423	SP	Boxcar DSD	51	Red		Eugene (Eugene Car Storage)	Roseville (Roseville Yard)	EUWCY	86	Set	Edit
242506	SP	Boxcar DSD	51	Red		West Colton (Sunset Lumber Roller-1)	Klamath Falls (Arrivals)	WCEUY	78	Set	Edit
242530	SP	Boxcar DSD	51	Red		Eugene (Eugene Car Storage)	West Colton (WC Yard)	EUWCY	77	Set	Edit
365019	SP	Gondola	65	Red		Klamath Falls (K Falls Indus Block)	Klamath Falls (Arrivals)->Roseville (Pioneer Pipe)	Klamath Falls Indus	117	Set	Edit
365022	SP	Gondola	65	Red		Klamath Falls (K Falls Indus Block)	Klamath Falls Industries (Team Track-1)->Eugene (NW Tube Shipping)	Klamath Falls Indus	131	Set	Edit
401290	SP	HopSand	36	Gray		Klamath Falls (Eugene Block)	Eugene (Eugene Car Storage)	WCEUY	26	Set	Edit
496543	SP	HopGrain	54	Gray		Alturas (Alturas -> Klamath Falls)	->Eugene (Steiner Hops)		202	Set	Edit
509368	SP	FlatBulkHead	60	Red		Eugene (Eugene Car Storage)	West Colton (WC Yard)	EUWCY	67	Set	Edit
509445	SP	FlatBulkHead	60	Red		Klamath Falls (Chelsea Block)			48	Set	Edit
599346	SP	Flat-F6B	60	Brown					0	Set	Edit
599378	SP	Flat-F6B	60	Brown					0	Set	Edit
599392	SP	Flat-F6B	60	Brown					0	Set	Edit
621112	SP	Box DPDDFA	60	Red		Eugene (Delco Portland)	Roseville (GM Warm Springs)->Eugene (Delco Portland)	EUWCY	28	Set	Edit
674368	SP	Box SPDDFI	51	Red		Lakeview (Arco Energy Spot 2)	Alturas (Arrivals)	Lake District	62	Set	Edit
674452	SP	Box SPDDFI	51	Red		West Colton (WC Yard)	Eugene (Eugene Car Storage)	WCEUY	88	Set	Edit
691407	SP	Boxcar Beer	65	Brown		Klamath Falls (Alturas Block)	Alturas (Osoturia Shipping Spot WC)->West Colton (Biagi Brothers-1)		130	Set	Edit
694579	SP	Box DPDDFI	51	Red		Eugene (Eugene Car Storage)	Klamath Falls (Arrivals)	EUWCY	4	Set	Edit
696425	SP	Boxcar DPDDF	51	Red		Klamath Falls (Alturas Block)			2	Set	Edit
699642	SP	Box SPDDFI	51	Red		West Colton (WC Yard)	Eugene (Eugene Car Storage)	WCEUY	178	Set	Edit

Sort by Oumber I Road O Type O Color O Load O Kernel O Location O Destination O FD O RWE O Train O Moves O Built O Owner



Questions

If you have any questions please feel free to contact me directly at dennis95747@yahoo.com

In addition you can join the JMRI Users Yahoo group at: http://groups.yahoo.com/group/jmriusers/ Or come see me after the clinic.

Thanks, Dennis Drury



