



CAROUTE Switchlist Generator

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CAROUTE is a new system developed by Decapod systems to route cars. CAROUTE routes cars exactly like the manual car card and waybill systems in use on many model railroads. The biggest difference is that the CAROUTE waybill has up to 20 positions and stays with the car. Whenever the car arrives at its current destination, the waybill is updated to route it to the next destination in list on the waybill. At the end of the list, the system resets to the starting position. Load/empty status is written on the waybill uniquely for each destination.

Using the CAROUTE program to route cars has a number of advantages over manual card systems:

- Paperwork and card shuffling is eliminated, once data entry is complete
- The correct waybill is always attached to the car
- Crews work from switchlists resembling real railroad documents
- Crews cannot change the waybills to make their switching easier
- The switchlist tells the crew what to do at each industry
- Maximum train lengths can be set
- Maximum cars sent to an industry can be set
- Data requirements are straight forward and easy to setup, about the same complexity as setting up a traditional card order system
- Switchlists are printed out for each train for all industries and towns served
- Switchlists are available for yardmasters showing all trains at a given town

Switchlists are generated by assigning a train to serve industries in the order you want them served. The car routing program then finds the cars that are in industries served by the train and assigns the train to pick them up and deliver them. Cars are sent to yards to make connections with other trains when necessary, or can be routed to specific yards for complex moves.

The data entry for CAROUTE is quite simple. Since the car waybills handle all of the routing requirements, the input is very straight forward. CAROUTE routes cars using the car specific waybills. On the waybill, you tell the car exactly where to go and whether it is a load or empty. You can list up to 20 sequential moves for the car in this manner. It is also very easy to control routing for specialized cars to certain industries. For example if you only route 50 foot boxcars to an auto parts plant, that and the interchange are the only destinations you route that boxcar to. The list of industries a train will serve is entered in sequence of service you want. If you want a car to go back and forth between the coal mine and the interchange, you simply enter in these 2 destinations. If you want a train to make a mine run, you simply route it run from the mine to the yard and back. You can also control the maximum train length. For industries, you control the siding capacity in number of cars and the number of operating session a car will layover before moving to the next destination. You can also include complex moves like loading a reefer at a fruit packer, sending it the icing platform, and then sending it on to its destination. You can easily route cars offline in the correct direction to their home road. For example, Santa Fe cars go west when empty and NYC cars go east.

Variability in train makeup does occur when the waybills for the cars are different from each other and different in length. For example, a boxcar may route from the interchange through 5 industries before being routed back to the interchange. Another boxcar may go from the interchange to a specific on line industry and back to the interchange. Therefore the 2 cars will probably not be in the same train more than once every 6 operating sessions.

The maximum data the program can handle is as follows:

- | | |
|--------------|------|
| • Cars | 1500 |
| • Industries | 300 |
| • Trains | 100 |
| • Towns | 200 |

CAROUTE includes an editor program to input and setup the data files and a router program to generate the switchlists. The software is available in both Windows and DOS versions. The DOS version will run under any DOS system from Version 3.1 on. The Windows version requires Windows 95g or newer. The instruction manual includes directions on how to load the software to run under DOS. The system requirements are minimal, but the best use of the software is with a printer to print the generated switchlists.

Sample Caroute Screens

Sample Industry Editor Screen

Industry Editor _ | 6 | X

Current File C:\AJim\PRR\vbcardat\Industar

Total Industries 11 Up
Down

Industry
3 Newman Packing Co. Add

Town 2 Monongehela Delete

Capacity 2 Go To Index

Yard Code 0 No Save File

Layovers 1 Print

Return to Main Menu

Sample Car Editor Screen

Car Editor _ | 6 | X

Current File C:\AJim\PRR\vbcardat\Carsvb2

Total Cars 25 Up
Down

Roadname	Number	Car Type
6 NYC	555437	x

Current Add
Delete

Location 1 Interchange PRR Go To Index

Waybill Step 3 Save File

Layover 0 Print

Return to Main Menu

Destination Waybills		
1	Interchange PRR	0 Empty
11	Derrick Envelope	0 Empty
1	Interchange PRR	1 Load
5	Olsen's Merchantile	0 Empty
1	Interchange PRR	1 Load
6	Spang Chalfant Pipe Mfg	0 Empty
1	Interchange PRR	1 Load
7	Freight Station	0 Empty
9	Car Shops	0 Empty
1	Interchange PRR	1 Load
7	Freight Station	0 Empty
0		0
0		1
0		0
0		1
0		0
0		1
0		0
0		1
0		0

Caroute Sample RR

Input file: carsac Output file: carsac2

Switchlist for train AM-21

Bentleyville yard

PICKUPS					DESTINATION	
SOU	66872	x	load	Car Shops	, Bentleyville	
PRR	123376	h	empty	Car Shops	, Bentleyville	
PRR	133800	h	empty	Car Shops	, Bentleyville	

Car Shops

PICKUPS					DESTINATION	
NYC	554385	x	load	Interchange PRR	, Ambridge	
SETOUTS					DESTINATION	
SOU	66872	x	load	Car Shops	, Bentleyville	
PRR	123376	h	empty	Car Shops	, Bentleyville	
PRR	133800	h	empty	Car Shops	, Bentleyville	

Beaver Creek

Derrick Envelope

PICKUPS					DESTINATION	
C&O	234765	x	load	Interchange PRR	, Ambridge	
NYNH&H	5643	x	empty	Interchange PRR	, Ambridge	

Vesta Mine

PICKUPS					DESTINATION	
PRR	12356	h	load	Interchange PRR	, Ambridge	
PRR	133677	h	load	Interchange PRR	, Ambridge	
PRR	13382	h	load	Interchange PRR	, Ambridge	
PRR	123384	h	load	Interchange PRR	, Ambridge	

Ambridge

Interchange PRR

PICKUPS					DESTINATION	
Mst1	32414	x	empty	Derrick Envelope	, Beaver Creek	
PRR	12380	h	empty	Vesta Mine	, Beaver Creek	
PRR	133452	h	empty	Vesta Mine	, Beaver Creek	
SETOUTS					DESTINATION	
C&O	234765	x	load	Interchange PRR	, Ambridge	
NYNH&H	5643	x	empty	Interchange PRR	, Ambridge	
NYC	554385	x	load	Interchange PRR	, Ambridge	
PRR	12356	h	load	Interchange PRR	, Ambridge	
PRR	133677	h	load	Interchange PRR	, Ambridge	
PRR	13382	h	load	Interchange PRR	, Ambridge	
PRR	123384	h	load	Interchange PRR	, Ambridge	

Beaver Creek

Vesta Mine

SETOUTS					DESTINATION	
PRR	12380	h	empty	Vesta Mine	, Beaver Creek	
PRR	133452	h	empty	Vesta Mine	, Beaver Creek	

Derrick Envelope

SETOUTS					DESTINATION	
Mst1	32414	x	empty	Derrick Envelope	, Beaver Creek	

Bentleyville yard