User's Manual

RAILTRAC® RateServer®

A Professional Multi-Mode Freight Rate Management System

Bourque Data Systems, Inc.
1610 Woodstead Court
Suite 220
The Woodlands, Texas 77380
Tel: 281.362.1513
Fax: 281.362.8316
www.railtrac.com

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RateServer® Overview

What is RateServer®?

RAILTRAC® RateServer® is a multi-mode freight rate software designed to store, manage, analyze, and retrieve freight rates for various modes of transportation. RateServer® is an independent module which can be used with other host systems to provide freight rates for the pricing of delivered goods, payment of freight, or other transactions requiring an accurate freight rate. RateServer® also enhances the capabilities of the RAILTRAC® Rail Fleet Management Module by providing the ability to rate rail shipments at the time they leave their origin thereby providing rail cost based reports.

RateServer's graphical user interface (GUI) runs under Microsoft Windows™ and provides the user with an intuitive and efficient environment with which to manage freight rates. Freight contracts, rate tables, carrier references and geographic codes can all be displayed with a couple of clicks of the mouse. All records displayed can be easily printed, faxed, e-mailed or saved into several PC database and spreadsheet formats for enhanced ad hoc reporting.

RateServer® is designed and implemented on a client/server model offering optimum performance and integration on open, industrial-strength database platforms such as Sybase, Microsoft SQL Server, and Oracle7.

Through an easy-to-use and intuitive interface, RateServer® provides the opportunity to efficiently manage freight rates by offering the following capabilities:

- ***Freight Contract Management***

  The storage, management, and analysis of freight contracts for rail, truck and marine transportation modes.

- ***Rate Table Management***

  The storage and management of freight rate tables linked to freight contracts and the ability to easily change, remove, add, and escalate these rates. RateServer® also allows for accessorial charges, which include cleaning, fuel surcharges, equipment charges, tolls, etc.

- ***Excess Charges***

The storage and management of excess charge items weather they are standard or exceptions. These charges include items related directly to additional services provided by the carrier. Surcharges can relate to fuel price increases.

- ***Geography***

  The storage and management of origins and destinations between the associated SPLC, zip, and company specific coding used for origins and destinations.

- ***Mileage***

  The storage and management of mileage between origins and destinations of SPLC, zip, and company specific coding.

- ***Carrier Management***

  The storage and maintenance of carriers used to move freight and the ability to prioritize among them.

Freight Contract Management

RateServer® provides the capability to store and manage freight contracts for rail and truck modes. In RateServer® all freight contracts have a common structure which contains two distinct, but related components, *Contract* and *Rate Table*.

- ***Contract*** is specific to a Carrier, Contract Number, and Contract Version Number.
- ***Rate Table*** lists the freight rates tied to the Contract and is unique to Origin, Destination, Product Class, Equipment Type, Rate Type, Effective Date, Quantity Breaks, and Mileage.

In addition, other information can be tied to the Contract such as Excess Charges, Escalations, and Comments.

Rate Management

RateServer® provides for the storage and management of freight rate tables per freight contract and the ability to remove, add, and escalate these rates. These rates are tied to *rate parameters*, which impact the rate. The first, most important rate parameter is the mode of transport. The user chooses the mode of transport from the Rates DropDownListBox.

Other rate parameters may be origin, destination, carrier, product/commodity classifications, equipment, mileage and quantity shipped. These items have an impact on the price of freight. They must be accurately defined in the Config tables (see chapter on Config).

RateServer® allows rate escalations. The escalation amount and date can be defined at the time the contract is entered.

Excess Charges

RateServer® stores and maintains excess charges associated with movements. These charges can be standard or exception, standard means the excess charges will rate with every inquiry, exception charges will not rate with every inquiry, but they will be stored within the agreement for reference. Accessorial charges are related to additional services provided by the carrier related directly to the shipment and/or the equipment used to carry the shipment.

Fuel surcharges can be linked to the rise (or fall) in the price of fuel. Switching charges may apply for rail shipments. Stop-off charges can be assigned for additional stops made for a truckload shipment.

Geography

RateServer® stores and manages origins and destinations where freight flows. O-D pairs can be defined using SPLC, zip, and company specific coding. RateServer® also provides a facility to allow for user-defined regions that identify specific geographic areas. These are required when creating a freight contract. Geographic codes provide validated rate parameters for the creation of rate tables.

Mileage

RateServer® provides for the storage and management of distances in miles between origins and destination by SPLC, zip, and company specific coding. These mileage records provide the validated rate parameters for creation of rate tables.

Carrier Management

RateServer® provides the capability to maintain lists of the carriers used to move freight. The Carriers function provides the ability to list and detail carriers that will be used by the shipper to transport goods. The listing is unique to a carrier's SCAC (Standard Carrier Abbreviation Code). This master listing of carriers provides information such as carrier name, transit mode, contacts, phone/fax numbers, and the mileage source used for freight contracts.

RateServer® displays carrier preferences by setting Contract Priority and Rate Precedence for particular carrier freight contracts. Analyzing rates offered by carriers can be achieved by setting all rate parameters equal to verify which carrier offers the most cost-effective rates.

What's Included in the User's Guide

The chapters in this manual explain the basics of RateServer®. Most of the chapters parallel the menu bar choices in the main screen of the software. The exceptions are the chapters entitled ***RateServer Overview*** (this chapter), ***Toolbars and Shortcuts*** and ***Config,*** these chapters should be read and understood before proceeding to the menu specific chapters. In general, to get the most out of the RateServer® User's Guide, read the following chapters in the order presented in this manual. This manual has a companion context-sensitive on-line help file, which is accessible through the RateServer® menu.

This manual is divided into the following chapters:

- ***RateServer Overview.*** Covers important aspects of RateServer® in terms of how it works, the structure of freight contracts, the structure of the rate tables, and the valid data sets which impact rates such as geography, mileage, and other reference data.
- ***Toolbars and Shortcuts.*** Teaches you how to utilize screen tools to filter freight contract and rate information to a more usable form.

- ***Config***. Provides documentation for functions pertaining to the setup and configuration of Geographic Codes, Mileage, and Reference Details that provide valid rate parameters.
- ***Agreements and Rate Tables.*** Includes a section on “How-to” enter agreements and rate tables. Also provides documentation for the Contracts menu item where functions are found pertaining to the recording and management of freight contracts (current and historical) negotiated with various carriers for different modes of transport. All pertinent information relating to a mode specific freight contract and its related rates can be recorded in the Contracts function.
- ***Volume Commitments.*** Volume requirement functionality in RateServer allows for storage and tracking of volume commitments.
- ***Troubleshooting.*** This section was designed to help users identify data errors that keep the system from returning a rate. It will become clear through working with RateServer® that there are many variables which will cause the system to return an "Unable to Rate" message.
- ***Rates.*** Provides for documentation of the functions pertaining to recording and management of the rate tables that belong to freight contracts. It also provides interactive functionality to Rate Shipments for various products for various modes of transportation.
- ***Stored Procedures***. Contains topics on how to call RateServer® stored procedures so that the RateServer® Database can serve as a modular component to provide rating capability to pricing, order entry, and billing systems.

Transportation Modes

Rail

The Rail Contracts function allows for the creation, modification, and canceling of freight contracts for movement of product by rail. The Agreement base information that defines a rail contract, (the *Contract)* are: the carrier code, contract number, and revision number. The *Rate Table* is tied to the *Contract*, and specifies the origin, destination, product class, railcar type, effective date, rate types, quantity breaks and the rate.

Switch charges can be associated with the contract and assigned to specific origins and destinations.

Truckload

The Truckload Contracts function allows for the creation, modification, and canceling of freight contracts for movement of product by truckload. The Agreement base information that defines a motor carrier contract, (the *Contract)* are: contract number, revision number, origin, and destination. Rate tables are tied to the truckload contract; *contract rates* specify the product class, equipment type, effective date, quantity breaks, mileage, and the rate.

Stop-off charges can be defined at multiple levels and breaks. Accessorial charges associated with truck shipments such as pump, cleaning or other charges are defined and linked to truckload contracts.

LTL

The LTL Contracts function is a facility for the creation, modification, and canceling of freight contracts for the movement of product by less-than-truckload. The Agreement base information that defines a motor carrier contract, (the *Contract)* are: contract number, revision number, origin, and destination. Rate tables can be defined to a specific carrier or can be tied to another carrier's tables with the discounts defined.

RateServer® Stored Procedures

The RateServer® Database can serve as a modular component to provide rating capability to pricing, order entry, and billing systems. Stored procedures reside on the database and can be queried, independent of the RateServer® client-side application to provide freight rates to other host systems. For instance, the pricing of an order entered into an order entry system can be rated at the moment the order is entered by tying record entry to a query of a RateServer® stored procedure.

The RateServer® stored procedures are pre-compiled, memory-resident programs, which remain on the database server. To obtain a rate from the database, the calling program may simply attach to the RateServer® database, run the procedure with the specific arguments required (such as origin, destination, commodity, carrier, etc.), then receive an accurate freight rate which the stored procedure returns. Error return codes and error return statements are provided should the procedure fail to retrieve a rate or if there is a problem with the input parameters.

The stored procedures are specific to the database on which RateServer® runs - Oracle7 or above, Sybase System 10 or above, and Microsoft SQL Server 6.5 or above.

Toolbars and Shortcuts

Using the Toolbar

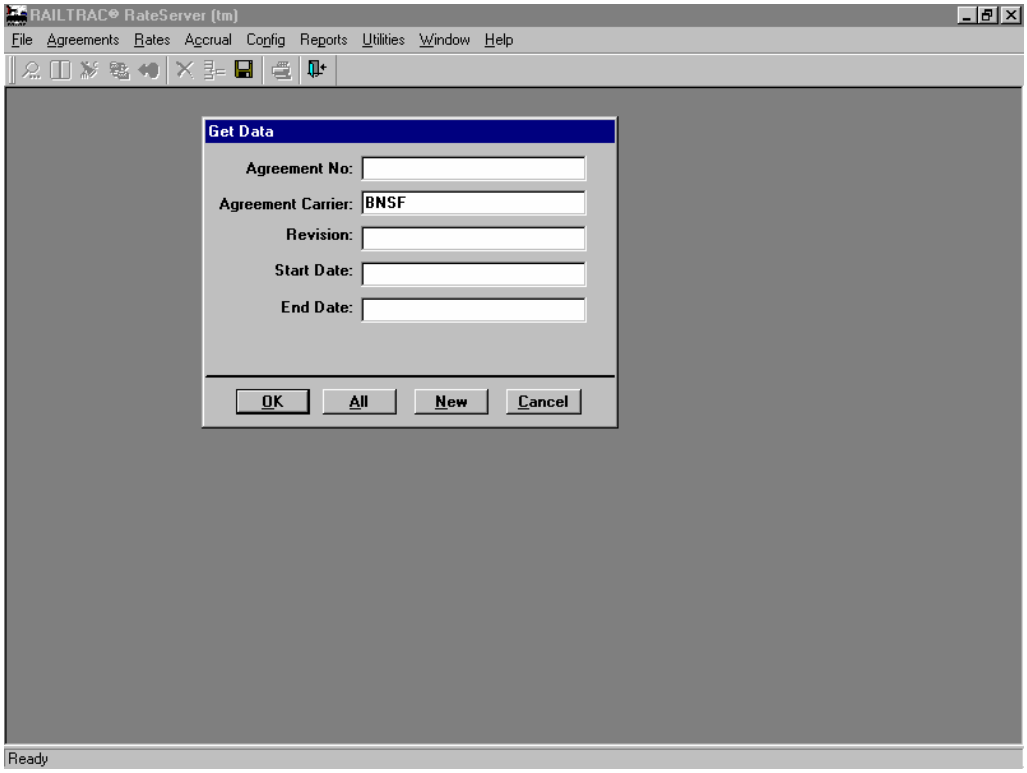
Button	Description
 Detail	When in a list, clicking this button will bring up the detail behind the highlighted row.
 List	When in detail, clicking this button will return back to the list.
 History	If there is history associated with a record clicking this button will display it.
 Sort	Allows the user to sort a list by any field. The user can click and drag fields from the left to the right to sort (see example below)
 Get Data	The Get Data button brings up the Get Data Box appropriate for the current screen.
 Delete	Deletes the current record. If in a contract or rate table when clicked, RateServer® will prompt the user for a contract or rate table end date.
 New	Clicking new will bring up the appropriate box for entry of a new record.
 Save	Clicking save will save the current information. It is important to save changes before exiting out of any window.
 Print	Will print current listing. Example, in Rail Agreements click the print button and it will print a list of all the rail agreements.
 Exit	Exits THE APPLICATION, not just the screen.

Using the Get Data Box

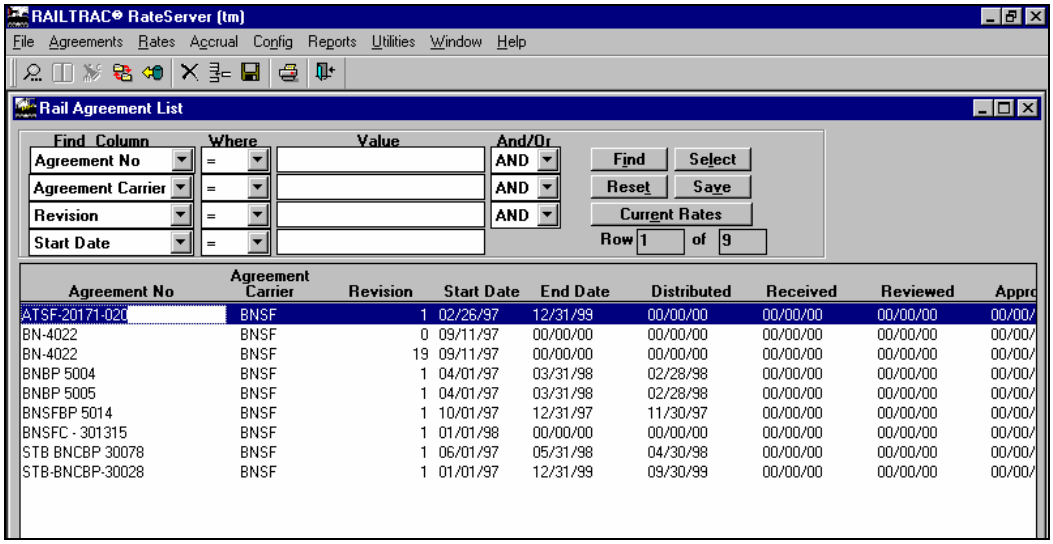
The Get Data Box is used to filter records from the RateServer database before they are displayed on the screen. This allows the user to define the characteristics of the data to be displayed.

Used properly, the Get Data Box can save time by allowing the user to better define the data needed. The number of records is limited to the criteria specifically entered in the Get Data Box. The more data entered on the get data screen, the faster data will be returned.

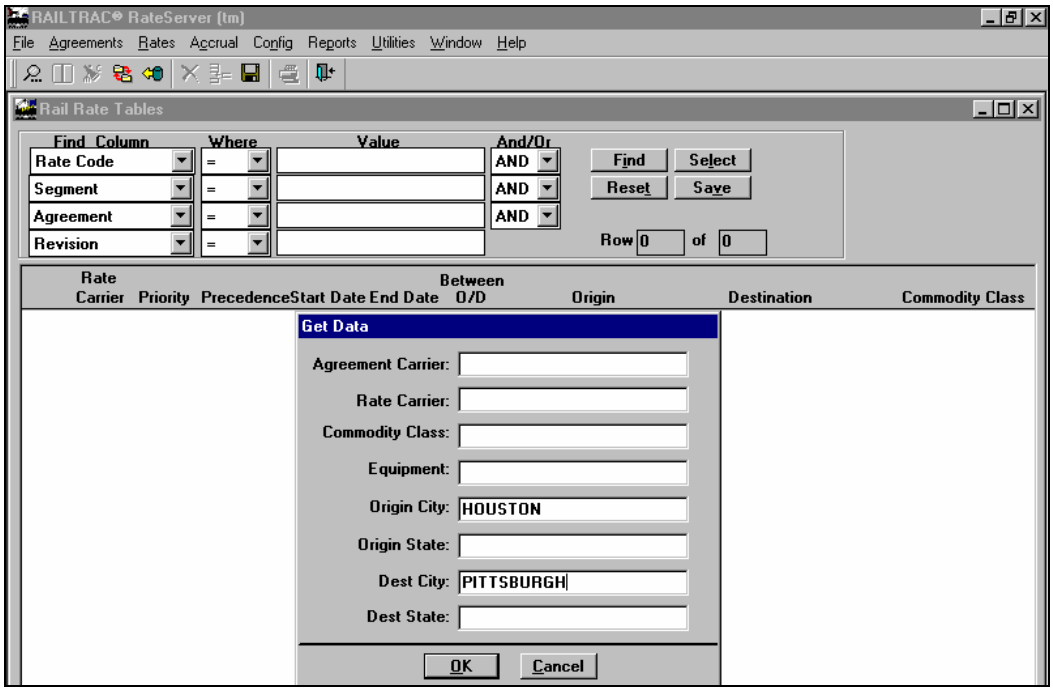
The following example is searching for rail agreements, clicking Agreements_Rail brings the Get Data Box. The user can enter one or many parameters. For example, an entry in Agreement Carrier for "BNSF" would yield all contracts for the BNSF.



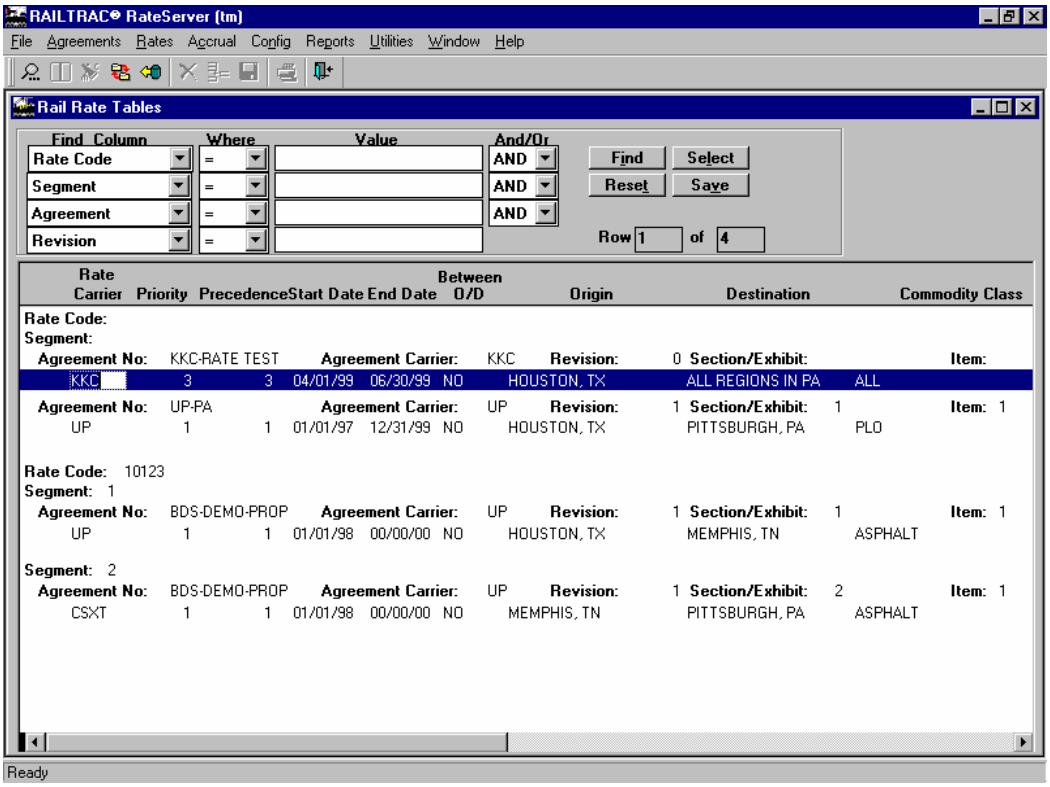
Once the OK button is clicked, the records are returned:



Another example would be to query for all contracts with service between HOUSTON and PITTSBURGH. The user could also enter Hou* and Pitts* or H* and P in the Origin, Destination fields and get a list with the appropriate cities.



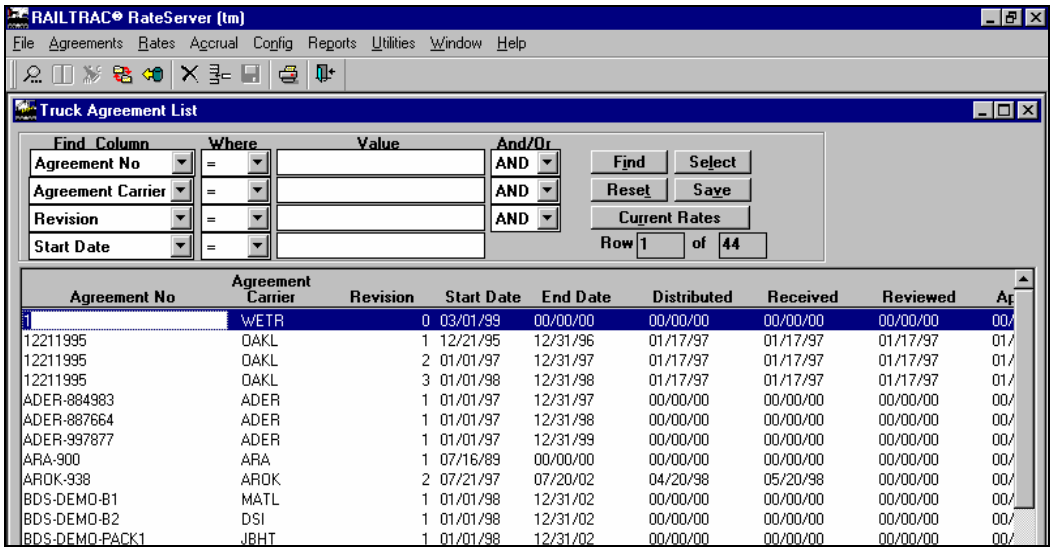
Once the OK button is clicked, the records are returned:



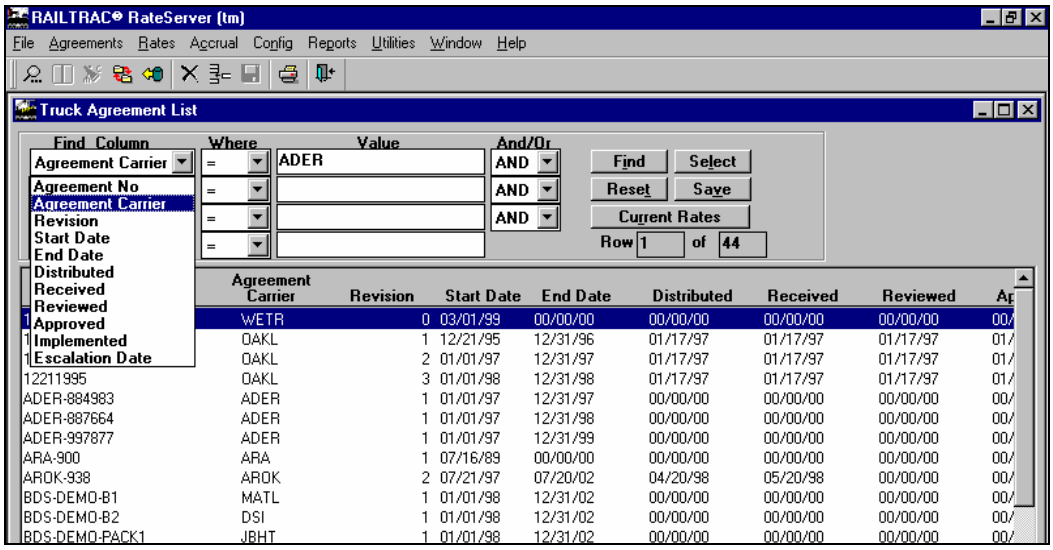
Find Function - Single Criteria Toolbar

In the "Find" function, (directly under the heading - Truck Agreement List) the user locates a value on the screen which is common to the set of records of interest. A filter is then defined

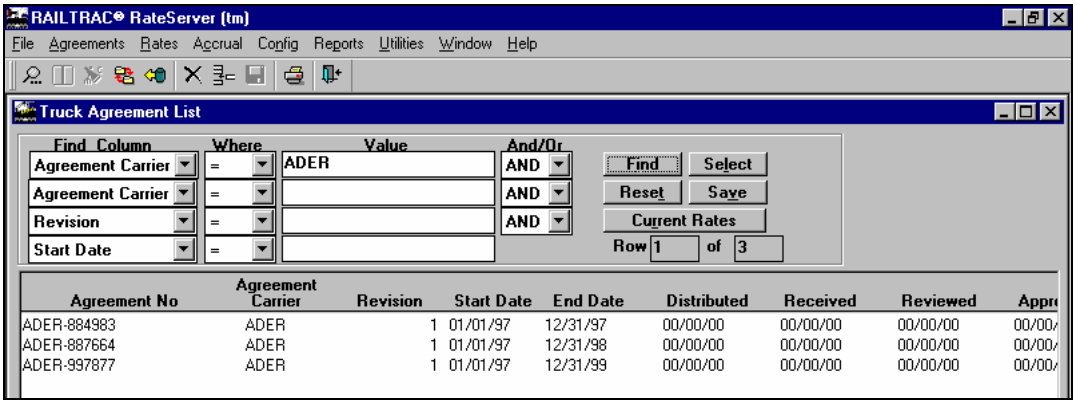
which says: "Find all records where this column value equals X". The filter is then invoked and only records having a value of "X" are displayed. In the screen below, a listing of Truckload contracts contain certain values to be used in record manipulation as *Agreement No., Agreement Carrier, Revision, Start Date and End Date, etc.*



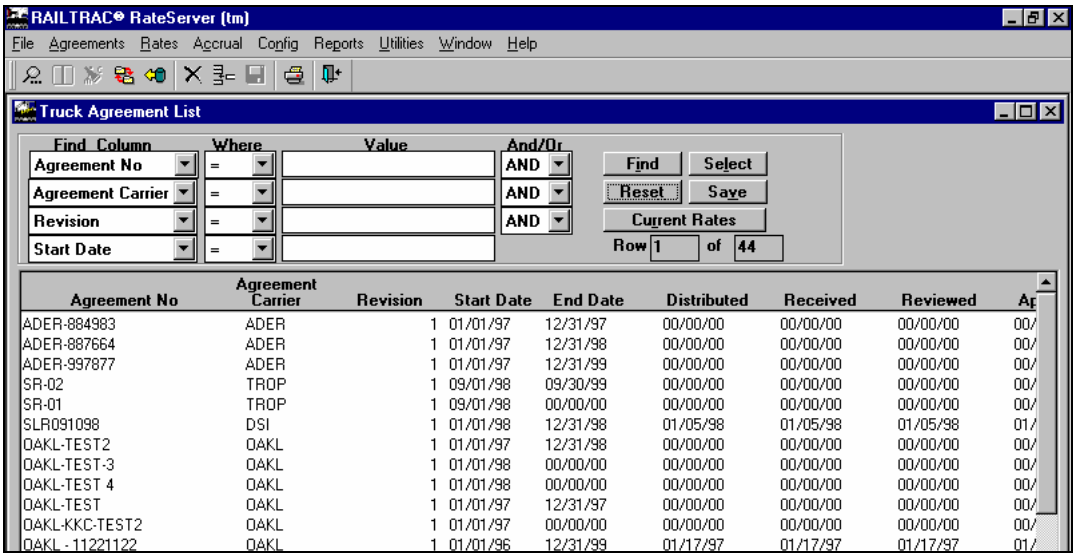
To "Find" all records for the carrier ADER, the user may manually build the criteria by choosing "Agreement Carrier" in the Find ListBox and defining the value as shown below:



To invoke the filter, click the Find button on the Toolbar:



Clicking the Reset button will disable the filter and re-display all records as before.



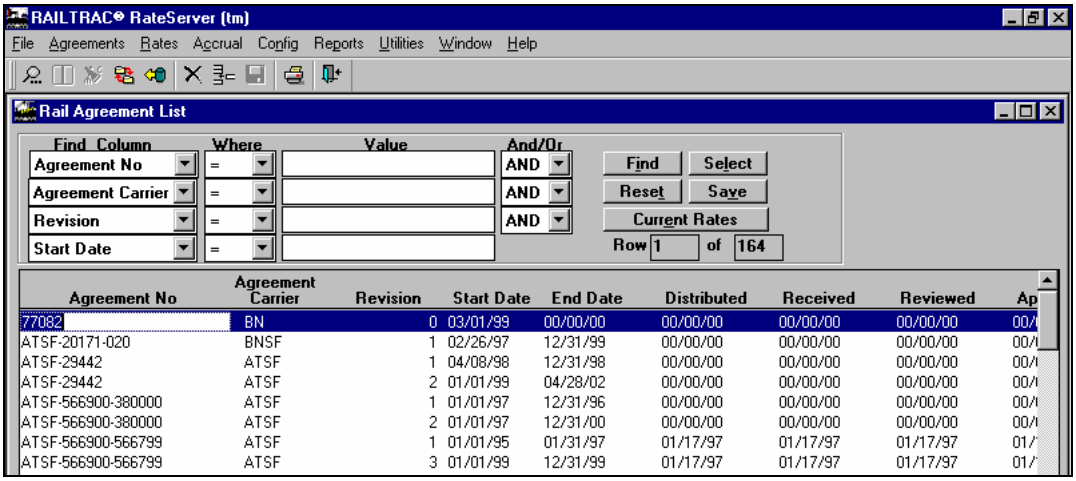
Important Note

If the Get Data button on the Toolbar is then used to retrieve a new record set, the Find criteria remains in effect, limiting the new record set retrieved to the values defined in the criteria.

Find Function - Multiple Criteria Toolbar

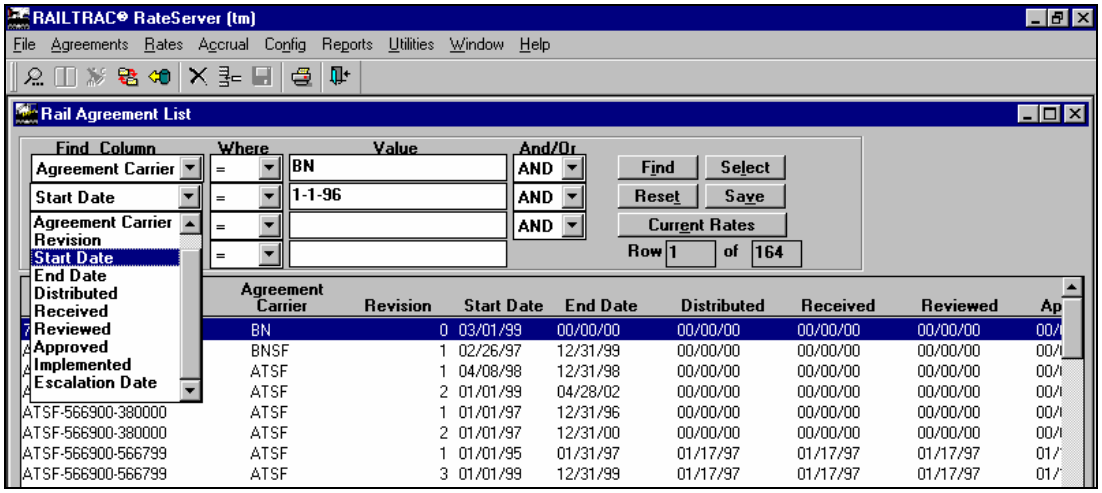
In the "Find" function, the user locates a value on the screen that is common to the set of records of interest. A filter is then defined which says: "Find all records where this column value equals X and that column equals Y". The filter is then invoked and only records having a column value of "X" and that column of "Y" are displayed.

In the screen below, a listing of rail contracts which contain certain values to be used in record manipulation as *Agreement No., Agreement Carrier, Revision, Start Date and End Date, etc.*

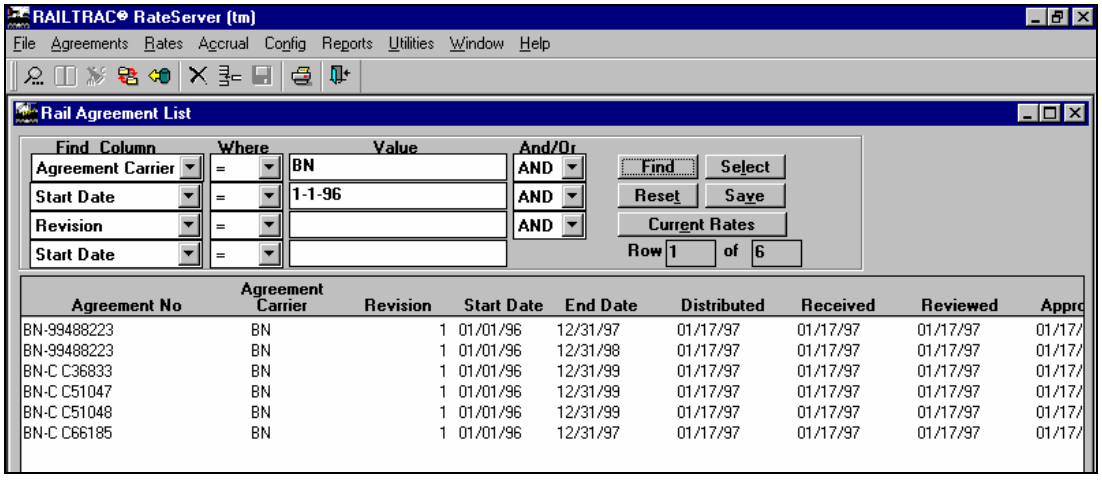


To "Find" all agreement records for the BN, the user may build an initial criteria by choosing "Agreement Carrier" in the Find ListBox and defining its value "BN":

Reminder – When using the click-right-click feature, a second criteria can be defined by the user then choosing Start Date in the Find ListBox and defining its value as "01/01/96":



The result is a listing of all BN rail contracts that started on January 1, 1996:



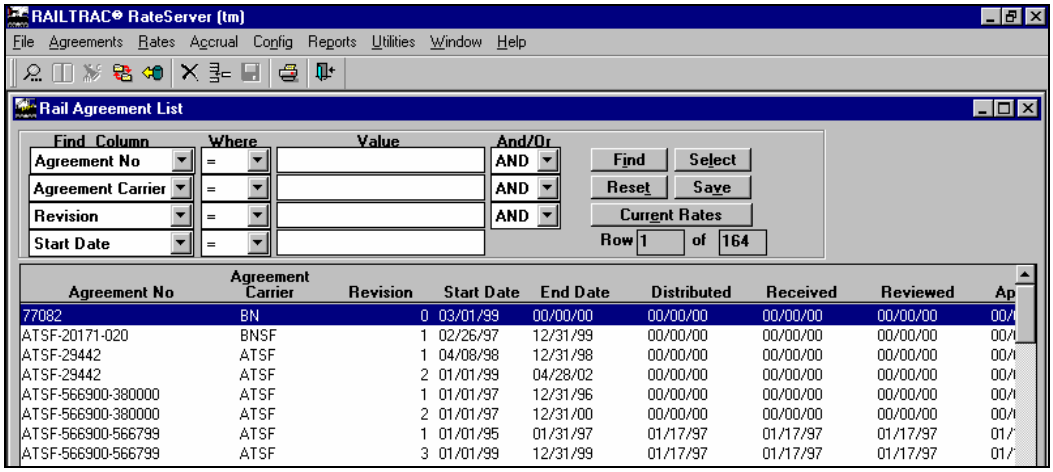
Important Note

If the Get Data button on the Toolbar is used to retrieve a new record set, the Find criteria remains in effect, limiting the new record set retrieved to the values defined in the criteria.

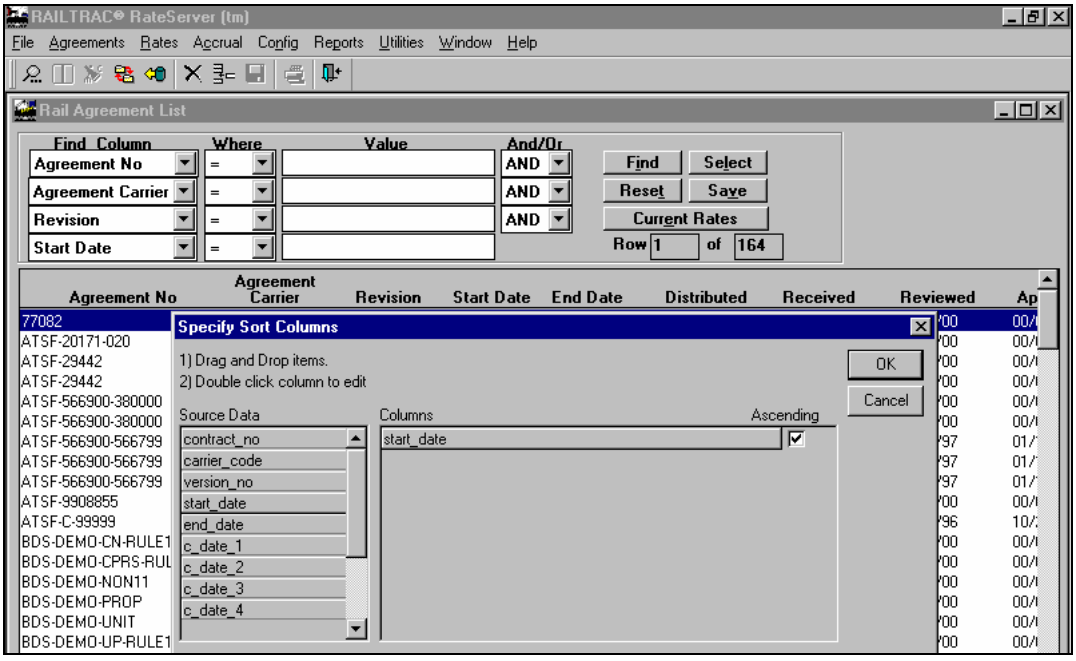
Sort Function - Toolbar

The "Sort" function allows each column of the displayed records to be sorted in an ascending or descending manner. Multiple columns can be sorted to create a "cascading sort" by sorting first by "X", then by "Y", then by "Z".

In the screen below, a listing of rail agreements which contain certain values to be used in record manipulation as *Start Date, End Date, and Carrier.*



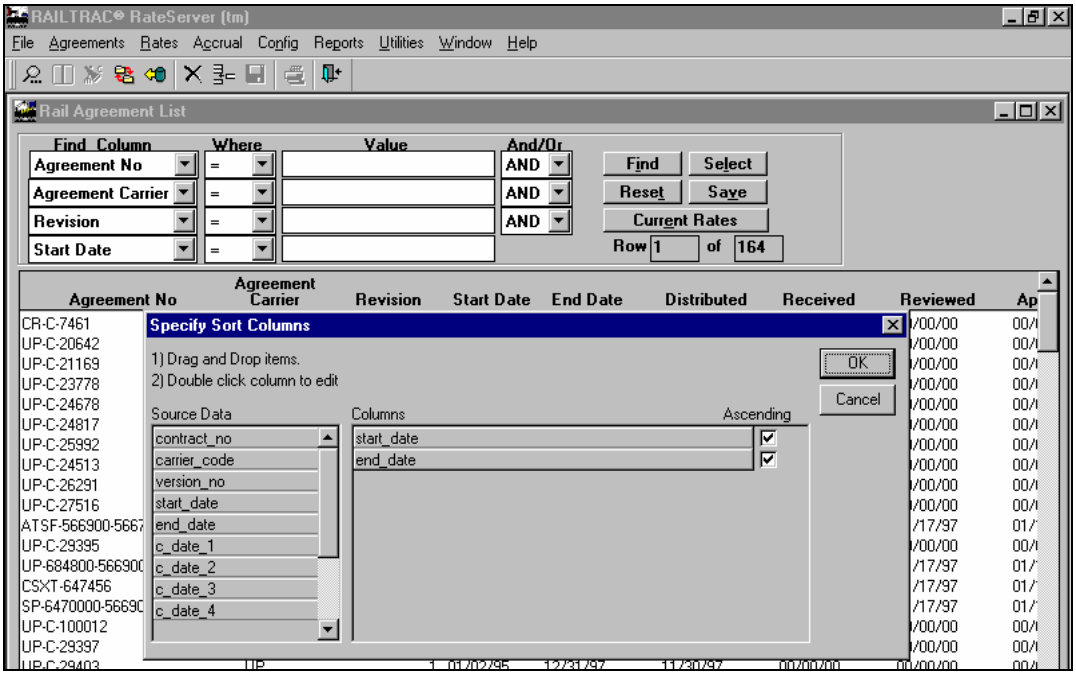
By clicking the Sort button on the ButtonBar, the Sort Criteria Box is displayed showing (on the right side) the current sort order, ascending/descending by each column:



To change the sort, drag the appropriate column into the order of sort desired. The user may drag fields from the Source Data list or from the Columns list. *The columns are named by their "database field names" which may be different from the column titles on the reporting screen although they should closely resemble on another.*

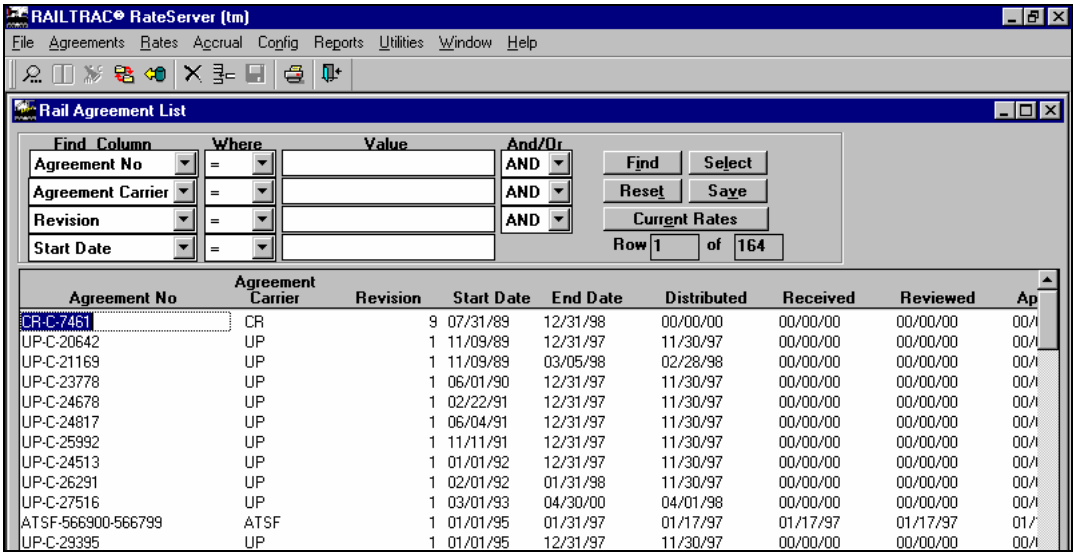
An "X" in the Ascending box designates the column will sort ascending, while a blank box means the column will sort descending.

The screen below shows the sort to be invoked first by "start_date", then by "end_date":



Important: If the Get Data button on the Toolbar is used to retrieve a new record set, the Sort criteria remains in effect, sorting the new record set retrieved.

Once the OK button is clicked, the sort is invoked with the result displayed below. Notice the records are first sorted by Start Date and then by End Date.

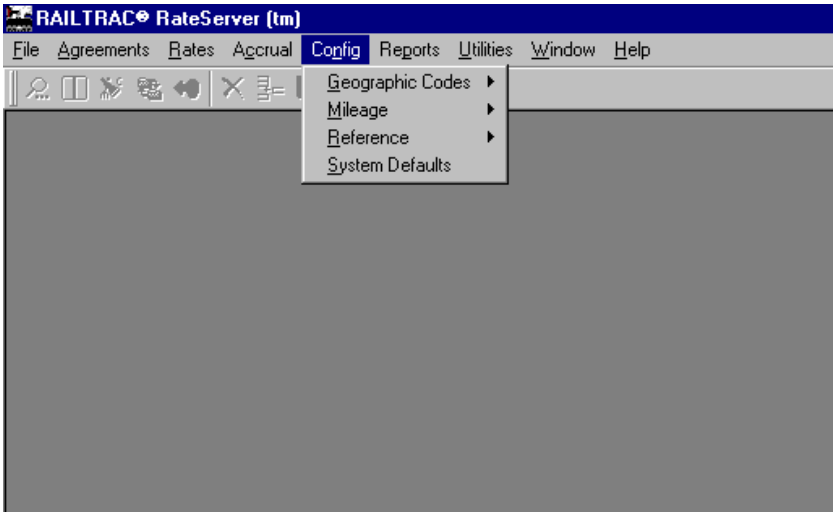


Config

Overview

The Config function is the section where all source and reference data is stored and maintained. This section is divided by topics and includes an area for Geographic Codes, Mileage, and Reference Details.

When clicking the the Config option on the menu bar, the DropDownListBox listing all Config functions will be displayed.



A summary of the functions in the Config Section are:

- ***Geographic Codes.*** The storage and maintenance area for all geography data.
- ***Mileage.*** The storage and maintenance area for all mileage data.
- ***Reference.*** The storage and maintenance area for all reference data. Reference data includes items such as carriers, commodities, and equipment types.
- ***System Defaults.*** provides for definition of parameters on a system-wide level.

All Config information must be entered correctly into the screens listed above because contracts and rate tables are built from this information. If the contract rates specify pricing to carry goods from an origin to destinations (O-D pairs), those origins and destinations must be defined in Config-Geographic Codes.

Additionally, if a movement requires miles between the O-D pairs inorder to rate, the miles for the O-D pairs must be present in Config-Mileage. If the rates are specific to the type of railcar used to transport a specific product, the equipment type and the commodity class must be defined in Config-Reference.

The records entered into the Config functions provide "validated" data sets from which rates are calculated. Often the records or definitions in Config show up in DropDownListBoxes in other areas of the application forcing the user to pick a "validated" option, or when a value is entered it is checked against a listing of values in the associated Config facility. This process of validation maintains the rating data in a standardized format so comparisons can be made between contracts, rates and price escalations.

Geographic Codes

The Geographic Codes function allows the user to define and maintain all geography information that will be required to define rate agreements. Geography is comprised of seven variables organized in a hierarchy structure based on the least specific to the most specific (i.e. If a rate table is defined by state, that rate table will be valid on any city or zip within that state, where if the rate table is defined by SPLC, that rate table would only be valid to that city and zips within that city). These variables are:

- ***Country.*** Provides for the storage and retrieval of valid country codes. This is the least specific geographic variable (i.e. largest single location).
- ***State.*** Provides for the storage and retrieval of valid state codes. States should include all US states, Mexican states and Canadian Provinces.
- ***Region Codes***. Provides for the storage and retrieval of region codes. Region codes are the first 2 digits of an SPLC code. For example, Houston's SPLC code is 684800, the region code 68 is defined as Southeast Texas.
- ***County Codes***. Provides for the storage and retrieval of County Codes. County codes are the first 4 digits of an SPLC code.
- ***SPLC.*** Provides for the storage and retrieval of SPLCs (Standard Point Location Codes).
- ***Zip.*** Provides for the storage and retrieval of valid zip codes.
- ***Company Locations.*** Provides for the storage and retrieval of company assigned codes for locations. This is a very specific function that allows users to define a location at a sub-zip code level. This is the most specific geographic variable.

The last two sections within the Geographic Codes function is Location Templates and Rail Service Locations:

Location Templates

Provides the functionality to combined multiple geographic points together to form one location. Templates in this section are classified as global templates and can be used across multiple agreements. RateServer contains functionality during the creation of a rate table to create new templates. Within the process, the users has the option to store the new template as contract specific or as global, thus making it available in this section. An example would be creating a template call the Houston Area and defining it with Houston, Pasadena and Deer Park. Creating a template to include these points will keep the user from having to enter

different rate tables for each of the three locations that make up the template. Templates can be based on any combination of the seven geographic variables defined above.

Rail Service Locations

Provides the functionality to store the Centralized Station Master for defining the rail carrier or carriers that can service a specific SPLC. This data set is critical for the use of rail rate codes where the locations are defined based on a group of points. If a rate table and rate code exist where the destination is defined from a template, rail service locations must be defined to insure accurate rating results. For example, if a rate table and rate code have a destination based on a template called BNSF Points and this template is based on multiple states, without the Rail Service Locations data, it would be possible to rate a move to a specific SPLC in a state that is part of the BNSF Points template, but is not serviced by the BNSF. (example: Texas is included in the definition of BNSF Points. If rail service locations were not defined and a shipment came through with a destination of Brownsville, TX, this rate code and rate table combination would apply because Brownsville is in the state of Texas. If service locations were defined, then Brownsville would only show service by the UP, thus the BNSF rate code and rate table would not apply.)

Country

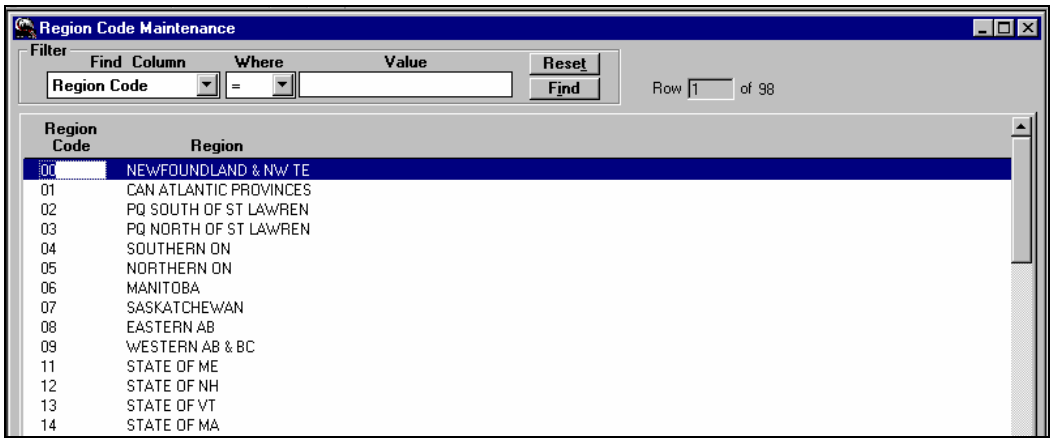
Countries are the highest level of the geographic hierarchy. This table defines the country code and name of all validate countries that have been defined. When defining a rate table location by country, any city/state within that country will be applicable for that rate table. (Note: For rail, the rail service location can make a specific location within that state not applicable if that carrier does not provide service to the location.)

State

States are the second highest level of the geographic hierarchy and define all US States, Mexican States and Canadian Provinces. When defining a rate table location by state, any city/state within that state will be applicable for that rate table. (Note: For rail, the rail service location can make a specific location within that state not applicable if that carrier does not provide service to the location.)

Region Codes

The Region Codes function is for the storage and retrieval of Regions. Region Codes are the first two digits of the SPLC. When defining a rate table location by region, any city/state where the SPLC begins with the same two characters that define the region code will be applicable with that rate table. (Note: For rail, the rail service location can make a specific location within that region not applicable if that carrier does not provide service to the location.)

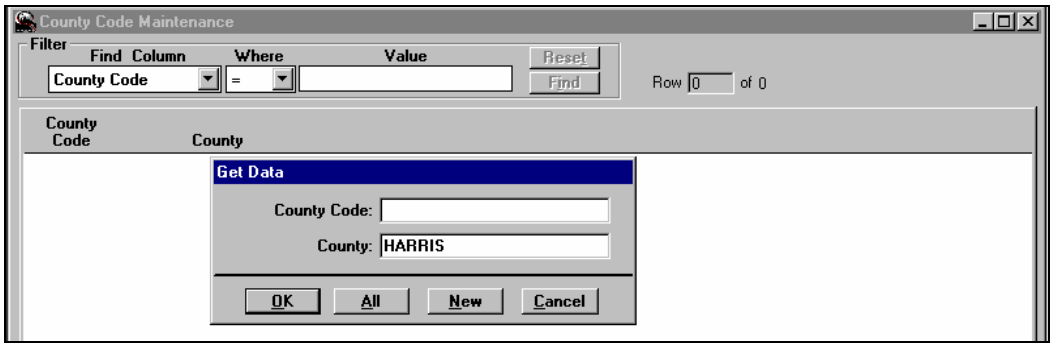


County Codes

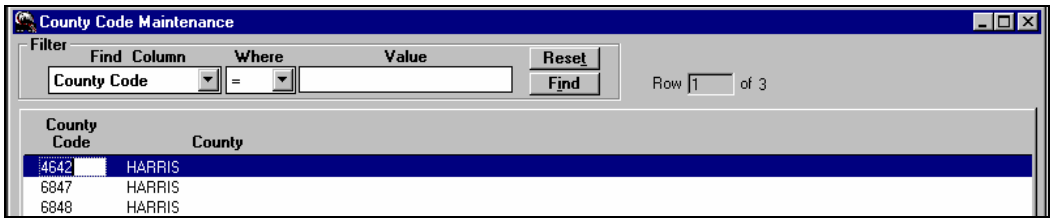
The Region Codes function is for the storage and retrieval of counties. County Codes are the first four digits of the SPLC. When defining a rate table location by county, any city/state where the SPLC begins with the same four characters that define the county code will be applicable with that rate table. (Note: For rail, the rail service location can make a specific location within that county not applicable if that carrier does not provide service to the location.)

The example will step through the process of retrieving county codes. Clicking on Config-County Codes brings a Get Data Box. Selecting ALL will return all county codes stored in RateServer®.

To retrieve a specific county, type the county name in the County Field of the Get Data Box and click the OK Button.



The next screen will show all county codes for the requested county. Any city having an SPLC beginning with these for numbers will reside in this county.



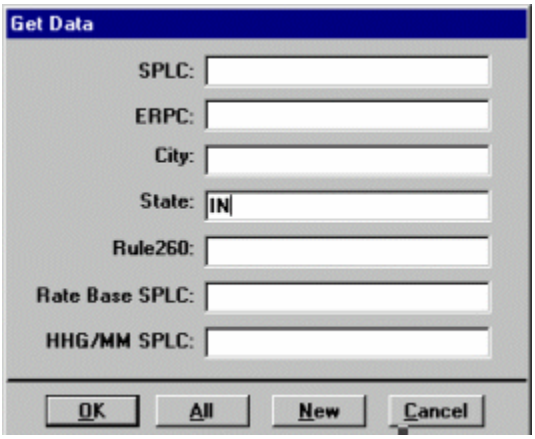
To insert a new County Code, simply click on the new button and enter the County Code and the County name.

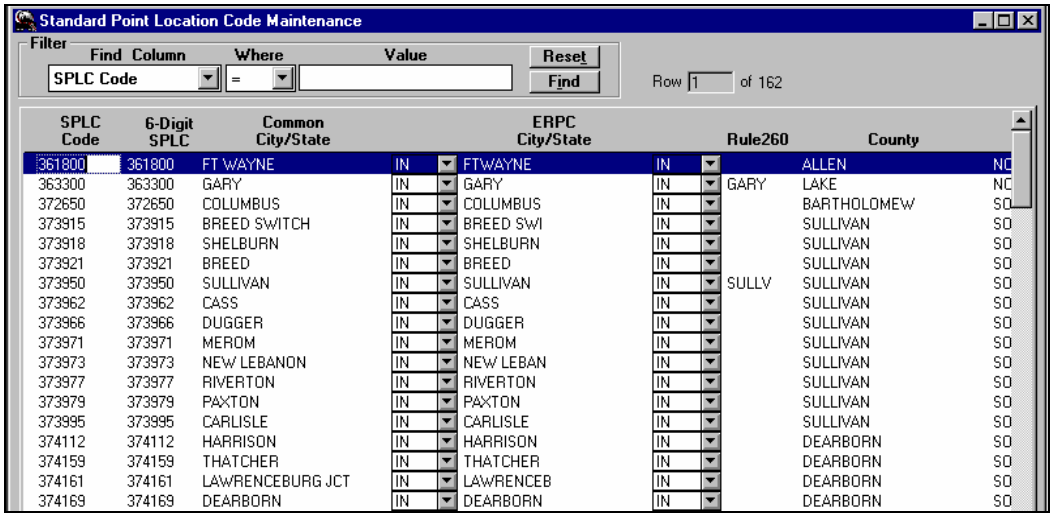
SPLC

The SPLC function is for the storage and retrieval of SPLCs (Standard Point Location Codes).

Upon entering the SPLC screen, a GetDataBox enables the user to pull up existing records by various parameters. The parameters available to search are the SPLC, ERPC, City, State, Rule 260 Rate Base SPLC or Mileage Look-up SPLC. The "ERPC" is the nine character CLM spelling of a city and the "Rule 260" is the five character interline junction spelling used in railroad routing strings.

The GetDataBox for an SPLC search contains the variables SPLC, ERPC City, Common City, State, Rule 260 Code, Rate Base SPLC and an SPLC mileage interface alias. By running an inquiry based on a state such as Indiana (IN), all SPLC's within that state will be returned:





To add an SPLC code:

1. From the Main Menu, click on Config-Geographic Codes-SPLC.
2. To enter a new SPLC record, click the "New" button on the Toolbar or on the GetDataBox and enter the new record.
3. The State field is a DropDownListBox of valid state abbreviations.
4. To save any modifications, click the Save button on the ButtonBar.

SPLC Specifications are:

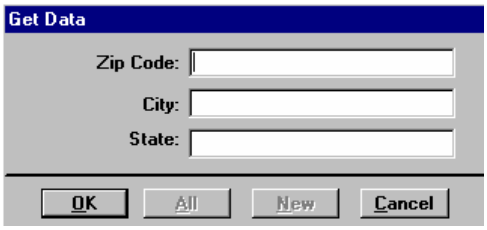
SPLC Code	Can be either 6 or 9 digit code. SPLC's defined at a 6-digit level will perform the same as a 3-digit zip code. Any shipment beginning with the same six digits will be applicable if a rate table was defined at the 6-digit level. If the rate table is defined at a 9-digit level, a shipment based on 6-digits would not be applicable.
6 Digit SPLC	This will automatically populate based on the previous input
Common City/State	The full city and state spelling of the location
ERPC City/State	Abbreviated 9 character spelling used by the railroads for CLM spellings. Can be populated with anything the user chooses.
Rule 260	Standard 5 character interchange code for all railroads.
County	Will automatically populate based on the first 4 characters of the SPLC.
Region	Will automatically populate based on the first 2 characters of the SPLC.
Rate Base SPLC	Specific to rail defining the rail basing point for the location being created.
Primary Index	Yes/No field. Specific to rail stating whether the location being created is a rail basing point.
HHG/MM SPLC	SPLC alias for interfacing with Rand McNally MileMaker. In some case the same point will have two different SPLC'S. This field allows us to look up mileage correctly, but store them by our number.

Zip

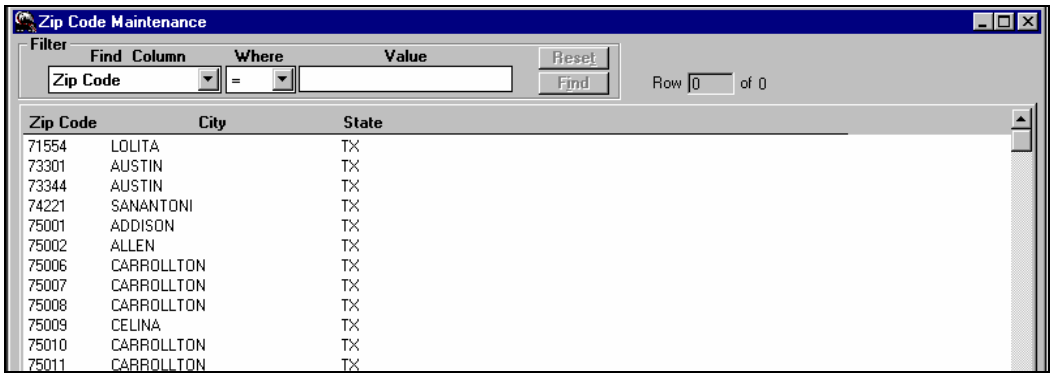
The Zip Code function is for the storage and retrieval of Zip Codes and Canadian Postal Codes. This is an alpha numeric field with a length of 9 characters.

Upon entering the Zip Code screen, a GetDataBox enables the user to pull up existing records by various parameters.

The GetDataBox for a Zip Code search contains the variables Zip Code, City and State:



By entering the State of TX in the Get Data Box, all zip codes in the state of Texas will be retreived:



To access and/or enter Zip Codes:

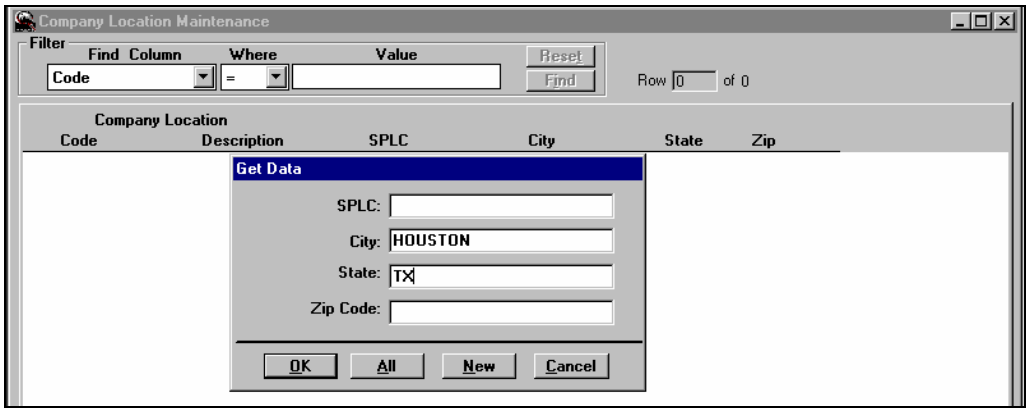
1. From the Main Menu, click on Config-Geographic Codes-Zip Code.
2. On the GetDataBox, enter the parameters suggested by the GetDataBox.
3. The Zip Code records are displayed in order of Zip Code - ascending.
4. To edit a record, highlight the record with the mouse, then change value.
5. To enter a new Zip Code record, click the "New" button on the Toolbar or on the GetDataBox and enter the new record.
6. The State field is a DropDownListBox of valid state abbreviations. The SPLC entered must be in the SPLC master.
7. To save any modifications, click the Save button on the ButtonBar.

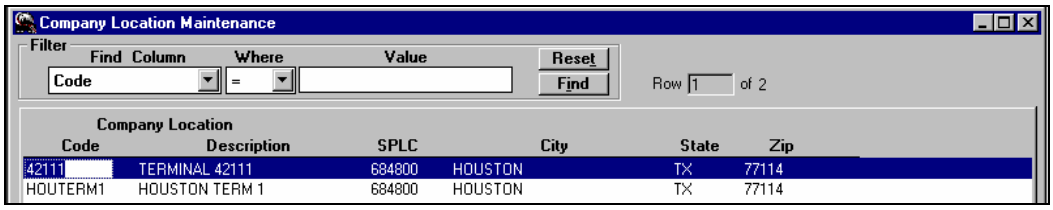
Company Locations

The Company Locations function is for the storage and retrieval of company defined codes for specific origin and destination locations that are more specific than SPLC or zip codes. An example would be a gasoline distributor who must encode service station destinations. There can be many service stations within a zip code and certainly within an SPLC. Therefore, RateServer® provides a shipper with a customized coding structure to define destinations for point-to-point moves and to define mileage for those moves.

Upon entering the Company Locations screen, a GetDataBox enables the user to pull up existing records by various parameters. The parameters available to search for the company location codes are SPLC, City, State and Zip Code.

The GetDataBox for a Company Location search contains the variables SPLC, City, State and Zip Code. To retreive a listing of all company locations in specific location, type the City and State into the Get Data Box and click the OK Button.





To access and/or enter Company Location codes:

1. From the Main Menu, click on Config-Geographic Codes-Company Locations.
2. On the GetDataBox, enter the parameters suggested by the GetDataBox.
3. The Company Location records are displayed in order of Company Location code - ascending.
4. To edit a record, highlight the record with the mouse, then change the value.
5. To enter a new Company Location record, click the "New" button on the Toolbar or on the GetDataBox and enter the new record.
6. The State field is a DropDownListBox of valid state abbreviations. The zip code can be entered only if that zip code is present in the Zip Code master.
7. To save any modifications, click the Save button on the ButtonBar.

Location Templates

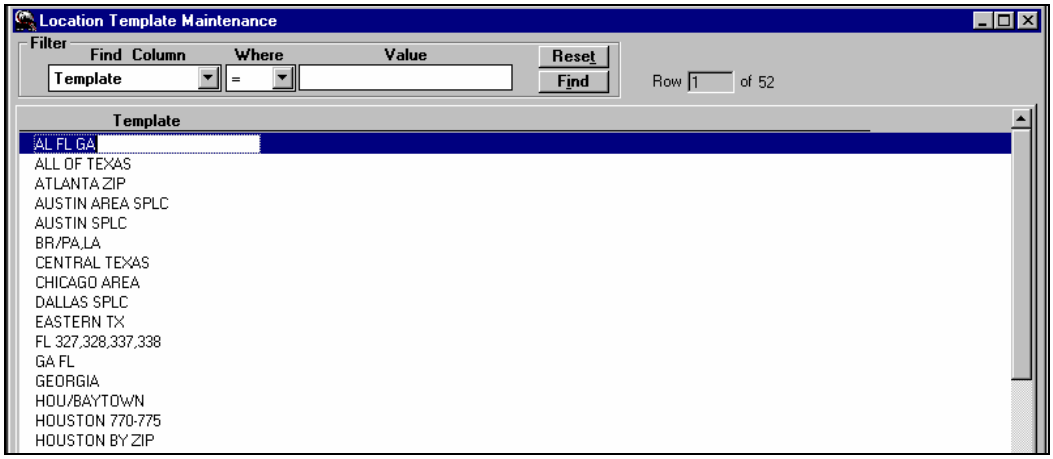
Location Templates allow for the storage and maintenance of global location groups. Location Templates are the grouping of multiple points for the creation of one geographic location that can be used to define O-D pairs in a rate table.. For example, if a shipment is moving from Houston to Los Angeles and Houston includes Houston and surrounding areas such as Pasadena, Deer Park, Sugar Land, and Baytown, location templates would allow for entry of these points to be included as Houston. Likewise, if Los Angeles included Long Beach, Glendale, and Pomona, these could be entered as a template named LA area. When

entering rates the user would simply chose the location templates rather than having to create a separate rate table for each point individually.

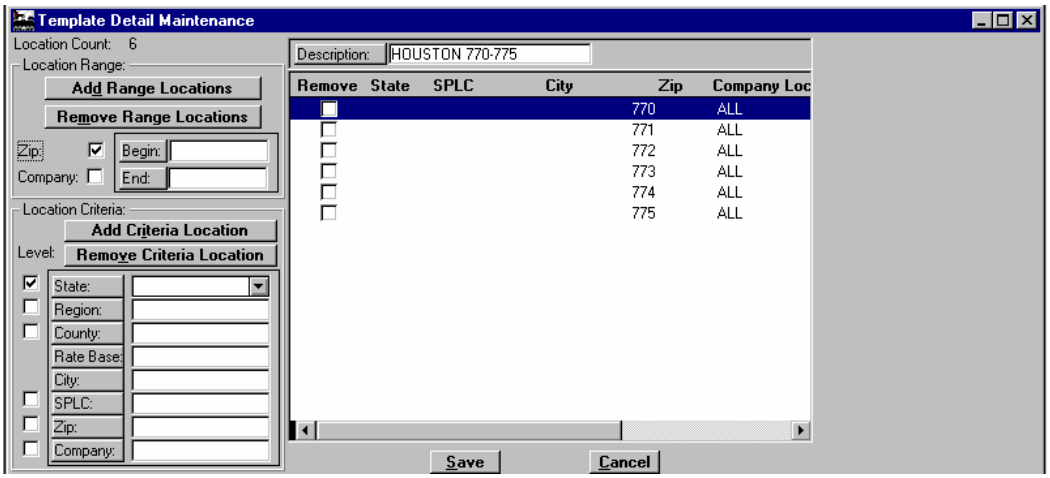
There are two types of templates. A global template can be set up and used with many agreements. A contract specific template can be set up and used with only one contract. All templates available in this section are global.

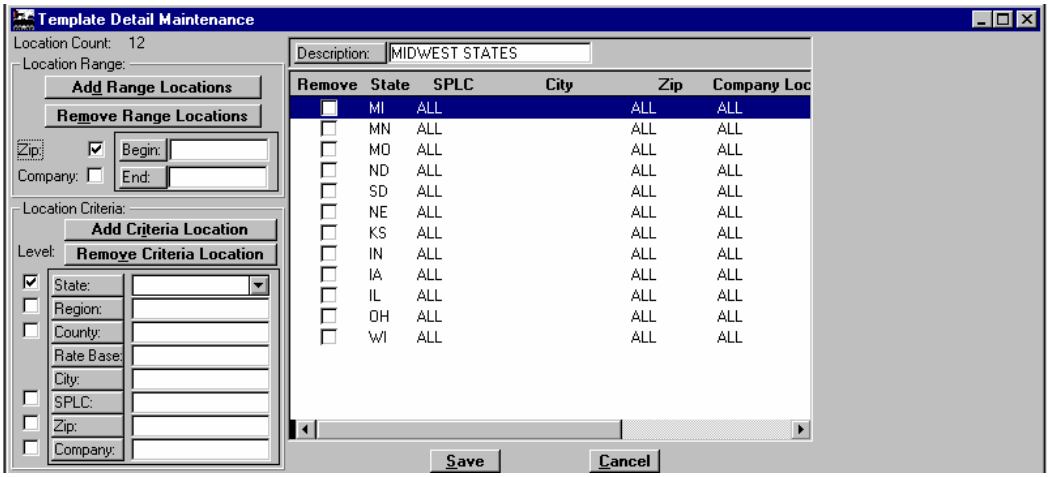
To set up a specific template from the rate table, place the cursor in the Agreement Origin field and click the right mouse button. To use an existing template, in the rate table, click the down arrow to get a list of existing templates.

The following screens show how to access the location templates and explores templates that have already been set up. A "how-to" section follows the screens. When clicking on Config-Location Templates, a screen appears listing the templates already in the system.



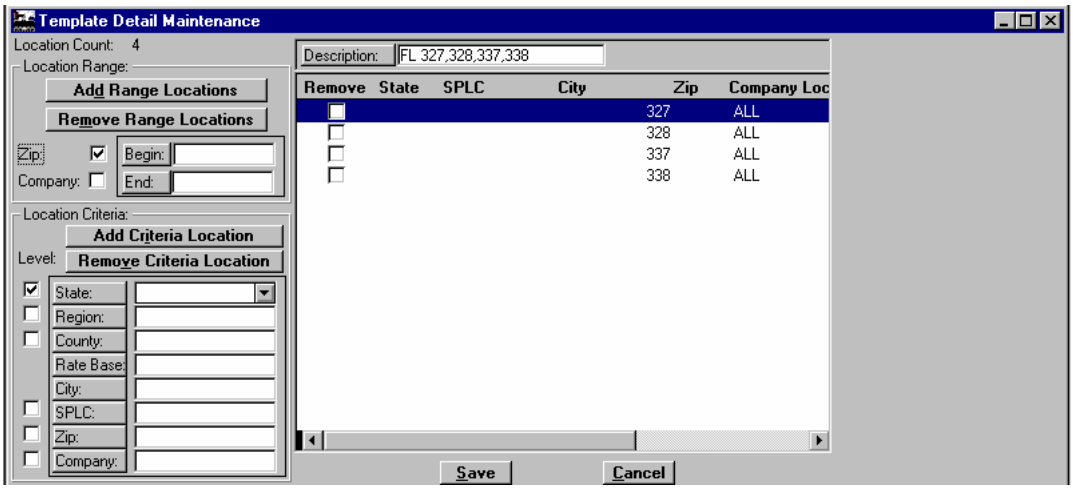
The screen below shows the location template "Houston 770-775", notice the three digit zips listed. This will include all SPLC's, Cities, and Company locations in the template. To remove a range simply click in the Remove column and save.





The screen above shows a location template for the Midwest States. It includes all Zips, SPLC's, Cities and Company locations included in these states. To add a state to this list, simply click in the State field on the lower left portion of the screen and add the state code. A drop down list box is included. After selecting the state, click the Add Criteria Location button and save. The location template will now include the new state.

The screen below shows four zip ranges in Florida.



To set up a Location Template using a Range:

1. From the Location Template Screen click the New button.
2. Add a description for the Template.
3. In the first section on the left side Zip has a check mark next to it, enter a beginning zip and an ending zip. The zips can be one to five digits. If company locations are set up, they can also be used.
4. Click Add Range Locations.
5. RateServer® will list the codes.
6. To set up a Location Template using Location Criteria:
7. From the Location Template Screen click the New button.

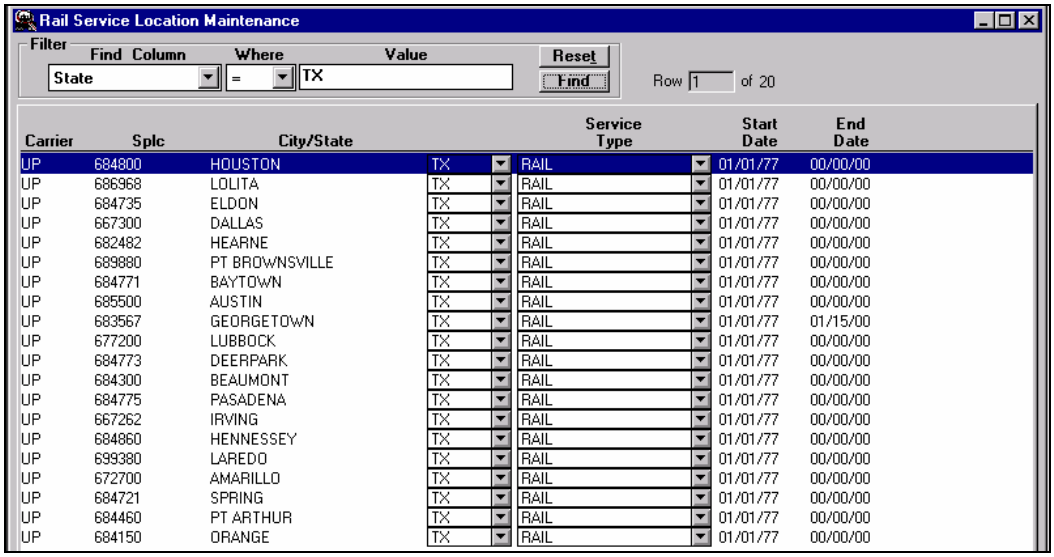
8. Add a description for the Template.
9. In the bottom section on the left side, there are several options to choose from: State, Region, County, Rate Base, City, SPLC, Zip and Company.
10. Click on the option needed. If the user needs the States of FL, TX, LA, MS, AL, GA, SC. Choose State by clicking in the box next to it, a check mark will appear.
11. Enter FL and click on Add Criteria Location, RateServer® will put the information on the right side and the state box will be ready for another state to be entered.
12. When all the states have been entered, click on the Save button and then cancel, the screen will then close.
13. The same steps should be followed when entering other criteria.

Rail Service Locations

Rail Service Locations store SPLC and associated railroad SCAC from the Centralized Station Master. This serves as a check against SPLC and carrier to confirm that a carrier actually services a location. **This information is critical for the use of rail rate codes where the locations are defined based on a group of points.**

If a rate table and rate code exist where the destination is defined from a template, rail service locations must be defined to insure accurate rating results. For example, if a rate table and rate code have a destination based on a template called BNSF Points and this template is based on multiple states, without the Rail Service Locations data, it would be possible to rate a move to a specific SPLC in a state that is part of the BNSF Points template, but is not serviced by the BNSF. (example: Texas is included in the definition of BNSF Points.

If rail service locations were not defined and a shipment came through with a destination of Brownsville, TX, this rate code and rate table combination would apply because Brownsville is in the state of Texas. If service locations were defined, then Brownsville would only show service by the UP, thus the BNSF rate code and rate table would not apply.)



Carrier	Splc	City/State		Service Type	Start Date	End Date
UP	684800	HOUSTON	TX	RAIL	01/01/77	00/00/00
UP	686968	LOLITA	TX	RAIL	01/01/77	00/00/00
UP	684735	ELDON	TX	RAIL	01/01/77	00/00/00
UP	667300	DALLAS	TX	RAIL	01/01/77	00/00/00
UP	682482	HEARNE	TX	RAIL	01/01/77	00/00/00
UP	689880	PT BROWNSVILLE	TX	RAIL	01/01/77	00/00/00
UP	684771	BAYTOWN	TX	RAIL	01/01/77	00/00/00
UP	685500	AUSTIN	TX	RAIL	01/01/77	00/00/00
UP	683567	GEORGETOWN	TX	RAIL	01/01/77	01/15/00
UP	677200	LUBBOCK	TX	RAIL	01/01/77	00/00/00
UP	684773	DEERPARK	TX	RAIL	01/01/77	00/00/00
UP	684300	BEAUMONT	TX	RAIL	01/01/77	00/00/00
UP	684775	PASADENA	TX	RAIL	01/01/77	00/00/00
UP	667262	IRVING	TX	RAIL	01/01/77	00/00/00
UP	684860	HENNESSEY	TX	RAIL	01/01/77	00/00/00
UP	699380	LAREDO	TX	RAIL	01/01/77	00/00/00
UP	672700	AMARILLO	TX	RAIL	01/01/77	00/00/00
UP	684721	SPRING	TX	RAIL	01/01/77	00/00/00
UP	684460	PT ARTHUR	TX	RAIL	01/01/77	00/00/00
UP	684150	ORANGE	TX	RAIL	01/01/77	00/00/00

Mileage

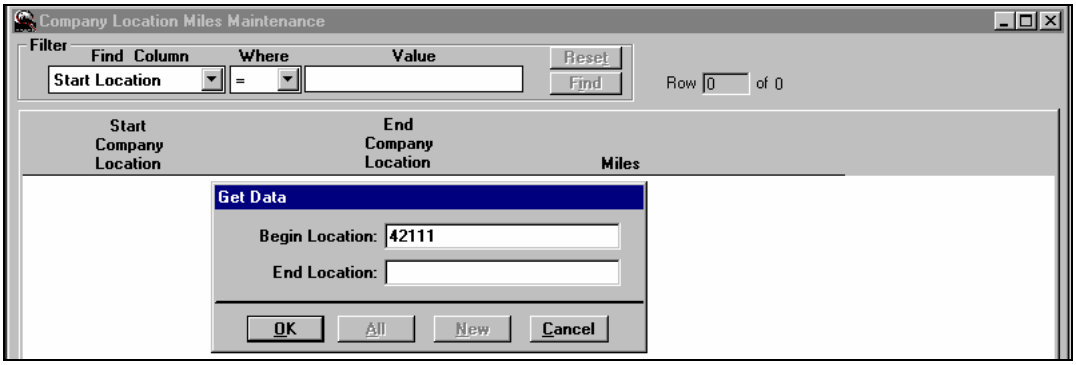
The Mileage functions allow for the storage of distances between to points. As distance (mileage) is often used in the calculation of freight rates, it is important that accurate mileage be stored and defined for the various Geographic Codes discussed in the preceding chapter.

Mileage may be defined by the following geographic variables:

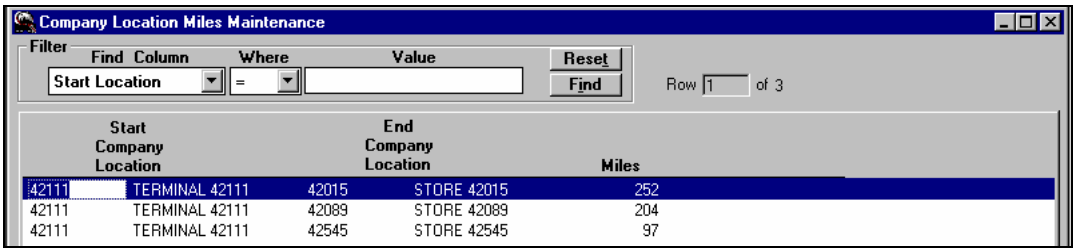
- ***Company Location.*** Provides for the storage and retrieval of mileage for O-D pairs defined by company assigned codes.
- **Find Miles.** Provides a look-up of miles already stored in RateServer®.
- ***Highway SPLC Miles.*** Provides for the storage and retrieval of mileage for O-D pairs defined by SPLC.
- ***Highway Zip Miles.*** Provides for the storage and retrieval of mileage for O-D pairs defined by zip code.
- **Mileage Source.** Provides for the storage of mileage source.
- **Rail Miles**. Provides for the storage and retrieval of rail miles.
- **Rate Base. A**llows the storage and retrieval of rate based miles.
- Company Location

Company Location Mileage provides a facility for the storage and retrieval of mileage for O-D pairs defined by company assigned codes.

The screen below shows initial entry into the Company Location Mileage screen with the GetDataBox prompting for parameters of Begin Location and End Location. In the example below the Begin Location is defined as Company Code "42111":



After clicking the "OK" button, a listing of all company defined O-D mileage originating at "Terminal 42111" is displayed. The columns are Start Company Location, End Company Location, and Miles:

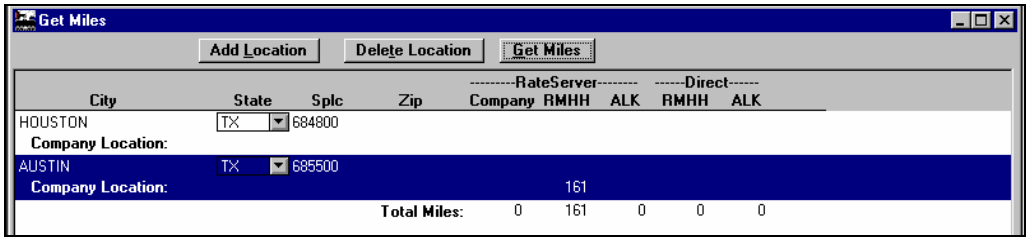


To access Company Location Mileage:

1. From the Main Menu, click on Config-Mileage-Company Location.
2. On the GetDataBox, enter the parameters suggested by the GetDataBox.
3. The Company Location Mileage records are displayed in order of Company Location Code - ascending.
4. To edit, highlight the field of interest and change value.
5. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
6. To save any modifications, click the Save button on the ButtonBar.

The Find Miles and Mileage Source are illustrated below. The other options, Company Location, Highway SPLC Miles, Highway Zip Miles, Rail Miles and Rate Based all prompt the user with a Get Data Box for retrieval of information.

Find Miles requires input of an Origin and Destination in order to return miles. The user must click on Add Location after entering either the city, state, SPLC, or zip of each location. After the origin and destination have been entered clicking Get Miles will return the result. In the example below, Houston to Austin shows as 161 miles and is listed under RMHH as the mileage source. Also note that it is listed under RateServer which means the miles are stored on the database, if the miles had not been stored locally, RateServer would have made a call to retrieve them and the result would have been listed under Direct.

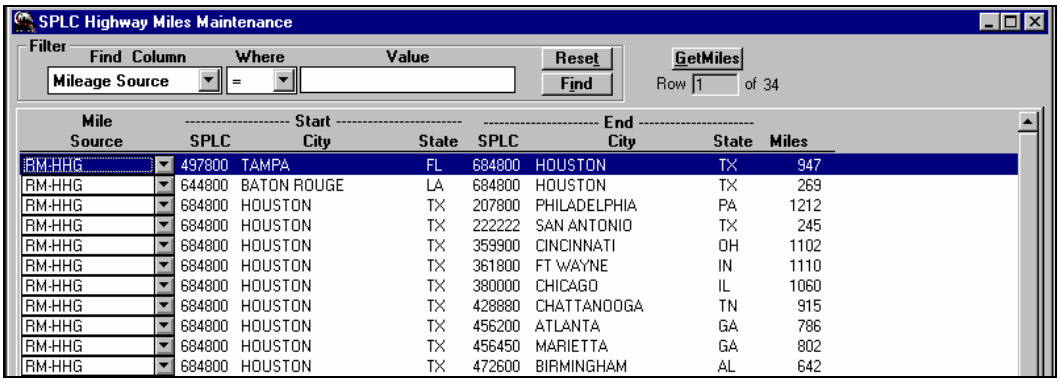


Highway SPLC Miles

The Highway SPLC Miles screen provides a facility to store and retrieve mileage for O-D pairs traveled by truck. Highway SPLC Miles are unique to origin and destination SPLC and the mileage source used to obtain the miles. Mileage between SPLC may differ according to the mileage guide used. The two main sources, agreed to between the carrier and shipper are either Rand McNally or Household Goods.

To view or edit Highway SPLC Miles records, the user enters in the GetDataBox data parameters such as Mileage Source, Begin SPLC, Begin City, Begin State, End SPLC, End City, and/or End State.

In the example below the GetDataBox was populated with "Houston" in the Origin City field and the screen below shows mileage stored in RateServer® between Houston and other cities.



To access Highway SPLC Miles:

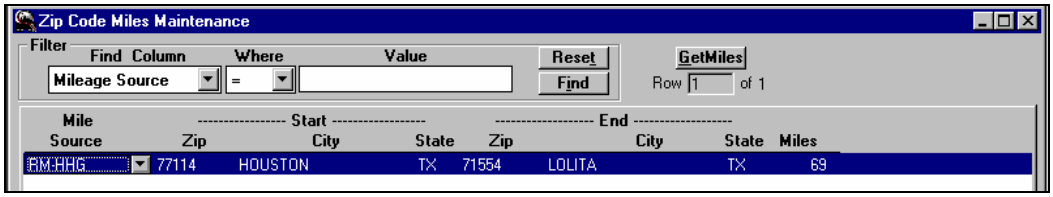
1. From the Main Menu, click on Config-Mileage-Highway SPLC Miles.
2. On the GetDataBox, enter the parameters suggested by the GetDataBox.
3. The Highway SPLC Miles records are displayed in order of Start SPLC - ascending.
4. To edit highlight the field of interest and change value.
5. To save any modifications, click the Save button on the ButtonBar.

Highway Zip Miles

The Highway Zip Miles screen provides a facility to store and retrieve mileage for O-D pairs traveled by truck. Highway Zip Miles are unique to origin and destination zip and the mileage source used to obtain the miles. Mileage between Zips may differ according to the mileage guide used. The two main sources, agreed to between the carrier and shipper are either Rand McNally or ALK.

To view or edit Highway Zip Miles records, the user enters in the GetDataBox data parameters such as Mileage Source, Begin Zip, Begin City, Begin State, End Zip, End City, and/or End State.

The screen below shows the result of entering "End Zip 71554" in the GetDataBox.



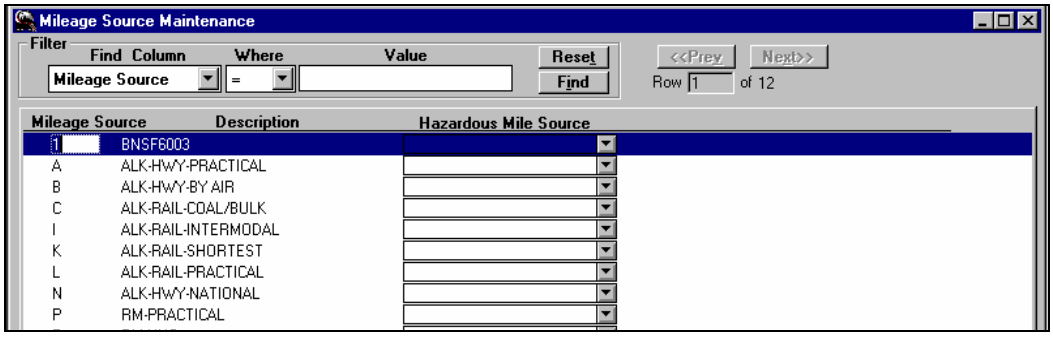
To access Highway Zip Miles:

1. From the Main Menu, click on Config-Mileage-Highway Zip Miles.
2. On the GetDataBox, enter the parameters suggested by the GetDataBox.

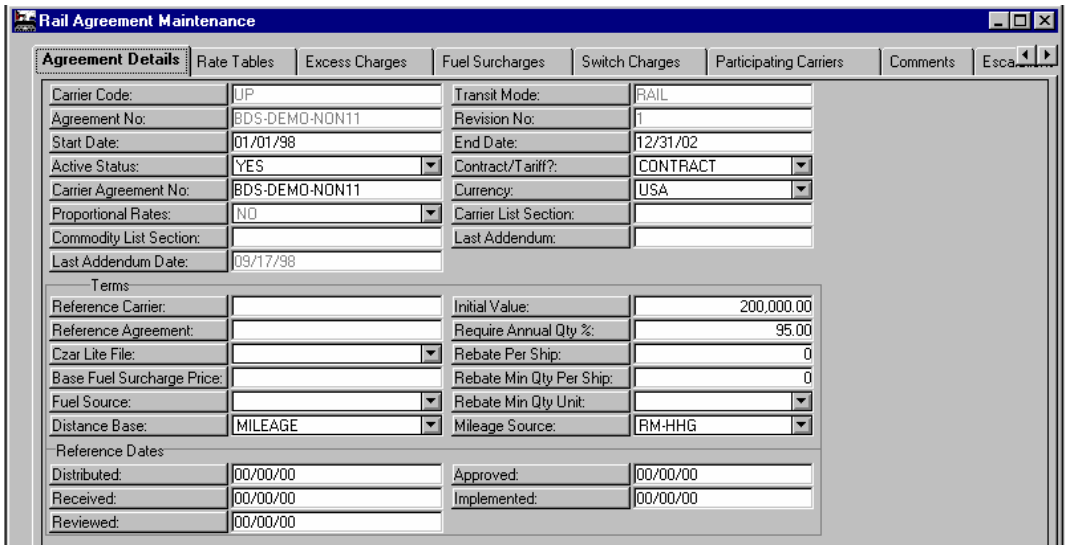
3. The Highway Zip Miles records are displayed in order of Start Zip - ascending.
4. To edit highlight the field of interest and change value.
5. To save any modifications, click the Save button on the ButtonBar.

Mileage Source

Mileage Source in Config-Reference allows for entry of sources of miles. Mileage Source is a field on the Agreement Header. If there is a mileage scale in an Agreement, this feature tells RateServer® where to go to look up miles not already stored in the system. Rand McNally and ALK are typically used.



The screen below shows the Agreement Header with the Mileage Source field populated.



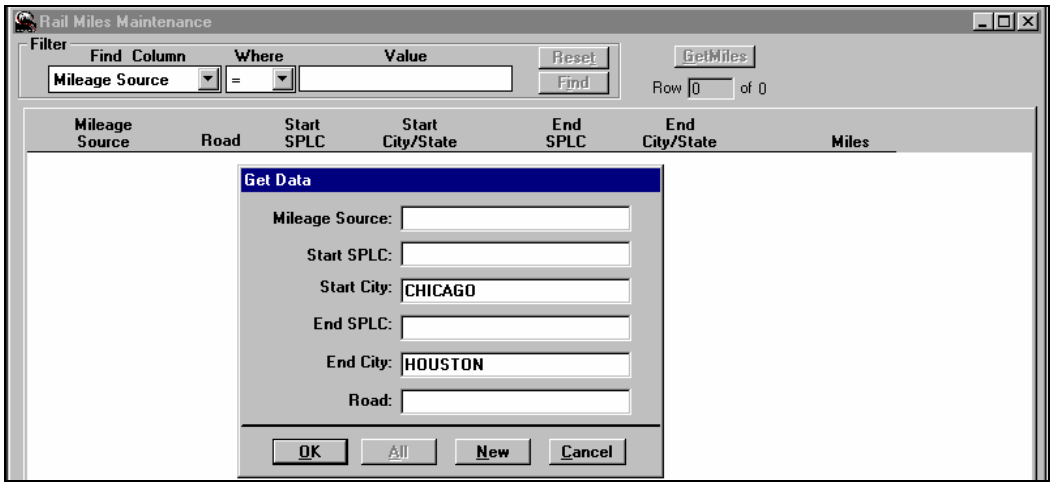
Rail Miles

The Rail Miles screen provides a facility to store and retrieve mileage for O-D pairs traveled by rail. Rail segments are unique to origin SPLC, destination SPLC, and railroad SCAC. A railcar shipped from origin to destination by utilize several rail segments due to the fact that several rail carriers will cooperate in moving the railcar to its ultimate destination.

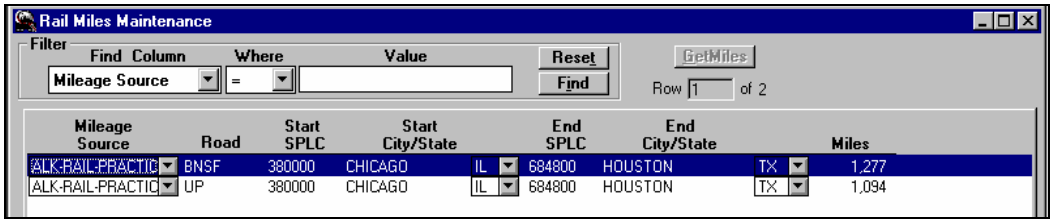
The mileage, recorded by segment, will be totaled to calculate the total mileage the railcar will travel on a given route.

To view or edit Rail Segment records, the user enters in the GetDataBox parameters such as Start SPLC, Start ERPC, End SPLC, End ERPC, and (Rail)Road. "ERPC" is the nine character CLM spelling of the city name.

The screen below shows a GetDataBox query asking for all rail segment records between the O-D pair of "CHICAGO" and "HOUSTON":



The records are then listed showing all railroads which travel between the O-D pair entered into the GetDataBox and the associated mileage figures.



To access Rail Miles:

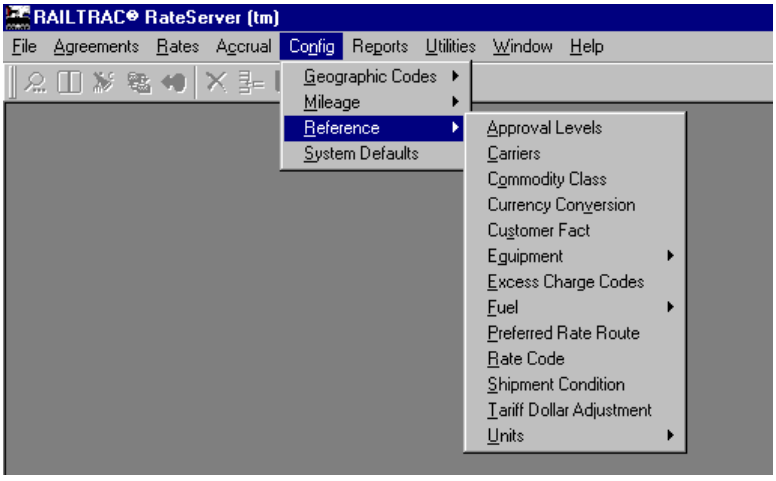
1. From the Main Menu, click on Config-Mileage-Rail Segment Miles.
2. On the GetDataBox, enter the parameters suggested by the GetDataBox.
3. The Rail Segment Miles records are displayed in order of Product Code - ascending.
4. To edit highlight the field of interest and change value. The Business Group field is a DropDownListBox of valid Groups.
5. To save any modifications, click the Save button on the ButtonBar.

Reference

The Reference functions allow for the definition of various data sets to provide valid reference information that is used throughout the entire application. These data sets are:

- ***Approval Levels***. Storage and maintenance area for the entry of approval levels with regard to agreement and addendum values.
- ***Carriers.*** Storage and maintenance area for defining valid freight carriers.
- ***Commodity Classes.*** Storage and maintenance area for defining classification of commodities and products that will be used within freight agreements.
- ***Currency Conversions***. Storage and maintenance area for conversion factors between currencies.
- ***Customer Fact***. Storage and maintenance area for the definition of customer information.
- ***Equipment.*** Storage and maintenance area for the definition of the types of equipment used within freight agreements.
- ***Excess Charge Codes.*** Storage and maintenance area for the definition of excess charges that will be defined within freight agreements.
- ***Fuel.*** Storage and maintenance area for defining variables associated with the fuel surcharge provisions contained in freight agreements.
- ***Rate Code.*** Storage and maintenance area for rail rate codes. Rate codes are the key element for linking rail movements to the agreement and/or agreements that contain the rate tables required for rating a complete movement.
- ***Ship Condition***. Storage and maintenance area for defining rate table shipment variables (i.e. line haul, back haul, continuous move, etc.).
- ***Tariff Dollar Adjustment***. Storage and maintenance area for the definition of tariff dollar adjustment factors.
- ***Units.*** Storage and maintenance area for the definition of units of measure that will be used within freight agreements and the definition of standard and commodity conversion multipliers to convert quantities from one unit of measure to another.

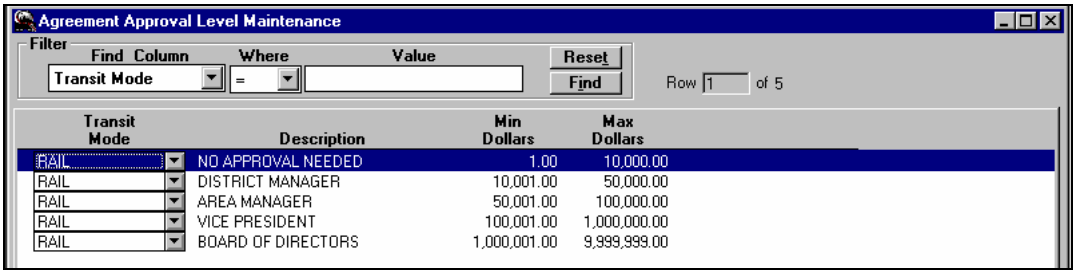
Below is the DropDownListBox listing all Reference functions.



Approval Levels

The Approval Level function allows for the definition of agreement approval levels by transit mode. As agreements are created and amendments are made, a value based on expected freight expense can be defined for each transaction. Based on the sum of all values associated with an agreement, the approval levels defined in this section will provide a message identifying who will be required to sign the negotiated agreement or amendment based on the expected freight expense of the transaction.

The following screen provides an example of the Agreement Approval Level screen.



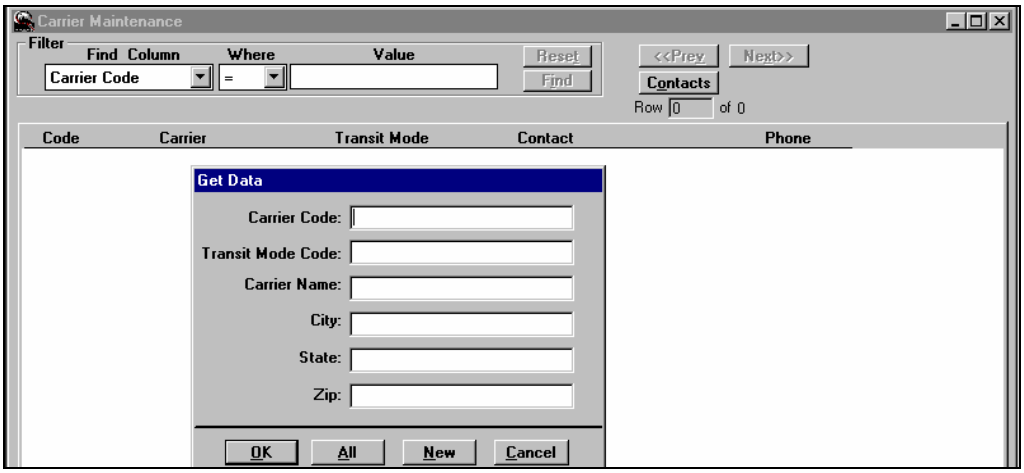
To access Approval Levels:

1. From the Main Menu, click on Config-Reference-Approval Levels.
2. To add a level, click the New button on the button bar and fill in the Transit Mode, Description, Minimum and Maximum Dollars.
3. To edit an existing record, highlight the field of interest and change value. The Transit Mode field is a DropDownListBox of valid modes.
4. To save any modifications, click the Save button on the ButtonBar.

Carriers

The Carriers function provides the ability to create and maintain information for the carriers that will be used by the shipper to transport goods. The listing is unique to a carrier's SCAC (Standard Carrier Abbreviation Code). This master listing of carriers provides information such as a carrier name, the transit mode it provides, contacts, phone/fax numbers, mileage source used in freight agreements, etc.

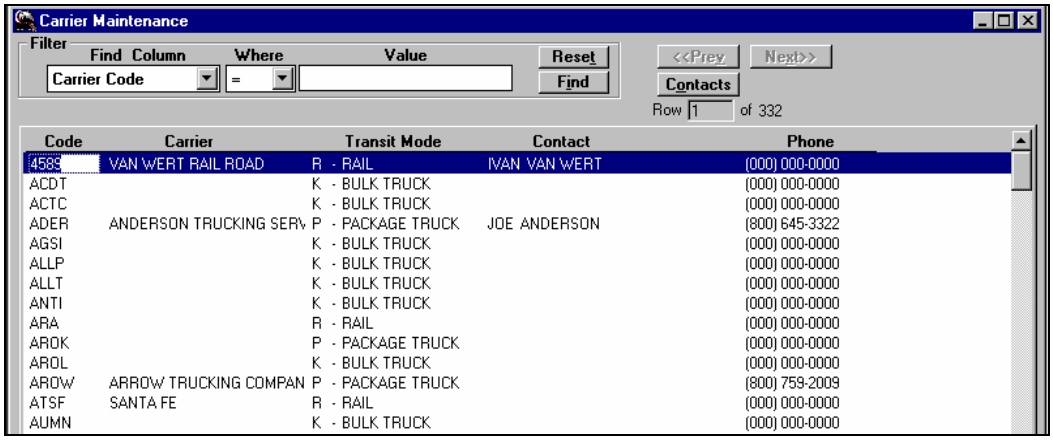
The screen below shows the GetDataBox to filter a list of Carriers by Carrier SCAC, Transit Mode, Carrier Name, Contact, City, State, and/or Zip Code. A user can also click the "All" button to get a listing of all the Carriers:



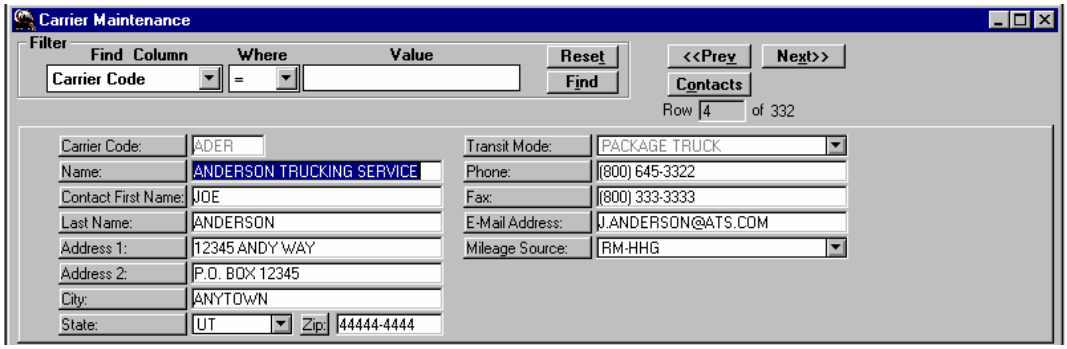
To access the Carriers Screen:

1. From the Main Menu, click on Config-Reference-Carriers.
2. The Carriers records are displayed immediately (without a GetDataBox) in order of Carrier SCAC - ascending.
3. To edit a record, highlight the record of interest, double-click it to obtain the detail screen, then highlight the field of interest and change the value.
4. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
5. To save any modifications, click the Save button on the ButtonBar.

The screen below shows a listing of Carriers as a result of clicking the "All" button. The columns from left to right are Carrier SCAC, Carrier Name, Transit Mode, Contact, and Phone:



The screen below results from double-clicking a individual record to view more Carrier details such as e-mail address and the mileage source used in the calculation of freight rates which involve distance. This screen is also used to edit a Carrier record:

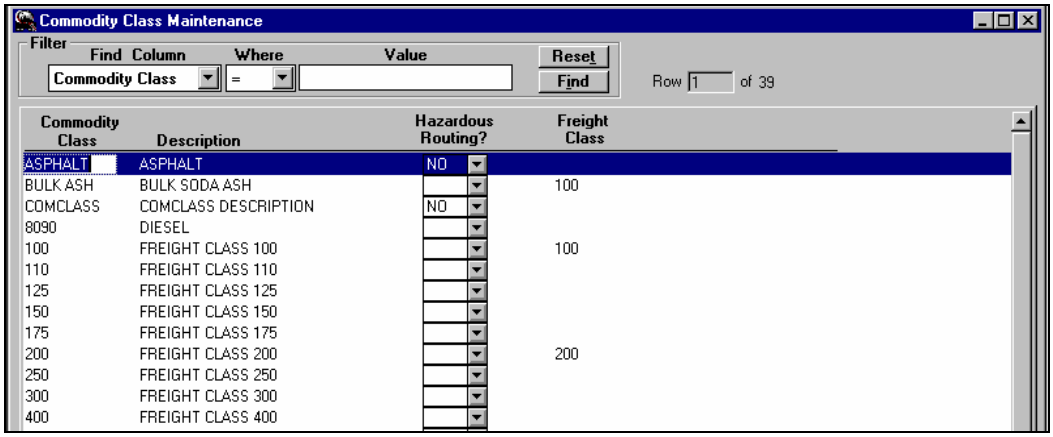


Commodity Class

The Commodity Class screens provide the ability to define the commodity classes that will be rated against in the freight agreements. Commodity Classes defined in this section make up the commodity drop down list that is available during the rate table creation process. All classes must be defined here or they can not be used in a rate table. These classes should represent a range or family of products that would all rate the same during an actual shipment. If classes are defined as specific products, multiple rate tables would be required for each product even though they would all rate the same.

Once a commodity class has been defined, a data window for assigning specific product codes to that class is available by double clicking a commodity class. Here, each product that makes up the class can be defined. This provides the flexibility to allow rate inquiries to be made by either commodity class or product code.

The screen below shows a listing of valid commodity classes:



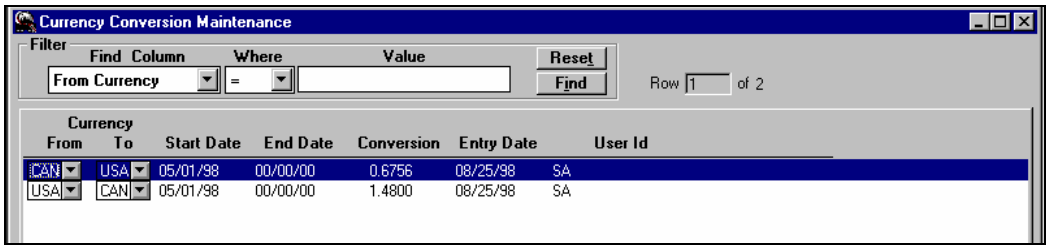
To access the Commodity Classes Screen:

1. From the Main Menu, click on Config-Reference-Commodity Classes.
2. The Commodity Class records are displayed immediately (without a GetDataBox) in order of Commodity Class - ascending.
3. To edit a record, highlight the record of interest, then change the value.

4. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
5. To save any modifications, click the Save button on the ButtonBar.

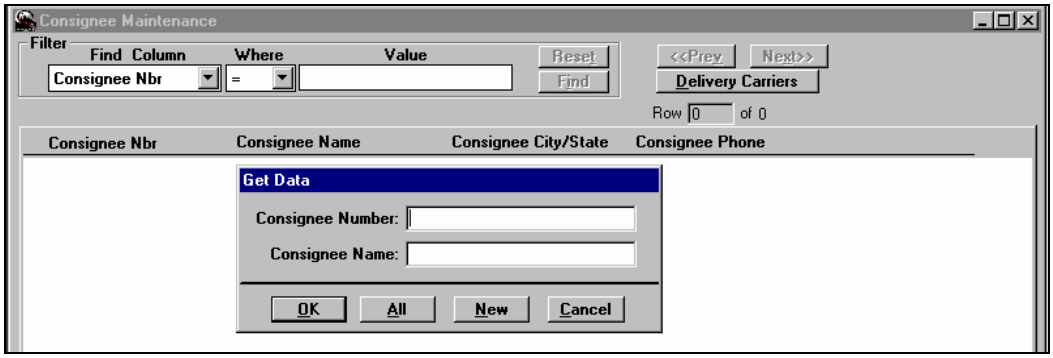
Currency Conversion

RateServer® allows for storage of currency conversion factors. These factors are used during on-line inquiries to convert freight cost to one common currency if more then one currency is used in the definition of the rate tables. Freight is always converted to the currency defined on the rate table of the final destination. For example, we have a rail shipment from Houston, TX to Winnipeg, MB, Canada, where a rule 11 exists with the UP publishing a rate to Chicago, IL in US dollars and the CN publishing a rate form Chicago to Winnipeg in Canadian dollars. During the on-line rate request, the system will take the UP freight and convert it to Canadian dollars and report the total freight of the movement in Canadian dollars. During a live shipment interface, no conversion takes place. Each leg of the rule 11 is stored separately in the accrual tables based on the currency that the freight will be paid in.

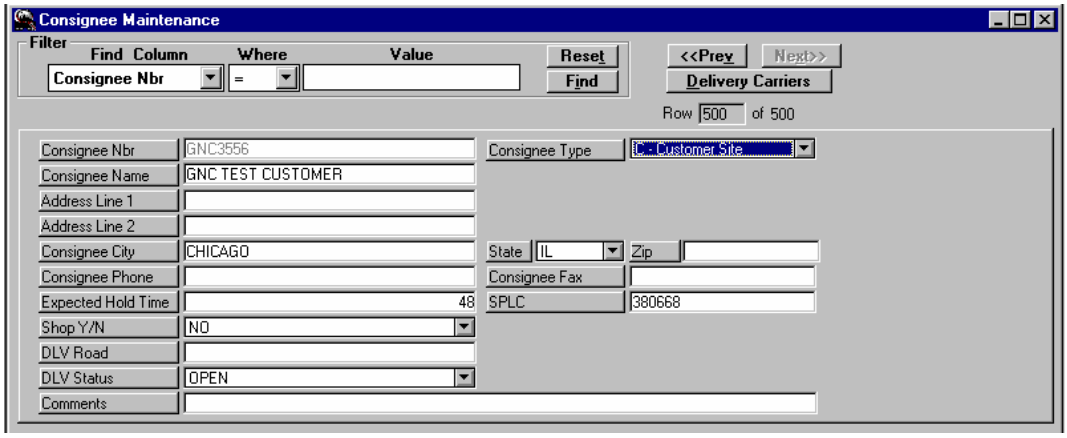


Customer Fact

The customer fact table stores contact information on customers. This is a table that is shared with RAILTRAC®. The available fields are Customer Number, Customer Name, City, State, Zip, Phone, Fax, etc.



Double-clicking on any customer or clicking the detail button will bring the following screen:



Equipment

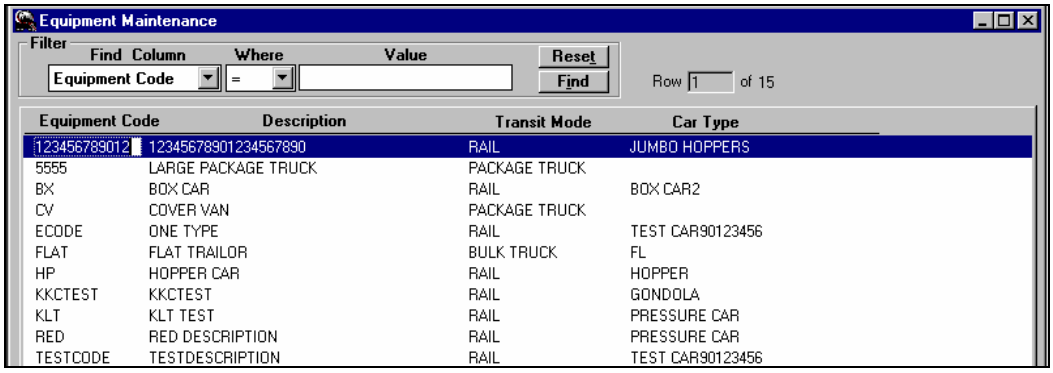
The Equipment section contains multiple screens that are used to define all the elements associated with transportation equipment as it relates to freight agreements. Many times equipment is a key variable for determining freight rates, and unless the elements of equipment are defined in this section, they will not be available for use in rate tables.

The equipment section contains screens for defining individual equipment types, rate equipment groups, rail car types and specifications associated with rail car UMLER data.

Equipment Types

This area is where individual equipment types are defined for all modes of transportation. Each individual equipment type automatically creates a rate equipment group for the defined equipment type. (note: Rate equipment groups are defined in the next section)

The screen below shows the equipment type screen that is available through the menu picks Config-Reference-Equipment-Equipment. Each equipment type includes an Equipment Code, a Description, the Transit Mode, and Car Type for rail shipments. To add a new piece of equipment click the new icon and enter the four fields listed above.



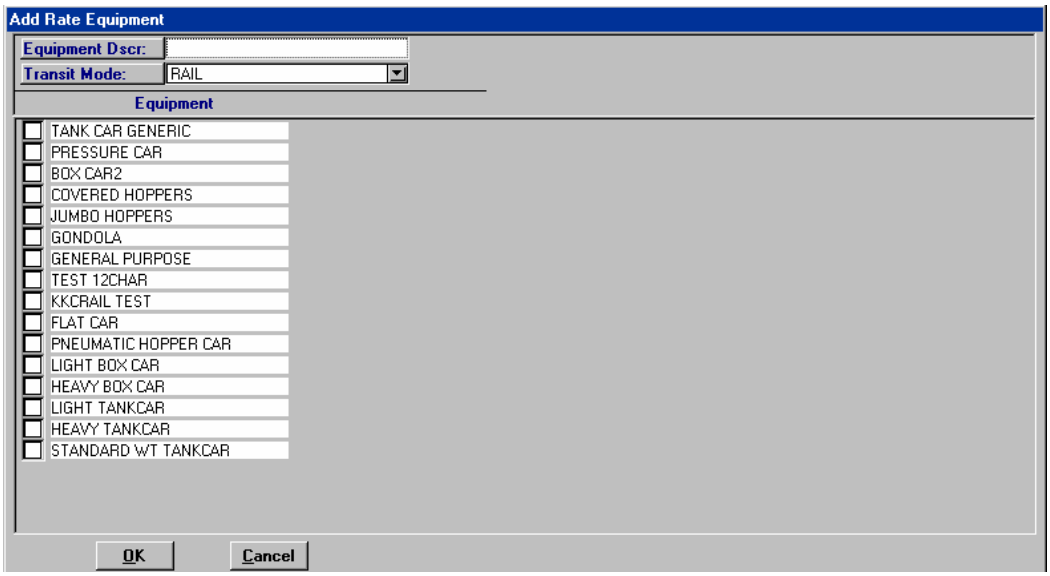
Rate Equipment Groups

Rate equipment groups are the variables that make up the equipment drop down lists that are available during the rate table creation process. RateServer® allows users to group individual equipment types together to form one equipment group that can be used in a rate

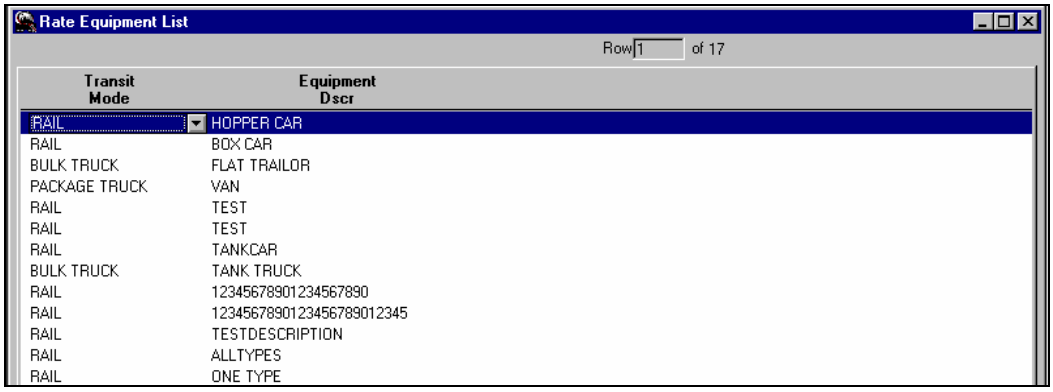
table. Every time an individual equipment type is defined, a rate equipment group containing that one equipment type is automatically created.

Rate equipment groups can be created here by clicking the new icon or during the rate table creation process by right clicking in the equipment type field. The creation process works the same from both places.

The screen below shows the rate equipment group creation screen. To create a new group, provide an equipment description and then select each equipment type that will make up this group by clicking the check box in front of the equipment type and then clicking the OK Button.

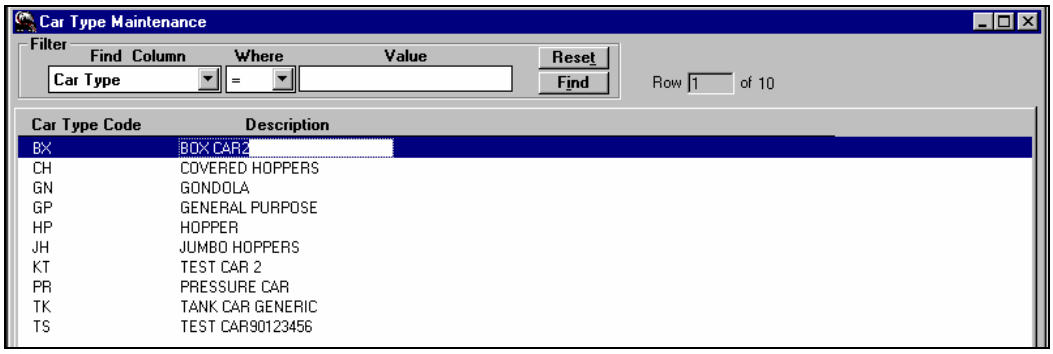


The screen below shows a list of Rate Equipment Groups.



Rail Equipment Types

Rail equipment types list the rail equipment types that have been defined. These equipment types are shared with RAILTRAC®. This information is reference data that currently does not impact the rating logic.



To access the Equipment Types Screen:

1. From the Main Menu, click on Config-Reference-Equipment Types.
2. Select either "Rail" or "Truck".
3. The Equipment Type records are displayed immediately (without a GetDataBox). In the Rail screen, they are sorted in order of Car Type Code - ascending. In the Truck screen, they are sorted in order of Equipment Code - ascending.
4. To edit a record, highlight the record of interest, then change the value.
5. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
6. To save any modifications, click the Save button on the ButtonBar.

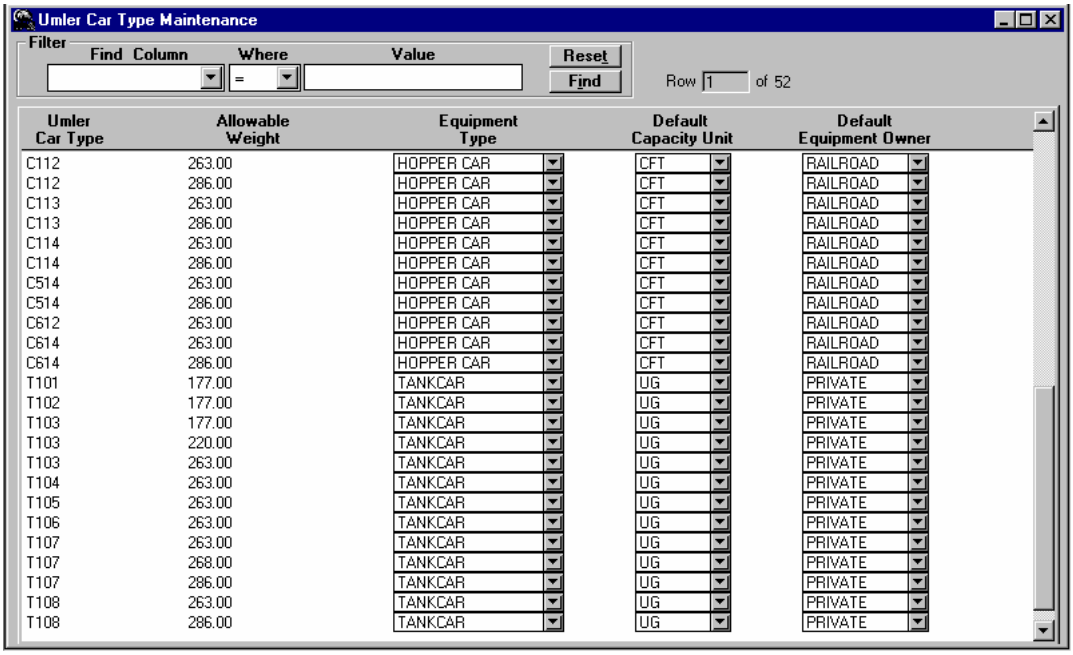
Umler Car Type

RateServer® contains functionality to query specific cars to identify the parameters of that car that will be required for freight calculation during the shipment rating process. These parameters are equipment type, car capacity and car ownership. If these parameters can not be provided by the shipping system during the rating interface, functionality exists to look up these parameters based on railcar used in the shipment. Umler car type is a translation table utilized to populate specific cars with these required parameters based on standard Umler values. This function is only required when rate tables have been defined based on the capacity of a railcar and is optional to find equipment type and car ownership if the shipping system can not provide this information during the rating interface process.

Each railcar loaded from Umler contains the Umler car type (C112, C113, T101, T103, etc.) and the allowable weight of the car. Based on these two variables, a RateServer® equipment type, a default car capacity unit of measure and a default car ownership is assigned. Every time a new car is loaded from Umler data, RateServer uses this table to tag the car with these three variables based on the car type and allowable weight provided by Umler.

The screen below provides an example of the Umler Car Type screen. Based on this example, an new car loaded from Umler that has a car type of C112 and allowable weight of

263 will be assigned a RateServer® equipment type of Hopper Car. The capacity of the car will be defined as cubic feet (CFT) and the ownership will default to railroad.



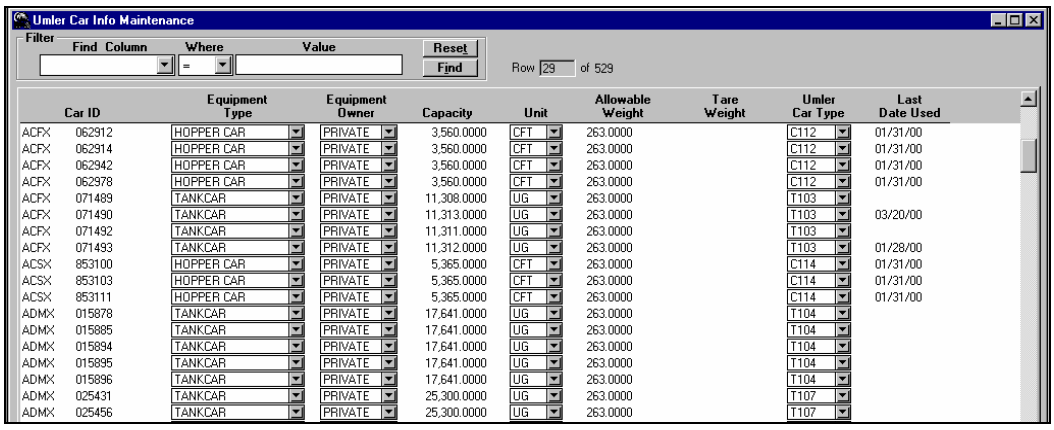
Umler Car Type	Allowable Weight	Equipment Type	Default Capacity Unit	Default Equipment Owner
C112	263.00	HOPPER CAR	CFT	RAILROAD
C112	286.00	HOPPER CAR	CFT	RAILROAD
C113	263.00	HOPPER CAR	CFT	RAILROAD
C113	286.00	HOPPER CAR	CFT	RAILROAD
C114	263.00	HOPPER CAR	CFT	RAILROAD
C114	286.00	HOPPER CAR	CFT	RAILROAD
C514	263.00	HOPPER CAR	CFT	RAILROAD
C514	286.00	HOPPER CAR	CFT	RAILROAD
C612	263.00	HOPPER CAR	CFT	RAILROAD
C614	263.00	HOPPER CAR	CFT	RAILROAD
C614	286.00	HOPPER CAR	CFT	RAILROAD
T101	177.00	TANKCAR	UG	PRIVATE
T102	177.00	TANKCAR	UG	PRIVATE
T103	177.00	TANKCAR	UG	PRIVATE
T103	220.00	TANKCAR	UG	PRIVATE
T103	263.00	TANKCAR	UG	PRIVATE
T104	263.00	TANKCAR	UG	PRIVATE
T105	263.00	TANKCAR	UG	PRIVATE
T106	263.00	TANKCAR	UG	PRIVATE
T107	263.00	TANKCAR	UG	PRIVATE
T107	268.00	TANKCAR	UG	PRIVATE
T107	286.00	TANKCAR	UG	PRIVATE
T108	263.00	TANKCAR	UG	PRIVATE
T108	286.00	TANKCAR	UG	PRIVATE

Umler Car Info

Umler car info is the area where all specific railcar information is stored. When the Umler rating interface is turned on, a look up is done in this area to define the equipment type, the car ownership and the capacity for each railcar in a shipment. If equipment type and ownership is provided in the interface record, only capacity will be identified through this process. Each time a car is used during the process, the system tags the car with the shipment date to identify when the last time this car was used.

The first step in loading this table should be to load all permanent assigned cars first and set the ownership flag to private. Next, load all required cars from Umler based on the Umler car type. This process will use the defaults that are defined in the Umler car type table to default the equipment type, capacity unit of measure and ownership values. Once loaded, car information fields such as ownership can be change if the Umler defaults do not represent the true value.

The screen below provides a view the Umler Car Info screen.



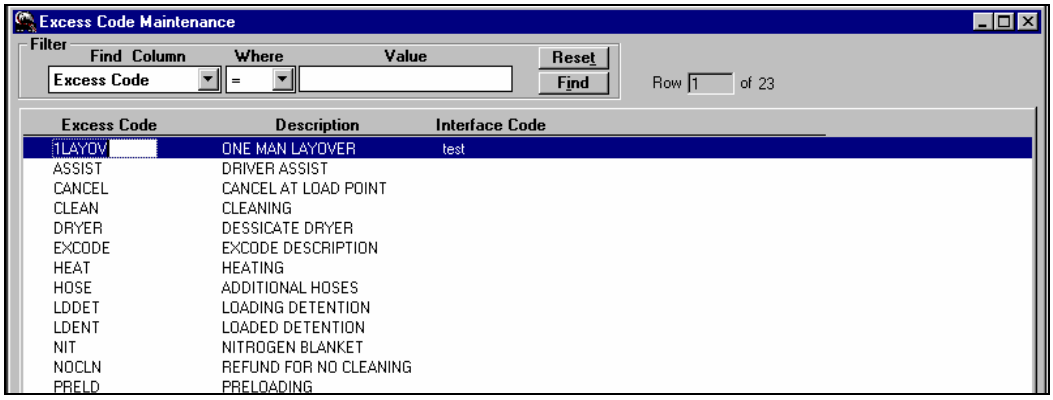
Car ID		Equipment Type	Equipment Owner	Capacity	Unit	Allowable Weight	Tare Weight	Umler Car Type	Last Date Used
ACFX	062912	HOPPER CAR	PRIVATE	3,560.0000	CFT	263.0000		C112	01/31/00
ACFX	062914	HOPPER CAR	PRIVATE	3,560.0000	CFT	263.0000		C112	01/31/00
ACFX	062942	HOPPER CAR	PRIVATE	3,560.0000	CFT	263.0000		C112	01/31/00
ACFX	062978	HOPPER CAR	PRIVATE	3,560.0000	CFT	263.0000		C112	01/31/00
ACFX	071489	TANKCAR	PRIVATE	11,308.0000	UG	263.0000		T103	
ACFX	071490	TANKCAR	PRIVATE	11,313.0000	UG	263.0000		T103	03/20/00
ACFX	071492	TANKCAR	PRIVATE	11,311.0000	UG	263.0000		T103	
ACFX	071493	TANKCAR	PRIVATE	11,312.0000	UG	263.0000		T103	01/28/00
ACSX	853100	HOPPER CAR	PRIVATE	5,365.0000	CFT	263.0000		C114	01/31/00
ACSX	853103	HOPPER CAR	PRIVATE	5,365.0000	CFT	263.0000		C114	01/31/00
ACSX	853111	HOPPER CAR	PRIVATE	5,365.0000	CFT	263.0000		C114	01/31/00
ADMX	015878	TANKCAR	PRIVATE	17,641.0000	UG	263.0000		T104	
ADMX	015885	TANKCAR	PRIVATE	17,641.0000	UG	263.0000		T104	
ADMX	015894	TANKCAR	PRIVATE	17,641.0000	UG	263.0000		T104	
ADMX	015895	TANKCAR	PRIVATE	17,641.0000	UG	263.0000		T104	
ADMX	015896	TANKCAR	PRIVATE	17,641.0000	UG	263.0000		T104	
ADMX	025431	TANKCAR	PRIVATE	25,300.0000	UG	263.0000		T107	
ADMX	025456	TANKCAR	PRIVATE	25,300.0000	UG	263.0000		T107	

Excess Charge Codes

The Excess Charge Code screen provides the ability to define excess/accessorial charges that are normally defined within an agreement. The excess charge codes should be defined to represent the type of charge that is being defined. These charges relate to things such as cleaning, detention (time waiting for a pickup), toll charges, hose charges, etc. These codes make up the DropDownListBoxes that are used during the creation of an agreement.

When excess charges are applied during an actual rating interface, each charge applied will create a record in the accrual tables. This provides the flexibility to report costs based on specific excess charge types.

The screen below shows a listing of excess charge codes. The columns are Excess Code, Description, and Excess Type:



To access the Excess Charge Code Screen:

1. From the Main Menu, click on Config-Reference-Excess Charge Code.
2. The Excess Charge Code records are displayed immediately (without a GetDataBox) in order of Excess Charge Code - ascending.
3. To edit a record, highlight the record of interest, then change the value. The Excess Type field has a DropDownListBox with the valid excess types as either Accessorial or Surcharge.
4. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
5. To save any modifications, click the Save button on the ButtonBar.

Fuel

The Fuel screens provide the ability to define a system wide fuel surcharge scale, store the current market prices of fuel and define the different fuel price sources that exist. These variables can then be linked to existing freight agreements where fuel surcharge provisions

exist so that changes in market price of fuel can be applied when applicable during the rating process. There are three steps required for the fuel surcharge process to work:

1. Create a fuel source and define that source in the agreement header.

For an agreement to apply a fuel surcharge, a fuel source must be defined as reference data and then linked to the agreement in the agreement header. More detail concerning fuel source is available in the Sources Section below.

2. Create a fuel surcharge scale.

Fuel surcharge scales can be global or agreement specific. A scale created in the reference section is a global scale. A scale defined in an agreement will be utilized only by that agreement. For a global scale to apply to an agreement, the Apply Company Surcharge Flag in the agreement header must be turned on. If a scale is defined in the agreement, that scale will always take precedence over a global scale. More details are available in the Surcharge Rates Section below.

3. Maintain fuel market prices.

Once a source and scale are defined, the market price for that source must be maintained. More details are available in the Market Prices Section below.

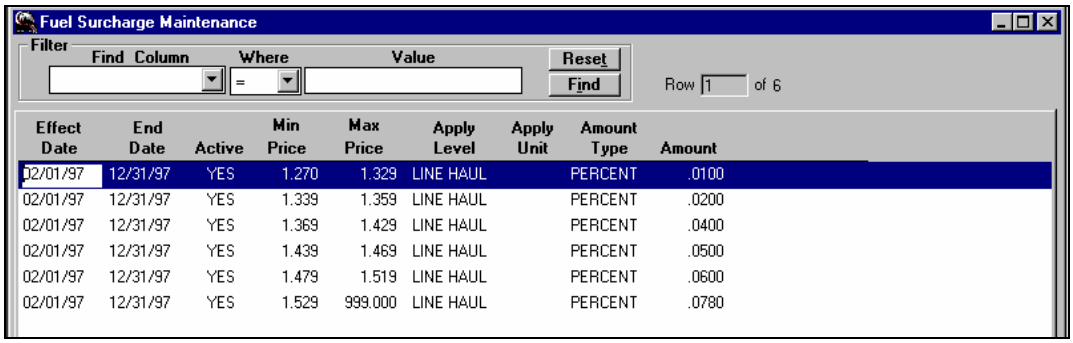
Surcharge Rates

Surcharge rates is the area where a system wide fuel surcharge scale is defined and maintained. Within the header of each agreement, users can define a fuel surcharge source and flag the agreement to utilize the system wide fuel scale. Once these two agreement variables are defined and a scale is defined in this section and a current market price exists for the agreement fuel source, the rating interface procedure will automatically calculate a fuel adjustment for all shipments that are rated through the agreement. If a surcharge scale is defined within the agreement, the agreement scale will take precedence over the global scale that exists in this section.

A fuel surcharge scale consists of the following variables:

- ***Effect Date.*** The date the fuel adjustment scale begins.
- ***End Date.*** The date the fuel adjustment scale ends.
- ***Active.*** Yes/No flag defining whether the line item is active.
- ***Min Price.*** Defines the minimum market price of fuel for the adjustment factor.
- ***Max Price.*** Defines the maximum market price of fuel for the adjustment factor.
- ***Apply Level.*** Defines the level where the surcharge will be calculated. When set to Line Haul, the surcharge will be calculated based on the total freight dollars of the movement. When set to Per Unit, the surcharge will be calculated based on the units defined in the scale. (i.e. If the unit is defined as miles, the total miles of the movement will be used to calculate the surcharge.)
- ***Apply Unit.*** The unit attached to the Per Unit Apply Level. If the Apply Level is set to Line Haul, this value will be blank.
- ***Amount Type.*** Defines the adjustment type. Valid Amount Types are Dollar or Percent.
- ***Amount.*** Defines the adjustment amount.

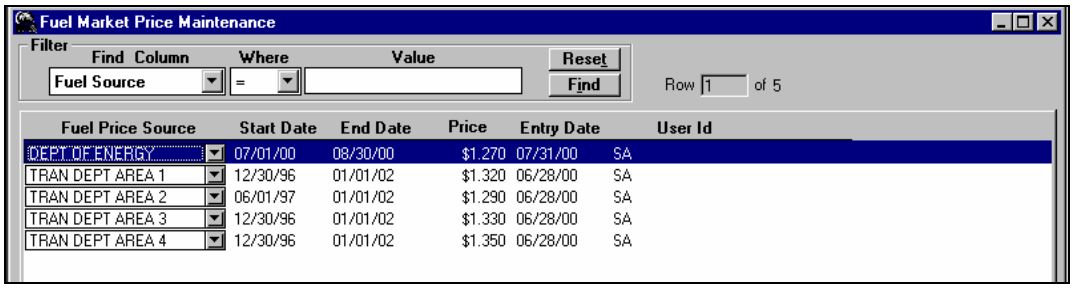
The screen below provides an example of a fuel surcharge scale. The scale in this example is based on a percentage of the line haul freight. Based on this scale, if the market price of fuel is $1.35, the fuel surcharge on a $500 freight bill will be $10 (500 * .02%). This screen can be accessed through Config-Reference-Fuel-Surcharge Rates:



Market Prices

Market Price is the area where the current price of fuel is maintained. Fuel prices are defined by the fuel source that publishes the price, the start date of the price and the end date of the price. Each time a market price is defined, the users ID for the user that created the record and the date the record was created is recorded on the record.

The screen below shows a listing of fuel prices for DOE Areas 1, 2, 3, and 4 (Department of Energy)



The screen below shows the result of double-clicking a current market price record. This example shows the historical fuel prices for the DOE.

Fuel Price Source	Start Date	End Date	Price	Entry Date	User Id
DOE	07/01/00	08/30/00	$1.270	07/31/00	SA
DOE	01/01/99	06/30/00	$1.300	07/31/00	SA
DOE	01/01/98	12/31/98	$1.350	08/03/98	SA
DOE	06/01/97	12/31/97	$1.330	06/26/97	SA

To access the Fuel Market Prices Screen:

1. From the Main Menu, click on Config-Reference-Fuel-Market Prices.
2. The Fuel Market Price records are displayed immediately (without a GetDataBox) in order of Fuel Price Source - ascending.
3. To edit a record, highlight the record of interest, then change the value. The Fuel Price Source field has a DropDownListBox

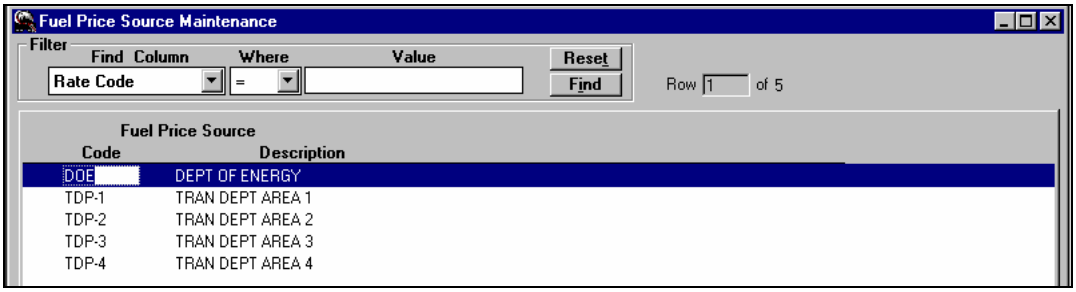
with the valid units which have been entered into the Fuel Sources screen.

4. To view the history of fuel prices for that area, highlight the source record of interest and double-click the record to display the historic prices.
5. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
6. To save any modifications, click the Save button on the ButtonBar.

Sources

The Sources section is where fuel pricing sources are created and maintained. A fuel price source is a code that defines the market publication that provides the current market price of fuel that is the base for calculating fuel surcharges. Within each agreement, the fuel price source must be defined in order to calculate fuel surcharges on movements that are rated through the agreement. For each defined fuel source, a market price for fuel published by that source must also be maintained. Based on the combination of these two variables, a fuel surcharge scale can be utilized to calculate fuel surcharge costs during the rating procedures.

The screen below shows a listing of defined fuel sources. These sources make up the drop down list available for defining the fuel source in the agreement header.



To access the Fuel Source Screen:

1. From the Main Menu, click on Config-Reference-Fuel-Fuel Source.
2. The Fuel Source records are displayed immediately (without a GetDataBox).
3. To edit a record, highlight the record of interest, then change the value.
4. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
5. To save any modifications, click the Save button on the ButtonBar.

Rate Code

Rate codes are specific to rail and are a critical element of the rail rating process. Without a complete and accurate rate code, rail shipments can not be rated through the interface procedures. For on-line rate inquiries, through movements can be rated without rate codes, but no rule 11 combination movements will be considered.

Rate codes identify all agreements where rate tables can be found for rating the entire movement based on the elements of the rate code. They essentially provide a rating road map for the rail rating interface process. Rate codes link routing and agreements to specific origin – destination – commodity - equipment type movement combinations.

For switch charges to apply during a rate inquiry, a rate code must exist where the switch location defined in the agreement is equal to or a part of the origin (for origin switches) or destination (for delivery switches) of the rate code, and the switch carrier is equal to the origin or delivery carrier of the rate code.

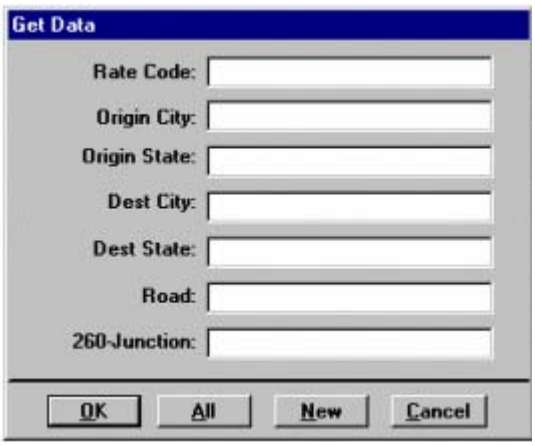
The following is an example to illistrate how a switch charge is applied during an inquiry: Within a UP agreement a switch charge is defined for the carrier TSU in Tulsa, OK. For this switch to apply at the origin of a shipment, a rate code would have to exist where the origin carrier is TSU, the first segment of the route is the UP utilizing the agreement where the switch is defined and the origin is equal to Tulsa, OK or a group of points where Tulsa would be include (i.e. The state of OK). For this same switch charge to apply at the destination, a rate code would have to exist where the delivery carrier is TSU, the last segment of the route is UP utilizing the agreement where the switch is defined and the destination is equal to Tulsa, OK or a group of points where Tulsa would be include.

RateServer® has an AutoCreate function where the system automatically creates a new rate code after a rate table has been created. The AutoCreate feature is only available for through rates.

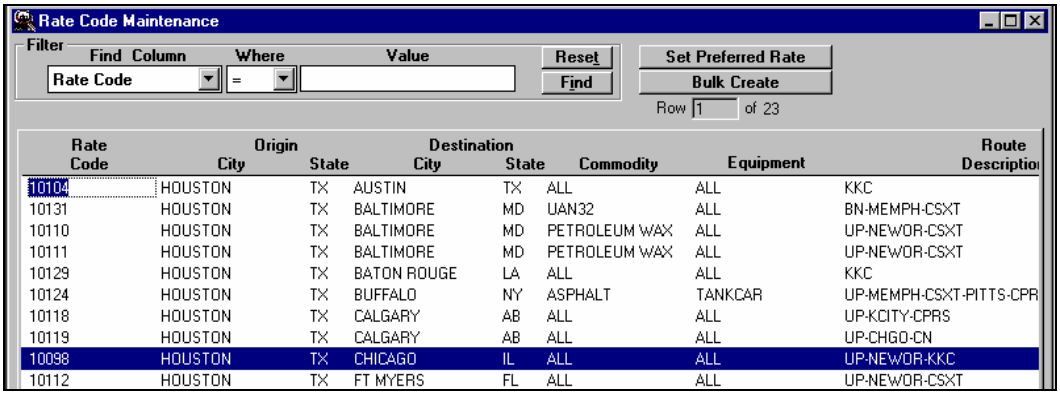
During the rail rating interface process, the first step is to identify the correct rate code for the origin/destination/product/route/equipment type of the shipment. Once the rate code is found, the process goes to the rate tables within the contract or contracts defined in the rate code and selects the appropriate rate based on the specifics of the movement.

When creating a rate code, commodity class and equipment type are key variables that must be defined. For the origin and destination being defined, if the rate tables within the agreement contain rates for multiple commodity classes and/or equipment types, the rate code can be defined with a commodity class of 'ALL' and an equipment type of 'ALL'. During interfacing, the more specific rate tables within an agreement will be used even though the rate code is defined as 'ALL'. The only time these variables need to be specifically defined is if the origin/destination being rated has multiple agreements that contain the rate tables for the different commodity classes and equipment type. Rate Codes determine which contracts should be used for rail shipments during interface. The screen below shows the GetDataBox that is displayed when clicking Config-Reference-Rate Code.

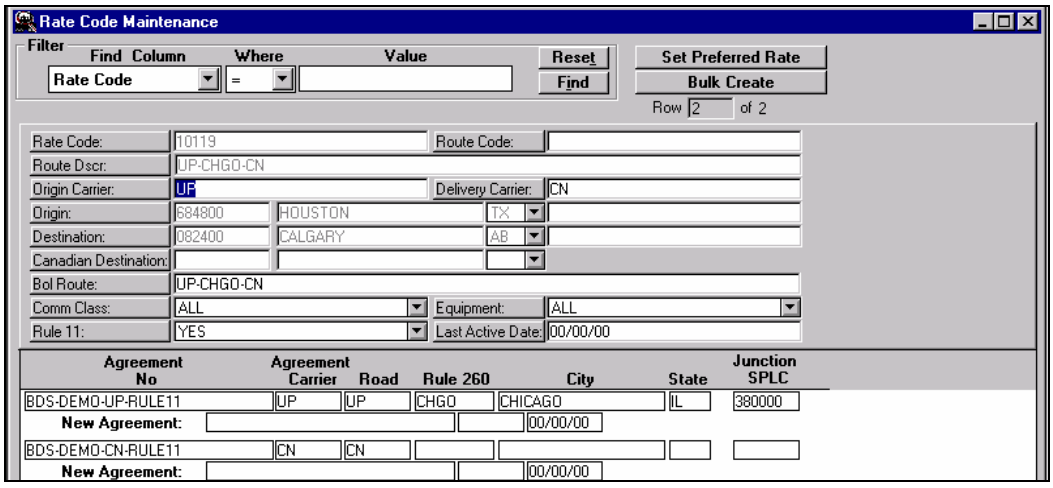
(Note: To insure the accuracy of the rating interface, when O-D pairs are defined based on location groups, Rail Service Locations should be defined. See the Rail Service Locations Section in this chapter for more details.)



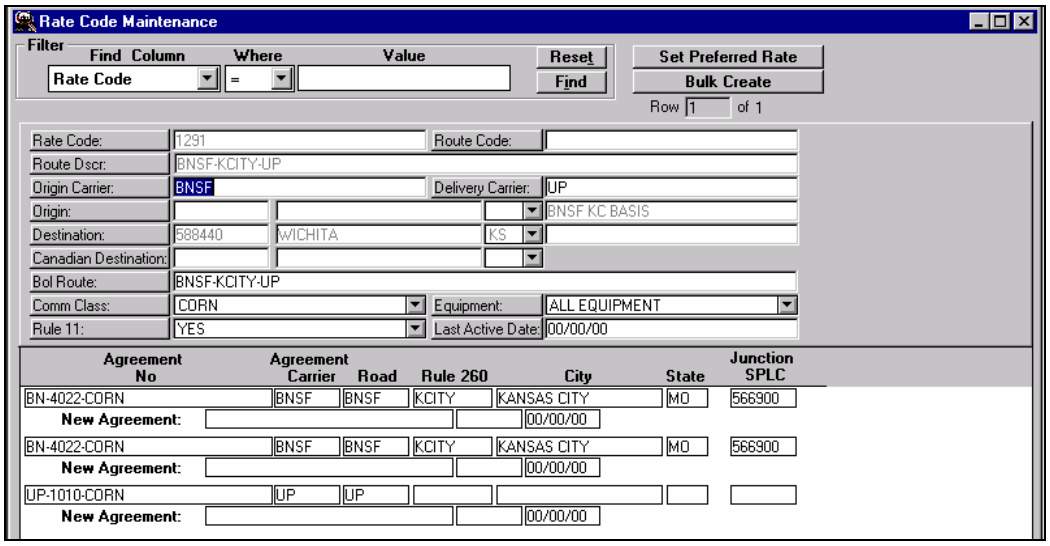
The next screen is a result of entering Houston as the origin city in the GetDataBox.



The screen below shows the detail of the rate code for Houston to Calgary. Notice commodity class is set to All, Rule 11 is set to Yes and Equipment is set to All.



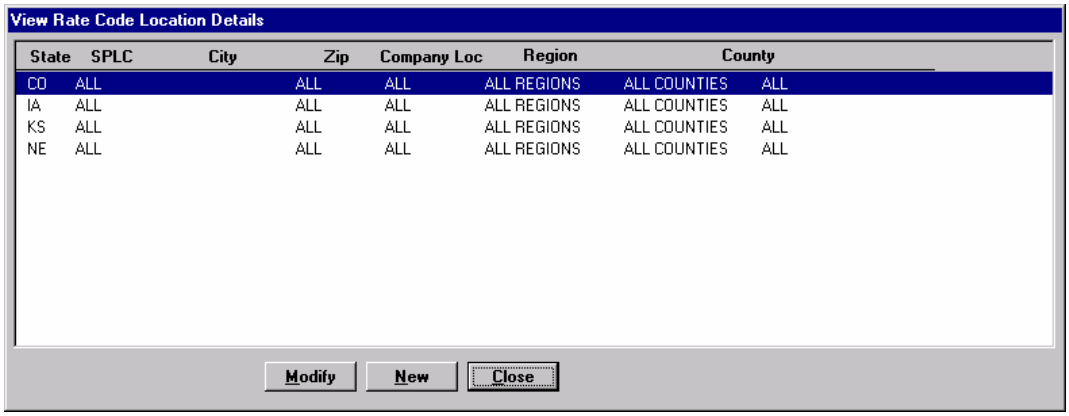
RateServer® allows users to set rate codes for use in various points. The screen below shows Rate Code 1291, this rate code is valid for shipments from all BNSF KC BASIS as an origin and Wichita, KS as a destination, for Commodity Class Corn, Rule 11-Yes, ALL EQUIPMENT.



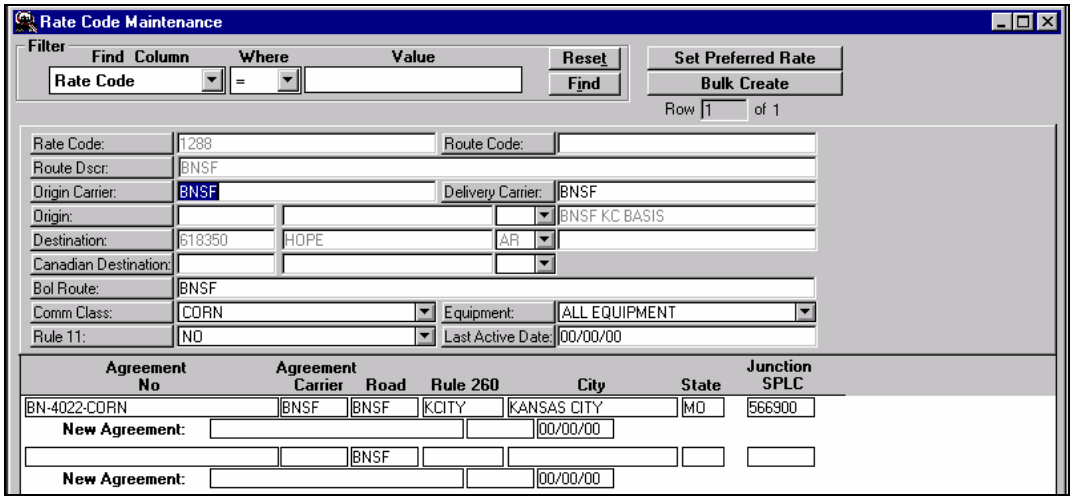
The rate code shown above only applies in a situation where a "tack-on" rate applies at an interchange point.

The lower portion of the Rate Code screen details the Agreements that should be used for rating. Notice the BN-4022-CORN agreement is listed twice, once for the Origin to Kansas City and then Kansas City to Kansas City. The last line is for UP-1010-CORN which is Kansas City to Wichita.

The detail below is the result of clicking in the Origin field BNSF KC BASIS and clicking the right mouse button. This rate code will apply to all points Colorado, Iowa, Kansas and Nebraska to Wichita, KS.



The next example shows a rate code with the same BNSF KC BASIS origin but a destination of Hope, Arkansas. It is for Commodity Class CORN, and it applies to ALL EQUIPMENT.



RAILTRAC® Route Codes can be used to build segments in Rate Codes.

If a RAILTRAC® Route Code is used to form a Rate Code, the top section of the rate code screen will be populated with Route Description, Origin and Delivery Carrier, BOL Route, Commodity Class will default to All, Rule 11 will default to No, and Equipment will default to All; The lower section of the Rate Code screen will be filled in with Agreement Carrier, Road, Rule 260 and Junction SPLC.

These fields can also be entered manually. A Route Code is not required. However, if entering these manually be sure to fill in the Agreement Carrier, Rule 260 and Road portion on the lower section as these are used to populate the Route Description field.

The Agreement No. field in the lower section must be entered manually. This tells RateServer® where to look for the rate tables that match the criteria described in the top section. Right-clicking in the Agreement No. field will bring a screen which allows the user to search for and select current contracts.

If BDS-DEMO-UP-RULE11 (shown above) included a rate table for Houston-Chicago for Plastics and all the criteria matched except that the Rule 11 flag on the Rate Table was set to No, the shipment would not rate because it could not find a matching rate table. The Rate Code tells RateServer® to only look for rate tables in the specified contract with criteria that matches the Rate Code exactly.

How To Build A Rate Code using a Route Code

1. Click on Tools/Reference/Rate Code.
2. Click the New button on the GetDataBox.
3. Enter a valid route code (if an invalid route code is entered the system will give an error and make the route code field blank).
4. Right-click in the Route Code field if the route code is unknown and a search box will appear.
5. RateServer® will automatically populate Route Description, Origin Carrier, Origin and Destination, Commodity Class, Equipment and Rule 11. If any of these variables need to be changed, now is the time to change them.
6. Click into the first line Agreement No. and enter the agreement.

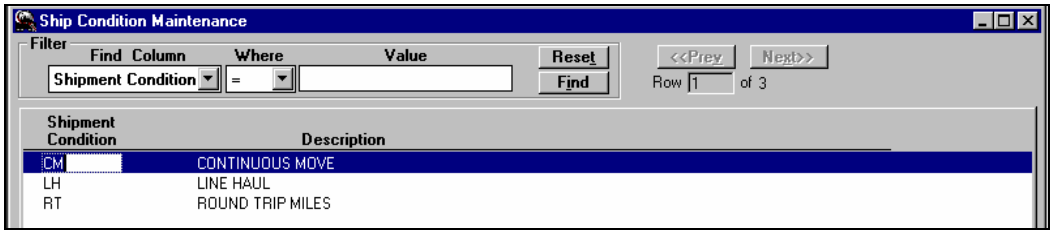
7. Tab to the Agreement Carrier field and enter the carrier.
8. Add an Agreement and Carrier to each segment.
9. Click on OK and RateServer® will add the rate code and display the number it assigned. It will then ask if this rate code should be assigned to a particular customer. Clicking No will clear the New screen, click cancel to get out of this screen. Clicking Yes will bring a list of customers whose destination city matches the destination on the route code. Select one or many of the customers and press OK.

How To Build A Rate Code Without using a Route Code

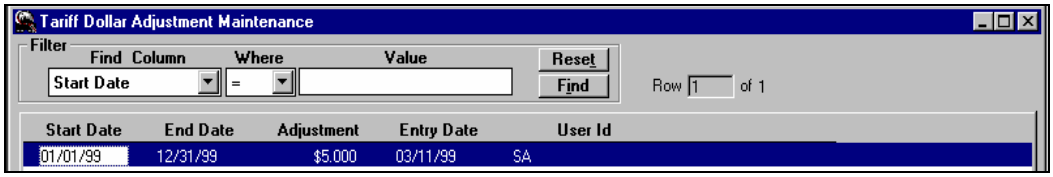
1. Click on Tools/Reference/Rate Code.
2. Click the New button on the GetDataBox. (If Rate Codes are on the screen, the system will ask if you want to use the current Rate Code as a template, if No is selected it will bring a blank screen, selecting Yes will bring a duplicate of the rate code that is highlighted). This example will begin from scratch.
3. Tab to and enter Origin Carrier
4. Tab to and enter Delivery Carrier
5. Tab to and enter either the Origin SPLC or City/State
6. Tab to and enter either the Destination SPLC or City/State
7. Change Commodity Class; Equipment; and the Rule 11 Flag if necessary.
8. Tab to and enter the Agreement No., Agreement Carrier, Railroad, Rule 260 Code or the Junction City and State or SPLC if applicable.
9. Complete Step 8 for all segments.
10. Click OK.

Shipment Condition

Config-Reference-Shipment Condition allows for entry of shipment conditions in RateServer®. In the screen below there are three, Continuous Move (CM), Line Haul (LH) and Round Trip Miles (RT). To create a new Ship Condition click on the new button in the button bar, a new blank line will allow for the new entry.



Tariff Dollar Adjustment



Units

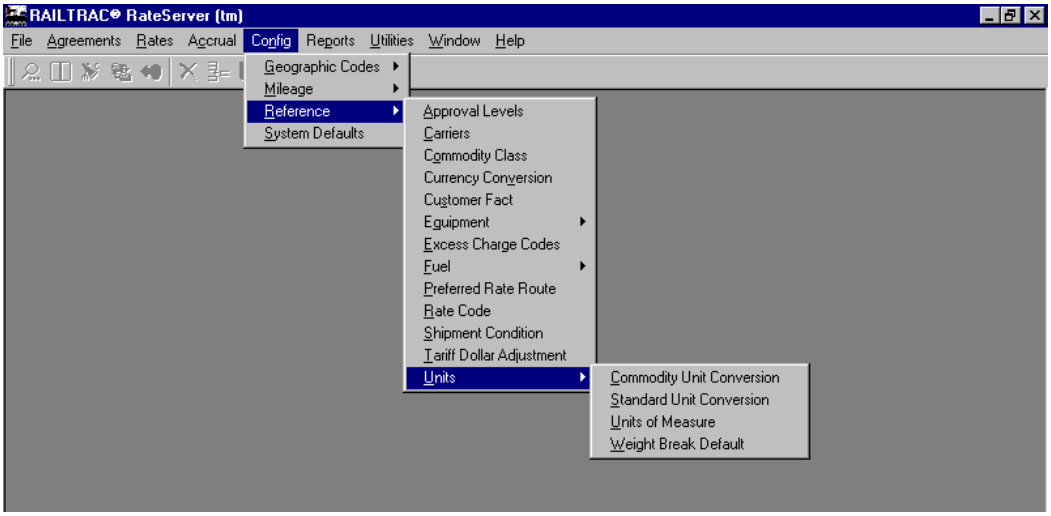
The Units screen provides a listing of valid units of measure and unit of measure conversions used for the rating of freight. These screens are:

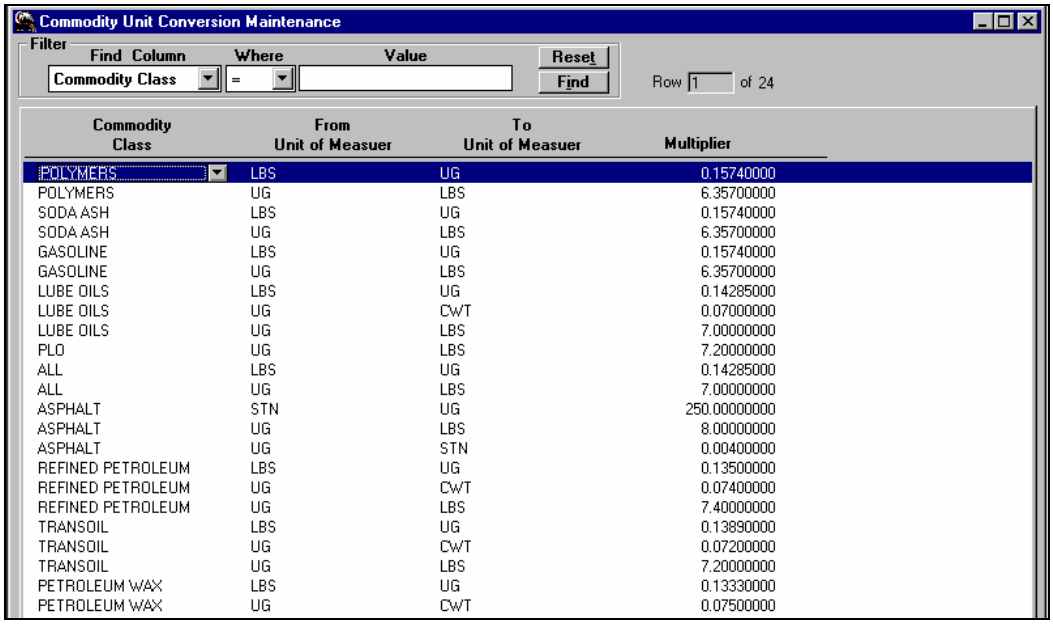
- ***Commodity Unit Conversion***. Provides for the storage and retrieval of multipliers for conversion from one unit of measure to another for a specific commodity or product classification.
- ***Standard Unit Conversion***. Provides for storage and retrieval of multipliers for standard unit conversions, regardless of the commodity.
- ***Units of Measure***. Provides for the definition of standard units of measure which are to be used in the rating.
- ***Weight Break Default***. Standard weight break defaults based on equipment type and quantity unit of measure. Once a default is created, anytime that equipment type / unit combination is used in a rate table, the weight breaks will auto populated based on these defaults.

Commodity Unit Conversion

This function provides for the storage and retrieval of multipliers for the conversion from one unit of measure to another for a specific commodity or product classification. Due to a product's weight and specific gravity, it will have a different multiplier for conversion from, say pounds to gallons, than another product. Therefore, for RateServer® to provide the versatility in allowing the rating of freight using different units of measure, the Commodity Unit Conversion allows quantities of a particular product to be described using different units of measure.

The screen below shows a listing of various product classes and the associated unit conversions with the multiplier:





To access the Unit of Measure Screen:

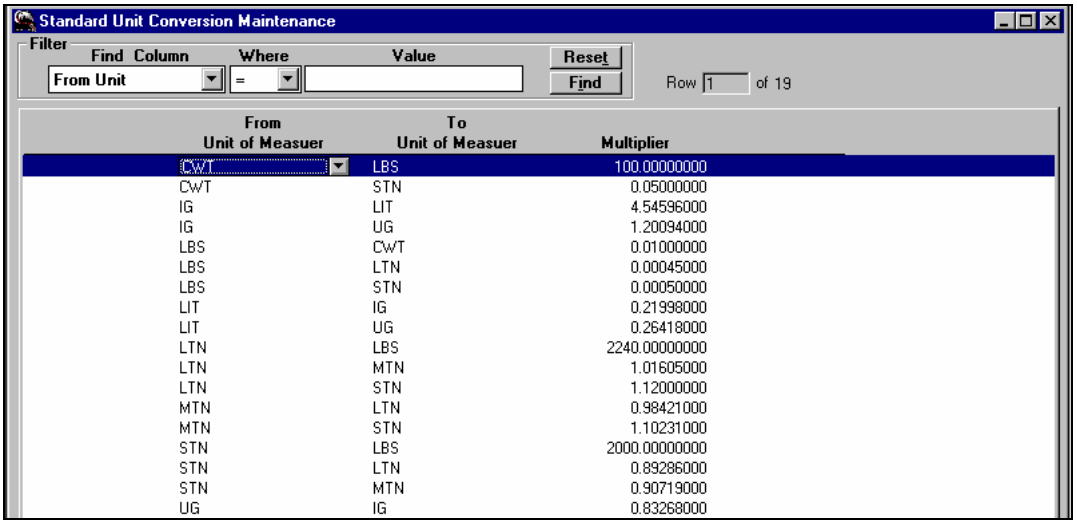
1. From the Main Menu, click on Config-Reference-Units-Commodity Unit Conversion.
2. The Commodity Unit Conversion records are displayed immediately (without a GetDataBox) in order of Commodity Class - ascending.
3. To edit a record, highlight the record of interest, then change the value. The Unit of Measure fields each have a DropDownListBox with the valid units which have been entered into the Unit of Measure function.
4. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.

5. To save any modifications, click the Save button on the ButtonBar.

Standard Unit Conversion

This function provides a facility for the storage and retrieval of multipliers for the conversion from one unit of measure to another, regardless of commodity or product classification. For those commodities where the multiplier is standard RateServer® provides the versatility in allowing the rating of freight using different units of measure.

The screen below shows a listing of various conversions for units of measure:



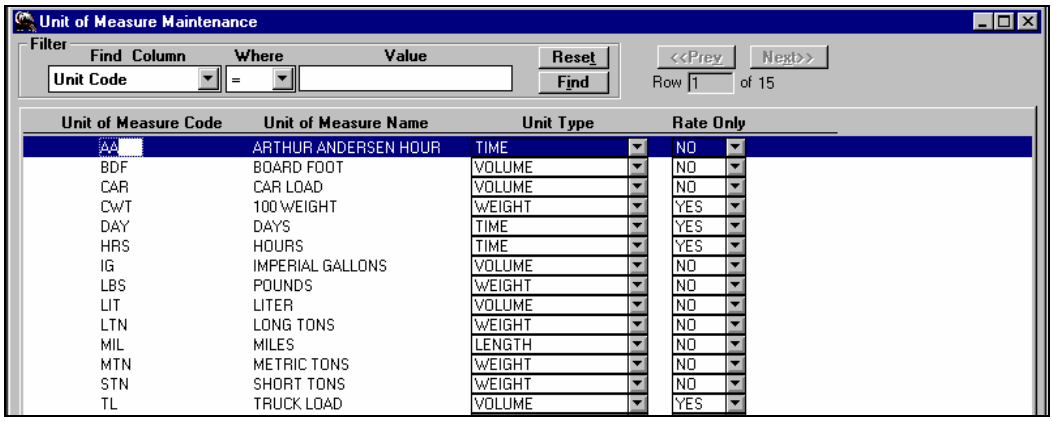
To access the Unit of Measure Screen:

1. From the Main Menu, click on Config-Reference-Units-Standard Unit Conversion.
2. The Standard Unit Conversion records are displayed immediately (without a GetDataBox).
3. To edit a record, highlight the record of interest, then change the value. The Unit of Measure fields each have a DropDownListBox with the valid units which have been entered into the Unit of Measure function.
4. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
5. To save any modifications, click the Save button on the ButtonBar.

Unit of Measure

This function provides for storage and retrieval of valid units of measure which will be used to rate freight in RateServer®. To utilize the unit conversion functions - Commodity Unit Conversion and Standard Unit Conversion, the units must be defined in the Unit of Measure function first.

The screen below shows a listing of various units of measure. The user can provide: the Unit of Measure Code which are abbreviations which will appear throughout RateServer® where a unit of measure is required; the Unit of Measure Name; and, the Unit Type defined as Weight or Volume:

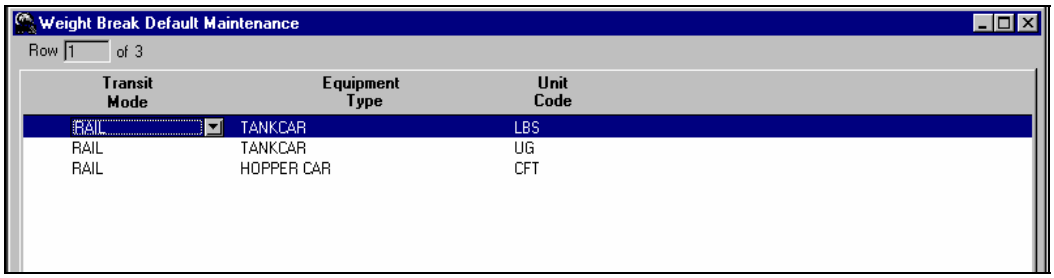


To access the Unit of Measure Screen:

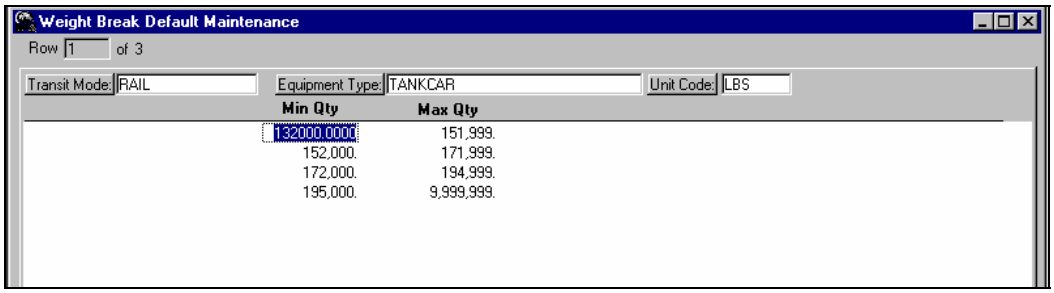
1. From the Main Menu, click on Config-Reference-Units-Unit of Measure.
2. The Unit of Measure records are displayed immediately (without a GetDataBox).
3. To edit a record, highlight the record of interest, then change the value. The Unit Type fields each have a DropDownListBox with the valid unit types of Volume or Weight.
4. To enter a new record, click the "New" button on the Toolbar and a new line will appear prompting for the entry of the new record values.
5. To save any modifications, click the Save button on the ButtonBar.

Weight Break Default

Weight break default is the common weight breaks that are used when a rate table is created for a specific equipment type and unit of measure. Once defined, anytime that equipment type and unit combination is used to create a rate table, the weights on the rate lines will automatically default to the values defined here.



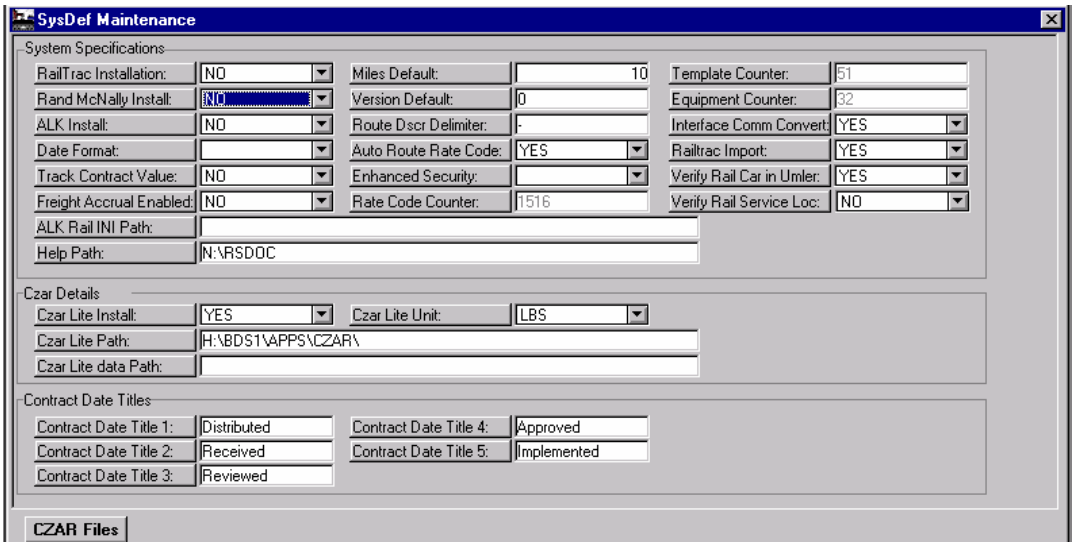
The screen above provides the list of equipment / unit combinations that have been defined in Weight Break Defaults. By double-clicking a record, the weight breaks of that combination will be displayed. The screen below provides an example of the weight breaks associated with a tankcar when the weight is defined in pounds.



Systems Defaults

The System Defaults screen allows setting of global system variables that determine how RateServer® works. For example, if Rand McNally Install is set to No, RateServer® will not go outside the system to search for miles for a particular movement.

Below is the System Defaults screen:

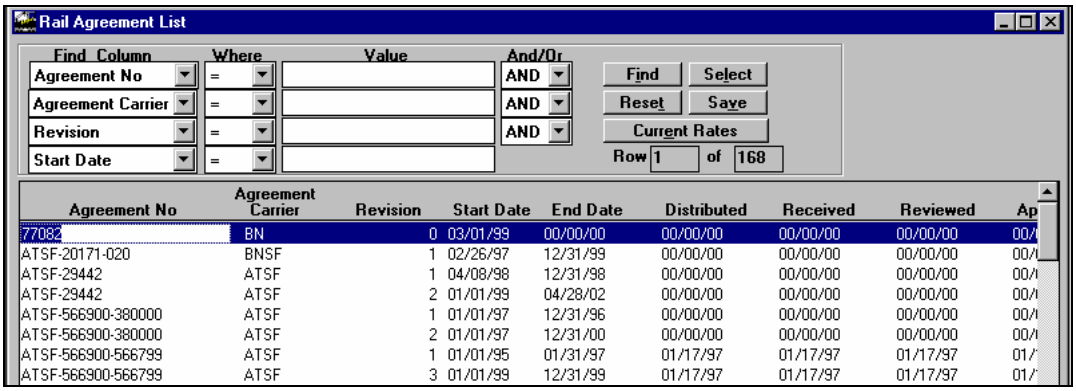


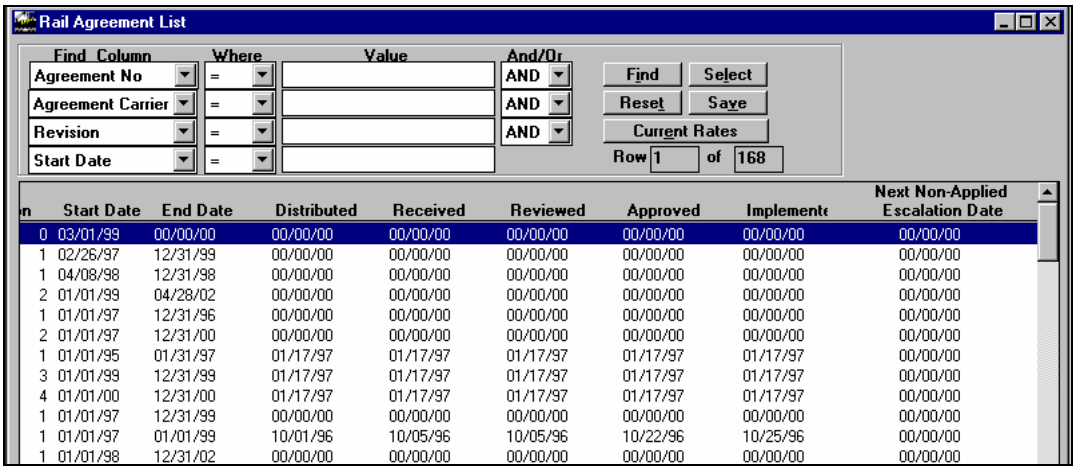
System Specification	Options
RailTrac Installation	Is RailTrac Installed? Yes/No field.
Rand McNally Install	Is Rand McNally Installed? Yes/No field.
ALK Install	Is ALK Installed? Yes/No field.
Date Format	DYM (Day/Year/Month) DMY (Day/Month/Year) MDY (Month/Day/Year) MYD (Month/Year/Day) YMD (Year/Month/Day) YDM (Year/Day/Month)

Track Contract Value	Should RateServer® track contract values? Yes/No field.
Freight Accrual Enabled	Should RateServer® create Freight Accruals? Yes/No field.
Miles Default	Numeric field. Standard is 0
Version Default	Numeric field. Standard is 0
Czar Lite Install	Is Czar Lite Installed? Yes/No field.
Czar Lite Path	Location of Czar Lite files (if installed).
Czar Lite Data Path	Location of Czar Lite data files, if different than Czar Lite Path.
ALK Rail INI Path	Location of ALK files.
Help Path	Location of RAILTRAC® context sensitive help file..
Route Description Delimiter	Defaults to a dash (-)
Auto Route Rate Code	Yes/No field. When entering a rate code and using a Railtrac Route Code, having this field set to yes will automatically populate the route information (Origin/Destination/Rail Segments) in the rate code.
Enhanced Security	Yes/No field.
Rate Code Counter	Numeric code that cannot be changed. When a new rate codes is entered this number will automatically increase by one.
Template Counter	Numeric code that cannot be changed. When a new location template is added this number will automatically increase by one.
Equipment Counter	Numeric code that records the number of different types of equipment used. When a new piece of equipment is entered this number will automatically increase by one.
Interface Comm Convert	Yes/No field
Czar Lite Unit	Which unit of measure Czar lite tables are in, such as pounds, tons, short tons, metric tons, etc.

The Contract Date Titles section has five fields that are optional. These fields can be populated to show the various stages a contract may go through. For example, Received, Reviewed, Approved, Sent to Carrier, Anniversary, Distributed, Implemented, etc. These are set in Systems Default and should not be changed once they are set and in use.

These fields show up on the Agreements List screen after the Start and End dates as shown in the screens below. The screens look identical whether looking at Rail, Truck or LTL. This screen is accessed through Agreements-Rail, at the GetDataBox selecting All.





Rand McNally

Rand McNally provides mileage information to RateServer® if properly installed. Below are the steps that need to be taken in order for RateServer® and Rand McNally to work together.

1. Install Rand McNally on a network drive. Users will need write access to this drive and the drive should be in the path of the machines that will access Rand McNally through RateServer®.
2. Move the Miles32.dll file to the same directory as the RateServer.exe.
3. Set the Rand McNally Install flag in System Defaults to Yes. Can also go through the RR_SYS_DEF.rand_install_yorn = Y.
4. Restart the application to reset the global flag.
5. Test the connection by running the FindMiles function under the Config-Mileage menu option.

Czar Lite

Czar Lite provides LTL Rate Tables for use in RateServer®. Below are the steps that need to be taken in order for RateServer® and Czar Lite to work together.

1. Install Czar Lite on a network drive.
2. In RateServer® System Defaults the following four things must be in place in order for the system to work properly.

a. Czar Lite Install must be set to Yes,

b. Czar Lite Path must identify where Czar Lite files are located and must have a \ at the end of the string. For example: H:\BDS\APPS\CZAR\

c. Czar Lite Data Path. This field is for identifying the location of the Czar Lite Data files if the location is different from the Czar Lite Path. BDS STRONGLY SUGGESTS THE DATA FILE BE IN THE SAME LOCATION AS THE CZARLITE APPLICATION. If the files are in the same location, this field should be left blank.

d. The Czar Files button on the lower left hand corner of the System Defaults screen stores the actual names of the Czar Lite data files to be used. The password is: Current Month, the word Czar and the Current Year. For example: 06czar1999.

To use Czar Lite when setting up an LTL Agreement use the following procedures.

1. On the Agreement header screen, in the second section, under Terms, Reference Carrier Should be Czar. When this is populated, Reference Agreement will automatically populate.
2. The field called Czar Lite File needs to identify which Czar Lite file will be utilized.
3. Upon completion of the contract header information the system will prompt for entry of discounts.

Agreements and Rate Tables

Rate Structures

Through Rates

Single or Multiple carriers–one contract. Through Rates are negotiated and paid through one carrier even if multiple carriers are used to make a shipment. All TL and LTL rates are classified as through rates. An example of a rail through rate would be a shipment from Houston to Atlanta moving UP-NEWOR-CSXT, where the UP would receive payment for the entire trip and then pay the CSXT for their portion of the shipment (New Orleans-Atlanta). The rate is published for the entire movement within the UP agreement.

Rule 11 Rates

Multiple carriers-multiple contracts. Rule 11 rates differ from through rates in that portions of a movement will be rated and paid separately. A rule 11 condition exists where at least two carriers involved in a movement publish the rates for their portion on the move in a separate agreement. Rule 11 rates are specific to rail rate tables. Using the example of a movement from Houston, TX to Atlanta, GA routed UP-NEWOR-CSXT, a rule 11 condition would exist if the UP and CSXT published the rates for there portion of the movement in there own agreements and the shipper in-turn will pay each carrier.

Every rail rate table contains a Rule 11 flag that identifies whether it can be used in combination with another agreements rate table. Valid values for the Rule 11 conditions are:

- **No – Non R11.** This rule 11 condition allows for the creation of a rate table that can only be used as a non-rule 11 through rate. This rate table can never be used in conjunction with a rate table from a different agreement to make a complete movement record.
- **Yes – R11 Points Beyond & Delivery.** This rule 11 condition allows for the creation of a rate table that is party to a rule 11 where the rate table destination can be both an interchange point for another rule 11 agreement or can be the final destination for a rail movement. An example of this condition is a gateway rate from New Orleans, LA to Jacksonville, FL on the CSXT, where Jacksonville can be an interchange point with another carrier such as the FEC or it can be the final destination for the movement. These rate tables can never be used as a non-rule 11 through rate.

- **Both – Non R11 & All R11.** This rule 11 condition allows for the creation of a rate table that can be used as a non-rule 11 through rate, or can be an interchange point for another rule 11 agreement or can be the final destination for a rail movement. An example of this condition is a gateway rate from New Orleans, LA to Jacksonville, FL on the CSXT, where Jacksonville can be an interchange point with another carrier such as the FEC or it can be the final destination for the movement and New Orleans can be the original origin of the shipment or it can be the interchange point for a rule 11 rate table.
- **I – Points Beyond.** This rule 11 condition allows for the creation of a rate table that is party to a rule 11 where the rate table destination can only be an interchange point for another rule 11 agreement. This rate table can never be used as the final destination for a rail movement. An example of this condition is a gateway rate from New Orleans, LA to Jacksonville, FL on the CSXT, where Jacksonville can only be an interchange point with another carrier such as the FEC.
- **F – Delivery Only.** This rule 11 condition allows for the creation of a rate table that is party to a rule 11 where the rate table destination can only be the final destination for a rail movement. This rate table can only be used on the back end of a rule 11 movement. An example of this condition is a gateway rate from New Orleans, LA to Jacksonville, FL on the CSXT, where Jacksonville can only be the final destination of the movement.
- **D – Non R11 or R11 Delivery.** This rule 11 condition allows for the creation of a rate table that can be used as a non-rule 11 through rate or can be a party to a rule 11 where the rate table destination can only be the final destination for a rail movement. An example of this condition is a gateway rate from New Orleans, LA to Jacksonville, FL on the CSXT, where Jacksonville can only be the final destination and New Orleans can be both an interchange point for a rule 11 or it can be the origin of the movement.

Proportional Rates

Multiple Carriers / Rates – One Agreement. Proportional Rates are specific to rail rate tables. This type of rate is where multiple carriers are involve and each rate is negotiated separately, but both rates are published within one agreement and the shipper in-turn will pay the agreement owner the combination of both rates. Using the example of a movement from Houston, TX to Atlanta, GA routed UP-NEWOR-CSXT a proportional rate would exist if the UP and CSXT publish separate rates for their portion of the move within the UP agreement. The shipper will pay the UP for the entire movement, then the UP will pay the CSXT for their portion.

A second proportional scenario is the use of tack-on rates. Many carriers publish rates to a common point and then publish an add-on to all points beyond. An example of this would be the BNSF publishing a rate from Denver, CO to Kansas City, MO and then publishing an add-on from Kansas City, MO to Tulsa, OK. The routing of the move will be BNSF Direct, but the agreement will contain a rate table from Denver to Kansas City and a rate table from Kansas City to Tulsa.

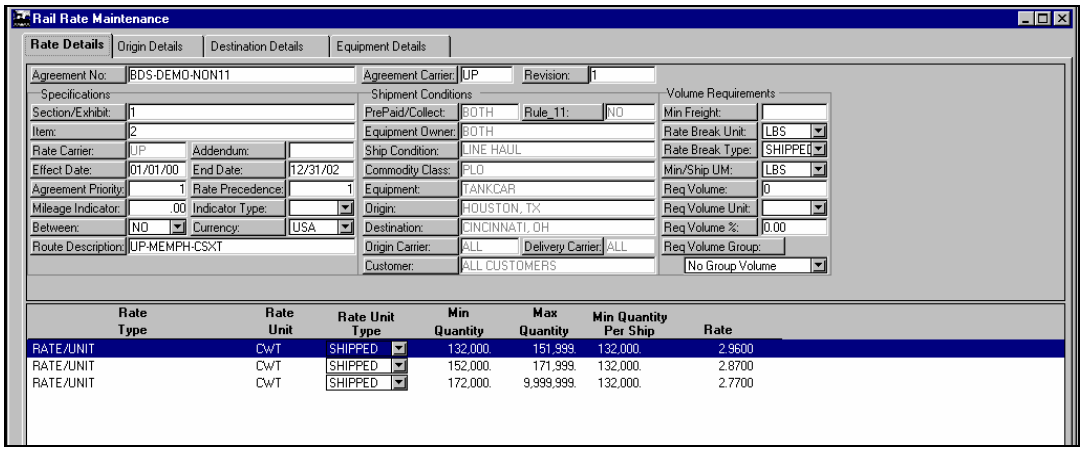
When entering new Agreements there is a yes/no field for Proportional Rate. Anytime an agreement contains at least one instance of a proportional rate, this flag must be set to Yes for the rating procedures to combined multiple rate tables in a proportional scenario.

Rate Tables Types

RateServer® contains 3 types of rate tables: Point-to-Point (PTP), Mileage scale and Matrix. A forth rate table input screen called WB Rate/Mile is a modified method for creating a PTP rate table. This input methods can create multiple PTP rate tables based on a mile per unit rate from a single input window.

Point-to-Point (PTP)

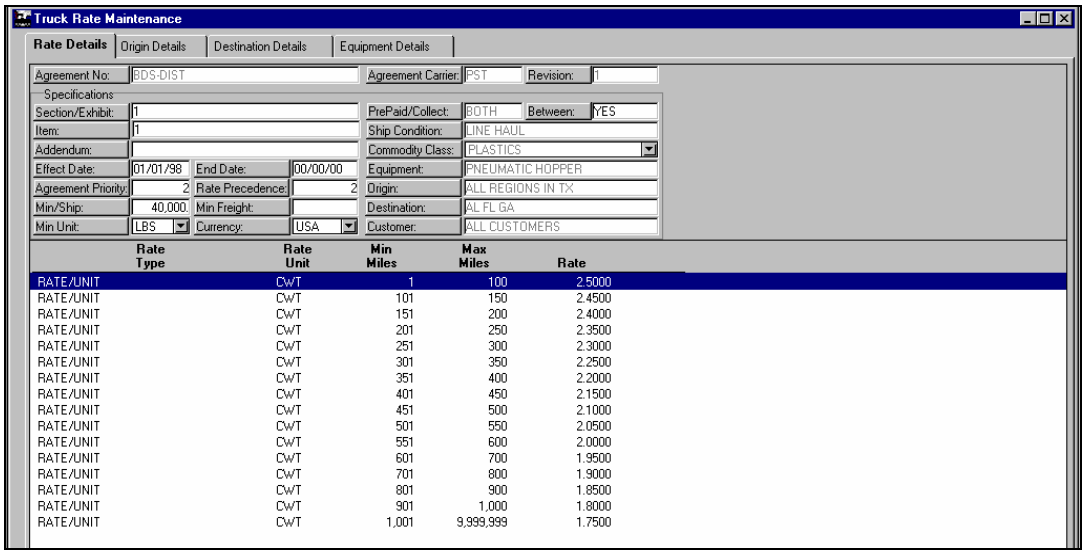
A PTP rate table is a one variable rate structure based on quantity from an origin to a destination. Origins and destinations can be defined as both single and multiple points. Acceptable variables for defining quantity are Shipped Quantity, Railcar Capacity (rail only) and Number of Cars (rail only). Multiple quantity breaks for any of the three variables can be created.



The screen above provides an example of a rail PTP rate table with 3 different quantity rate breaks that are based on shipped quantity. The quantity breaks are defined in pounds with the rates being published in CWT.

Mileage Scale

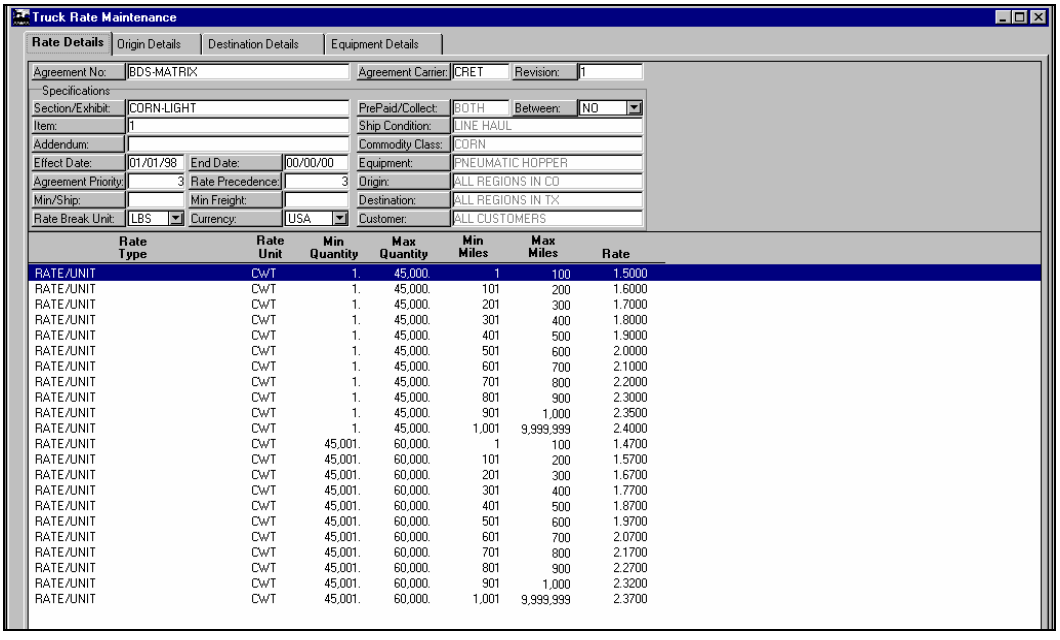
Mileage scale is a distance based rate scale. Each rate line within the rate table will allow for a different rate based on a mileage range.



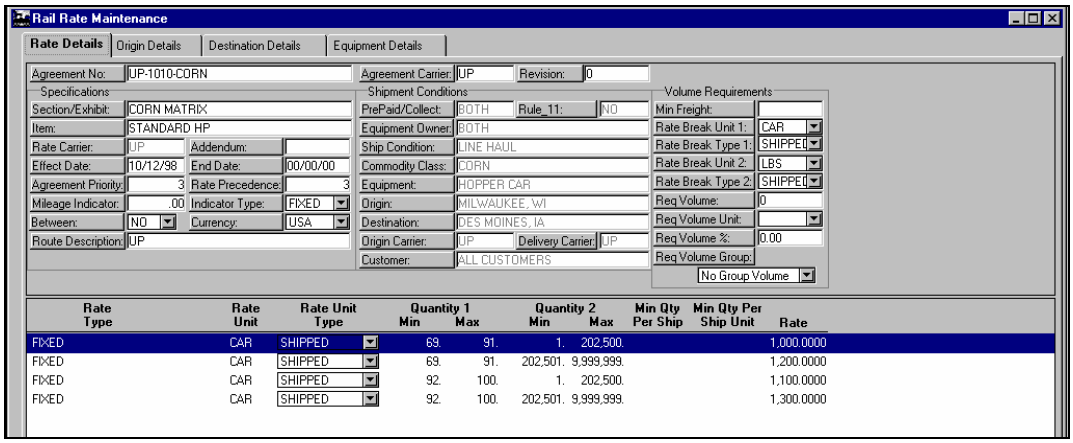
The screen above provides an example of a truck mileage scale. For each defined mileage break, a different CWT rate is published.

Matrix

Matrix rate tables utilize a two variable rate structure. For truck matrix scales, the two variables will always be based on shipped quantity and miles. Rail matrix scales are multi-dimensional and the two variables are defined within each rate table (i.e. Car Capacity to Number of Cars, Shipped Quantity to Miles, Number of Cars to Miles, etc.)



The screen above provides an example of a truck matrix scale for 2 different weight breaks.



The above screen is an example of a rail matrix scale where variable 1 is based on the number of cars being shipped (i.e. unit train) and variable 2 is based on shipped quantity. The rates published for each combination are a flat per carload rate.

Rate Types

RateServer® contains seven rate types that are used in the rating logic for the calculation of freight. These rate types provide a great deal of flexibility in the way rate tables can be created.

Fixed

Fixed rates are a flat per truck load or carload rate. Many fixed rates contain weight breaks as shown in the example below.

Rate Type	Rate Unit	Rate Unit Type	Min Quantity	Max Quantity	Min Quantity Per Ship	Rate
FIXED	CAR	SHIPPED	1.	152,000.	132,000.	1,500.0000
FIXED	CAR	SHIPPED	152,001.	172,000.	132,000.	1,600.0000
FIXED	CAR	SHIPPED	172,001.	9,999,999.	132,000.	1,700.0000

Rate per Unit

Rate * quantity. Quantities can be defined in any unit type required (i.e. miles, tons, gallons, pounds, CWT, etc.). Based on the example below, a shipment of 190,000 LBS would cost $2679.00.

Rate Type	Rate Unit	Rate Unit Type	Min Quantity	Max Quantity	Min Quantity Per Ship	Rate
RATE/UNIT	CWT	SHIPPED	132,000.	151,999.	132,000.	1.5000
RATE/UNIT	CWT	SHIPPED	152,000.	171,999.	132,000.	1.4500
RATE/UNIT	CWT	SHIPPED	172,000.	194,999.	132,000.	1.4100
RATE/UNIT	CWT	SHIPPED	195,000.	9,999,999.	132,000.	1.3800

Cumulative

Rate per unit up to a specified quantity plus a different rate per unit for all additional quantities. (ex. Base rate of $1.50 CWT up to 100,000 LBS plus $1.00 CWT on all volume

shipped over 100,000 LBS. A movement of 190,000 LBS of product will return a total freight cost of (100,000 LBS * 1.50cwt) + (90,000 LBS * 1.00cwt) = $2,400.00).

Rate Type	Rate Unit	Rate Unit Type	Min Quantity	Max Quantity	Min Quantity Per Ship	Rate
CUMULATIVE	CWT	SHIPPED	1.	100,000.	160,000.	1.5000
CUMULATIVE	CWT	SHIPPED	100,001.	9,999,999.	160,000.	1.0000

Over Minimum per Unit

Fixed base rate up to a specified quantity plus a rate per unit for all volume over the specified quantity. (ex. Base rate of $500 per TL up to 45,000 LBS with a rate of $1.00 CWT on any volume over 45,000 LBS. A movement of 55,000 LBS of product will return a total freight cost of 500 + (10,000 LBS * 1.00cwt) = $600.00)

Rate Type	Rate Unit	Min Quantity	Max Quantity	Rate
FIXED	TL	1.	9,999,999.	500.0000
OVER MIN/UNIT	CWT	45,001.	9,999,999.	1.0000

Excess per Unit

Fixed base rate plus a rate/unit. (ex. Flat rate of $500 per TL plus $.50 per mile. A movement of 100 miles will return a total freight cost of 500 + (.50 * 100 miles) = $550.00)

Rate Type	Rate Unit	Min Quantity	Max Quantity	Rate
EXCESS/UNIT	MIL	1.	9,999,999.	0.5000
FIXED	TL	1.	9,999,999.	500.0000

Excess per Mile

This rate type can only be used on a mileage scale rate table. This is a double mileage scale with a rate per unit on one scale plus a cent per mile on a separate overlapping scale. (ex. CWT rates published in one mileage scale with a second per mile scale. A movement of 45,000 LBS of product travelling 700 miles will return a total freight cost of (45,000 LBS * 1.85cwt) + (.40 * 700 miles) = $1,112.50).

Rate Type	Rate Unit	Min Miles	Max Miles	Rate
EXCESS/MILE	MIL	1	100	0.2500
EXCESS/MILE	MIL	101	200	0.2800
EXCESS/MILE	MIL	201	300	0.3000
EXCESS/MILE	MIL	301	400	0.3200
EXCESS/MILE	MIL	401	500	0.3500
EXCESS/MILE	MIL	501	600	0.3700
EXCESS/MILE	MIL	601	9,999,999	0.4000
RATE/UNIT	CWT	1	500	1.8000
RATE/UNIT	CWT	501	1,000	1.8500
RATE/UNIT	CWT	1,001	2,000	1.9000
RATE/UNIT	CWT	2,001	9,999,999	1.9500

Excess Over Min per Mile

This rate type can only be used on a mileage scale rate table. This is a mileage scale to a maximum mile level plus a cent per mile for every mile over the maximum mile level. (ex.

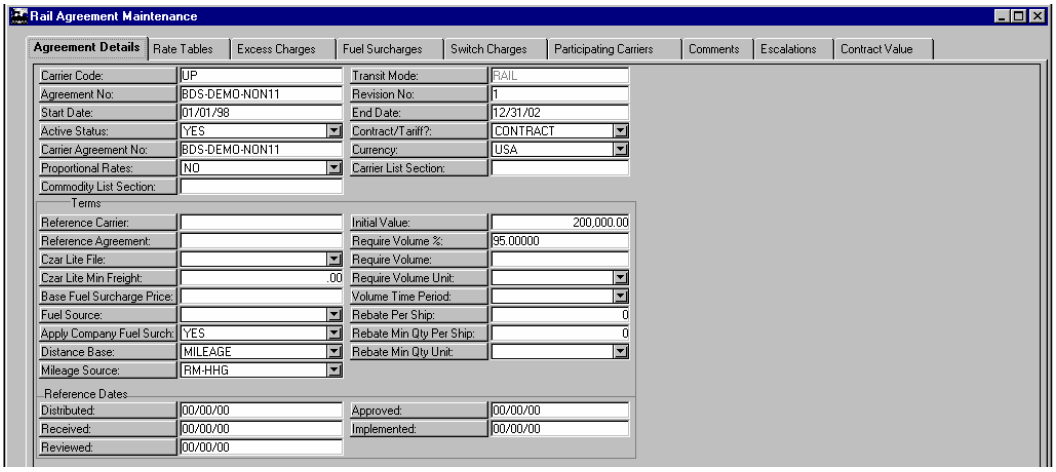
CWT rates published in a mileage scale up to 600 miles plus $.35 per mile for all miles greater than 600 miles. A movement of 45,000 LBS of product travelling 700 miles will return a total freight cost of (45,000 LBS * 2.30cwt) + (.35 * 100 miles) = $1,070.00).

Rate Type	Rate Unit	Min Miles	Max Miles	Rate
EXCESS OVER MIN/MILE	MIL	601	9,999,999	0.3500
RATE/UNIT	CWT	1	100	1.8000
RATE/UNIT	CWT	101	150	1.8500
RATE/UNIT	CWT	151	200	1.9000
RATE/UNIT	CWT	201	250	1.9500
RATE/UNIT	CWT	251	300	2.0000
RATE/UNIT	CWT	301	350	2.0500
RATE/UNIT	CWT	351	400	2.1000
RATE/UNIT	CWT	401	450	2.1500
RATE/UNIT	CWT	451	500	2.2000
RATE/UNIT	CWT	501	550	2.2500
RATE/UNIT	CWT	551	9,999,999	2.3000

Agreement Structure

All agreements are created and maintained by mode within the Agreement Section of the application. In this section agreements can be queried by agreement number, carrier, agreement start date or agreement end date. Results are displayed on a list screen, that by double clicking a specific agreement will provide all details that exist in that agreement. Detail screens are organized in a tabular format where each tab is based on information type.

The screen below provides example of the agreement detail screen and tab organization for Rail.



All agreements have a common structure that contains two distinct, but related components. They are:

Component	Description
Agreement Details	This component, (also referred to as agreement header,) defines the overall terms of the agreement. This is specific to a Carrier, Agreement Number, and Agreement Version Number. An Agreement can be a Contract or Tariff.
Rate Tables	This component lists the freight rates tied to the Agreement and is

	unique to actual shipment parameters (i.e. Origin, Destination, Product etc.)

Agreements cannot be created without creating at least one rate table for that agreement.

The Agreement Detail Screen is the first screen that appears when double clicking a record on the list screen. In addition to the Agreement Detail and Rates, tabs exist for these functions:

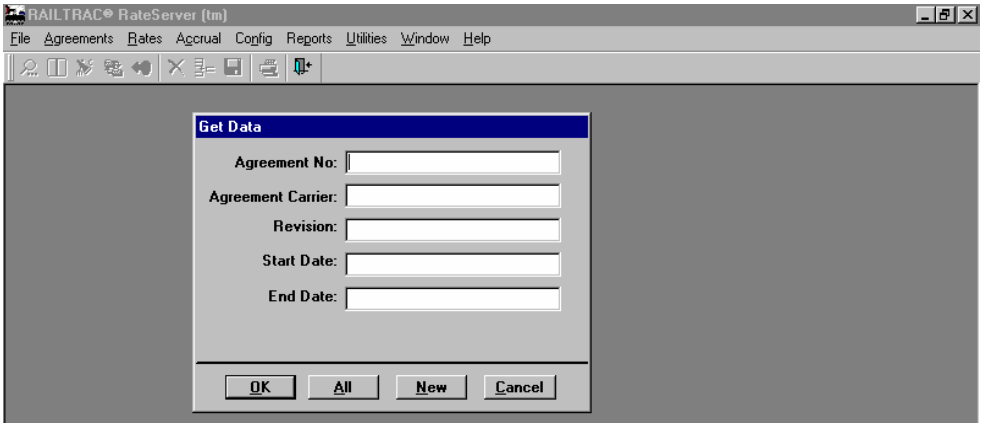
Excess Charges	**Charges related to additional services provided by the carrier during a move.**
Fuel Surcharges	Surcharges related to the rising cost of fuel.
Switch Charges	Charges related to switches other than the line-haul move (Rail only).
Participating Carriers	Carriers that are party to the agreement (Rail only).
Stop Charges	Charges for additional stops made during the line-haul (TL only).
Discounts	Definition of discount terms. (LTL only)
Escalations	Fixed or percentage increases (decreases) of a rate at some time in the future.
Contract Values	Estimated value of contract for budgeting and negotiating approval levels.
Comments	Date/user specific comments.

Excess charges, fuel surcharges, switch charges and stop charges are four types of supplement rating parameters for defining additional charges to the base freight. These charge types are separated because each one has a unique structure that RateServer must be aware of in order to calculate an accurate charge.

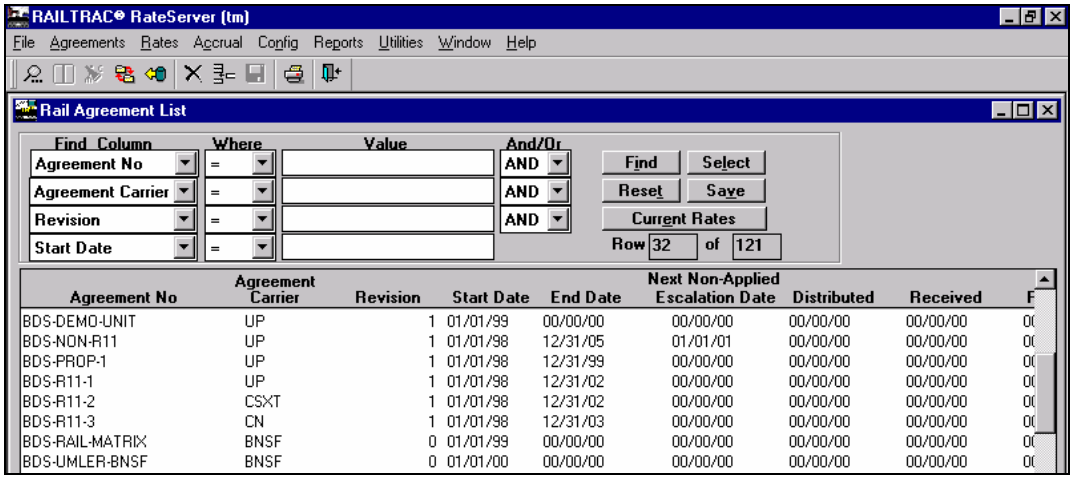
The Agreements function is for the creation, modification, and canceling of freight agreements used for the movement of product by rail, truck or LTL. The base information defining an agreement, the *Agreement Header*, is the carrier code, agreement number, and revision number. The *Rate Table* is tied to the Agreement Header, and specifies all origins, destinations, product classes, equipment types, effective dates, rate types, quantity breaks and rates contained within the agreement.

To request an agreement, a GetData Box option is available in order to define inquiry parameters such as Agreement Number, Carrier Code, Begin City, Begin State, End City, and/or End State.

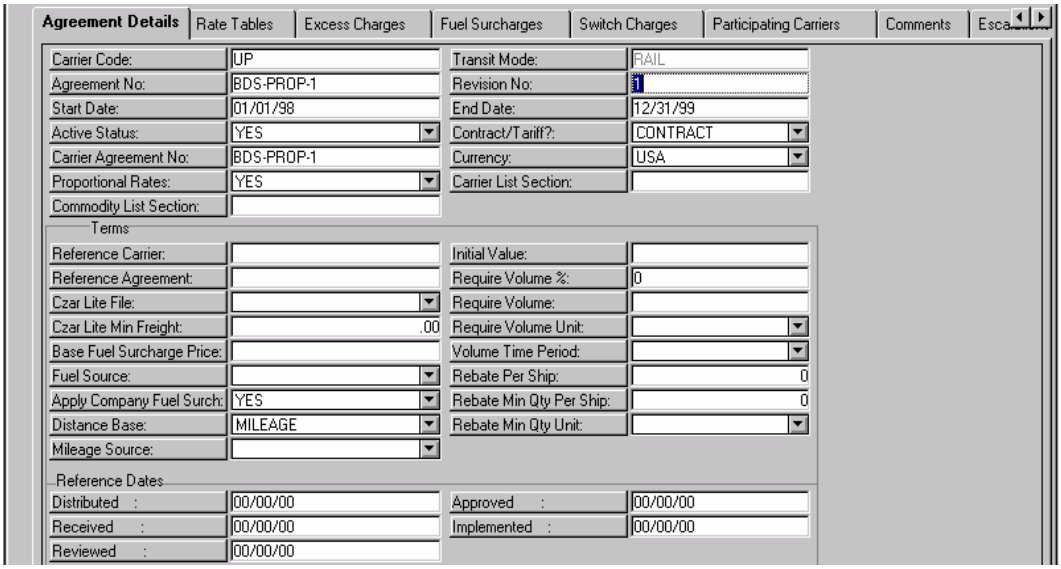
The screen below shows the GetData Box that is available for each transportation mode within the Agreements Section. Users can define as many variables as necessary to meet the desired output. To retrieve all agreements, leave all parameter blank and click the 'ALL' button at the bottom of the window. The * can be used as a wildcard (i.e. Typing A* for the parameter Agreement Carrier, will return all agreements where the carrier starts with the letter A).



An initial listing shows the Agreement No., Carrier, Revision Number, Start Date, End Date, Next Non-Applied Escalation Date and the Contract Reference Dates (i.e. Distributed, Received, Reviewed, Approved, etc.).



To edit an existing rail agreement record, double click a specific record or highlight a record and click the "Detail" button. The screen below shows the agreement details in a tabular format to access the Agreement Details, Rate Tables, Excess Charges, Fuel Surcharges, Switch Charges, Participating Carriers, Comments, Escalations, and Contract Value:

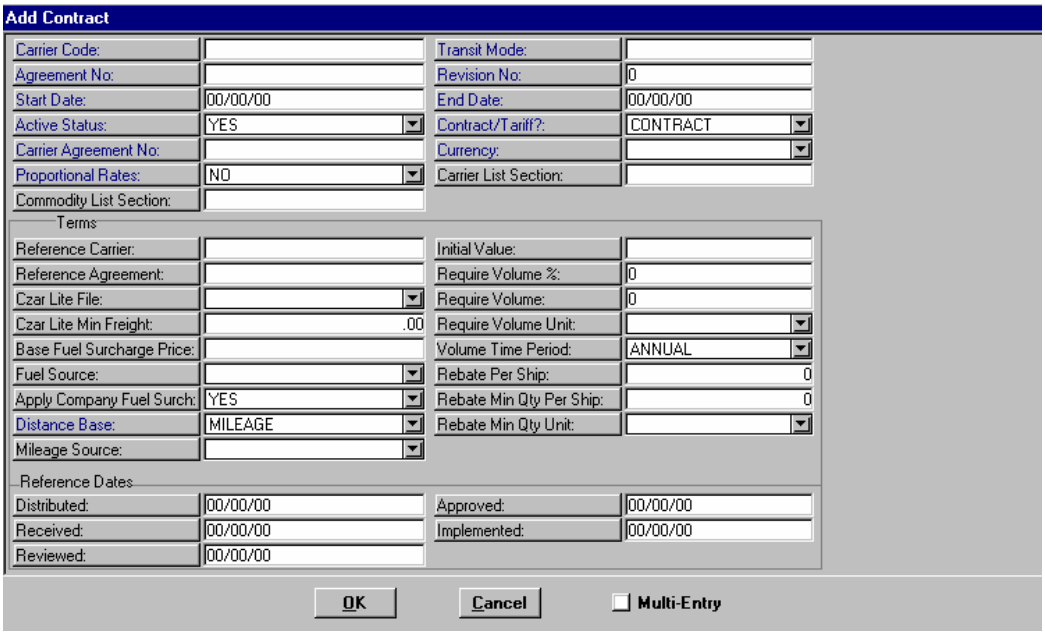


Entering a New Agreement

Agreement Details

To enter a new agreement record, click on Agreements and select the mode that is being created. In the Get Data box click the "New" button and the blank entry screen will appear.

The Agreement Detail is basically the same for all modes. A few variables are specific to mode and when not needed can be left blank. All fields where the font color is blue are required and must be populated in order to create a new agreement. ***At least one rate table must be entered in order for an agreement to be saved.***



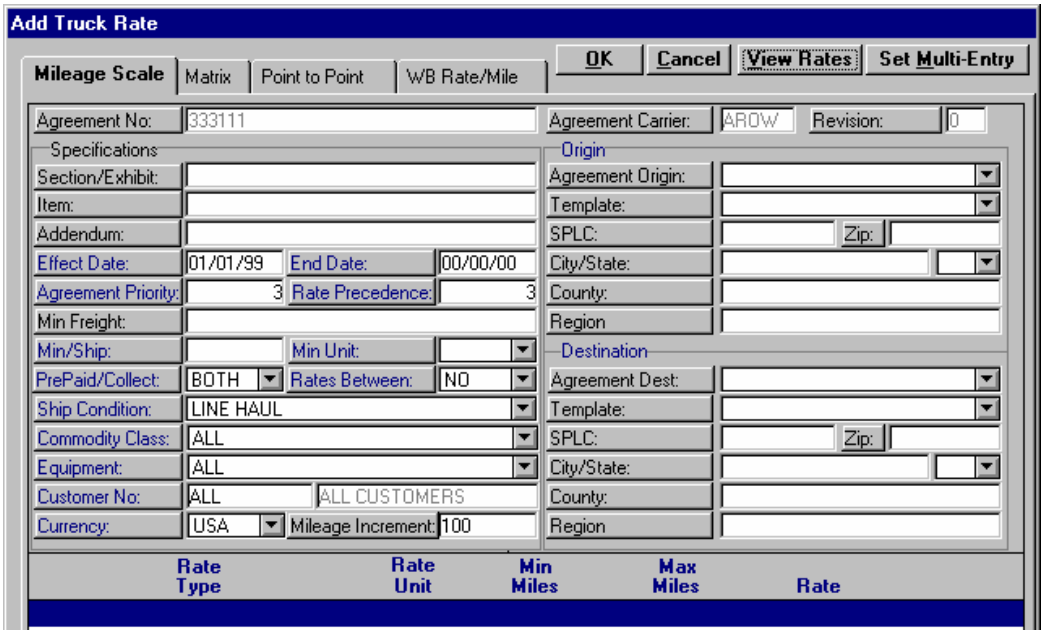
The variables of an agreement detail record are:

Variable	Definition
Carrier Code	**Required.** Four character SCAC of the Carrier who owns the agreement. This field is populated from the Carrier Fact table in the Config section. This field can be populated using the right mouse click to view all defined SCAC's. If SCAC does not exist, one will have to be created in the carrier fact table prior to creating the agreement.
Transit Mode	**Required.** This field will automatically be populated based on the carrier SCAC.
Agreement No.	**Required.** The agreement number of the contract or tariff. If one does not exist on the published agreement, it would be up to the company's business rules to create a numbering system.
Revision No.	**Required**. The version number of the agreement. This number in association with the agreement number will create an entirely new agreement. The default value for the first revision number of a new agreement is populated based on the Version Default field in Config-System Defaults. A new version can be created anytime the date terms of the original agreement are modified. This provides the capability to save the original terms of the agreement as a completely separate agreement from the modified agreement.
Start Date	**Required.** Start date of the agreement. Anytime this date is modified, all rate tables that exist with the same date will also be modified. As stated in the description of revision number, if this date is modified the system will prompt users with a message asking if they want this change to create a completely new agreement with a different revision number. It is possible for rate tables associated with this agreement to have a start date that is later than the start date of the agreement, but always earlier than the end date.
End Date	**Required.** End date of the agreement. Anytime this date is modified, all rate tables that exist with the same date will also be modified. As stated in the description of revision number, if this date is modified the system will prompt users with a message asking if they want this change to create a completely new agreement with a different revision number. It is possible for rate tables associated with this agreement to expire prior to the end of the agreement, but they can never extend past the agreement end date. This field can be left blank for any agreement that is open-ended (i.e. does not expire).
Active Status	**Required**. Yes/No field defining whether the agreement is active. Automatically defaults to Yes when creating a new agreement. If field is marked No, the record will no longer be available through the application interface.
Contract/Tariff	**Required.** Defines whether this is a negotiated agreement or a generic tariff.
Carrier Agreement No	**Required**. Will automatically default to the value defined in the Agreement No. field above. This field can be modified to represent the number defined on the carrier's agreement. This value will always be used as the agreement number that is used on a bill of lading.
Proportional Rates	**Required**. (Rail Only) Yes/No Field specifying whether any rate tables associated to this agreement use a proportional rate structure. (See Rail Rate Structure section for definition of proportional rates).
Carrier List Section	Defines the header of the Participating Carrier List for the Report Agreement Attachments, found in the Report section.
Commodity List Section	Defines the header of the Commodity List for the Report Agreement Attachments, found in the Report section.
Terms Section	

Reference Carrier	SCAC of the carrier who owns a rate table that will be utilized within this agreement. RateServer® allows agreements to share rate tables published in a different agreement. This is very common with LTL agreements and allows users to create the rate table once and allow other agreements to use the rate table. This is where this association takes place.
Reference Agreement	The agreement number is where a share rate table is published. This field works together with the above field to identify the owner agreement.
CZAR Lite File	If a CZAR Lite File is used, it will be referenced here. The CZAR Lite File information is stored in Config-System Defaults.
CZAR Lite Min Freight	If CZAR Lite is used, what is the minimum freight.
Base Fuel Surcharge Price	If a contract specifies a Base Fuel Surcharge price, it would be entered here.
Fuel Source	For contracts using fuel surcharges, the Fuel Source should be listed here.
Apply Company Fuel Surcharge	Identifying whether or not the company wide fuel surcharge applies to this agreement. Yes/No field.
Distance Base	**Required.** Mileage is the default. Rate base is the other options and should be selected when entering Rate base rates.
Mileage Source	Identifies how mileage is calculated. ALK, Rand McNally, company miles, etc.
Require Annual Qty %	Information field only. If the contract calls for a required annual percentage of total shipments, it would be recorded in this field.
Require Volume	Amount of product that must be shipped within this agreement to guarantee the published rates. Any rate tables contained in the agreement will apply.
Require Volume Unit	Unit of measure of the Require Volume defined above.
Volume Time Period	The amount of time provided to ship the volume commitment amount. Each period begins with the agreement start date or the anniversary of the start date based on the time period selected. Valid options are Quarterly, Bi-Annual, Annual or Contract Life.
Rebate Per Ship	Information field only. This is for recording the number of shipments needed to receive a carrier rebate.
Rebate Min Qty Per Ship	Information field only. This feature is for recording the minimum number of shipments needed for a rebate.
Rebate Min Qty Unit	Information field only. This feature is for recording the minimum quantity of units needed to receive a rebate.
Initial Value	This defines the initial contract value.
Reference Dates	
Contract Date Title 1	User defined dates to assist with contract management. The header description of these dates can be defined under Config-System Defaults.
Contract Date Title 2	User defined dates to assist with contract management. The header description of these dates can be defined under Config-System Defaults.
Contract Date Title 3	User defined dates to assist with contract management. The header description of these dates can be defined under Config-System Defaults.
Contract Date Title 4	User defined dates to assist with contract management. The header description of these dates can be defined under Config-System Defaults.
Contract Date Title 5	User defined dates to assist with contract management. The header description of these dates can be defined under Config-System Defaults.

Once the agreement header is defined, the system will prompt you to create a rate table and ask what type of rate table is being created. By clicking a specific rate table type, the input screen for that type will be displayed. Any other rate table type can be selected by clicking the appropriate tab.

Below is a screen showing entry of a Mileage Scale rate table. Note the "tabs" at the top, Mileage Scale, Matrix, Point-to-Point and WB Rate/Mile. If the wrong rate table type was selected, by clicking one of the other tabs, that rate table type will be displayed.



Rate Tables

All rate tables contain specific movement variables that define the conditions of the rate table. These variables are matched against the specific variables of a shipment to identify whether the rate table contains valid rates for the movement. Once a rate table is found to be valid for a movement based on the movement variables, database stored procedures will calculate total freight based on the rate lines that exist within the rate table.

All rate table types have similar entry specifications for defining the shipment variables of the rate table. The variables of a rate table are: (*note: rail rate tables contain some variables that are not required for truck. On the list below, variables are qualified with a rail only statement.)*

Variable	Definition
Section/Exhibit	The section or exhibit number or alpha defined in the contract.
Item	The item number defined in the contract.
Rate Carrier	The carrier SCAC of the carrier that owns the rate table. This will always equal the agreement carrier unless the table is a proportional rate table owned by a carrier other than the agreement owner (rail only).
Addendum	The addendum number defined in the contract.
Effective Date	Starting date of the rate (defaults as defined in Agreement).
End Date	Ending date of the rate (defaults as defined in Agreement). If the end date displays 00/00/00, that it is open ended and blank in the database.
Agreement Priority	The priority of the rate in relation to other rates in other Agreements. The priority concept allows users to specify a preference for a particular rate table over a second rate table from a different agreement that meets the parameters of the shipment. This provides the ability to rank carriers at the

	rate table level and identify the negotiated agreement that should be used over general tariff agreements. If priority is equal between two rate tables, the lowest rate will prevail.
Rate Precedence	The priority of the rate in relation to other rates in this Agreement. The precedence concept allows users to specify a preference for a particular rate table over a second rate table within the same agreement that meets the parameters of the shipment. If precedence is equal between two rate tables, the lowest rate will prevail.
Mileage Indicator	Defines the mileage allowance term of the rate table. A value of 0 means a zero mileage movement. A value of 1 means a full mileage movement. Any value in between is either a fix rate or a ceiling rate that the carrier will pay (rail only).
Indicator Type	Defines whether the mileage indicator value above represents and fixed value or a ceiling.
Rates Between	Yes / No flag defining whether the rate applies on shipments moving from the origin to destination as well as the destination to origin.
Currency	Currency freight rate is published in.
Prepaid/Collect	Defines whether the defined rates are based on payment terms. Valid values are Prepaid, Collect or Both.
Rule 11	Defines whether the rate is based on the rule 11 condition. (rail only)
Ship Condition	Special shipment conditions (defined in Config).
Commodity Class	Definition of the commodity class that applies for the defined rates (commodity classes must be defined in Config Section for them to appear on the drop down list).
Equipment	Equipment type that applies for the defined rates (equipment types must be defined in Config Section for them to appear on the drop down list).
Origin Carrier	Origin or gateway carrier (rail only).
Delivery Carrier	Non-line haul delivering carrier (rail only).
Customer Number	Defines whether the rates are specific to a customer. Default value is 'ALL'.
Equipment Owner	Defines whether the rate is based on the equipment owner. Valid values are BOTH, RR or Private (rail only)
RT (RAILTRAC) Path Code	Path Code from RAILTRAC® that can be used to populate the route description (rail only).
Route Description	Defines the rail routing associated to the rates (RR-SCAC-RR...) (rail only).
Agreement Origin	Listing of all locations currently defined within the agreement. Any location can be selected from the drop down list to be used as an origin point on a new rate table. New location templates can be created within the agreement by right clicking the mouse when the cursor is in this field.
Template	Listing of all global location templates defined in Config.
SPLC	Standard Point Location Code.
Zip	Zip code.
City/State	City name and state.
County	County designation.
Region	Regional designation.
Rate Base Territory	Rail rate base territory number (rail only)
Country	Country designation.
Agreement Destination	Listing of all locations currently defined within the agreement. Any

	location can be selected from the drop down list to be used as a destination point on a new rate table. New location templates can be created within the agreement by right clicking the mouse when the cursor is in this field.
Template	Listing of all global location templates defined in Config.
SPLC	Standard Point Location Code.
Zip	Zip code.
City/State	City name and state.
County	County designation.
Region	Regional designation.
Rate Base Territory	Rail rate base territory number (rail only)
Country	Country designation.
Min Freight	Minimum freight dollar.
Rate Break Unit	Defines the unit of measure that the weight break quantities contained on the rate lines are defined in.
Rate Break Type	Defines whether the weight break quantities on the rate lines are based on the capacity of a railcar or the quantity being shipped in the railcar. (rail only)
Min / Ship	Defines the minimum shipment quantity.
Min / Ship UM	Defines the unit of measure of the minimum shipment quantity.
Req Volume	Defines the volume commitment quantity that must be shipped against the rate table. (rail only)
Req Volume Unit	Defines the unit of measure of the volume commitment quantity. (rail only)
Req Volume %	
Req Volume Group	Defines the volume commitment group the rate table belongs to. The volume commitment group provides functionality to tie multiple rate tables together to meet one volume commitment level. (rail only)

Once all shipment variables are defined in the rate table header, the rate lines will then need to be created. Refer to the Rate Types Section above for a complete description of the seven available rate types that can be used for defining rates.

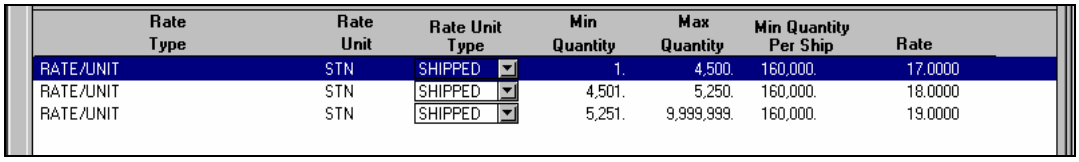
Point-to-Point Rate Lines

PTP rate lines are a one variable rate structure always based on a minimum and maximum quantity value. The variables for a point-to-point rate are:

- **Rate Type.** Defines the freight calculation variable of the rate line. (See the Rate Types Section above for a complete description of all freight calculation methods)
- **Rate Unit.** Defines the unit of measure that the rate is based on.
- **Rate Unit Type.** Defines the quantity source used by the rating engine for calculating freight charges. Valid values are Capacity and Shipped. This field is only used when the Rate Type field is a rate/unit. (rail only)
- **Min Quantity.** Defines the minimum quantity that applies for the defined rate. (quantity unit of measure is defined in the rate table header)
- **Max Quantity.** Defines the maximum quantity that applies for the defined rate. (quantity unit of measure is defined in the rate table header)

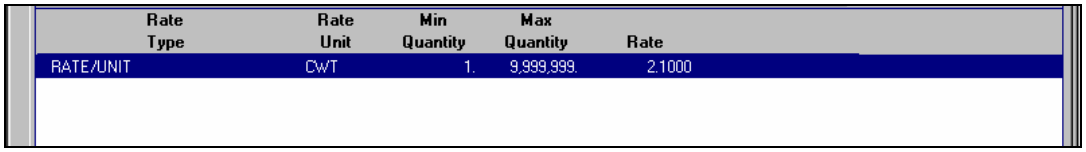
- **Min Quantity Per Ship.** Defines the minimum shipped quantity that applies for the defined rate. Value defaults to the min/ship quantity defined in the header. This field is only used when the Rate Type field is a rate/unit. The value of this field can very between rate lines if the min/max quantities are based on Capacity (i.e. Rate Break Type in header equals capacity) and the Rate Unit Type field is set to Shipped. What this scenario means is the capacity of the railcar is used to select the correct rate, but freight is calculated by multiplying the rate by the shipped quantity. (rail only – truck utilizes the min/ship quantity defined in the header)
- **Rate.** Freight rate for the rate line.

The screen below provides an example of a rail point to point rate line. In this example there are 3 rate lines based on the cubic foot capacity of the railcar where the rate is published in short tons and is based on the quantity being loaded in the car. (example: A 4650 cubic foot capacity car loaded with 190,000 LBS of product would rate at $18.00 per short ton. Total freight would be $1710.)



Rate Type	Rate Unit	Rate Unit Type	Min Quantity	Max Quantity	Min Quantity Per Ship	Rate
RATE/UNIT	STN	SHIPPED	1.	4,500.	160,000.	17.0000
RATE/UNIT	STN	SHIPPED	4,501.	5,250.	160,000.	18.0000
RATE/UNIT	STN	SHIPPED	5,251.	9,999,999.	160,000.	19.0000

The screen below provides and example of a truck point to point rate line. In this example, any quantity being shipped will rate at $2.10 CWT. Minimum quantity per shipment is defined in the rate table header.



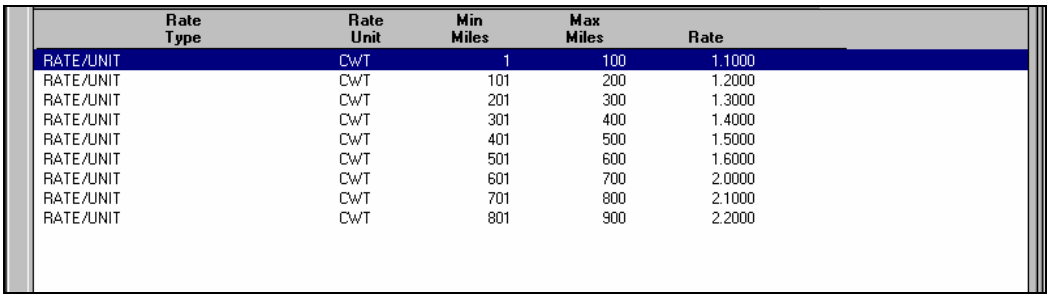
Rate Type	Rate Unit	Min Quantity	Max Quantity	Rate
RATE/UNIT	CWT	1.	9,999,999.	2.1000

Mileage Scale Rate Lines

Mileage scales set a rate according to the number of miles that are traveled. The variables for mileage scale rate lines are:

- **Rate Type.** Defines the freight calculation variable of the rate line. (See the Rate Types Section above for a complete description of all freight calculation methods)
- **Rate Unit.** Defines the unit of measure that the rate is based on.
- **Min Miles.** Defines the minimum miles that are applicable for the defined rate.
- **Max Miles.** Defines the maximum miles that are applicable for the defined rate.
- **Rate.** Freight rate for the rate line.

The screen below shows a typical truck mileage scale where a CWT rate is published for specific mileage ranges.



Rate Type	Rate Unit	Min Miles	Max Miles	Rate
RATE/UNIT	CWT	1	100	1.1000
RATE/UNIT	CWT	101	200	1.2000
RATE/UNIT	CWT	201	300	1.3000
RATE/UNIT	CWT	301	400	1.4000
RATE/UNIT	CWT	401	500	1.5000
RATE/UNIT	CWT	501	600	1.6000
RATE/UNIT	CWT	601	700	2.0000
RATE/UNIT	CWT	701	800	2.1000
RATE/UNIT	CWT	801	900	2.2000

Matrix Rate Lines

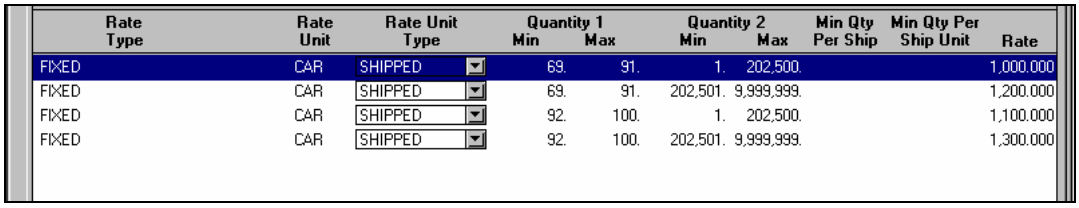
Matrix rates utilize a two variable rate structure. Rail matrix scales are multi-dimensional and the two variables are defined within the rate table header (i.e. Car Capacity and Number of Cars, Shipped Quantity and Miles, Number of Cars and Miles, etc.). For truck matrix scales, the two variables will always be based on shipped quantity and miles. The variables for matrix rate lines are:

- **Rate Type.** Defines the freight calculation variable of the rate line. (See the Rate Types Section above for a complete description of all freight calculation methods)
- **Rate Unit.** Defines the unit of measure that the rate is based on.
- **Rate Unit Type.** Defines the quantity source used by the rating engine for calculating freight charges. Valid values are Capacity and Shipped. This field is only used when the Rate Type field is a rate/unit. (rail only)
- **Min Quantity 1 (rail) / Min Quantity (truck).** Defines the minimum quantity that applies for the defined rate. (quantity unit of measure is defined in the rate table header)
- **Max Quantity 1 (rail) / Max Quantity (truck).** Defines the maximum quantity that applies for the defined rate. (quantity unit of measure is defined in the rate table header)
- **Min Quantity 2 (rail) / Min Miles (truck).** Defines the minimum quantity 2 for rail or the minimum miles for truck that applies for the defined rate. (quantity unit of measure is defined in the rate table header for rail. Truck will always be miles.)
- **Max Quantity 2 (rail) / Max Miles (truck).** Defines the maximum quantity 2 for rail or the maximum miles for truck that applies for the defined rate. (quantity unit of measure is defined in the rate table header for rail. Truck will always be miles.)
- **Min Quantity Per Ship.** Defines the minimum shipped quantity that applies for the defined rate. Value defaults to the min/ship quantity defined in the header. This field is only used when the Rate Type field is a rate/unit. The value of this field can very between rate lines if the min/max quantities are based on Capacity (i.e. Rate Break Type in header equals capacity) and the Rate Unit Type field is set to Shipped. What this scenario means is the capacity of the railcar is used to select the correct rate, but freight is

calculated by multiplying the rate by the shipped quantity. (rail only – truck utilizes the min/ship quantity defined in the header)

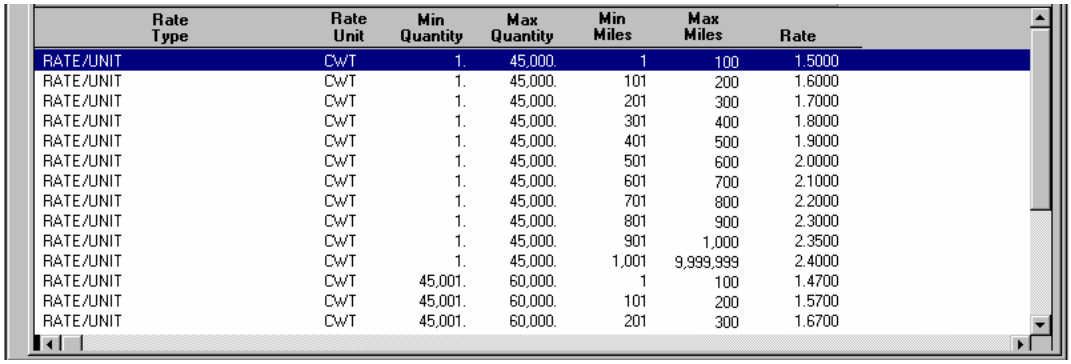
- **Min Quantity Per Ship Unit.** Defines the unit of measure of the minimum quantity shipped value. (rail only – truck utilizes the min/ship unit defined in the header)
- **Rate.** Freight rate for the rate line.

The screen below provides an example of a rail matrix scale where variable 1 is based on the number of cars shipped and variable 2 is based on shipped quantity. The rates published for each combination are a flat per carload rate.



Rate Type	Rate Unit	Rate Unit Type	Quantity 1 Min	Quantity 1 Max	Quantity 2 Min	Quantity 2 Max	Min Qty Per Ship	Min Qty Per Ship Unit	Rate
FIXED	CAR	SHIPPED	69.	91.	1.	202,500.			1,000.000
FIXED	CAR	SHIPPED	69.	91.	202,501.	9,999,999.			1,200.000
FIXED	CAR	SHIPPED	92.	100.	1.	202,500.			1,100.000
FIXED	CAR	SHIPPED	92.	100.	202,501.	9,999,999.			1,300.000

The screen below provides an example of a truck matrix scale for 2 different weight breaks. The rates published for each combination are in CWT.

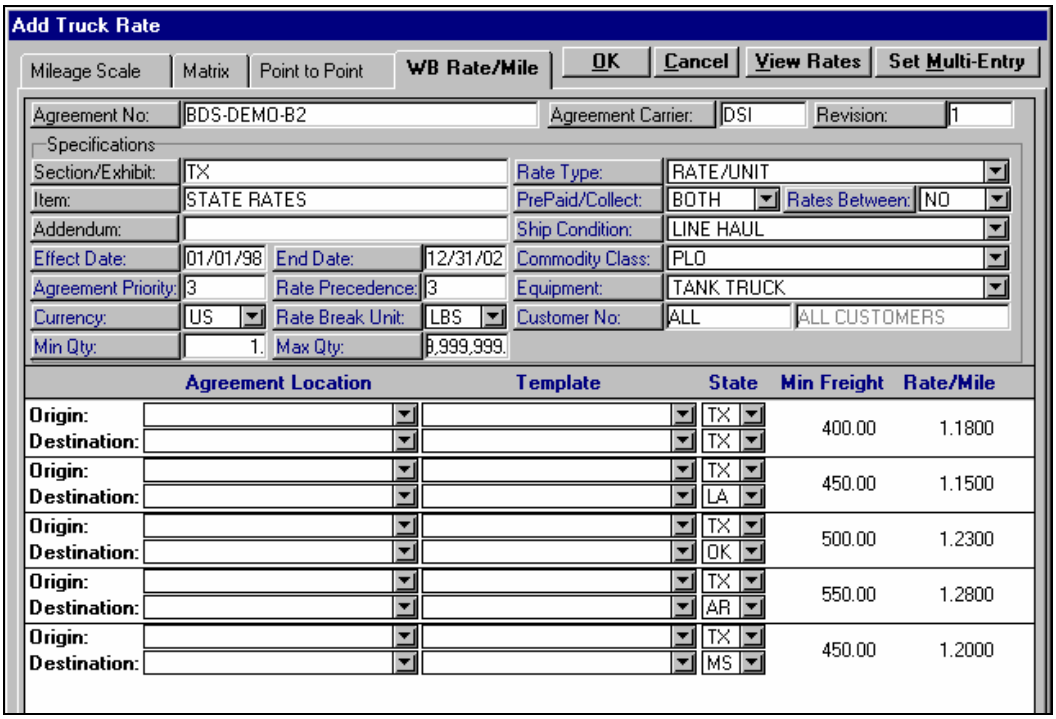


Rate Type	Rate Unit	Min Quantity	Max Quantity	Min Miles	Max Miles	Rate
RATE/UNIT	CWT	1.	45,000.	1	100	1.5000
RATE/UNIT	CWT	1.	45,000.	101	200	1.6000
RATE/UNIT	CWT	1.	45,000.	201	300	1.7000
RATE/UNIT	CWT	1.	45,000.	301	400	1.8000
RATE/UNIT	CWT	1.	45,000.	401	500	1.9000
RATE/UNIT	CWT	1.	45,000.	501	600	2.0000
RATE/UNIT	CWT	1.	45,000.	601	700	2.1000
RATE/UNIT	CWT	1.	45,000.	701	800	2.2000
RATE/UNIT	CWT	1.	45,000.	801	900	2.3000
RATE/UNIT	CWT	1.	45,000.	901	1,000	2.3500
RATE/UNIT	CWT	1.	45,000.	1,001	9,999,999	2.4000
RATE/UNIT	CWT	45,001.	60,000.	1	100	1.4700
RATE/UNIT	CWT	45,001.	60,000.	101	200	1.5700
RATE/UNIT	CWT	45,001.	60,000.	201	300	1.6700

WB Rate/Mile Rates

Weight Break Rate/Mile is an input method for creating a point-to-point rate table where the rate is always published as per mile.

The screen below shows the input window for creating point-to-point rate tables through the WB Rate/Mile function. In this example a separate point-to-point rate table will be created for the commodity PLO from the state of Texas to the states of Texas, Louisiana, Oklahoma, Arkansas and Mississippi. Each rate table will be created with a rate per mile rate for shipped quantities between 1 and 9,999,999 LBS.



Below is an example of a carrier's rate tariff that was used in the WB Rate/Mile example provided above.

Schedule A BDS-DEMO-B2

ITEM NO. 100B replaces ITEM 100A Effective: JANUARY 1, 1998

Item covers petroleum lubricating oils transported in standard carbon steel tank trucks. Rates are applicable for cargo loadings up to the lesser of 49,000 lbs. or the vehicle's legal weight limit.

From points in Texas to points in the following destination states:

DEST. STATE	POINTS WITHIN DEST STATE	$ PER MILE	MINIMUM TL CHARGE	NOTES
TX	ALL	1.18	400.00	
LA	ALL	1.15	450.00	
OK	ALL	1.23	500.00	
AR	ALL	1.28	550.00	
MS	ALL	1.20	450.00	
FLl	PANHANDLE	1.27	575.00	ZIPS 323—325
FL2	ALL EXC PANE	1.97	575.00	ZIPS 320—322
GA	ALL	1.11	575.00	

IA	ALL	1.17	575.00	
IL	ALL	1.27	575.00	
IN	ALL	1.27	575.00	
KS	ALL	1.11	575.00	
KY	ALL	1.27	575.00	
MD	ALL	1.67	575.00	
MO	ALL	1.11	575.00	
NC	ALL	1.17	575.00	
NJ	ALL	1.67	575.00	
OH	ALL	1.27	575.00	
PA	ALL	1.67	575.00	
SC	ALL	1.17	575.00	
TN1	WESTERN	1.68	575.00	ZIPS 375, 380
TN2	EASTERN	1.17	575.00	ZIPS 370
VA	ALL	1.37	575.00	
WI	ALL	1.17	575.00	
WV	ALL	1.37	575.00	

Rate Table Creation/Input Features

RateServer® contains three on-line processes that simplify the manual input of rates.

A copy function that will allow an existing rate table within the agreement to be used as a template for the creation of a new rate table. To create a new rate table,

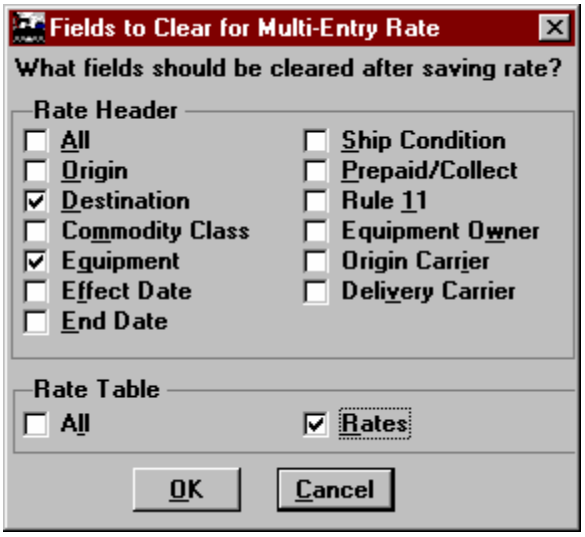
1. Open the appropriate agreement and select the Rate Tables tab.
2. Highlight an existing rate table that has the same structure as the new one being created.
3. Click the new icon and answer YES to the message box, “Do you want to use the selected rate table as a template?” (If you double click into the rate table and click the new icon from the rate table detail screen, you will receive a message box asking if the intent of the creation process is to add a new line to the existing rate table, or create an entirely new table. Answer “ADD TABLE” to the message box “What do you want to add” will then bring up the template message box.)
4. Change any required variables on the template rate table (i.e. destination and rate) and save.

A multi-input feature that allows users to specify values that will be retained on rate tables that are created during the current input session. These values can be reset multiple times during any input session.

1. Open the appropriate agreement and select the Rate Tables tab.
2. Click the new icon. Answer YES or NO to the rate table template question depending on the structure desired for the new rate table.

3. In the Add Rate window, click the Set Multi-Entry Button at the top of the window. This will pop up the Fields to Clear window for setting the multi-entry scenario.
4. The “Fields to Clear for Multi-Entry Rate” window is divided into 2 sections. Section 1 contains a list of fields that are contained in the rate table header. To clear specific fields from the header during the multi-entry process, click the check box in front of each field that should be cleared. (multiple fields can be checked). Section 2 defines the multi-entry condition for the rate lines of the rate table. By selecting the ALL option, each rate line will have to completely re-input for each new rate table. By selecting the RATES option, only the rate value on the rate line will be cleared. All rate type settings and min/max quantity values will remain.
5. Click the OK Button at the bottom of the window and beginning creating the first rate table. After clicking OK to save the first rate table, all subsequent rate table add windows that pop up will retain all information from the previously created rate table except for the variables that were selected in the “Fields to Clear for Multi-Entry Rate” window. This will continue until the multi-entry values are reset by clicking the Set Multi-Entry Button again and selecting new variables or until the rate table creation session is ended.

The graphic below provides an example of the “Fields to Clear for Multi-Entry Rate” window. Based on the values selected in this example, after the first rate table is created, all subsequent rate tables will retain all values from the previously created rate table except for the destination, the equipment type and the rates that are contained in each rate line.



An increment counter that will auto fill mile increments during the creation of a mileage scale rate table and matrix table.

1. From the Add Rate window during the creation of a mileage scale or matrix rate table, populate the mileage increment field on the rate table header with the mileage differential value

between the first and second rate lines. Use the tab key to move the cursor from this field to the first rate line of the rate table. ***(Note: It is very important to tab off this value after input in order for the application to recognize that the value has been changed.)***

2. Create the first rate line of the rate table using the tab key to create all additional required rate lines. Each time a new rate line is created the min miles value will be 1 greater then the previous rate line and the max miles will be the min miles plus the increment value.
3. As increment values change throughout the scale, the increment counter in the header can be reset to a new value. Prior to changing the increment value, make sure a new rate line exists where the rate has not been defined. ***(Note: If the increment counter in the header is modified and a new rate line with a blank rate does not exist, the application will not provide additional rate lines for completing the scale. The system will loose focus and will not be aware that a new rate line is needed.)***
4. Once new rate line with blank rate is created, use the mouse and click the cursor on the mileage increment field. Type in the new increment value and tab off the value. ***(Note: Always tab so the application will recognize that the value has been changed)***.
5. Use mouse to move the cursor to the max mile value and modify if required. If the max mile value is correct, put cursor directly on the rate field and type in the rate. Use the tab key to create the next new rate line. The new rate line created will now use the new increment value.
6. Continue above process until the scale is complete. At the end of the input process, if an additional rate line exists and the rate has not been defined, the system will not save that rate line.
7. For rail matrix rate tables, the increment counter is only for populating quantity 2 values.

Agreement Excess Charges

Excess charges are where all accessorial charges other than rail switches, fuel surcharges and truck stop charges are defined. All excess charges are defined by an excess code that represents the type of charge that is being defined. All excess charge codes are created in the Config Section and form the drop down list for defining valid charges.

There are two types of excess charges that can be created: *Standard* and *Exception*.

Standard Excess Charge

Standard excess charges are charges that will always be applied if the conditions of the shipment match the conditions of the excess charge. An example of a standard excess charge would be a tank cleaning on every gasoline shipment. During an on-line inquiry, standard excess charges will always be calculated in the total freight results. By double click on the

excess charge amount, the details used to compute the excess charges will be displayed. During an actual shipment interface, each excess charge applicable will create a separate accrual record.

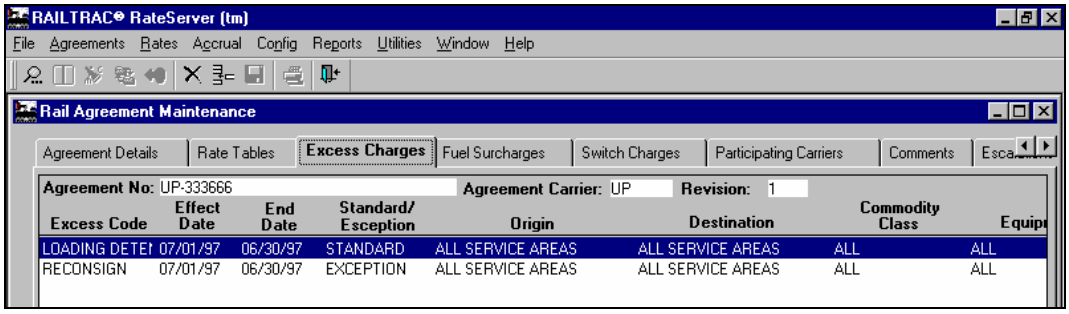
Exception Excess Charge

Exception excess charges are charges that do not occur every time even though the conditions of the shipment match the conditions of the excess charge. Many times exception excess charges are charges that apply based on specific requests at the time of shipment (i.e. pump, additional hose, driver assisted unloading, etc.) or a variable charge that can not be foreseen at the time of shipment (i.e. detention). During an on-line inquiry, a function exists that will allow users to select and define quantities for exception excess charges that they want to apply to the results of the inquiry. During an actual shipment interface, exception excess codes can be passed with the shipment and these charges will be applied and will create an accrual record.

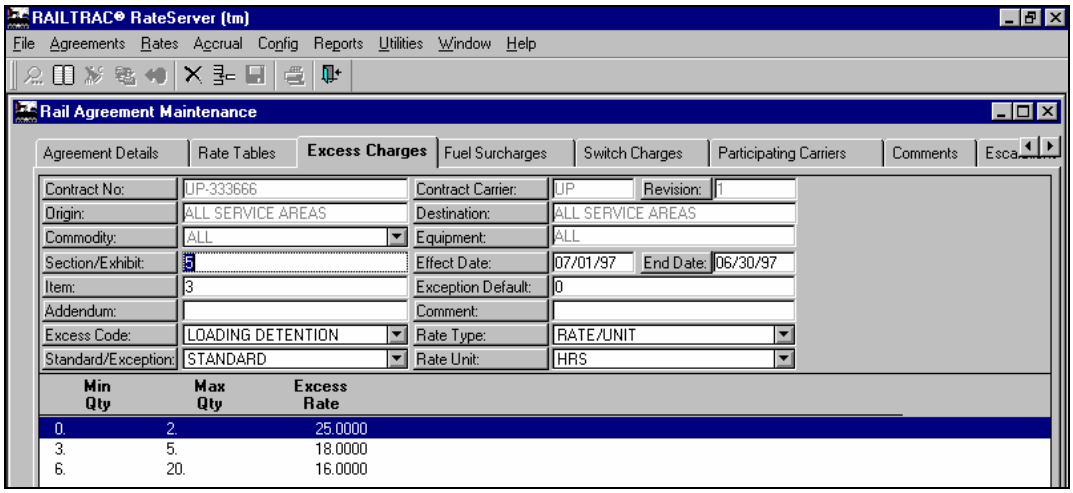
Excess Charges can be created based on specific movement conditions. The variables that define these conditions are:

- **Origin.** Defines the origins of the excess charge. The default value of "ALL SERVICE AREAS" is used if the excess charge applies to all rate table origins contained in the agreement.
- **Destination.** Defines the destinations of the excess charge. The default value of "ALL SERVICE AREAS" is used if the excess charge applies to all rate table destinations contained in the agreement.
- **Excess Code.** Defines the charge type (i.e. Detention, Cleaning, Highway Tolls, etc.)
- **Standard/Exception.** Defines whether the charge should always apply or if it is a conditional charge that may apply.
- **Effect Date.** Effective date of excess charge.
- **End Date.** Expire date of excess charge.
- **Rate Type.** Defines whether the rate is a Fixed or Per Unit rate.
- **Rate Unit.** Defines the quantity unit of measure that applies for the excess charge. (i.e. Detention may be defined in hours, Additional hose may be defined in feet, etc.)
- **Min Qty.** Minimum quantity required for the excess rate.
- **Max Qty.** Maximum quantity required for the excess rate.
- **Excess Rate.** Excess charge amount.

The screen below shows a list of excess charges contained in an agreement. The two excess charge codes contained in this example are for LOADING DETENTION and for CAR RECONSIGNMENT.



Double-clicking the LOADED DETENTION record shows the detail. This charge is a STANDARD charge, meaning it applies when a loaded railcar has spent more hours in a railroad facility than necessary. The charge is applied by the hour on a sliding scale from 25 to 16 dollars per hour depending on the amount of time it is detained.



Fuel Surcharges

Fuel surcharge clauses are common to compensate a carrier against an unexpected rise in the cost of fuel. Fuel surcharge scales can be defined within an agreement to make them specific to that agreement or they can be established at a system level where they will apply to all agreements that are tagged to use the global surcharge scale. The variables that make up a fuel surcharge scale are the same for both types. Global fuel surcharges are created in the Config – Reference – Fuel section while agreement specific scales are defined in the specific agreement on the Fuel Surcharges Tab within the agreement.

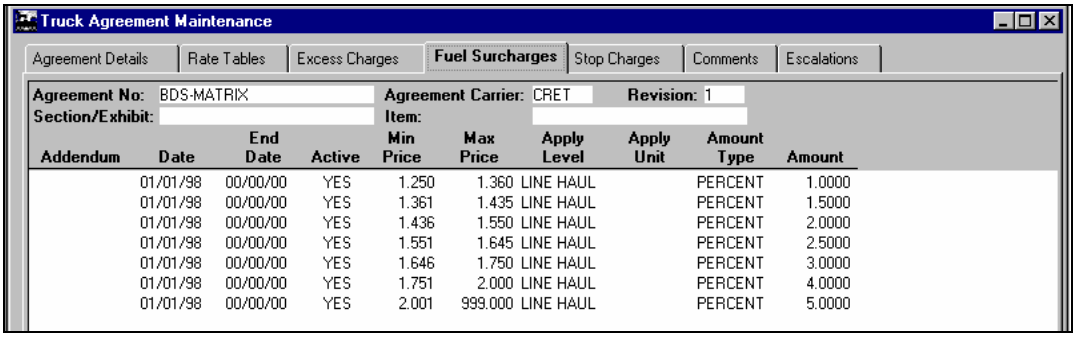
The variables that make up a fuel surcharge scale are:

- **Start Date.** The effect date of the fuel surcharge scale.
- **End Date.** The expire date of the fuel surcharge scale.
- **Min Price.** The minimum fuel market price where the surcharge rate would apply.
- **Max Price.** The maximum fuel market price where the surcharge rate would apply.

- **Apply Level.** Defines whether the fuel adjustment is based on the calculated line haul freight or is a per unit adjustment based on a variable such as shipment quantity or miles traveled.
- **Apply Unit.** Defines the unit of measure
- **Amount Type.** Defines the calculation process that applies to the defined rate.
- **Amount.** Defines the fuel surcharge rate.

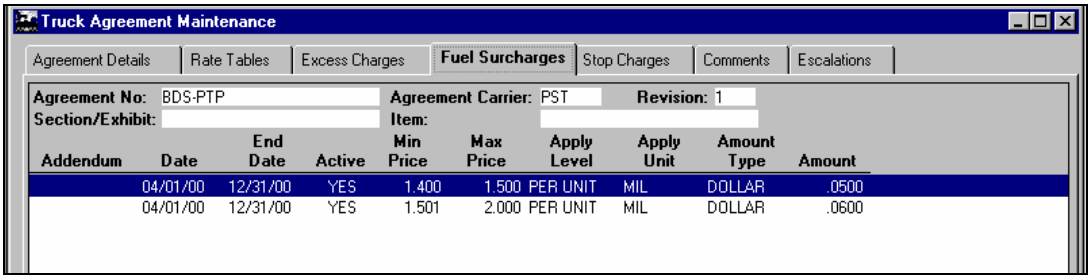
The two screens below provide examples of a fuel surcharge scale. The first is based on a percentage adjustment of the line haul freight cost where the second is based on a cent per mile adjustment based on the distance of the movement.

In the example below, the first line of the scale states that when the market price of fuel falls between $1.25 and $1.36 per gallon, a fuel adjustment of 1 % of the line haul freight will be applied. Using this scale, for a freight cost of $1,500 with a fuel market price of $1.50 per gallon, the fuel adjustment would be $30 (2% of $1,500).



Addendum	Date	End Date	Active	Min Price	Max Price	Apply Level	Apply Unit	Amount Type	Amount
	01/01/98	00/00/00	YES	1.250	1.360	LINE HAUL		PERCENT	1.0000
	01/01/98	00/00/00	YES	1.361	1.435	LINE HAUL		PERCENT	1.5000
	01/01/98	00/00/00	YES	1.436	1.550	LINE HAUL		PERCENT	2.0000
	01/01/98	00/00/00	YES	1.551	1.645	LINE HAUL		PERCENT	2.5000
	01/01/98	00/00/00	YES	1.646	1.750	LINE HAUL		PERCENT	3.0000
	01/01/98	00/00/00	YES	1.751	2.000	LINE HAUL		PERCENT	4.0000
	01/01/98	00/00/00	YES	2.001	999.000	LINE HAUL		PERCENT	5.0000

In the example below, the first line of the scale states that when the market price of fuel falls between $1.40 and $1.50 per gallon, a fuel adjustment of 5 cents per mile will be applied. Using this scale, for a movement traveling 350 miles with a fuel market price of $1.50 per gallon, the fuel adjustment would be $17.50 (.05 * 350 miles).



Addendum	Date	End Date	Active	Min Price	Max Price	Apply Level	Apply Unit	Amount Type	Amount
	04/01/00	12/31/00	YES	1.400	1.500	PER UNIT	MIL	DOLLAR	.0500
	04/01/00	12/31/00	YES	1.501	2.000	PER UNIT	MIL	DOLLAR	.0600

Steps for Creating Fuel Surcharges

For fuel surcharges to function properly, four components need to be defined and maintained.

1. **Define Fuel Price Source.** The fuel price source is a code that represents the entity that maintains the current market rate on fuel prices and will provide the base for current market price against a fuel surcharge scale.

   To create a fuel price source, go to Config – Reference – Fuel – Sources and click the new icon. A new line in the data window will appear for defining the

fuel source code and fuel source description. Once both variables have been defined, click the save icon.

2. **Create Fuel Surcharge Scale.** A fuel surcharge scale can be created as a global scale that can be used by multiple carriers across multiple agreements or it can be created within an agreement making it specific to that agreement. Anytime a scale exists within an agreement, that scale will take precedence over a global scale. A global scale will only apply against a specific agreement if the Apply Company Fuel Surcharge flag in the agreement header is set to "YES".

To create a global fuel surcharge scale, go to Config – Reference – Fuel – Surcharge Rates and click the new icon. Define each variable of the fuel surcharge scale based on the variable definitions provided above. To create an agreement specific scale, bring up the appropriate agreement within the Agreements Section and double click on the record. Click the Fuel Surcharges Tab and click the new icon to begin creating the scale.

3. **Link Fuel Source to Agreement and Populate the Apply Company Fuel Surcharge Flag.** For a fuel surcharge to calculate based on a global or an agreement defined scale, the fuel price source will need to be linked to the agreement. For a global scale to apply to an agreement, that will also have to be defined in the agreement. Within the agreement header two variables exist for this purpose. The first variable, Fuel Source, provides a drop down list of all fuel price sources that have been defined in the Reference Section. The second variable, Apply Company Fuel Surcharge, is a Yes/No flag used to identify whether the global fuel scale defined in the Reference Section should apply if an agreement specific table does not exist.

To define these two variables, bring up the appropriate agreement within the Agreements Section and double click on the record. This will take you directly to the Agreement Details Tab where the agreement header information is located. The Fuel Source and Apply Company Fuel Surcharge fields are located in the left column of the Terms Section in the data window. Populate these two variables and click the save icon.

4. **Publish Current Fuel Market Price.** The final step in the fuel surcharge process is maintaining the current fuel market price for all the fuel sources that are being used. Without the definition of a market price based on a time window of the ship date, surcharge costs will not be calculated.

To define the fuel market price, go to Config – Reference – Fuel – Market Prices and click the new icon. A new line in the data window will appear for defining the current market price for a price source. The variables required are fuel price source, start date, end date and fuel price. Once these four variables have been defined, click the save icon. The application will automatically tag each record with the date of entry and the ID of the user that created the record.

Switch Charges

Switch charges are additional costs incurred either at the origin or destination in order to move the railcar to an origin gateway for linehaul or to deliver the railcar at the destination. The variables that make up a switch are:

- **Start Date.** The effect date of the switch charge.
- **End Date.** The expire date of the switch charge.
- **Switch Carrier.** The carrier who will handle the switch and will receive payment from the carrier owning the agreement.
- **Switch Location / SPLC.** The city/state where the switch charge will occur.
- **Commodity Class.** The commodity class that the switch charge will apply to. If the switch is not commodity specific, the value will be set to 'ALL'.
- **Customer.** The specific customer who the switch charge will apply to. If the switch is not customer specific, the value will be set to 'ALL'.

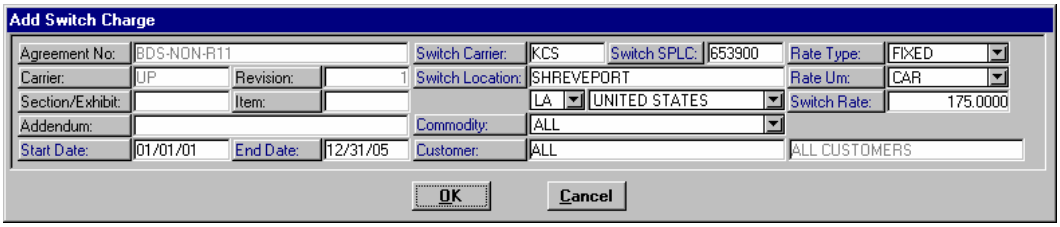
For each unique combination of the above variables, a switch rate can be defined.

For switch charges to apply during a rate inquiry, a rate code must exist where the switch location defined in the agreement is equal to or a part of the origin (for origin switches) or destination (for delivery switches) of the rate code, and the switch carrier is equal to the origin or delivery carrier of the rate code.

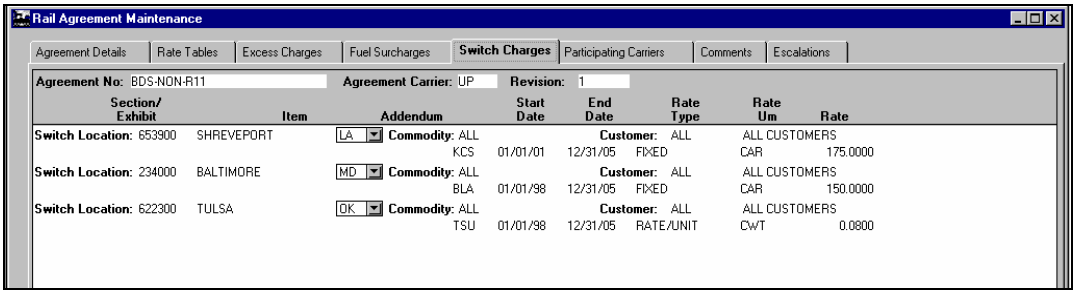
The following is an example to illistrate how a switch charge is applied during an inquiry: Within a UP agreement a switch charge is defined for the carrier TSU in Tulsa, OK. For this switch to apply at the origin of a shipment, a rate code would have to exist where the origin carrier is TSU, the first segment of the route is the UP utilizing the agreement where the switch is defined and the origin is equal to Tulsa, OK or a group of points where Tulsa would be include (i.e. The state of OK). For this same switch charge to apply at the destination, a rate code would have to exist where the delivery carrier is TSU, the last segment of the route is UP utilizing the agreement where the switch is defined and the destination is equal to Tulsa, OK or a group of points where Tulsa would be include. If the rate code used during the inquiry does not have the TSU as either the origin carrier or delivery carrier, the agreement rate for Tulsa will still apply, but no switch charges will be calculated.

To create a switch charge, bring up the appropriate agreement within the Agreements Section and double click on the record. Click the Switch Charges Tab and click the new icon to begin creating the switch charge. Define all the variables described above and click the save icon. The switch carrier must always be defined as a participating carrier of the agreement for the switch charge to be saved. Also, remember to create the appropriate rate code in order for the switch charge to apply during rate inquiries.

The screen below shows the entry of a $175 per car switch charge from the UP to the KCS in Shreveport, LA.



The screen below shows an example of 3 switch charges that exist within an UP agreement. The first switch is for $175/car in Shreveport, LA on the KCS. The second switch is for $150/car in Baltimore, MD for switches with the BLA and the third switch is in Tulsa, OK on the TSU at a rate of $.08 CWT. Anytime a shipment is made where these conditions exist, the switch cost associated with the move is automatically calculated. During a real shipment interface, a separate accrual record will be created for the switch.

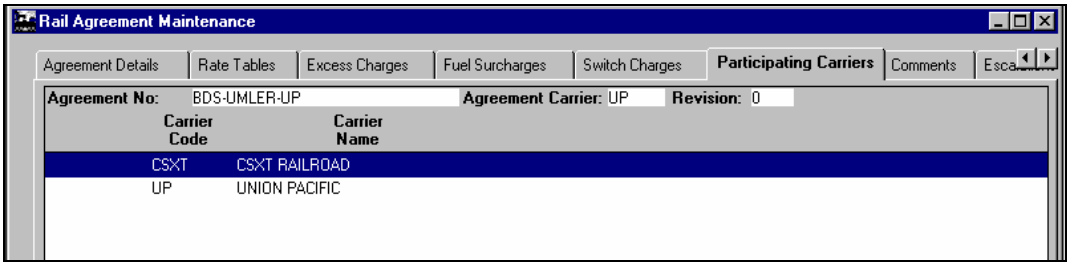


Participating Carriers

The Participation Carriers Section is specific to rail and provides a list of all rail carriers that are party to the agreement.

This list provides the validation source for identifying whether rate table origin and destination points can be service by the carriers that participate in the agreement when the Verify Rail Service Location Flag in System Defaults is activated. If this process is active, the Rail Service Locations table in Config – Geographic Codes must be populated with the OPSL Station Master List in order to create rate tables. As each new rate table is being saved, a validation process takes place where the origin and destination of the rate table are matched to the carriers defined in the Participating Carriers List to identify if those locations are serviced by any of the carriers.

The screen below shows the participating carrier list for an UP agreement. The carriers that are party to this agreement are the UP and the CSXT. If the verify service location function is turned on, each origin and destination defined on a rate table will be validated against the rail service location table to verify that either the UP or CSXT provides service to that location. If the validation fails, the application will not allow the rate table to be saved.



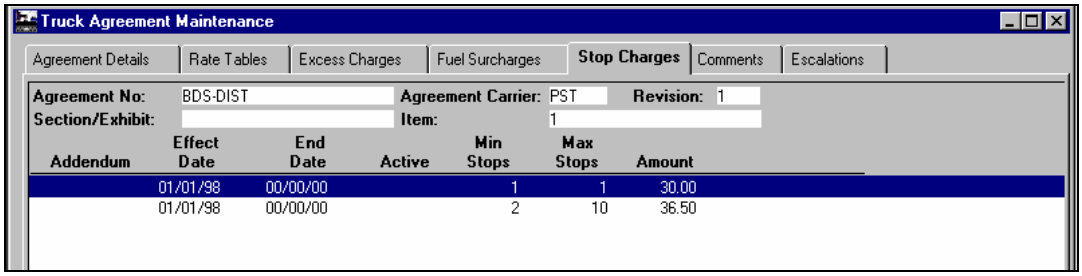
Stop Charges

Stop charges apply to truckload shipments only and allow the user to create a charge scale based on any addition stops that occur on a movement. Stop charges are calculated based on all additional stops over the first one and will create an accrual during a life shipment interface. The conditions and freight calculation procedures utilized in the multi-stop process are:

- **Mileage Scale and Matrix Scale Rate Tables.** Any multi-stop movement rated using a mileage or matrix scale will automatically apply stop charges without any special set up requirements. The freight calculation process will always utilize miles between all stops of the movement.
- **Point-to-Point Rate Tables that are based on a rate per mile.** This rate table type performs identical to a mileage or matrix scale rate table.
- **Standard Point-to-Point Rate Tables based on a fixed per truck load our rate per unit.** This type of rate table will only calculate and able stop charges if the 'MultiStop' field within the rate table header is set to a yes. The freight calculation process will not include any mileage cost between stops. Freight will always be the fixed truckload or per unit rate plus stop charges.

When defining stop charges, five variables must be provided. These variables are:

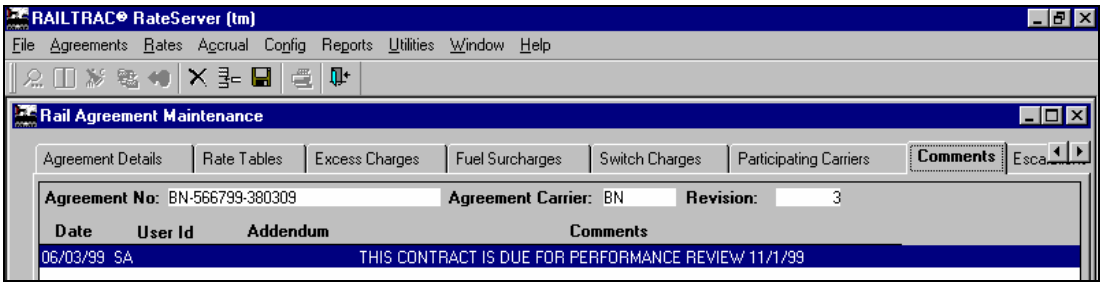
- **Effect Date.** The effect date of the stop charge.
- **End Date.** The expire date of the stop charge.
- **Min Stops.** The minimum number of additional stops for the defined amount.
- **Max Stops.** The maximum number of additional stops for the defined amount.
- **Amount.** Flat per stop charge for any additional stops made based on the range of stops defined.



The screen above provides an example of a stop charge scale. For 1 additional stop the charge is $30 and stops of 2 or greater, the charge is $36.50 per stop. On a move from Houston, TX to New Orleans, LA – Mobile, AL – Birmingham, AL – Atlanta, GA, 3 additional stops would be made. Based on this example, the stop charge would calculate to $103.00. (1 stop @ $30, 2 stops @ $36.50)

Comments

RateServer® offers a powerful comment function for each freight agreement. By highlighting the agreement of choice, and clicking the Comments button, a screen appears to allow entry of comments. Each comment is recorded by the date/time entered and by the ID of the person who entered it:



Rate Escalation

The Rate Escalation Section is where escalation conditions are defined and where rate table mass-updates for applying escalations are performed. Escalations can be created at any time, but they should not be applied until the time they are due. If escalations are applied early, and a new rate is entered based on the timeframe prior to the escalation, the escalated rate table for this new entry will not be automatically created.

The escalation creation screen is divided into three areas: Escalation Criteria, Escalation Detail and History Detail.

Escalation Criteria

Escalation criteria define which rate tables will be impacted in the escalation process. A combination of any of the criteria variables can be set to make the conditions of the escalation as specific as possible. By leaving all variables at their default values, all current rates in the agreement will be effected. ***(Note: Only define the number of escalation criteria variables that are required to identify the desired rate tables. Over defining these variables can impact the speed and efficiency of the escalation update process.)*** The variables that make up escalation criteria are:

- **Section/Exhibit.** This value defines the section of the agreement where the rate is published. This would be similar to the chapter in a book. When this value is populated, only rates published in the defined section will be effected with the escalation. If the section is not required, the value can be left as NULL.
- **Item.** Like section above, this is a secondary grouping of rates. If defined, only rates published in that item will be effected with the escalation.
- **Origin.** Defines whether the escalation is specific to one origin. If it is not origin specific, the value will default to 'All Locations Served'. Clicking the mouse in the field and then right clicking can create a new location template.
- **Destination.** Defines whether the escalation is specific to one destination. If it is not destination specific, the value will default to 'All Locations Served'. Clicking the mouse in the field and then right clicking can create a new location template.
- **Commodity Class.** Defines whether the escalation is specific to one commodity class. If it is not commodity specific, the value will default to 'All'.
- **Equipment.** Defines whether the escalation is specific to one type of equipment. If it is not equipment specific, the value will default to 'All Equipment'.

- **Rate Start Date.** Defines whether the escalation is specific to rates that start on a specific date. If it is not specific to a start date, the value will be left blank.

Escalation Detail

Escalation detail defines the specific terms of the escalation. (i.e. When the escalation goes into effect, when the new rates will end, what the escalation amount is, and how the rounding of the new rates should be applied.) The variables that make up the escalation terms are:

- **Escalation Date.** Defines the start date of all rate tables that are updated based on the escalation conditions.
- **Escalation End Date.** Defines the end date on all new rate tables that are created during the escalation process. If this value is left blank, the end date of all new rate tables will default to the end date of the agreement.
- **Amount Type.** Defines the meaning of the escalation amount. Available values at PERCENT, FLAT or REPLACE.
- **Escalation Amount.** Defines the specific value that will be applied during the escalation process.
- **Fixed Round Factor.** Defines how many decimals will be applied during the escalation process on all rate tables where the rate is defined as a fixed per TL or car amount.
- **Per Unit Round Factor.** Defines how many decimals will be applied during the escalation process on all rate tables where the rate is defined as a per unit amount.
- **Apply to Minimum Freight.** Defines whether the escalation will impact any minimum dollar amounts that may exist on rate tables being impacted by the escalation process.

History Details

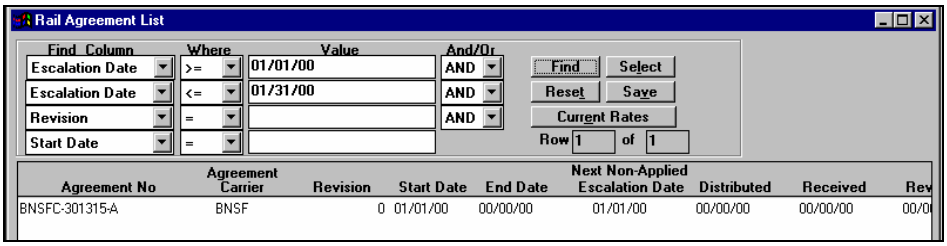
Escalation history detail is an audit function that keeps record of who and when the escalation process for updating rate tables was executed. Each time an escalation is applied or backed out, the escalation is tagged with the user ID of the person who executed the procedure and the date and time the procedure was executed.

Applying Escalations

All new rate tables based on a specific escalation are automatically created, but the escalation procedure must be manually kicked off.

1. The first step of the escalation process is to identify the agreements that contain escalations that are due and have not been applied. From the Agreements section, go to a specific mode and bring up a list of all agreements. Using the on screen toolbar, develop a query against the field Next Non-Applied Escalation Date based on the time frame required.

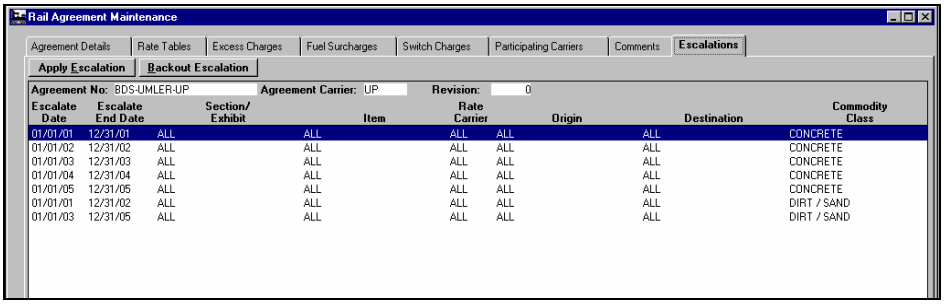
Below is an example of a tool bar query that will show all rail agreements that contain an escalation that has not been applied and is due to be applied between January 1, 2000 and January 31, 2000.



2. Highlight and double click an agreement that shows an escalation that is due.

3. Click the Escalation Tab to bring up a list of all escalation conditions that exist in the agreement.

Below shows a listing of the escalations that exist for the agreement BDS-UMLER-UP. Over the life of this agreement, the commodity Concrete will be escalated on January 1 of each year where the commodity Dirt/Sand will be escalated on January 1, 2001 and on January 1, 2003.



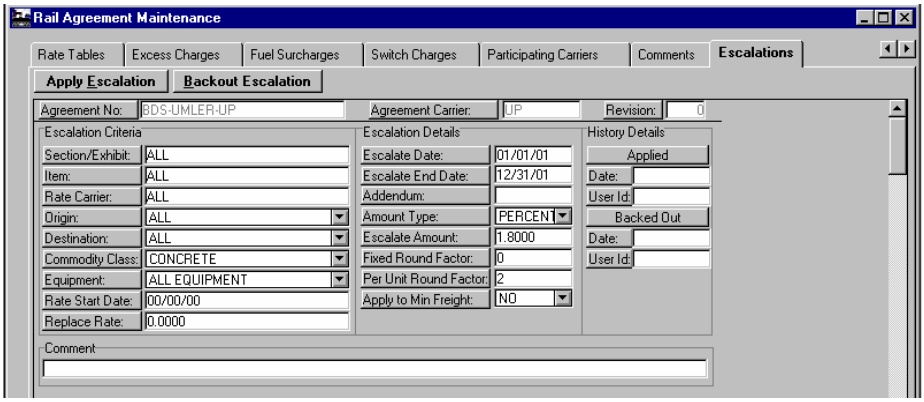
4. Highlight and double click the escalation that is due and review all variables of the escalation for accuracy. (Note: The escalation can be applied from the list screen, but it is suggested to go through the detail screen so all parameters of the escalation can be reviewed for accuracy. An escalation back out procedure exists, but it is much more efficient and much cleaner from an audit stand point to take all possible steps to insure the accuracy of the escalation upfront in order to avoid unnecessary back outs.)

Below shows an example of the detail window of an escalation.

Within the Criteria section, commodity has been defined as Concrete. When this escalation is applied, only current rate tables having a commodity of Concrete will be impacted.

Within the Details section, this escalation is set to take place on January 1, 2001 and create new rate tables good through December 31, 2001 at a 1.8 % increase over current rate levels. Fixed rates will be rounded to whole dollars and per unit rates will be rounded to the penny.

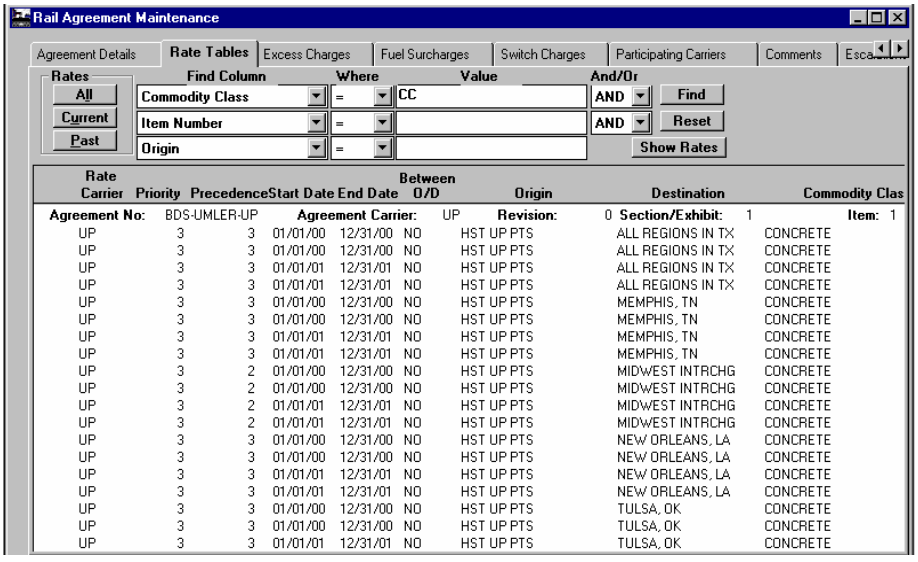
Within the History section, we can see that this escalation has not been applied.



5. Clicking the Apply Escalation Button from the escalation detail window. When the process is complete, the system will tag the escalation with the date the escalation was applied and the user ID of the user who applied the escalation.

6. To review the results, click the Rate Tables Tab and review the rate tables. Each point pair involved in the escalation process will now have an addition rate table. The old rate table will have and end date the day before the escalation goes into effect and a new rate table will exist with a start date equal to the effect date of the escalation.

Below shows an example of the results from applying the January 1, 2001 Concrete escalation. Each rate table that began on 01/01/00 has been expired as of 12/31/00 and a new rate table based on the 1.8 % escalation has been created with a start date of 01/01/01 and an end date of 12/31/01.



Backing Out Escalations

If any escalation was applied in error, a procedure exists to back out the escalation and return all applicable rate tables back to their pre-escalation status. Any escalation that is backed out will be tagged with the date the activity occurred and the user ID of the user who applied the back out.

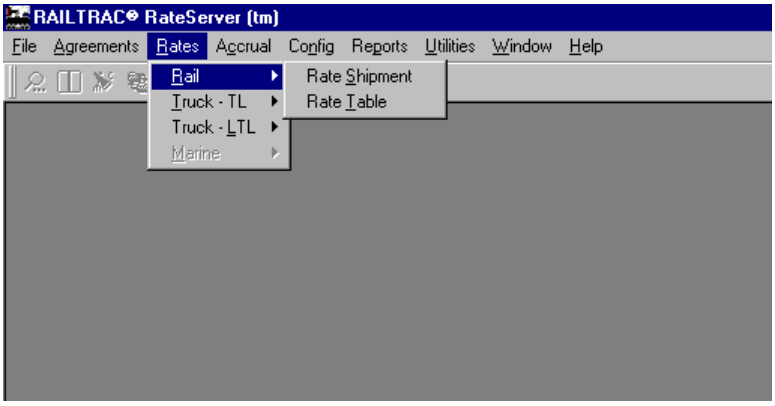
1. Click the Escalation Tab within an agreement to bring up a list of all escalation conditions that exist in the agreement.
2. Highlight the escalation and review to make sure that the escalation has already been applied. This can be done from either the list screen our by double clicking into the detail window.
3. Click the Backout Escalation Button from either the list window or the detail window.
4. To review the results, click the Rate Tables Tab and review the rate tables. Each escalated rate table should be gone and the rate tables that were the source of the escalation should be back to their original condition.

Rates

Rates Menu Overview

The Rates functions in RateServer® pertain to recording and management of the rate tables belonging to freight contracts. It also provides interactive functionality to Rate Shipments for various products using different modes of transportation.

The screen below displays the Rates DropDownListBox from the main menu:



A summary of the Rate functions are as follows:

Rail

Provides for rating individual rail shipments (Rate Shipment) and for displaying many rail rates given parameters such as product, equipment, origin/destination, etc. (Rate Table).

Truck

Provides for rating individual truckload shipments (Rate Shipment) and for displaying many truck rates given parameters such as product, equipment, origin/destination etc. (Rate Table).

LTL

Provides for rating individual less-than-truckload shipments (Rate Shipment) and for displaying many less-than-truckload rates given parameters such as product, equipment, origin/destination etc. (Rate Table).

In the Rate Shipment screens, the user enters in the *rate parameters* to obtain a listing of the freight rates, which meet the criteria. Rate parameters are items that impact the freight rate for moving goods. The first, most important rate parameter is the mode of transport.

Other rate parameters include origin, destination, carrier, product/commodity classifications, equipment, date of shipment and quantity shipped. These items impact the cost of freight and must be accurately defined in the Config tables (see chapter on Config) related to geographic coding and general reference information.

Rail Rates

The Rail Rates function provides a Rate Shipment facility to obtain rail rates for particular shipments and a Rate Tables function to query for all rates, which meet user-defined criteria according to origin, destination, commodity class, and equipment type.

Rate Shipment - RAIL

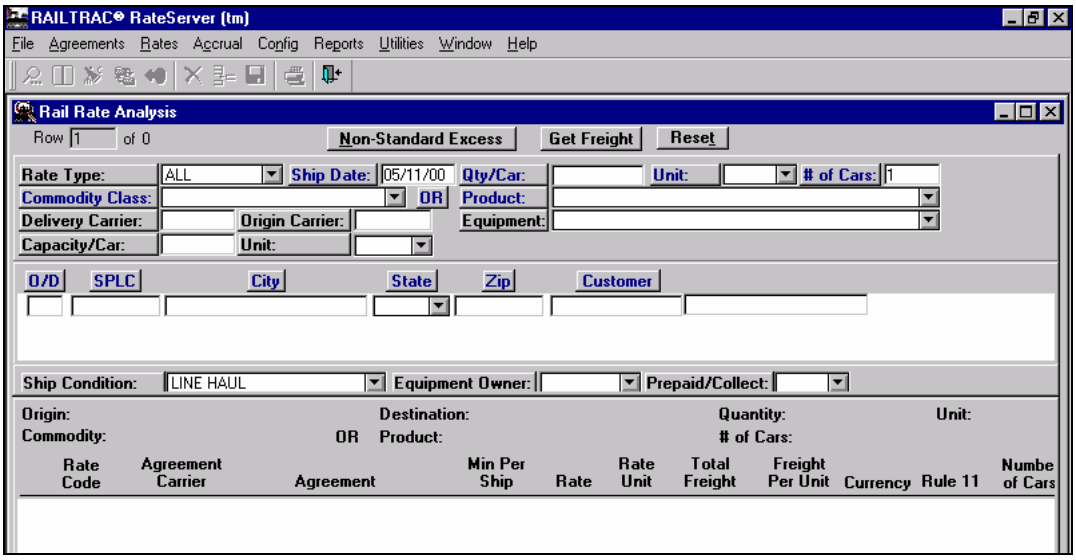
This facility allows a user to "rate" the movement of goods using rail as a mode of transport. The user is required to input various parameters, which impact the freight rate; the screen then displays a set of rates, which meet the criteria entered.

The user enters the following rate parameters, then clicks the Get Freight button to obtain the set of rate records that match the parameters entered. Below is a listing of the parameters and which parameters are required.

Rate Type	This function is in development, currently the default is All.
Ship Date	Date the shipment will occur. Required (defaults to current date).
Qty/Car	Numeric quantity of product to be shipped. Required.
Unit	Unit of Measure for product being shipped.
# of Cars	The number of cars in this shipment.
Commodity Class	Classes or families of products or commodities. Required (if Product not entered). Either Commodity Class OR Product must be entered. The system will not allow both.
Product	Individual Product or Commodity Code. Required (if Commodity Class not entered). Either Commodity Class OR Product must be entered. The system will not allow both.
Delivery Carrier	Non line-haul carrier at destination (switch carrier).
Origin Carrier	Non line-haul carrier at origin (switch carrier).
Equipment	Select from the drop down menu. Equipment is identified through Config_Reference_Equipment_Equipment.

Capacity/Car	Ratetables can be set up according to rail car capacity. This optional field allows for rating based on capacity.
Unit	Unit of capacity measure.
Origin	Origin SPLC or City/State, Zip or Customer. Required.
Destination	Destination SPLC or City/State, Zip or Customer. Required.
Ship Condition	Defaults to Line Haul. Required.
Equipment Owner	Railroad or non-Railroad owned.
Prepaid/Collect	Is the shipment prepaid or collect?

The screen below shows the Rate Rail Shipment screen before entry begins. The fields labeled in blue on your screen are required:



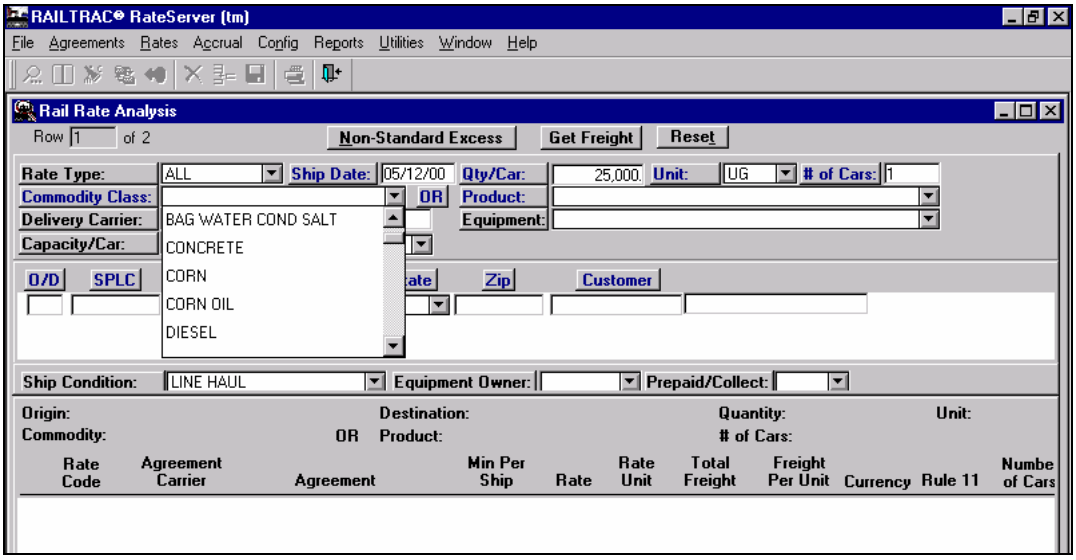
Rate a Rail Shipment

1. From the Main Menu, click on Rates-Rail-Rate Rail Shipment.
2. Enter the required values in the blue fields plus any other optional fields.
3. It is easiest to TAB from field to field. For DropDownListBox fields, enter the first letter of the value until the value you require appears.
4. Click the Get Freight button and a set of rates meeting the criteria entered is displayed in the lower half of the screen.

The screens below will show the process of obtaining a rate for a shipment of CORN OIL from TULSA, OK to HOPE, AR.

Use the Tab key to move from field to field during data entry.

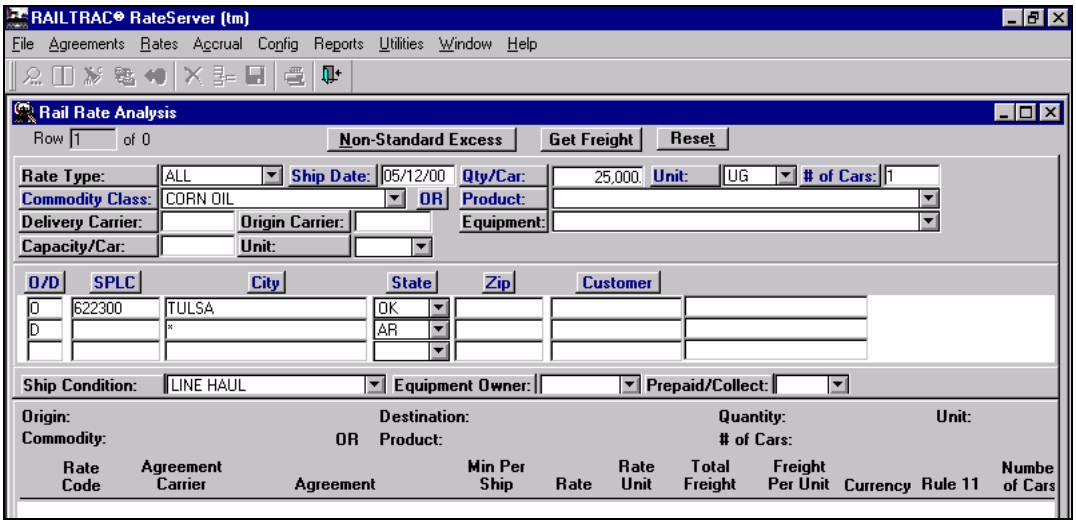
First, enter the Ship Date (it will default to the current date), the Quantity and Unit of Measure. Tabbing to the next field, Commodity Class, the user desires a listing and thus clicks the arrow to invoke the DropDownListBox:



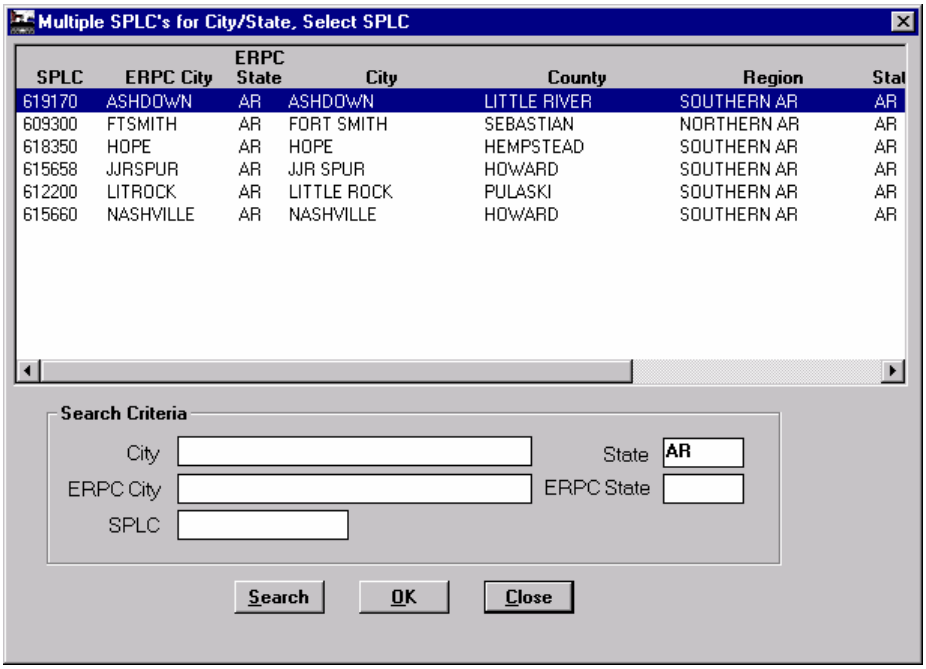
The user then defines the origin(s) and destination(s). This screen allows rates to be queried by multiple origins to a destination or an origin to multiple destinations.

In the example below, we only ask for one origin and one destination.

The option exists to only enter a * character in the city and populate the state and when tabbing off the state a list of all cities in that state will appear, as shown below.

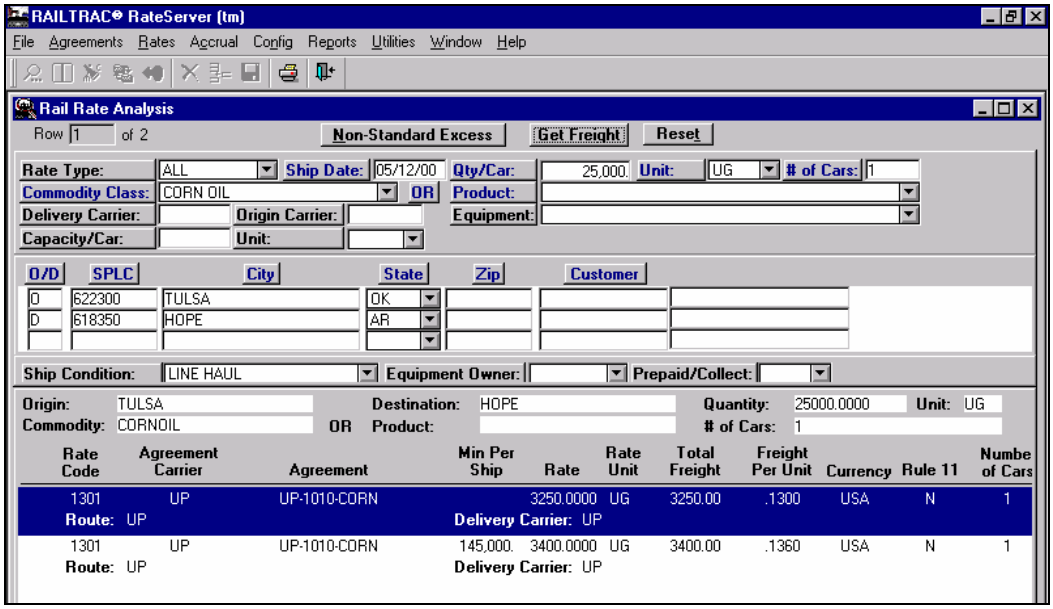


After tabbing off the Destination City field, a search box is displayed showing all cities in Arkansas.



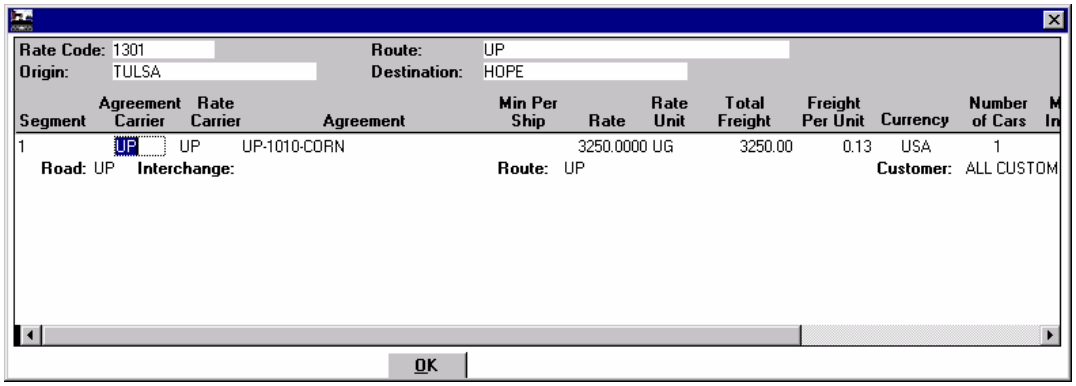
The user highlights the proper destination city and clicks OK.

Then, to obtain a freight rate, the user clicks the Get Freight button and the rate is displayed showing a Rate Code, Agreement Carrier, Agreement, Min per Ship, the Rate, Rate per Unit, Total Freight, Freight per Unit, Rule 11(yes or no), and Route:

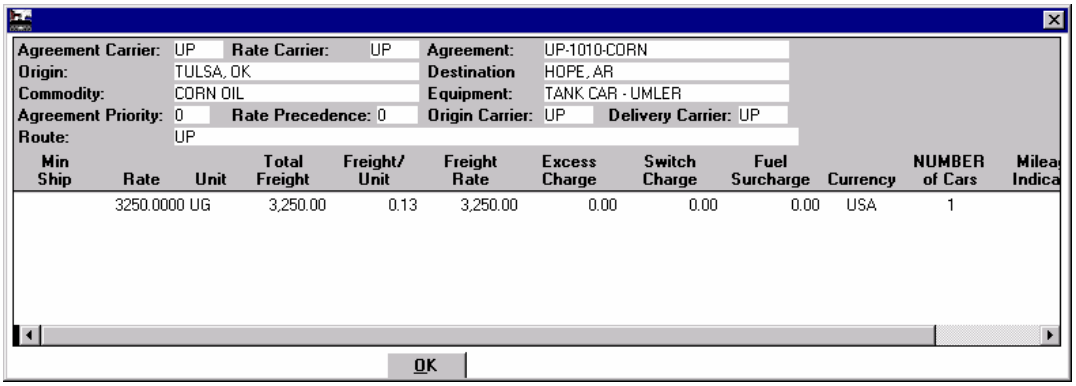


In this case, the move is not a Rule 11 combination move. Only one agreement will be utilized to move the shipment.

To obtain additional details about this rate, double-click the record and the detail box is displayed showing how the rate was calculated:



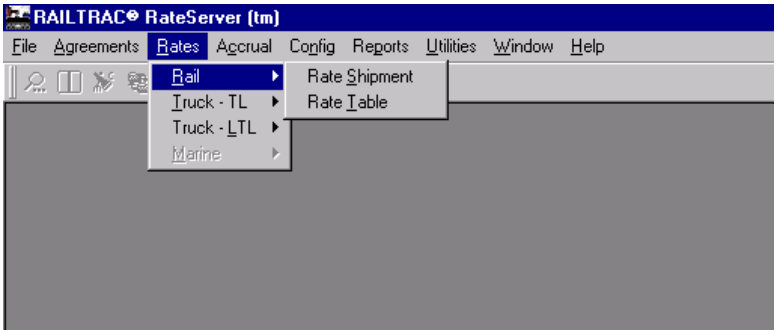
The popup box shows that the UP participates in the move and the details show the cost information and routing. For more details, double-click the record again to see all component costs of the carrier. The popup screen below is displayed once the user has double-clicked on the UP agreement:



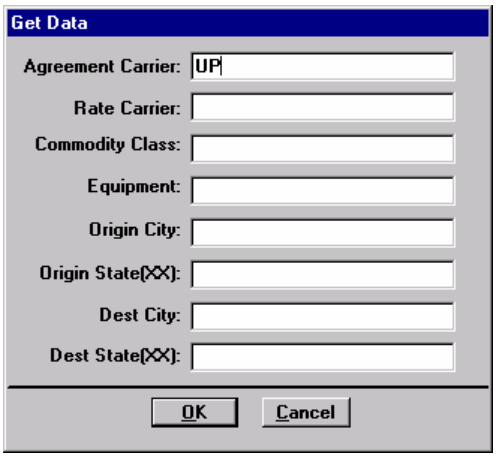
Rate Table - RAIL

This function allows the user to display multiple rates for moves given certain parameters entered, such as carrier, product class, origin, destination, etc.

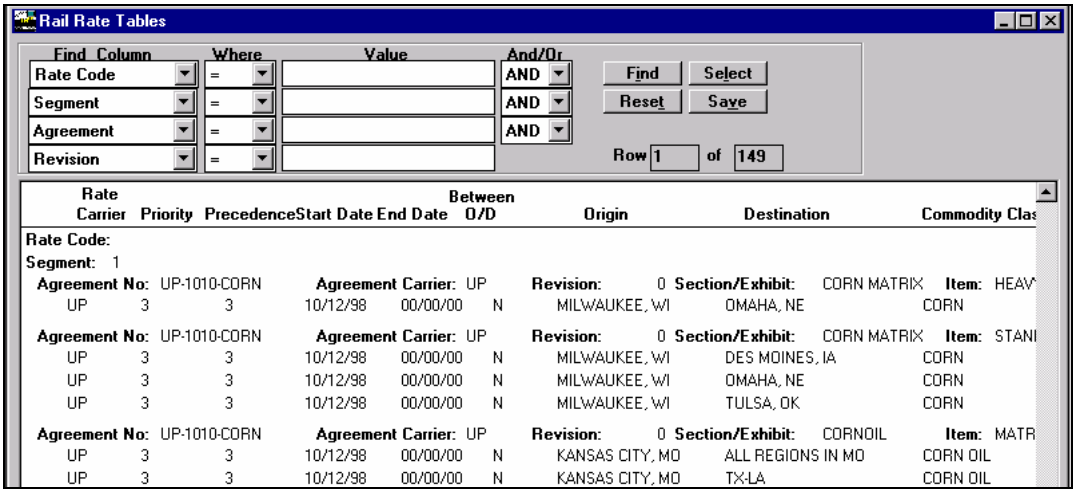
The screen below shows the menu location of the Rail Rate Table function:



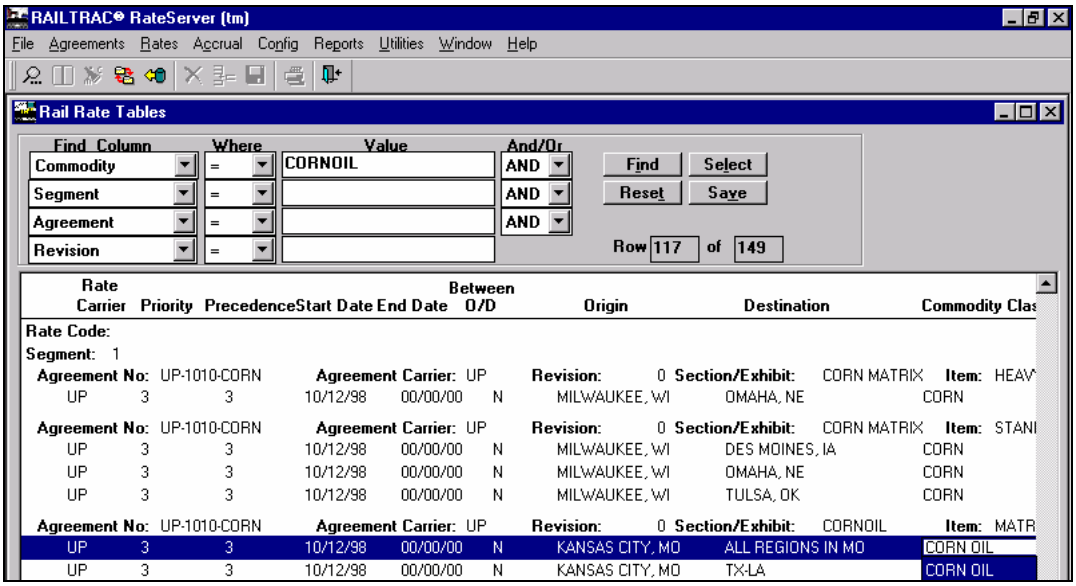
The screen below shows a Get Data Box to query for contracts of a specific Carrier, Commodity Class, Equipment Type, Origin and Destination Points. In this case we ask for contracts for "UP" (for a quicker return, we could also fill in one or more of the other parameters):



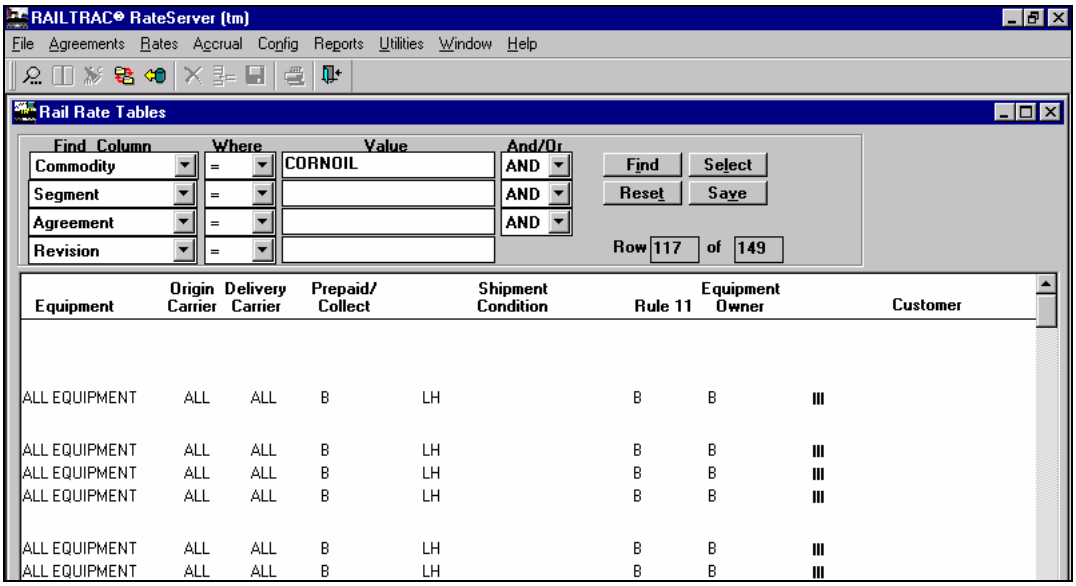
The result is a listing of all Union Pacific rail agreements. Notice in the toolbar that there are 149 agreements listed:



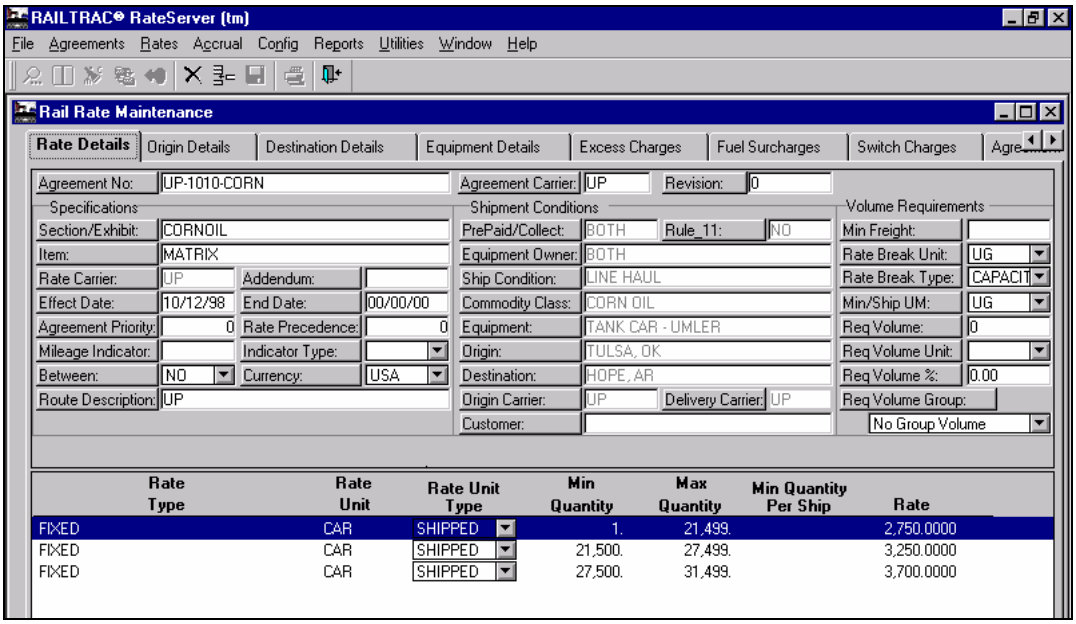
Should the user wish to see only the UP agreements with Commodity Class CORN OIL, they can click on a CORN OIL value in the Commodity Class column, right click to set the criteria in the Toolbar, then click the Find button. The result is shown below - all UP agreements, which carry CORN OIL:



Using the lateral scrollbar at the bottom allows viewing of the far columns on the right:



A double-click on the first record for a destination of HOPE, AR yields the details of the agreement as shown below:



The user can then use the tab buttons on this screen to investigate Origin, Destination, and Equipment Details, and Excess, Switch and Fuel Charges, etc. See the Agreement Chapter for more details on these screens.

Truck - TL

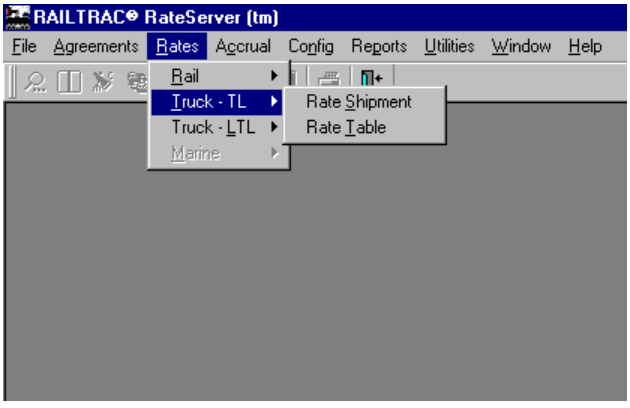
The TL (TruckLoad) Rates function provides a facility to obtain motor carrier rates for particular shipments and Rate Tables to store rates according to origin, destination, commodity class, equipment type, and quantity breaks.

Truckload origins and destinations can be defined as several types - Company Code, SPLC and Zip Code.

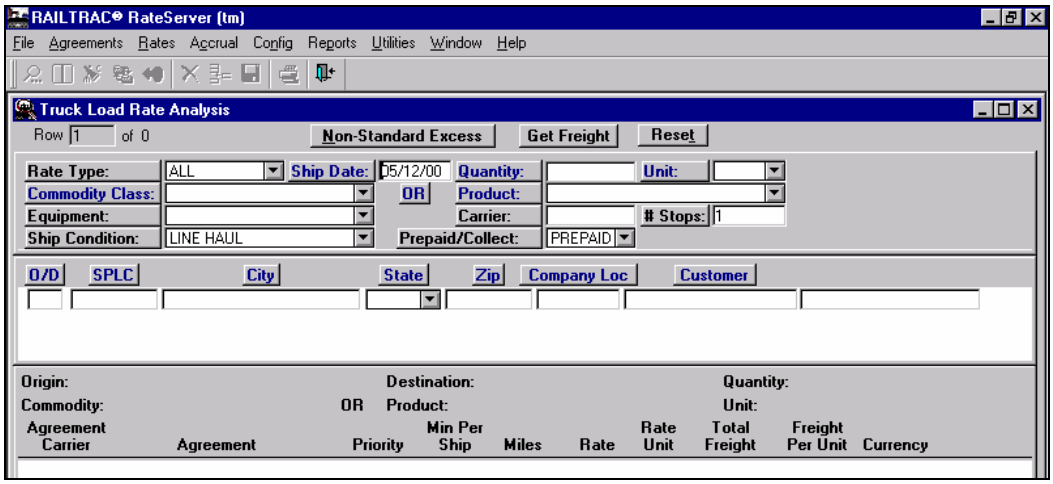
Rate Shipment - Truckload

This facility allows a user to "rate" the movement of goods using truck as a mode of transport. The user is required to input various parameters which impact the freight rate and the screen then displays a set of rates which meet the criteria entered.

The screen below shows the menu location of the Rate TL Shipment screen:



And the result is the Rate Shipments screen for Truckload moves:



The user enters the following rate parameters, and then clicks the Get Freight button to obtain the set of rate records matching the shipment parameters entered:

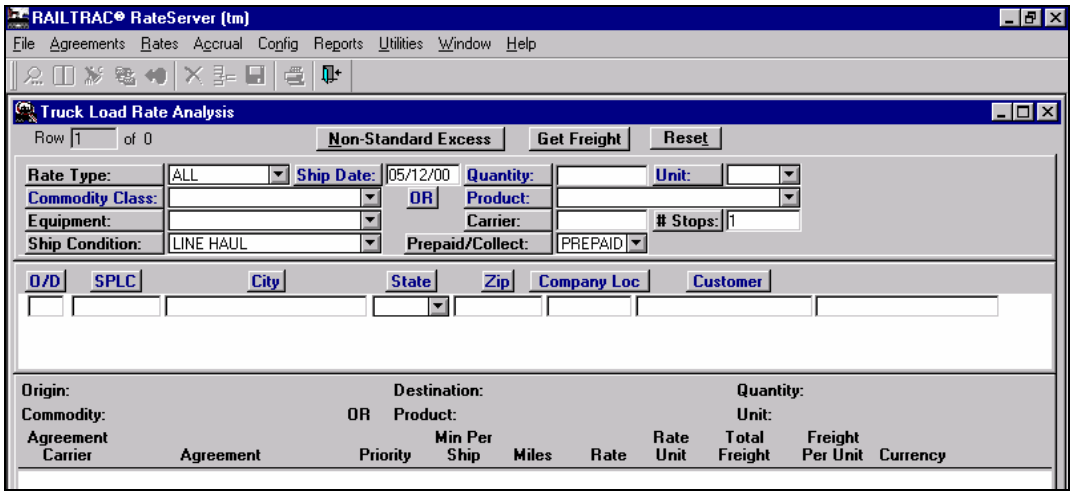
Rate Type	New Functionality currently in development. System default is currently set to All.
Ship Date	Date the shipment will occur. **Required (defaults to current date).**
Quantity	Numeric quantity of product to be shipped. **Required.**
Unit	Unit of measure of quantity to be shipped. **Required.**
Commodity Class	Classes or families of products or commodities. **Required (if Product not entered).**
Product	Individual Product or Commodity Code. **Required (if Commodity Class not entered).**
Equipment	Package, Flat, or any user defined. **Required.**
Carrier	The SCAC code of the motor carrier.
# of Stops	Number of stop offs during move. **Required (defaults to one).**
Ship Condition	Line Haul or custom definitions created under Config. **Required (defaults to LINE HAUL).**
Prepaid/Collect	Is the shipment prepaid or collect?
Origin	Origin SPLC or City/State or Zip, Company Location or Customer Code. **Required.**
Destination	Destination SPLC or City/State or Zip, Company Location or Customer Code. **Required.**

Access the Rate TL Shipment screen and obtain a rate

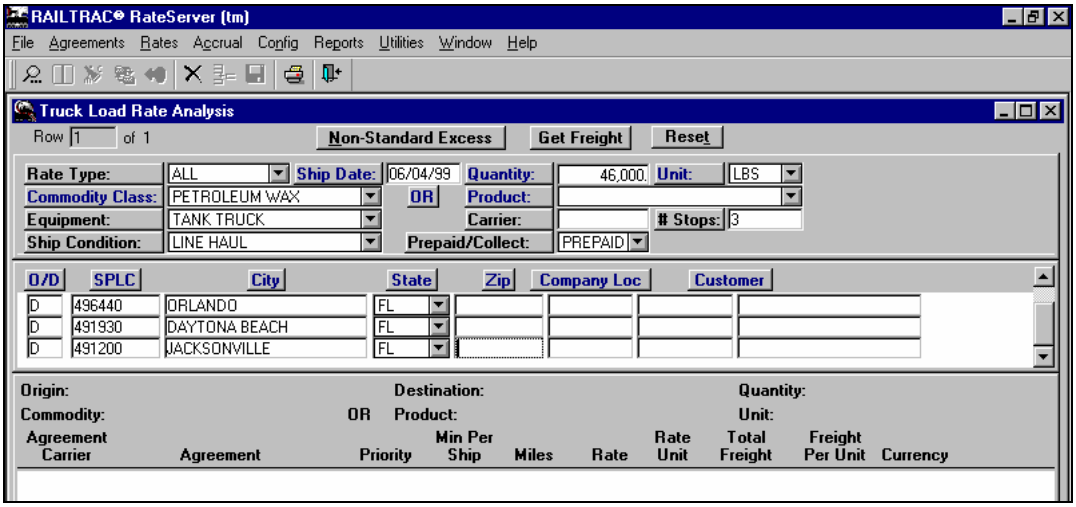
1. From the Main Menu, click on Rates-Truck-TL-Rate Shipment.
2. Enter the proper values in the blue fields plus any others.
3. It is easiest to TAB from field to field. For DropDownListBox fields, enter the first letter of the value until the value you require appears.
4. Click the Get Freight button and a set of rates meeting the criteria entered is displayed in the lower half of the screen.

The fields above either contain DropDownListBoxes which lists valid values from which the user can choose or the fields are "right-click enabled" where the user can right click the field to obtain a large listing and/or search facility for the proper values.

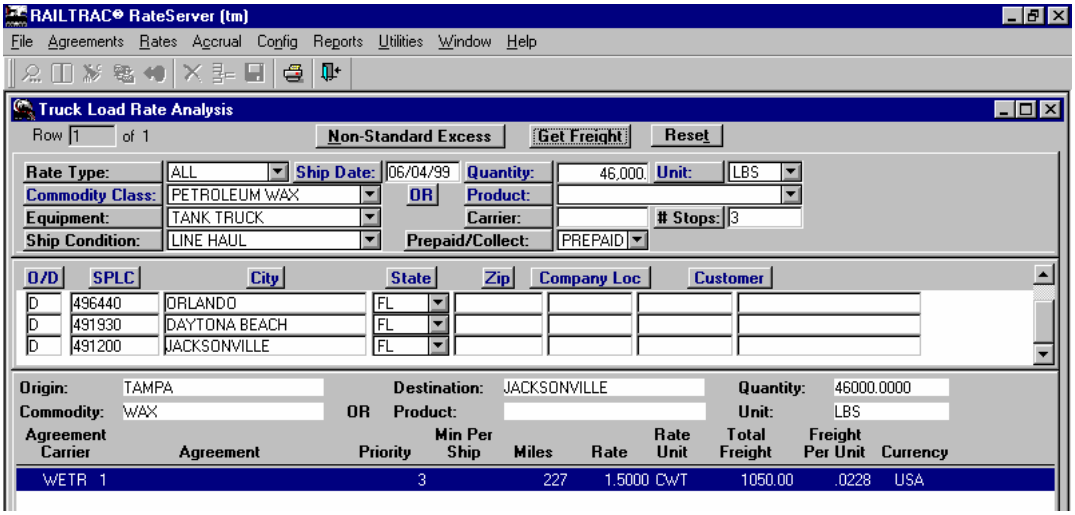
Users can click the arrow in the fields that have arrows to invoke a DropDownListBox of valid options from which he/she may choose:



The next screen shows all other rate parameters entered such as Quantity, Units, Origin, and Destinations. Notice this particular shipment is comprised of three Stops in Orlando, Daytona Beach, and Jacksonville:



To obtain the rate records, the user clicks the Get Freight button on the Toolbar and the rates are displayed:



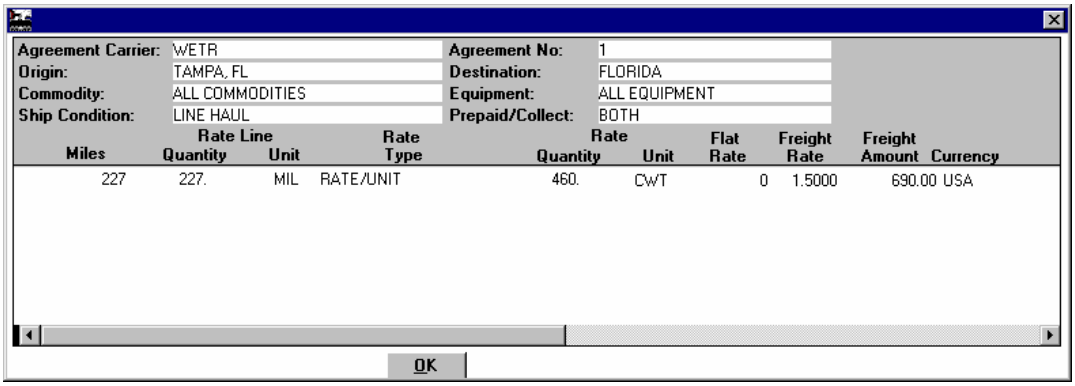
The screen above shows the rated record for WETR showing a Total Rate of $1,050.

The columns listed are:

Carrier Code	SCAC code for the carrier.
Contract Number	Freight contract meeting freight parameters entered.
Contract Priority	If the rate is the same this indicates the contract which would be chosen.
Rate Precedence	If the rate is the same this indicates the contract which would be chosen.
Total Freight	Total price for moving the freight including the additional charges for Excess, Fuel, and Stops.
Freight Rate	The base rate per unit of moving the freight.
Excess Charge	Any applicable excess charges tied to the contract.
Fuel Surcharge	Any surcharges from fuel price increases tied to the contract.
Stop Charge	Any applicable stop.

To obtain additional details about this rate, double-click the rate or charge of interest and a box is displayed with the detail on how the rate or charge was calculated.

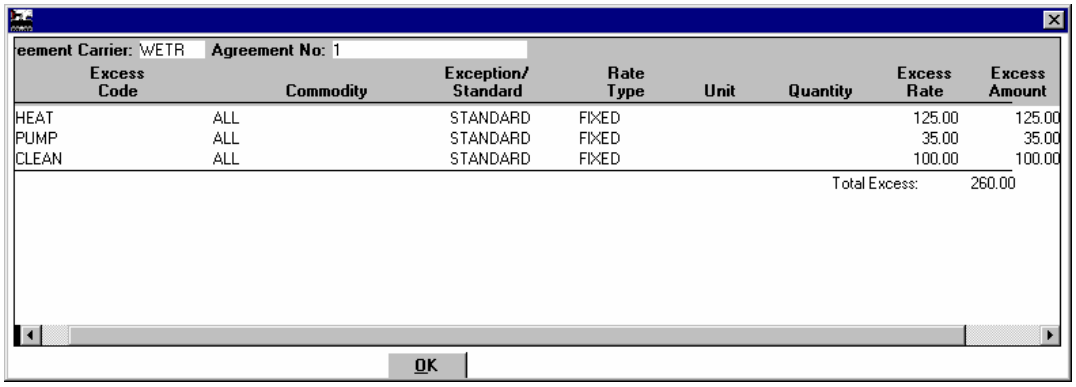
In the screen below, the user clicks the Freight Rate:



This shows that for the distance of 227 miles, the rate was calculated at $1.50 per hundredweight (CWT) for 460 CWT for a base freight rate of $690.

The screen below shows the Excess Charges for this contract showing additional charges for HEAT, CLEAN and PUMP. To get to this screen simply double-click on the Excess Charge.

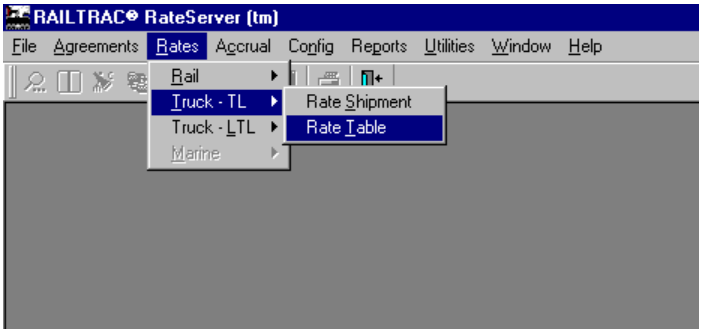
A click to the right on the scrollbar reveals what the charges are and how they are calculated (the user can also split the screen by dragging a line from the small dark box the left of the LeftArrow on the scrollbar). In this case the HEAT charge is a fixed rate at a rate of $125. The CLEAN and PUMP charges are fixed at a rate of $100 and $35.00 respectively. The total Excess Amount is $260.



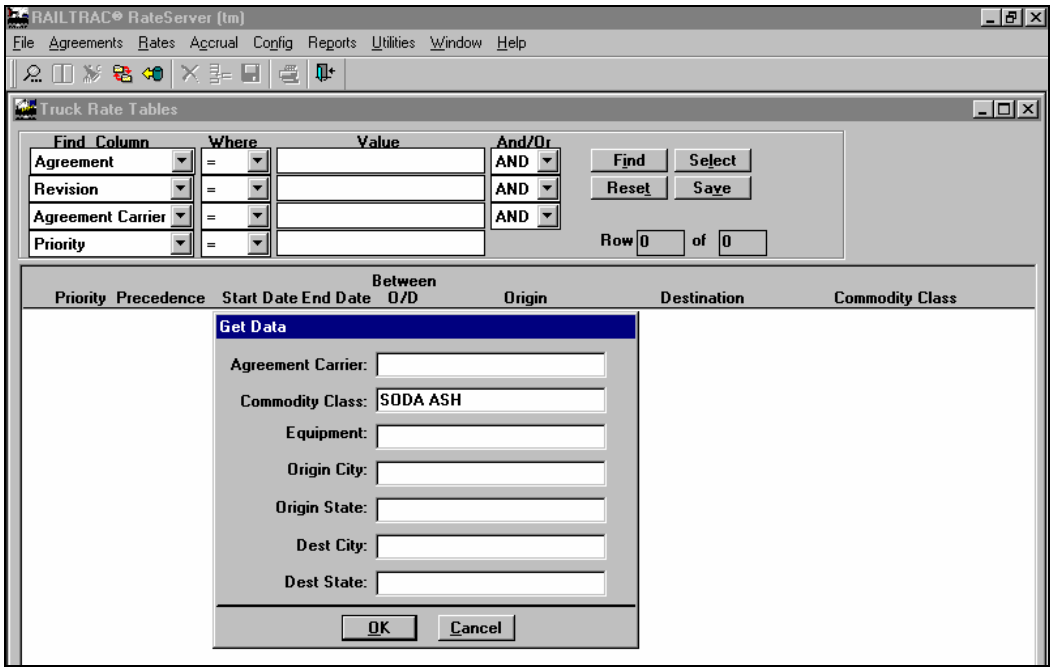
Rate Table - Truckload

This function displays the Truckload rate tables for a given carrier. The rates are set by rate parameters such as carrier, product class, origin, destination, etc.

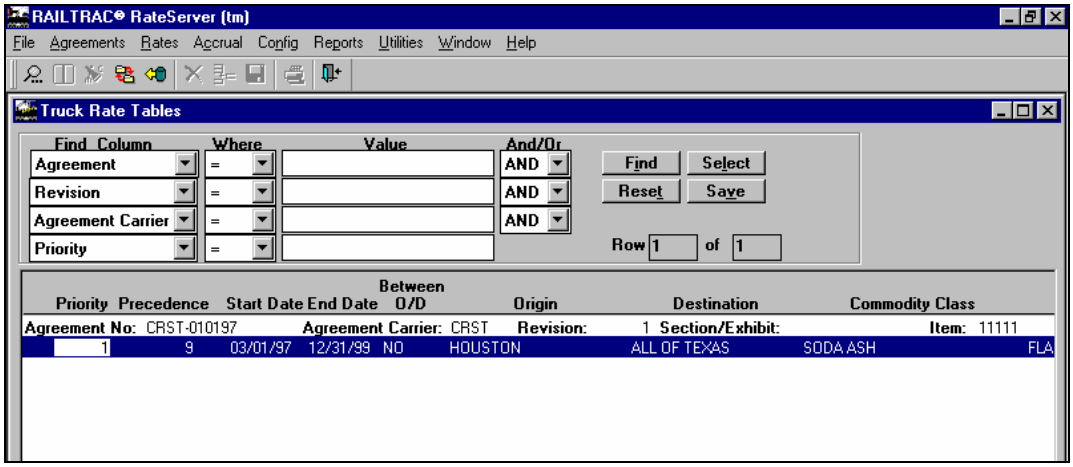
The screen below shows the menu location of the Truckload Rate Table screen:



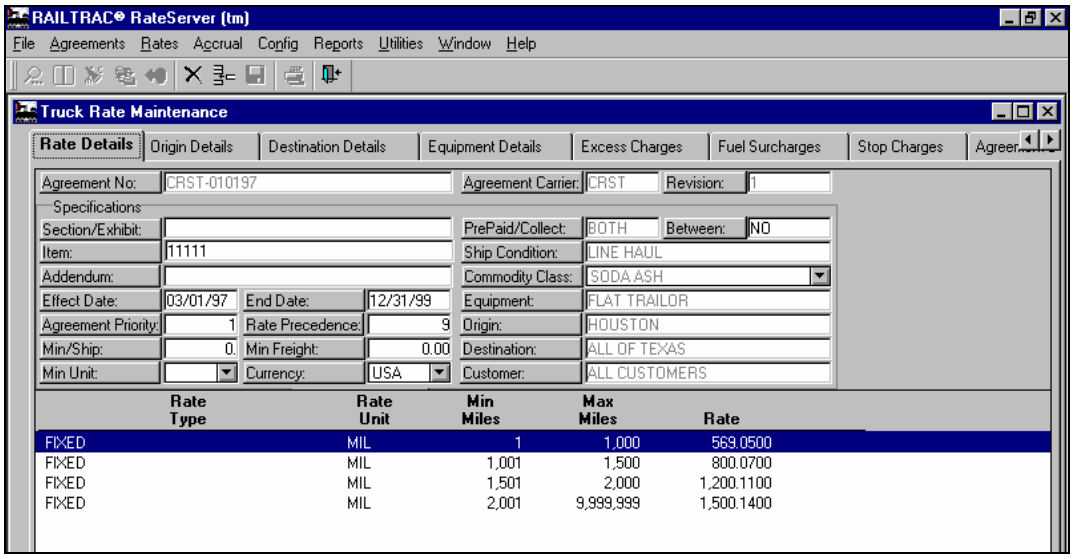
The screen below shows a Get Data Box for contracts of a specific Carrier, Commodity Class, Equipment Type and Origin Destination Points. In this case we ask for agreements for "SODA ASH":



The query returns one agreement with CRST.



This CRST agreement serves all destinations in Texas from Houston. Double-clicking the CRST agreement record shows the following details:



The rate is based on a fixed cost per mileage range in increments of 1,000 and 500 miles quantity breaks as listed.

The user can use the tab bar to investigate Origin, Destination, and Equipment Details, and Excess, Switch and Fuel Charges, etc. See the Agreements chapter for more details on these screens.

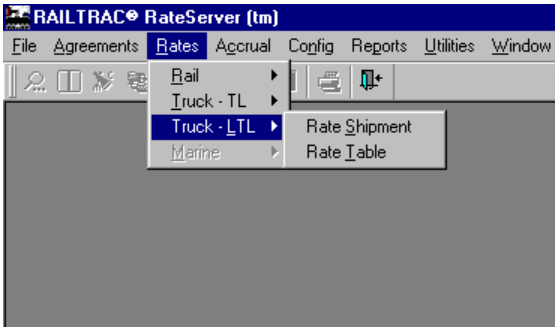
Truck - LTL

The LTL (Less-Than-Truckload) Rates function provides a facility to obtain motor carrier rates for shipments where delivered quantities are less-than-truckload. In addition, Rate Tables are provided to store discount structures according to origin, destination, commodity class, equipment type, and quantity breaks.

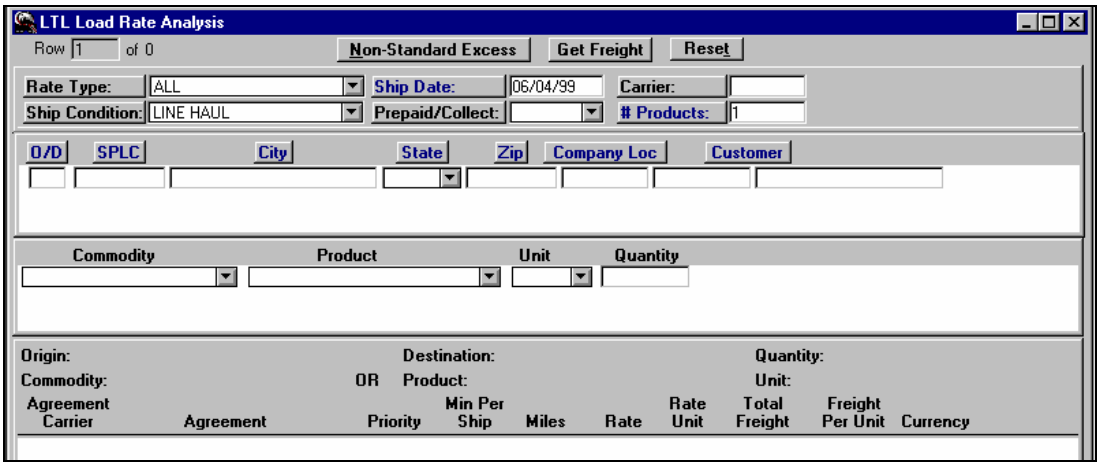
Rate Shipment - LTL

This facility allows a user to "rate" a movement of goods using LTL as a mode of transport. The user is required to input various parameters impacting the freight rate and the screen then displays a set of rates meeting the criteria entered.

The screen below shows the menu location of the LTL Rate Shipment function:



Then the initial data entry screen after the Rate Shipment item is clicked:



Contract Carrier	The SCAC of the carrier
Ship Date	Date of Shipment. **Required**
Ship Condition	Line Haul or custom definitions created under Config. **Required (defaults to LINE HAUL)**
Prepaid/Collect	Is shipment cost prepaid or collect?
Num of Products	Number of individual products. **Required (defaults to 1)**
Origin	Origin SPLC or City/State or Zip. **Required**
Destination	Destination SPLC or City/State or Zip. **Required**
Commodity Classes or Products	Products or class definitions created under Config. **Required**
Unit and Quantity	Unit of Measure and Quantity Shipped. **Required**

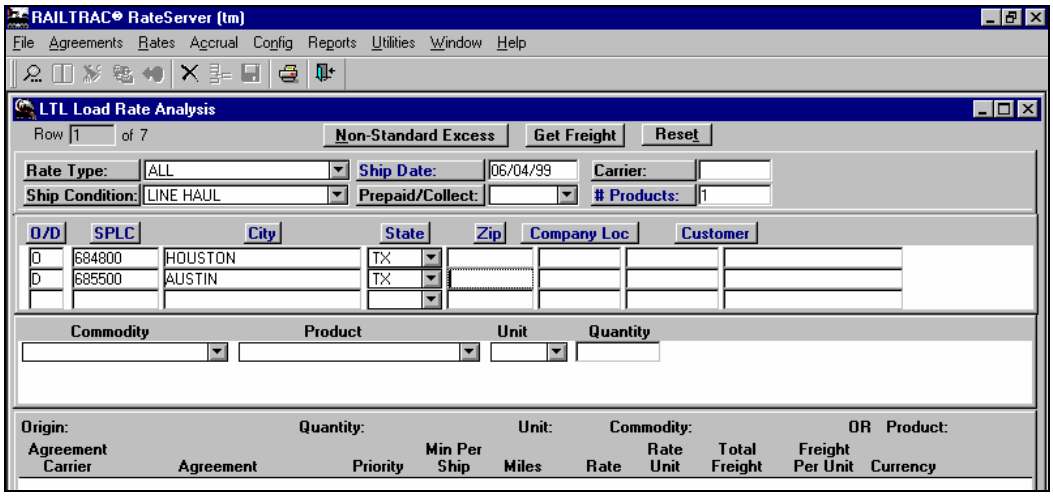
The user enters the following rate parameters, and then clicks the Get Freight button to obtain the set of rate records that match those parameters entered:

Access the Rate LTL Shipment screen and obtain a rate:

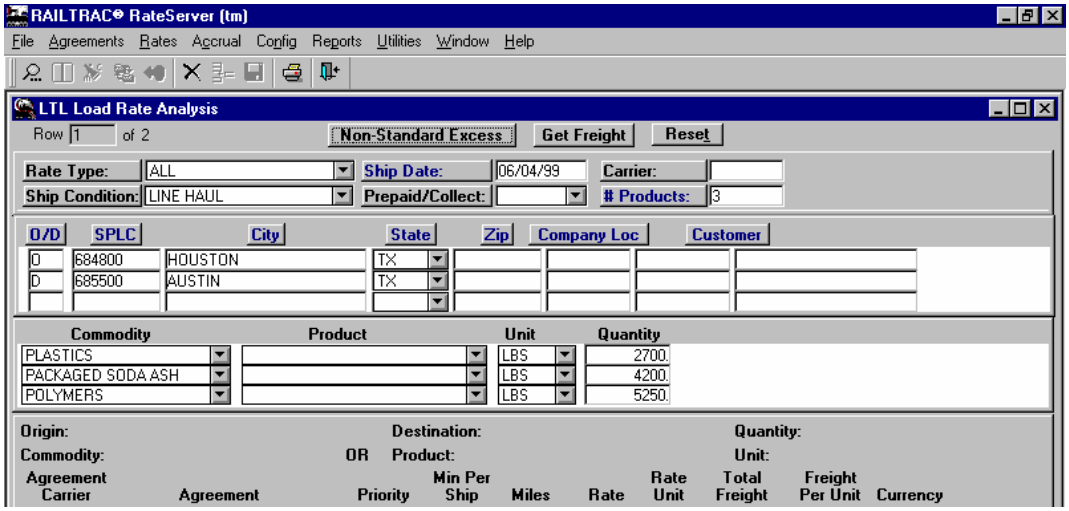
1. From the Main Menu, click on Rates-Truck LTL-Rate Shipment.
2. Enter the proper values in the blue fields plus any others.
3. It is easiest to TAB from field to field. For DropDownListBox fields, enter the first letter of the value until the value you require appears.
4. Click the Get Freight button and a set of rates that meet the criteria entered is displayed in the lower half of the screen.

The following screens show how to display available rates for a LTL delivery from Houston, TX to Austin, TX for three (3) different products.

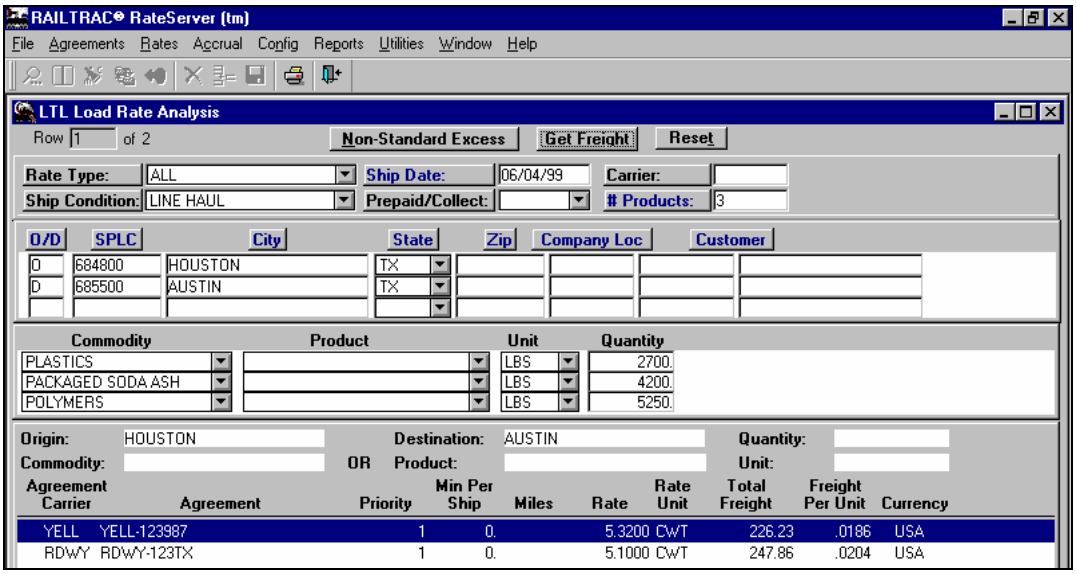
First fill in the header, then origin-destination pair:



Then fill in the three products, their quantities and unit of measure:



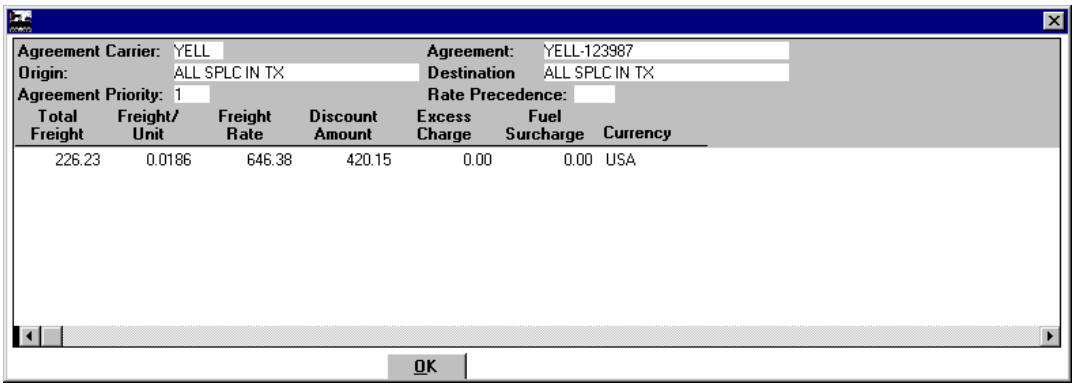
Next click Get Freight. The screen below shows that two contracts are available one from Yellow and one from Roadway. The Total Freight is calculated by subtracting the Discount Amount from the Freight Rate.



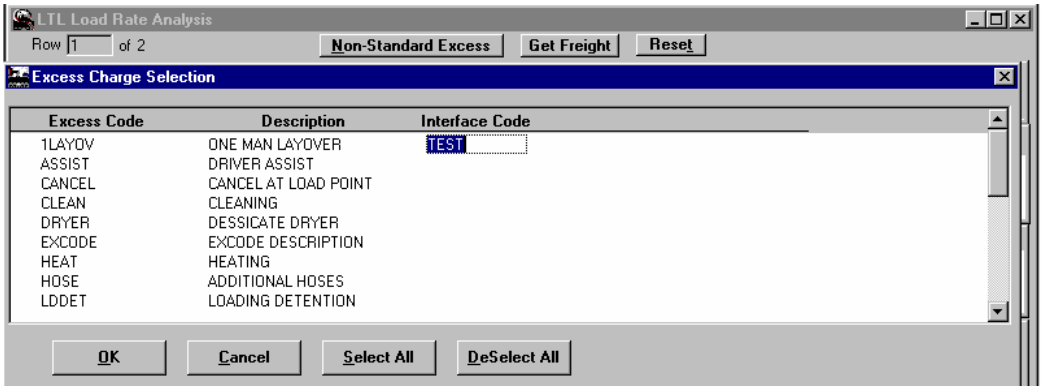
The columns listed are:

Agreement Carrier	The SCAC of the carrier
Agreement Number	The number assigned to this agreement
Priority	The priority number assigned to this rate table
Min Per Ship	Minimum per Shipment
Miles	Miles used in calculation of rate (if applicable)
Rate	Cost per a Unit of Measure
Rate Per Unit	Unit of Measure of the Rate
Total Freight	Net freight after discount plus excess charges
Freight Per Unit	A per unit cost figure
Currency	The currency in which the carrier is paid

To obtain more details on the rates and charges, double-click the rate or charge of interest and a box is displayed with the detail on how the rate or charge was calculated. The screen below is the result of clicking the line Freight Rate for YELL:



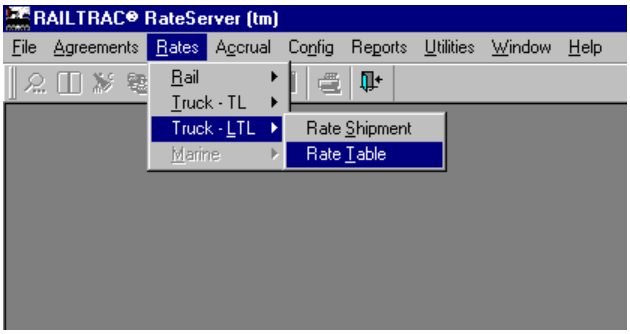
To price the freight to include any possible excess charges, click the Non-Standard Excess button that displays available charges:



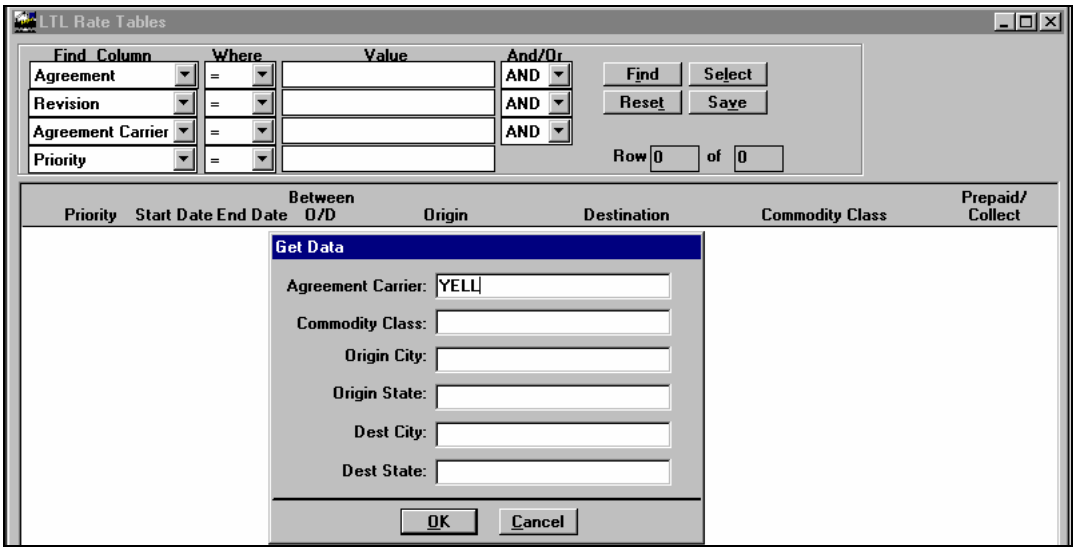
Rate Table - LTL

This function displays all the LTL rate tables for parameters input by the user. The rates are set by rate parameters such as carrier, product class, origin, destination, etc.

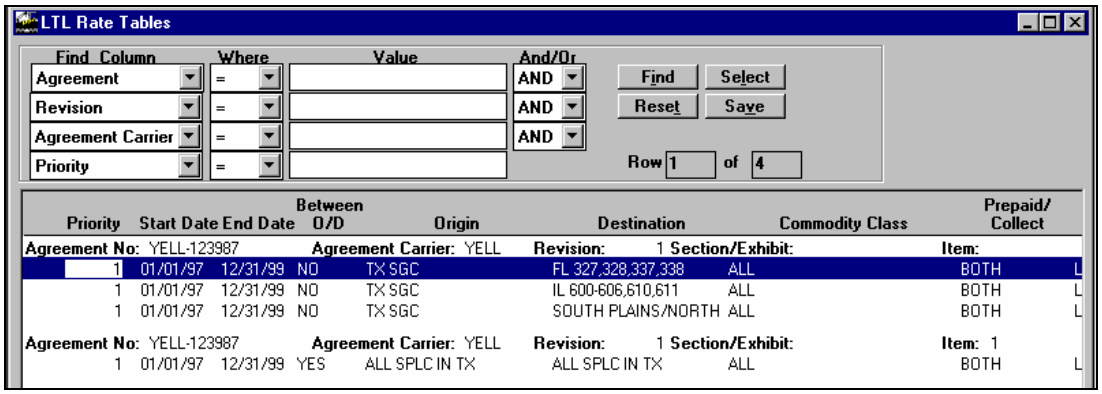
The screen below shows the menu location of the LTL Rate Table screen:



The screen below shows a Get Data Box to query for contracts of a specific Carrier, Commodity Class and Origin Destination Points (City A to City B). In this case we ask for contracts for Yellow Freight (YELL):

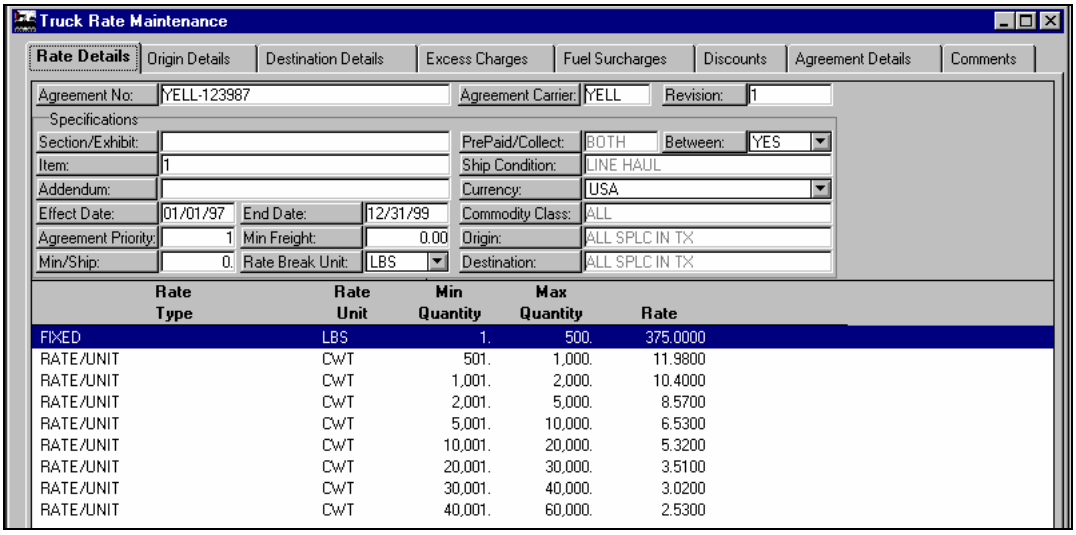


There are four contracts for Yellow as seen in the screen below:

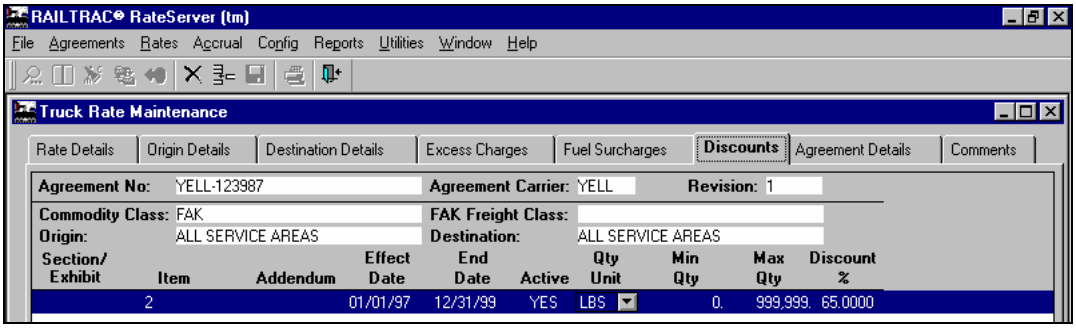


Double-click the record or click the Detail button to view the rate table. The header shows these rates are set for various origins and destinations, and for all commodities

The screen below shows the rates set by quantity shipped in CWT. There is a flat rate of $375.00 for any shipment under 500 LBS. For shipments between 501 to 1000 LBS, the charge is $11.98 per CWT with other quantity breaks listed below:



A click on the tab labeled "Discount" reveals the screen below. This shows a discount of 65 percent off the rate table for all quantities (0 - 999,999 LBS) effective from 1/1/97 through 12/31/99 for all Commodity Classes.



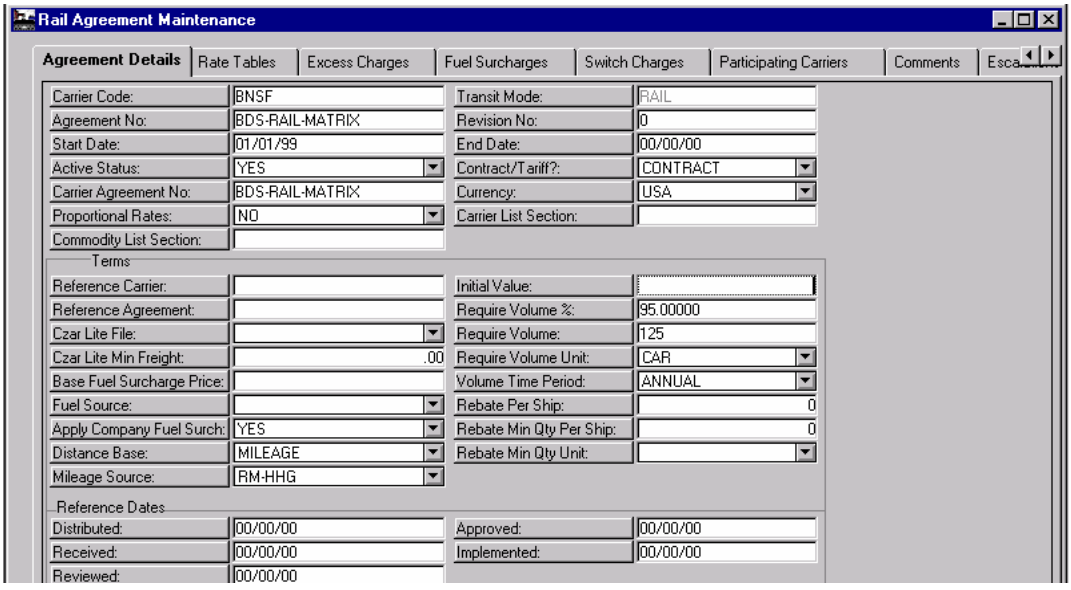
Volume Commitments

Overview

Volume requirement functionality in RateServer allows for storage and tracking of volume commitments. This functionality allows a user to store the information on three different levels, Agreement Header, Group Designation, and Individual Rate Tables. The screens below show several different scenarios using these new features.

Volume number and volume group can be tracked through an **Interface Request** when Accruals Marked for Volume are flagged Yes. Data is available through a RateServer® report detailing the number of shipments made that apply to that volume commitment.

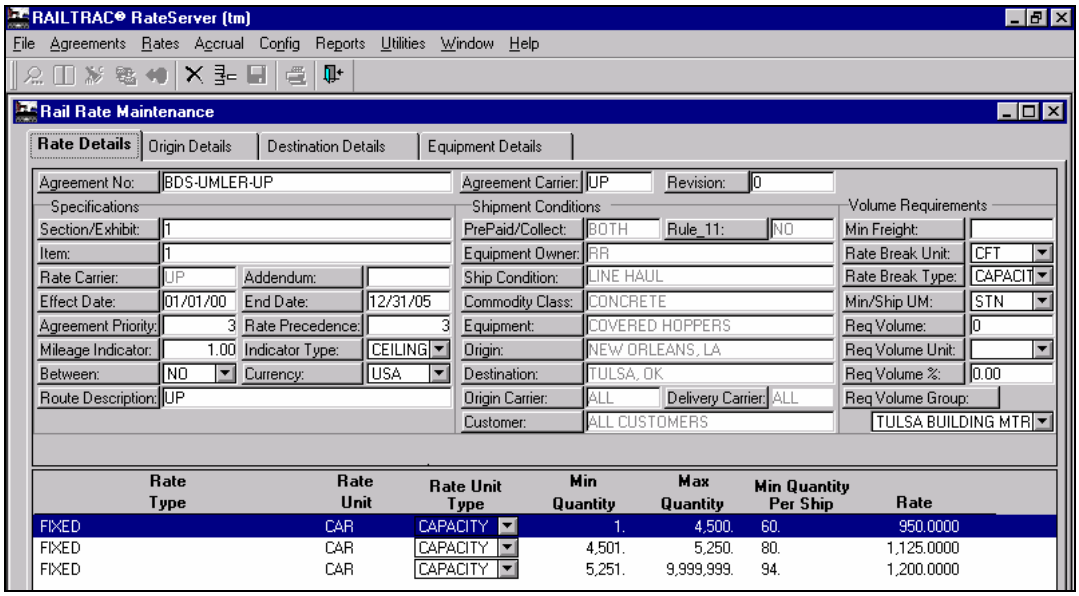
The screen below shows an Agreement Header Level Volume Requirement. When Required Volume %, Required Volume, Require Volume Unit and Volume Time Period are populated on the Agreement Header level it signifies that these requirements apply to all rate tables under this agreement.



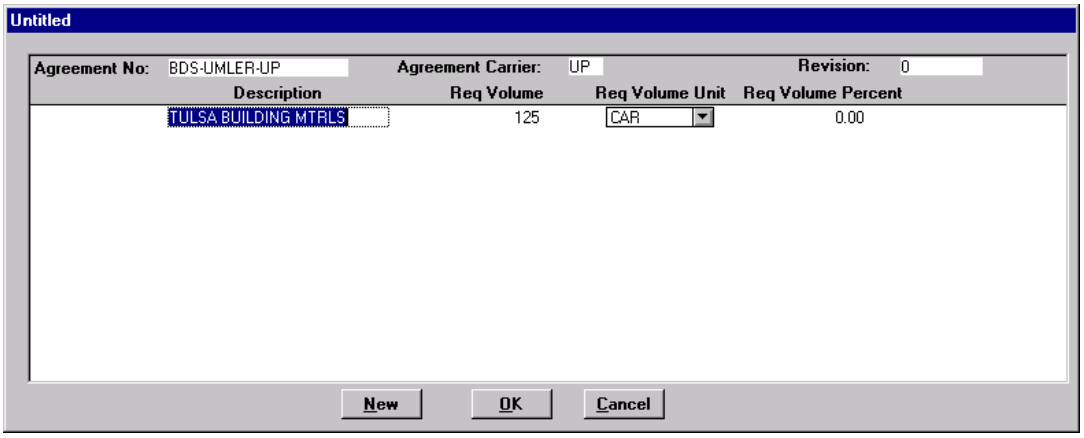
Volume Requirement Fields	Description
Require Volume %	% of the volume that must be shipped.

Require Volume	The number of units to be shipped.
Require Volume Unit	The Volume Unit. Drop down field lists all units in RS.
Volume Time Period	Options for this field are: Quarterly, Bi Annually, Annual or Contract Life. These dates are based on the Start Date of the Agreement.

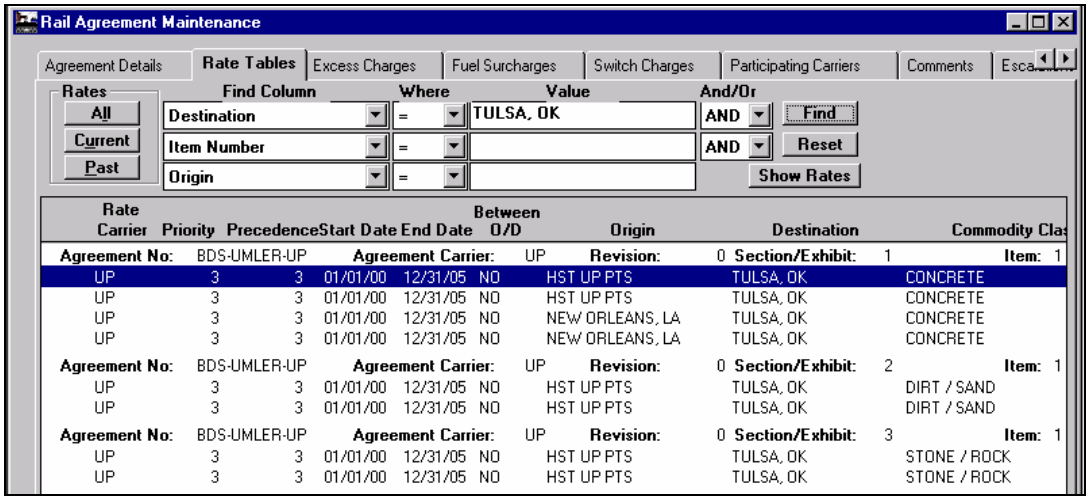
The second level for volume requirement is the Group level. The screen below shows a Rate Table that includes a Req Volume Group identified as Tulsa Building Materials. Note that the Req Volume, Req Volume Unit and Req Volume % are not populated. It is possible to have an individual rate table apply to a volume requirement as well as a volume group. The example below only shows the volume group being used. Notice that the Volume Requirements tab on the right side of the screen is different than the Matrix example.



The next screen shows the Req Volume Group used on the rate table above. In this example, Req Volume Unit is car and the Volume is 125.

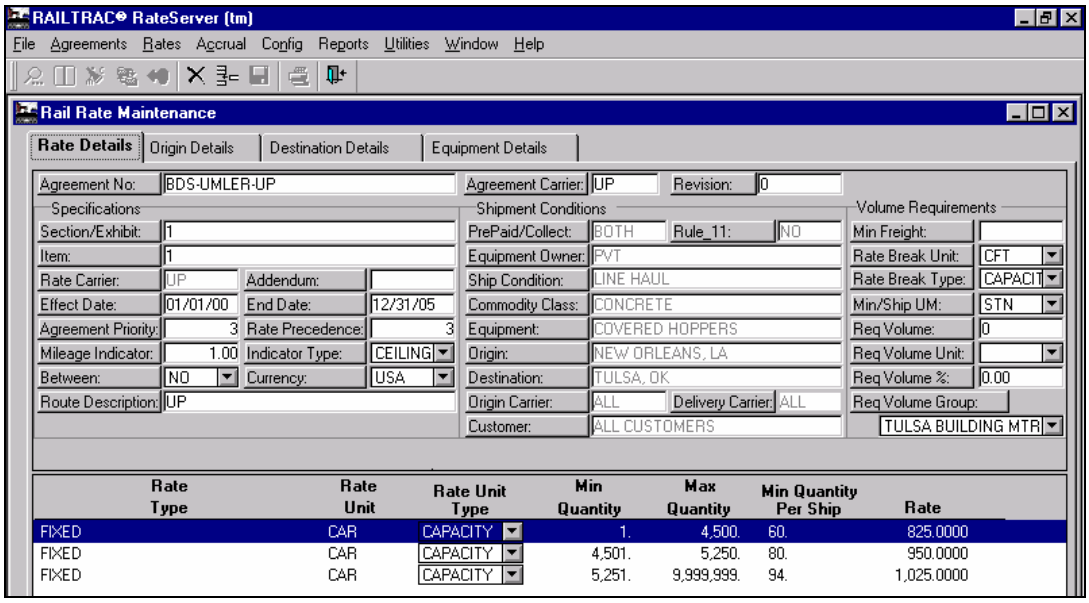


This screen shows the Rate Tables in the agreement that are a part of the Tulsa Building Materials Group. Notice that the Rate Tables show commodity class as concrete, dirt/sand, stone/rock. All of these materials are included in the volume requirement. Whenever any of these Rate Tables are used the volume for that shipment is recorded as a part of the requirement.

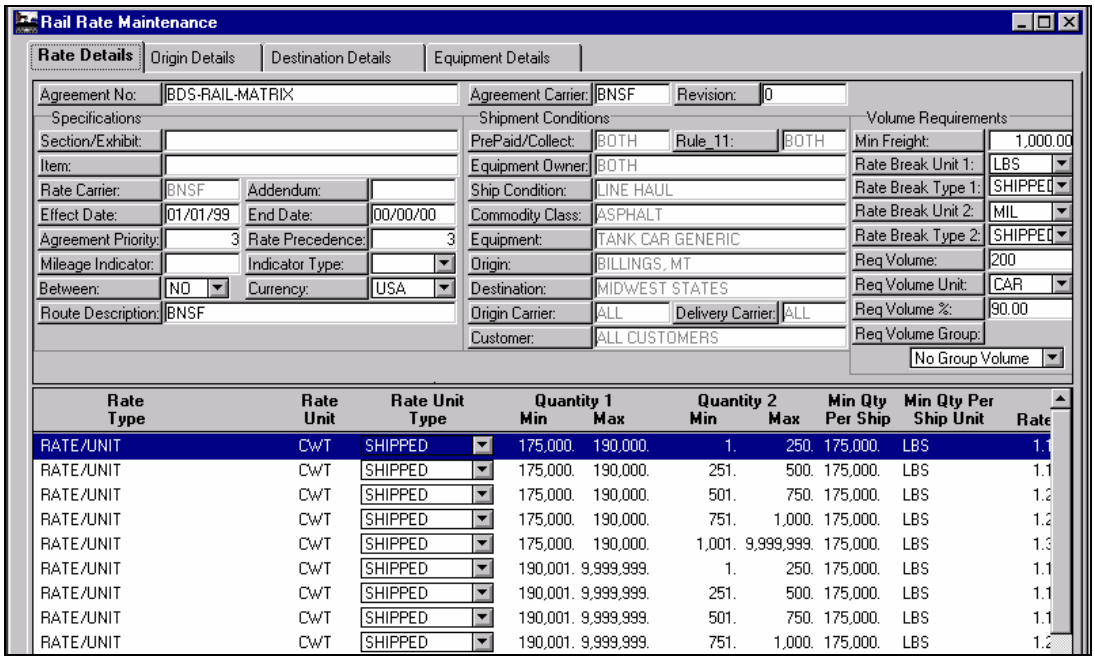


A new section for Volume Requirements has been added to the far right side of the Rail Rate Maintenance screen. The screen below shows a Matrix rate table, note that the Matrix rate table.

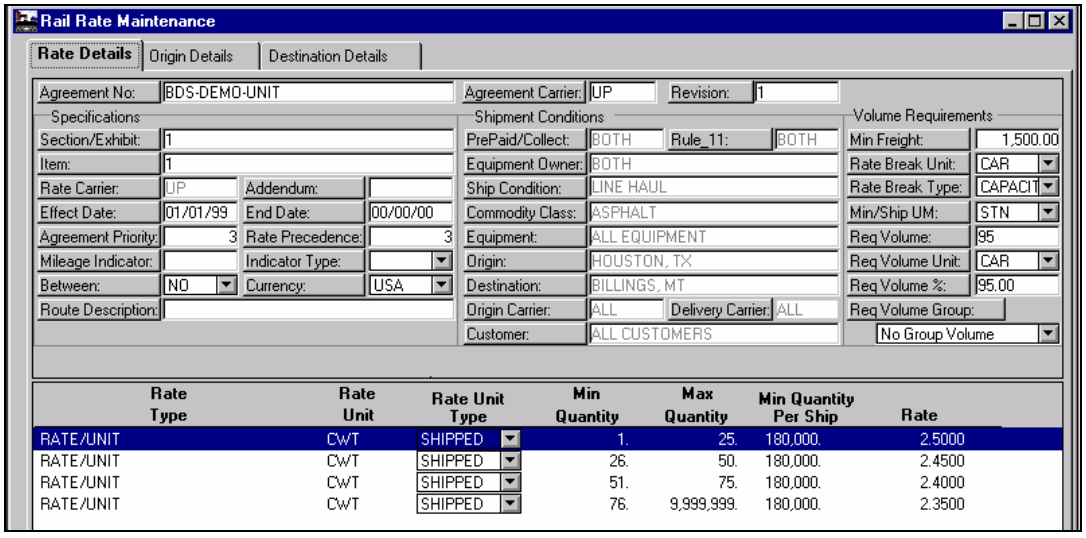
The rate table below is a fixed car rate using the Tulsa Building Material volume group.



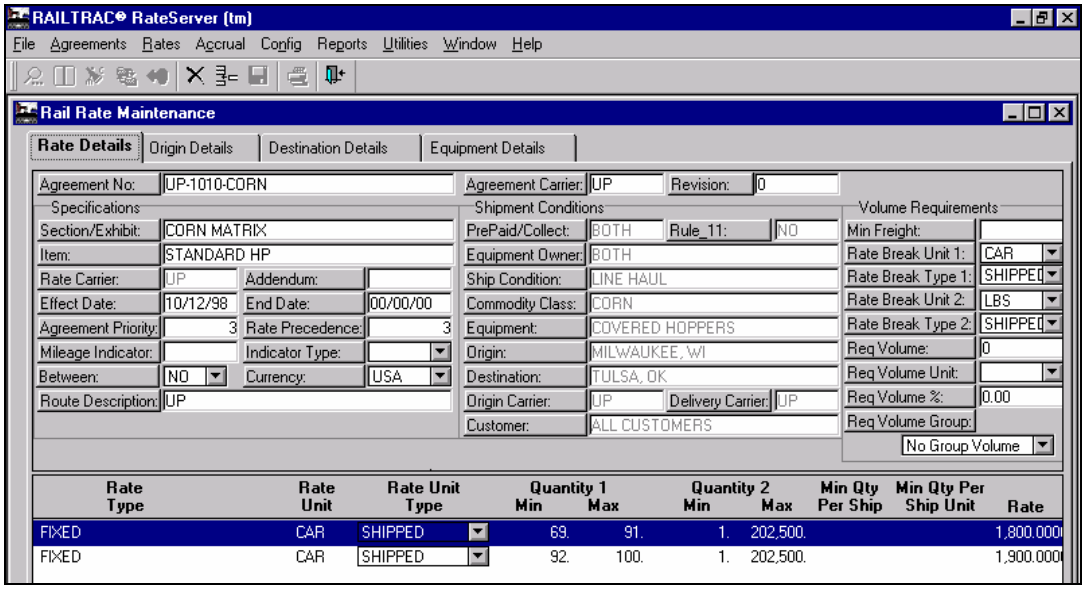
The screen below shows a rate table with individual requirements listed. This is a Matrix table, the Rate Break Units are defined by the user, there is a Rate Break Unit 1 and a Rate Break Unit 2. The required volume is 200 cars and the Required Volume % is 90.



The next example is a point-to-point rate table for a unit train. Notice on the Volume Requirements section on the right side of the screen, the Rate Break Unit is Car and the rate unit field in the lower section is CWT. Min and Max quantity in this example is referencing the number of cars, the minimum quantity per shipment is 180,000 lbs.



The screen below is also an example of a unit train, it is a fixed car rate with a minimum number of cars as well as a min max product quantity. The rate is $1,800 for shipments of 69-91 cars with a quantity min 1 and max 202,500; the rate for 92-100 cars with a min/max quantities of 1-202,500 is $1,900.


RAILTRAC® RateServer (tm)
File Agreements Rates Accrual Config Reports Utilities Window Help
Rail Rate Maintenance
Rate Details
Origin Details
Destination Details
Equipment Details
Agreement No: UP-1010-CORN
Agreement Carrier: UP
Revision: 0
Specifications
Section/Exhibit: CORN MATRIX
Item: STANDARD HP
Rate Carrier: UP
Addendum:
Effect Date: 10/12/98
End Date: 00/00/00
Agreement Priority: 3
Rate Precedence: 3
Mileage Indicator:
Indicator Type:
Between: NO
Currency: USA
Route Description: UP
Shipment Conditions
PrePaid/Collect: BOTH
Rule_11: NO
Equipment Owner: BOTH
Ship Condition: LINE HAUL
Commodity Class: CORN
Equipment: COVERED HOPPERS
Origin: MILWAUKEE, WI
Destination: TULSA, OK
Origin Carrier: UP
Delivery Carrier: UP
Customer: ALL CUSTOMERS
Volume Requirements
Min Freight:
Rate Break Unit 1: CAR
Rate Break Type 1: SHIPPED
Rate Break Unit 2: LBS
Rate Break Type 2: SHIPPED
Req Volume: 0
Req Volume Unit:
Req Volume %: 0.00
Req Volume Group:
No Group Volume
Rate Type
Rate Unit
Rate Unit Type
Quantity 1 Min
Quantity 1 Max
Quantity 2 Min
Quantity 2 Max
Min Qty Per Ship
Min Qty Per Ship Unit
Rate
FIXED CAR SHIPPED 69. 91. 1. 202,500. 1,800.000
FIXED CAR SHIPPED 92. 100. 1. 202,500. 1,900.000

Troubleshooting

Introduction

This section is designed to help users identify data errors that keep the system from returning valid rates during an on-line inquiry or through the batch rating process.

There are many variables that will cause RateServer® to return an "Unable to Rate" message. The majority of the time there is a data problem where something required is missing or there is a miss match of conditions between related tables. To help highlight these potential points for error, this section is divided into several parts based on functional areas of the system. The sections are: Agreement Header, Rate Tables, Config and Rail Rate Codes. Each section will point out critical data elements that could potentially cause problems with the rating procedures.

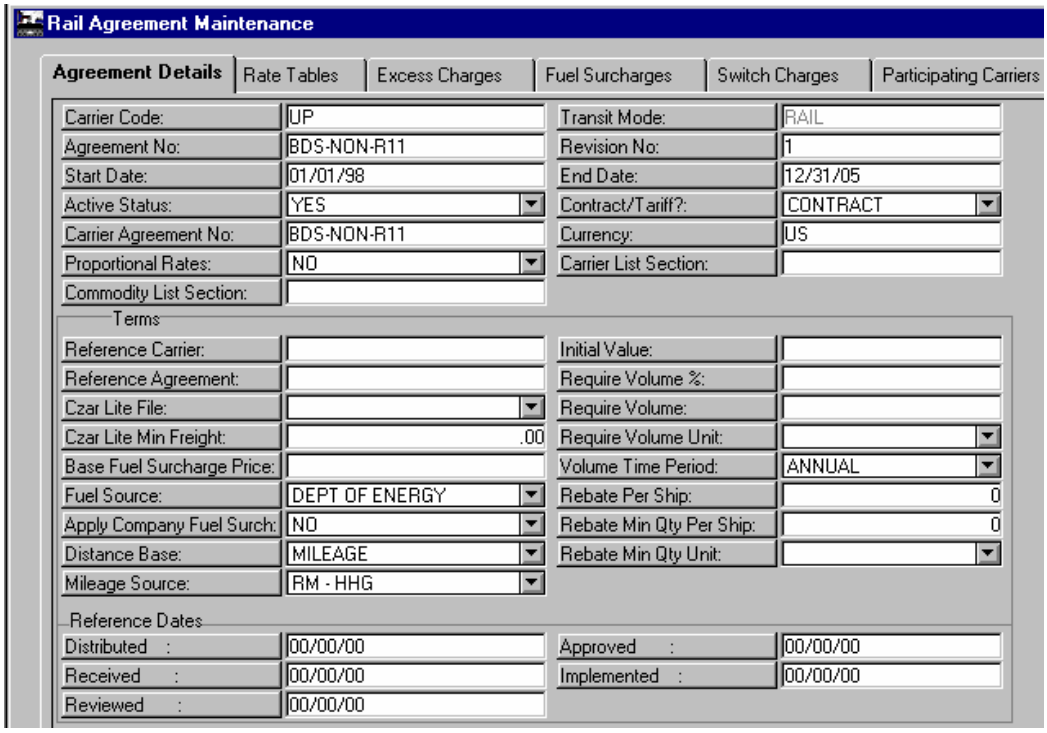
Agreement Header

The Agreement Header Section defines the overall terms of an agreement. The critical elements contained within the header that must be defined are:

- Active Status must be set to Yes.
- Contract/Tariff must be populated.
- Currency must be populated.
- For rail, if any rate tables within the agreement are proportional, the Proportional Rates field must be set to Yes.
- If this agreement contains mileage based rate tables, the fields Distance Base and Mileage Source must be populated with valid values. It is a good practice to always populate Distance Base and Mileage Source on all Agreements.
- If working on a LTL agreement and Czar Lite tables are being used, Reference Carrier must say Czar Lite, and the Czar Lite File field contains the address where the Czar Lite Data file resides.
- If using fuel surcharges Fuel Source should be populated. See Config section of this manual for more information on setting up fuel surcharges.

- If a global fuel surcharge should be applied, the Apply Company Fuel Surcharge field must be set to Yes.

Below is an example of the Agreement Header screen for a rail agreement. In this example, the Proportional Rates field is set to 'NO'. This means that the rating procedures will never attempt to combine multiple rate tables within this agreement to complete one movement. For the calculation of Fuel Surcharges, Department of Energy has been selected as the source and a global company fuel surcharge defined in the Config Section will not apply. Fuel surcharges will only be calculated id a scale exists within the agreement and a current market rate is defined in the Config Section.



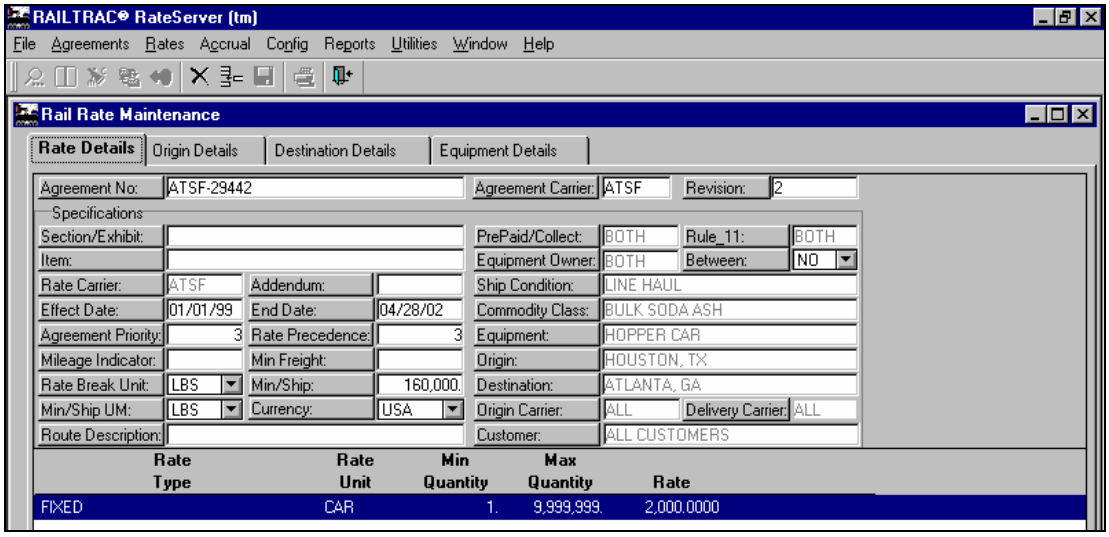
Rate Tables

The Rate Tables Section contains all the rate tables published within the agreement. The list below indicates the variables that should be checked in a rate table if rating problems exist.

- Shipment Date on rate analysis must fall between the start date and end date of the rate table. Verify that the Rate Table has not expired.
- If the rate is based on a specific product code, that product must be assigned to the Commodity Class (Config_Reference_Commodity Class) that is used in the Rate Table.
- A rate table must exist for the Origin/Destination/Product and Equipment combination requested in the rate analysis.
- For interface inquiries all codes contained in the argument lists (i.e. SPLC, commodity, product, equipment, etc.) must match the codes stored against the rate tables.

- For all Rate Tables, Origin and Destination details must exist and the locations requested in the inquiry must be contained with these detail definitions. The dates associated with the appropriate location detail record must be valid for the timeframe of the inquiry. (In the screen below, notice the tabs Origin Details and Destination Details, there must be data in these fields for a rate to be returned.)
- If Equipment is defined in the Rate Table then Equipment Detail must exist. If equipment is defined as ALL, no equipment detail will be needed. For information on defining equipment see the Config Chapter in this manual.
- For rail, the rule 11 condition on the rate table must correspond with the rule 11 condition contained in the rate code.
- The unit of measure being supplied in the inquiry must match the units defined in the rate table, or a valid conversion must be published in the unit conversion area in the Config Section.
- The quantity contained in the inquiry can not exceed the max quantity of the rate table. (Keep in mind that the inquiry quantity may be converted to match the units published on the rate table. In this scenario, the result of the conversion must not exceed the published max quantity.)
- For mileage scales, a mileage range must exist that matches the actual mileage of the movement.

Below is an example of a rail rate table.



Config

The Config Section contains very important information that is required for the success of the rating procedures. The major relationships to focus on here are Geography, Mileage, Commodity, Equipment and Unit of Measure Conversions.

Geography

- The O/D pair contained in any inquiry must be defined in the SPLC table. All locations defined must include the SPLC, city, state and country. The system

will automatically populate region code from the first two characters of the SPLC and county code from the first four characters of the SPLC.

- If the inquiry is being made based on zip code, or the rate table locations are defined based on zip code, the zip to SPLC relationship for the points must exist. By double clicking any SPLC record in Config – Geographic Codes – SPLC you can see the listing of zip codes linked to that SPLC. By double clicking any Zip Code record in Config – Geographic Codes – Zip Codes you can see the listing of SPLC's linked to that zip code.
- If the rail service validation option is active, the O/D pair on any rail inquiry must be served by the appropriate carriers included in the routing.

Mileages

- For live interface inqueries, mileage must exist between the O/D pair for the mileage source defined in the agreement header. If an interface exists with RM Milemaker, a batch process exists to find all missing mileage points after the first rating pass failed because mileage did not exist.
- For on-line inqueries, if the mileage source is a supported electronic interface from RM or ALK, all points requiring mileage that do not exist will automatically be looked up and stored in the database. If the mileage source is based on a manual input, these miles must exist for an inquiry to be successful.
- Mileage must be stored at the same geographic level of the inquiry. If the inquery is based on zip codes, then miles must exist based on the zip codes.
- If an automatic mileage interface such as RM Milemaker or ALK PC Miler is being used and the SPLC of a location in RateServer does not match the SPLC in the mileage software, make sure the RM Mileage Alias field in the SPLC table is populated with the SPLC the mileage software requires.

Commodity

- The product code contained in the inquiry must be associated to the appropriate commodity class contained in the applicable rate table.

Equipment

- The equipment type contained in the inquiry must be a valid equipment type.
- The equipment type contained in the inquiry must be part of the rate equipment group contained in the applicable rate table.
- Anytime rail rate tables are based on car capacity, the UMLER car validation option must be active and all railcars contained in a rail inquiry must be defined in the UMLER Car Information table.

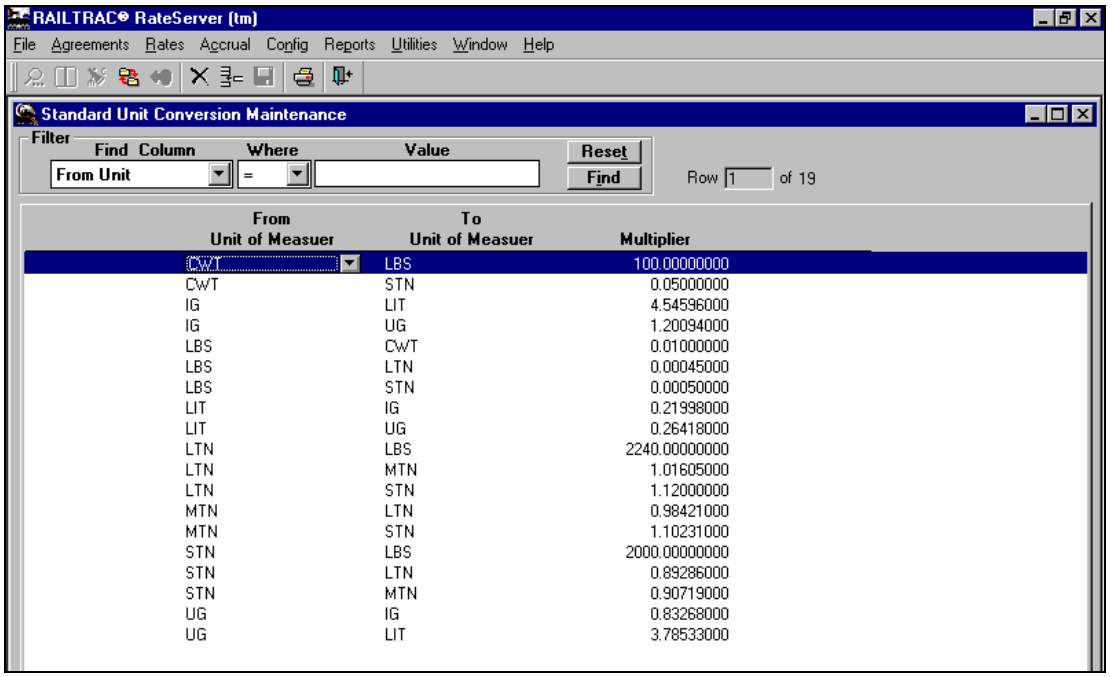
Units of Measure

- If the unit of measures utilized in the rate table matches the same unit type as the unit of measure used in the rate request, the conversion facts need to be defined in Config-Reference-Units-Standard Unit Conversion. The unit type defines the

unit of measure as a measurement of weight, volume, time or length. (Example: If the rating request is being made based on pounds and the rate calculation type is in cents-per-hundredweight, a conversion fact between pounds and cents-per-hundredweight must exist in the Standard Unit Conversion table because both cents-per-hundredweight and pounds have a unit type of weight.)

- If the unit of measures utilized in the rate table does not match the same unit type as the unit of measure used in the rate request, the conversion facts need to be defined in Config-Reference-Units-Commodity Unit Conversion. (Example: If the rating request is being made based on gallons and the rate calculation type is in cents-per-hundredweight and the quantity breaks are in pounds, a conversion fact between gallons and pounds must exist for the requested commodity class in the Commodity Unit Conversion table. For example gallons are a unit type of volume and pounds are a unit type of weight. Because the conversion from these 2 types can differ based on specific characteristics of the commodity, a conversion factor would have to exist for each commodity class.)

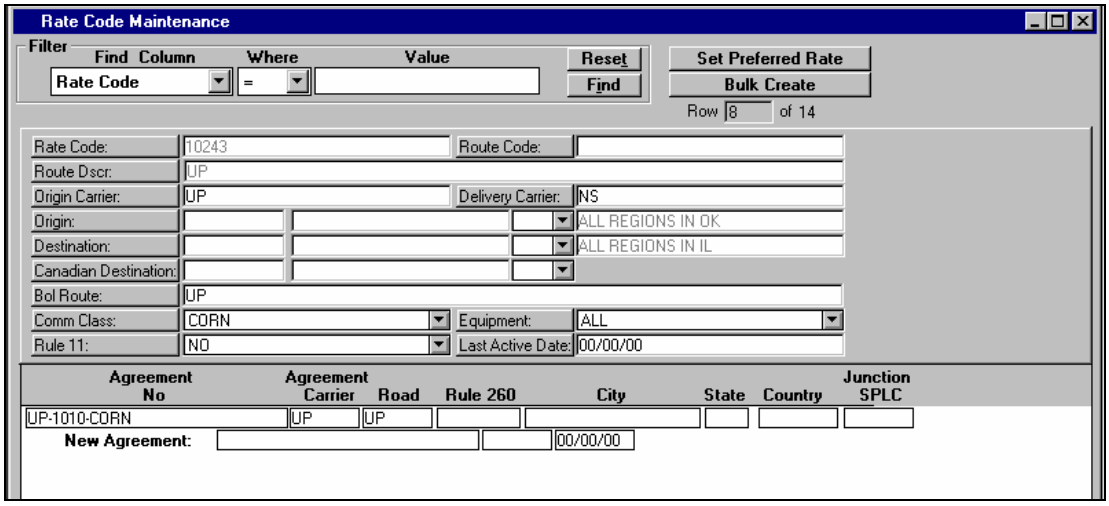
Below is an example of the standard unit conversion screen. The multiplier is the numeric factor that is used to convert quantities from one unit of measure to another. The units must be defined in Config – Reference – Units – Units of Measure before they can be made available from the drop down pick lists.



Rate Codes

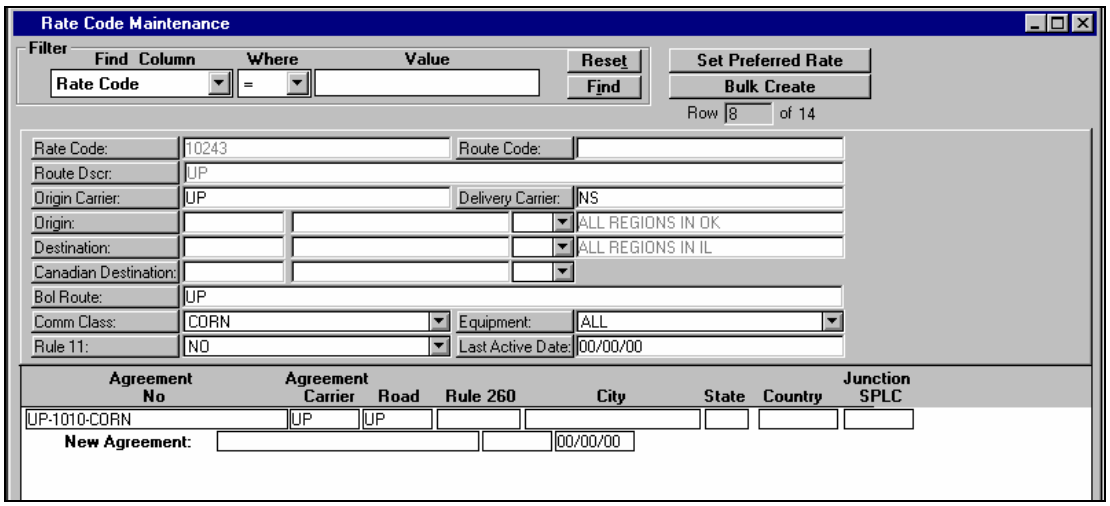
Rate Codes apply only to Rail shipments. On-line rating is possible without a rate code, however, during interface a rate code is mandatory. The following are a listing of requirements associated with all rate codes, Non-Rule 11 rate codes and Rule 11 rate codes.

Rail – All



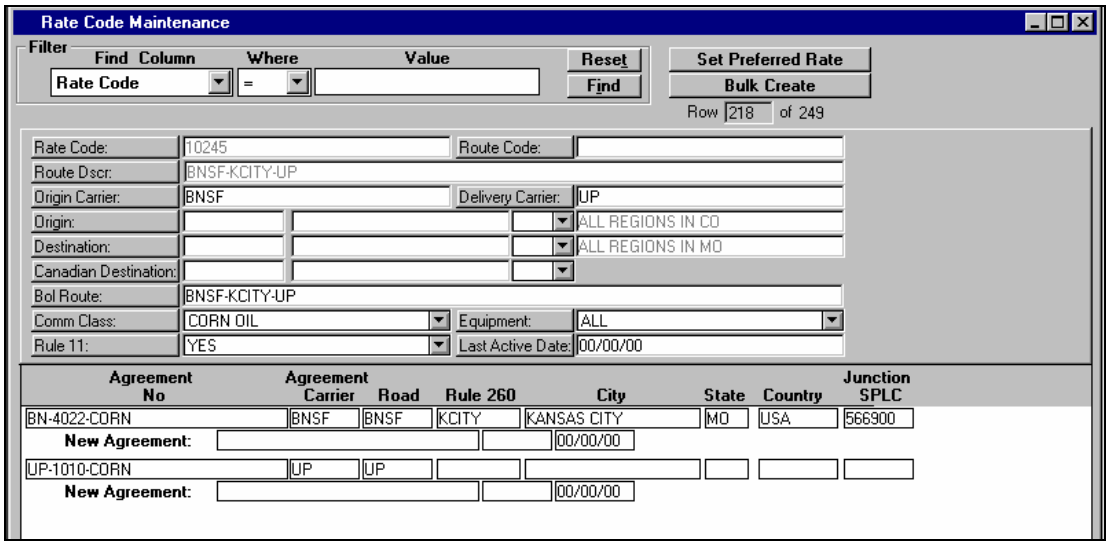
- All rate codes must have the origin and delivering carrier fields populated with the carrier that will ultimately perform that service. These carriers may or may not be part of the line haul route depending on any switch parameters.
- A rate code must exist in order to apply any switch charges to a movement. The switch associated to the agreement must define the carrier who performs the switch and the switch location must be defined as either the origin or destination location. In the example above, the route is UP direct with an NS delivery. If an NS switch is defined in the agreement UP-1010-CORN for any destination in the state of IL, that charge will automatically be applied on this rate code.
- Make sure the origin and delivery carriers contained in the rate code are applicable with the origin and delivery carries defined in the rate table.
- If the inquiry is based on an actual shipment that has already occurred, make sure the route description of the inquiry matches the route description of the rate code.
- The origin and destination location on the inquiry must match the locations defined on the rate code. If the locations on the rate code are SPLC specific, the inquiry locations must be an exact match. If the rate code locations are based on a geographical group, then the points on the inquiry must be contained within the rate code groups. To check the make up of a rate code location group, position the cursor on the location description and then right click the mouse. This will bring up the rate code location detail window.
- If the rate code locations are based on groups and the validate rail serve location option is active, make sure the specific locations specified on the inquiry are serviced by the carriers associated to the route, origin carrier and delivery carrier. In the rate code example above, for an inquire from Tulsa, OK to Decatur, IL to apply, the rail serve location table would have to include records showing that Tulsa, OK can be served by the UP and that Decatur, IL can be served by both the UP and the NS. (See the Rail Service Locations in the Config Section for more information on this topic.)

Rail – Non-Rule 11



- All rate codes associated to a through movement (non-rule 11) should only have the agreement number defined on the first segment (as shown below). If the Agreement No. field is populated on any other segment, the system will not rate the movement. ***(Note: The only time the above statement is not true is if the rate code contains proportional rate tables where the beginning point of a segment equals the end point of that same segment. An example of this would be a proportional rate from Atlanta, GA to Jacksonville, FL where the CSXT agreement contains a separate line haul rate from Atlanta to Jacksonville owned by the CSXT as well as a rate in Jacksonville owned by the FEC. In this case, the second segment of the rate code would have Jacksonville as both the beginning and ending location. For this example, the same agreement number would be shown on segment 1 and 2 even though the movement is not a rule 11.)***

Rail – Rule 11



- All rating for a movement using multiple agreements for the complete line haul, will require a rate code. For interface rating all rail movements will require a rate code. On-line inquiries will return rates without a rate code for a through movement.
- The Rule 11 flag on the rate code must be set to a Yes and the Rule 11 flag on all associated rate tables can not be set to a No.
- For all rate tables that are party to a Rule 11 movement, the Origin Carrier and/or Delivery Carrier must be populated as ALL based on the location of the interchange. If both the origin and destination can be interchange points in a Rule 11 movement, then both Origin Carrier and Delivery Carrier must be populated as ALL unless the interchange is specific to one carrier.
- For any Rule 11 rate code, make sure the appropriate agreement number is populated on the segment that applies to that agreement. If a segment exists on the rate code where the line haul rate for that segment is contained in the rating of a previous segment, the agreement number for that segment should be blank. (For example, if the rate code is a three segment movement and the rating on the second segment is handled with the first segment, an agreement number should only appear on segment one and three of the rate code.)

Troubleshooting Checklist

All Inquiries

1. Does the ship date fall between the start and end date of the appropriate rate table?
2. If rating based on a specific product code, that product code must be assigned to the commodity class that is used in the appropriate rate table.
3. The active flag in Agreement Detail must be set to Yes and the fields Contract/Tariff and Currency must be populated with valid values. If this agreement contains any mileage based rate tables, the fields Distance Base and Mileage Source must be populated with valid values. It is a good practice to always populate these two values on all agreements.
4. A rate table must exist matching the Origin/Destination/Product and Equipment type requested in the inquiry. For interface inquiries, all codes contained in the argument lists must match the codes stored against the rate tables. For example, Equipment type codes, product or commodity codes, carrier SCAC's, volume unit of measure codes, etc.)
5. Origin Detail and Destination Detail must exist and the locations stipulated in the rate inquiry must be contained with these detail definitions on the Rate Table.
6. If equipment is defined in the rate table, Equipment Detail must exist. If equipment is defined as All, no Equipment Detail will be needed.
7. The carrier SCAC should match the carrier defined in the agreement.
8. For any rate inquiries that are based on distance, mileage will have to exist for the points requested under the mileage source that is defined in the agreement

header. Make sure multiple active mileage records for the same points do not exist.

9. Based on the quantity and rate unit of measures utilized in the rate table and the unit of measure being used in the inquiry, proper unit conversion factors must exist.

   If the unit of measures utilized in the rate table matches the same unit type as the unit of measure used in the rate request, the conversion facts need to be defined in Config_Reference_Units_Standard Unit Conversion.

   The unit type defines the unit of measure as a weight measurement, a volume measurement, a time measurement, etc. (example: If the rating request is being made based on pounds the rate calculation type is in cwt, a conversion factor between pounds and cwt must exist in the Standard Unit Conversion table. For example, cwt and pounds both have a unit type of weight)

   If the unit of measure utilized in the rate table does not match the same unit type as the unit of measure used in the rate request, the conversion facts need to be defined in Config_Reference_Units_Commodity Unit Conversion. For example, if the rate request is being made based on gallons and the rate calculation type is in cwt and the quantity breaks are in pounds a conversion fact between gallons and pounds must exist for the requested commodity class in the Commodity Unit Conversion table.

   Gallons are a unit type of volume and pounds are a unit type of weight. Because the conversion from these 2 types can differ based on specific commodity characteristics, a conversion factor would have to exist for each commodity class.

Rail Rate Codes – All

1. All rate codes must have the origin and delivering carrier fields populated with the carrier that will ultimately perform that service. These carriers may or may not be a part of the line haul route depending on any switch parameters.
2. A rate code must exist in order to apply any switch charges to a movement. The switch associated to the agreement must define the carrier who performs the switch and the switch location must be defined as either the origin or destination location.

Rail Rate Codes – Non Rule 11

3. All rate codes associated to a through movement (non rule 11) should only have the agreement number defined on the first segment.
4. Verify that the Rule 11 flag on the rate code is set to No.

Rail Rate Codes – Rule 11

1. All rating for a movement that is using multiple agreements for the complete line haul will require a rate code. For interface rating all rail movements will require a rate code. On line

inquiries will return rates without a rate code for a through movement.

2. The Rule 11 flag on the rate code must be set to Yes and the associated rate tables must have Rule 11 set to Yes also.
3. For any rate tables that are party to a Rule 11 movement, the Origin Carrier and/or Delivery Carrier must be populated as All based on the location of the interchange. If both the origin and destination can be interchange points in a Rule 11 movement, then both Origin Carrier and Delivery Carrier must be populated as All.
4. For any Rule 11 rate code, make sure the appropriate agreement number is populated on the segment that applies to that agreement. If a segment is contained in the rating of a previous segment, the agreement number for that segment should be blank. (ie. If the rate code is 3 segment movement and the rating on the second segment is handled with the first segment, an agreement number should only appear on segment 1 and 3 of the rate code).

Stored Procedures

What are Stored Procedures?

This chapter explains how to call RateServer® stored procedures. This documentation is technical and meant to be used by information systems personnel who will integrate the module with other host systems.

The RateServer Database can serve as a modular component providing freight rating capability to pricing, order entry, and billing systems. Stored procedures reside on the database and can be queried, independent of RateServer client side application, to provide accurate freight rates to other host systems. For instance, the pricing of an order entered into an order entry system can be rated at the moment the order is entered by tying record entry to a query of a RateServer stored procedure.

To accomplish this, a remote function call (RFC) is embedded in the order entry system which passes the necessary rate parameters to RateServer stored procedure. The stored procedure then retrieves the proper freight rate and passes it back to the host system (should a rate not be available, the RateServer returns error codes and descriptions for trap and processing). This allows the retrieval of freight rates without the need to interact with the client side application of RateServer because to takes the format of a direct call to the database.

RateServer stored procedures are pre-compiled, memory-resident programs which reside directly on the database server. To obtain a rate from the database, the calling program may simply attach to RateServer database, run the procedure with the specific arguments required (such as origin, destination, commodity, carrier, etc.), then receive the rate the stored procedure returns. Error return codes and error return statements are provided should the procedure fail to retrieve a rate or if there is a problem with the input parameters.

The stored procedures are specific to the database on which RateServer runs - Oracle7 or above, Sybase System 10 or above, and Microsoft SQL Server 6.5 or above. However, the documentation outlined below is meant to be database independent.

Stored Procedure Rules

Error Return Codes

The following return codes are generated should an error result when the stored procedure is called. A char(25) return statement is also available for passage to the host system to indicate the reason the rate was not produced.

Return Code	Return Statement	Statement Definition
0	Successful	Successful
-1	Lockout Record	This shipment has been locked and the requested import record can not be accepted.
-10	Unable to rate	No rate could be determined
-11	Unable to find rate table	A contract was found but without a matching rate table.
-12	Unable to rate for qty	A rate table was found but no rate line for the ship quantity could be found.
-13	Invalid Contract	The contract was determined to be invalid.
-14	Invalid Ref Contract	The reference contract was determined to be invalid.
-16	Unable to find contract	The contract specified could not be found.
-22	Unable to find reference	The reference contract specified could not be found.
-25	Unable to convert unit	A unit conversion was attempted but failed. Unit conversions can occur during the calculation of freight, excess charges, fuel surcharge or rail switch charges.
-26	Unable to determine miles	No miles found within the RateServer® database
-29	No mileage source	A mileage lookup failed because no mileage source was specified for the agreement.
-30	Unable to get fuel surcharge	The fuel surcharge could not be calculated.
-31	Invalid customer no	An invalid customer number was provided as an argument.
-32	Invalid rate code	An invalid rate code was provided as an argument.
-33	No preferred rate code	No rail rate code could be found for the shipment parameters submitted.
-37	Oracle Error	An Oracle error/violation has occurred.
-111	Invalid Car	For Rail shipments in systems that verify against Umler, the car does not exist in Umler.
-201	Invalid Key	One of the following values on the shipment record is null: bol_no, equipment_init, equipment_no, ship_date
-202	Shipment Exists	The shipment trying to be added already exists.
-203	Payment Sent to A/P	The shipment to be replaced, deleted, or canceled has already sent payment records

		to AP.
-204	Shipment Does Not Exist	The shipment to be replaced, deleted, locked or canceled does not exist.
-205	Invalid Record Type	The record type argument contains a value other than: A(dd), C(ancel), D(elete), L(ock), or R(eplace)
-220	Invalid Carrier	The carrier code does not exist in the Carrier table.

Rate Type Calculation Summary

The following defines how RateServer calculates the various rate types:

Rate Type	Calculation	PTP/Matrix Next Rate Analyzed
Fixed	Rate	N
Cumulative	(quantity – rate line min quantity + 1) * rate + Sum((max quantity – min quantity + 1) * rate) for rate lines < rate line min quantity	N
Rate/Unit	Rate * quantity	Y
Excess	Fixed rate + (rate * quantity)	Y
Over Min/Unit	Fixed rate + ((quantity – min quantity per ship) * rate)	Y
Excess/Mile	Calculated Rate + (miles * rate)	N
Excess Over Min/Mile	Calculated Rate + ((miles - min miles for mileage break) * rate)	N

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