

Aptean

CTMS Initial Setup Guide

CTMS USER GUIDE - 12.45

10/05/24 - 1.0 Reference: SETUP

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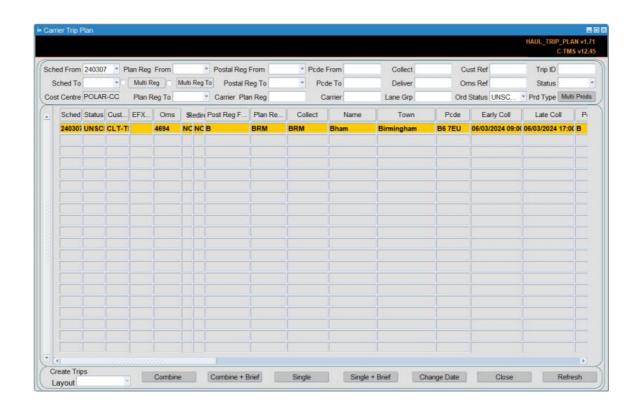
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1 Carrier Trip Plan

Warning: This is an incomplete guide.





2 Initial Setup



3 Set Up C-TMS

Warning: This is an incomplete guide.

3.1 Initial Setup

Start using the OBS Administrative user

3.2 Basic Setup

- 1. Set up the Cost Centre. This should not be the same name as the customer group or the customers. Convention is to end it with "-CC". Ensure that it is not more than 10 characters (C-ePOD limitation).
- 2. Set up the Customer Group this is used to ring-fence Customers and Locations.
- 3. Customer create each customer (supplier) for the implementation, accepting the defaults generally. Link these customers to the customer group.
- 4. Planning Group from Business Data/Group Names, set up a planning group. This is used to group orders and filter the order well.

3.3 Geographical

- 1. Location Types work out and create the location types for the contract. "RDC" must be used for depots.

 "BRANCH" is usually good for deliveries to primary transport to customer distribution centres, "HOME" for home deliveries, "SUPPLIER" for customer locations, etc. Only "RDC" is absolutely required.
- 2. Locations Set up Locations by entering the Location Name, Address and assigning to the correct location type. Lat/Long and Timezone will be entered automatically if required. Ring-fence to the customer when creating, or select ALL if they apply to all customers (e.g. cross-dock depots within the transport network). At least the depots are required. Set loading rates. Default to Standard Load/Unload.
- 3. Regions and Region Depots should be setup, as shown below.

3.3.1 Regions and Region Depots

Owning Depot is defined as the depot that is responsible for planning a trip, and is used by access control to determine whether a planner should see an orders or trips for planning.

This logic depends on the creation of the following data:

- Create planning regions through postcode.
- Use Static Data Region Depot to link a planning region to a depot.
- Set up planning regions by postal region i.e. "L" could be assigned to a region "GBLIV" or "GBNW".

Locations created are automatically assigned to the planning region based on the postcode.

The postcode is extracted according to the rules applied against the Countries. So, for GB, the postal region is extracted. For example, for a location with an address "L24 1XZ", the postal region "L" is extracted, and for postcode "NG6 8UZ", the postal region is "NG" (Nottingham).

If you want to change this automatic assignment, this can be done in the CTMS Locations screen - change the planning region in the screen against the location and tick "Retain Planning Region" before saving - the new region will be saved and the system will not automatically reset it.

Users can then be assigned a default depot through Access Control. Your user can be based at a single depot (set through the BASED_AT user parameter), or your user can have access to all depots (set through the ALL_DEPOTS user parameter).



When a user has an assigned depot, most screens will automatically filter the data shown in the screens to show only the data matching the planning region or default depot. For example, the Planning screen will only show orders in the unscheduled order well from the planning regions owned by your depot, and trips from, to or through that owning depot configured against the user using the screen.

3.4 Admin User for the Customer

- 1. Using Access Control, create the admin user required just for that customer/transport network. Usually, this is easier to copy another user first.
- 2. Restrict the user to the home depot for that customer.
- 3. Assign the user to the correct group usually, this user is the Admin user, and should be assigned to the already-existing ADMIN group.
- 4. Switch to this user now and test access is OK.

3.5 Resources

Set up the following:

- 1. DU Types
- 2. Carrier Groups
- 3. Carrier Types
- 4. Carriers
- 5. Carrier rules for restrictions, DUs and product types
- 6. Trailer types
- 7. Tractor/Trailer or Vehicles
- 8. Drivers
- 9. Delivery Types/Service Levels use Standard if there are no specific requirements.
- 10. Products link to default DU types, and loading rates. Default to Standard Load/Unload.

The user can now be restricted to carrier, and system defaults for DU types and Product Types can be set up.

3.6 Accounts

- 1. Set up an Account for:
 - 1. Customers
 - 2. Cost Centre
 - 3. Carrier
- 2. Set up Invoicing Requirements for the customer.
- 3. Set up Currency per customer and carrier.
- 4. Set up a contract between:
 - 1. Cost Centre and Customer, for revenue. Note that a contract MUST be set up for an order to be valid, or you will not be able to change the order status.
 - 2. Cost Centre and Carrier, for trip cost.
- 5. Set up Tariffs as required. Basic distance, with this revenue being slightly higher per mile than the trip cost, usually provides good demo results. e.g. 60p/75p per mile.

At this point, the system will be capable of being used to create orders and trips.

3.7 Bespoke Setup

- Cross-dock Paths
- Fixed Routes
- Fixed Schedules
- Additional Users and User Groups adjust the Menus and Tabs required on the group if required.
- Execution systems/interfaces:
 - ♦ C-ePOD
 - ♦ Microlise SmartPOD



- **♦ TomTom WEBFLEET**
- ◆ FlexiPOD
- C-PORTAL TTM

3.7.1 Fixed Routes

Parameters:

• AUTO_SCHEDULING must be configured to "Y" for the cost centre

3.7.1.1 Domestic/Home Delivery

For a domestic-style delivery mode (JIT planning, plan to final depot and then wait for final mile planning):

Parameters:

• TRM_LOC_RADIAL_ROUTES - "N"

Schedule Rules:

- Set the scheduling engine to "Home Delivery Network Schedule"
- Start the scheduling engine (3 minutes for testing, up to 5-15 for live)

Zones:

• Set up zones to go from each depot's catchment areas to every other depot.

Locations:

• Set preferred carrier up against each RDC, typically every carrier that will pass through that location, but definitely ones that originate routes at that location.

Routes:

- Auto-processing, defined depot, trailer type, defined carrier, execution days, number of trips. Ensure that the MODE is set to TRUNK (or some other desired mode).
- Stops:
 - ◆ Stop 1 Location, Depot from which orders are currently based, all Mand, Fixed, PK and DL ticked, offset (number of minutes from midnight), Early and Late set to some minutes before/after the offset e.g. 90, Fill factor 1.0, PK cutoff half an hour before.
 - ♦ Stop 2 cross-dock stop, Zone for orders, location to cross-dock through, Mand and DL ticked, offset, Early and Late..
 - Repeat for return or onward journey.

Monitoring:

• Use the Schedule Rules Audit tab and refresh.

3.7.2 C-ePOD Settings

EPOD settings on:

- Customer
 - ♦ EPOD Enabled ticked on EPOD Params tab
- Location Type Default settings for locations of this type:
 - ◆ Send EPOD Job Load/Unload tick to send the jobs at location stops of this type to ePOD
 - ◆ Consol EPOD Job Load/Unload tick to consolidate the jobs at location stops of this type where the location is the same.
 - ◆ Send EPOD Dets Load/Unload tick to send the item details of jobs at location stops of this type to ePOD
 - ♦ EPOD Job Group Load/Unload tick to set a specific job group to EPOD for jobs at locations of this type.
- Location override the defaults above from the EPOD tab:



- ◆ Send EPOD Job Load/Unload tick to send the jobs at location stops of this type to ePOD
- ♦ Consol EPOD Job Load/Unload tick to consolidate the jobs at location stops of this type where the location is the same.
- ♦ Send EPOD Dets Load/Unload tick to send the item details of jobs at location stops of this type to ePOD
- ◆ EPOD Job Group Load/Unload tick to set a specific job group to EPOD for jobs at locations of this type.
- Carrier
 - ◆ EPOD Enabled ticked
 - ◆ Auto Debrief Col set to "N". For customer-collect carriers, set this to "Y".
 - ◆ Auto Debrief Del set to "N". For customer-collect carriers and some 3rd-party carriers with no debrief process, set this to "Y".
 - ◆ Send to ePOD Col set to "Y"
 - ♦ Send to ePOD Del set to "Y".
- Carrier Group
 - ♦ If a different ePOD Site is required per carrier, set the EPOD Site here. Depends on System Parameters as to whether this is sent.
- Drivers
 - ◆ Set EPOD User.

A job is required for the sending of tasks to C-ePOD, and a webservice is required to pick up the updates.

There are also many system parameters controlling the function of EPOD - search for EPOD in the parameter name.

Name	Level	Description
EPOD_COMPLETE_ON_RTD	COST_CENTRE	Complete Trip when RTD job sent back from epod
EPOD_CONSOLIDATION_LEVEL	COST_CENTRE	Level of job consolidation for epod
EPOD_DEPOT_JOBS	SYSTEM	EPOD Debrief jobs which load at or deliver to RDC locations
EPOD_ENROUTE_COLLECTIONS	SYSTEM	Set Trip to En-Route via ePOD Interface
EPOD_JOB_GROUP_FORMAT	SYSTEM	Indicates whether the value passed in the EPL Job Group to EPOD is the Cost Centre (CC), Carried ID (CI), Customer Group (CG) or Customer (CU).
EPOD_SET_ACTUAL_SIGNATORY_BLANK	SYSTEM	Set EPOD actual signatory to blank (Y/N)?
EPOD_SITE_ID_FORMAT	SYSTEM	Indicates whether the value passed in the EPL Site ID to EPOD is the Database Name(DB), Cost Centre (CC), Carrier ID (CI) or Carrier Group (CA).
EPOD_VIEW_POD_URL	SYSTEM	URL for EPOD Documents
EPOD_WS_ADDRESS	SYSTEM	EPOD Web Service End Point
EPOD_WS_MESSAGE_FORMAT	SYSTEM	EPOD message format - can either be PARCEL or BULK to define where fields are sent in the web service message. MODE1 for LFS, MODE2 for general usage (NHSBT)
EPOD_WS_PASSWORD	SYSTEM	EPOD Web Service Login Password
EPOD_WS_TIMEOUT	SYSTEM	Number of minutes before a WS message will be set to Held
EPOD_WS_USERNAME	SYSTEM	EPOD Web Service Login Username

3.7.3 C-PORTAL TTM Settings

Predominantly against the customer.



4 Business Data Maintenance

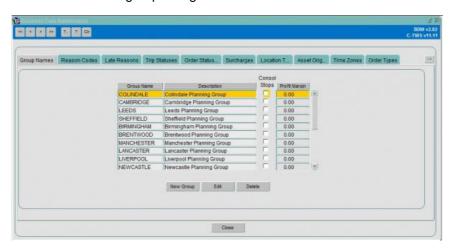
Within the C-TMS system there is a large amount of Static or Reference data, Locations, Resources, Products, Customers, Cost Centres, Lane Based Orders and Messaging have been discussed separately but there are several other areas of static data that exist, namely Business Data, System Parameters and System Configuration.

Maintenance of business data functionality is used within C-TMS software to maintain data related to the business. The business data maintenance form can be accessed from the Maintenance Menu.

There are many tabs covering the different business data requirements.

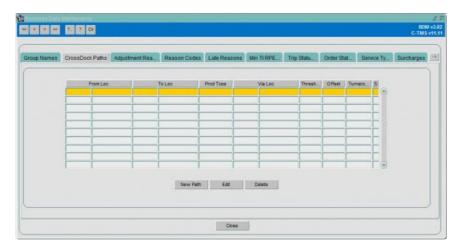
4.1 Group Names

This displays valid Order Groups that exist in C-TMS system. Order groups are used to group orders together, for example all orders from a location could be grouped together.



4.2 CrossDock Paths

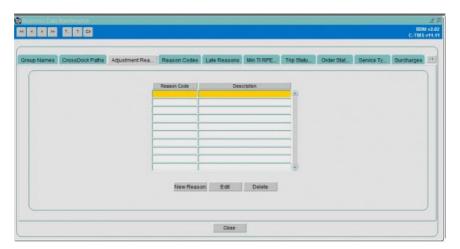
Crossdocks are used within C-TMS system to configure deliveries from A to B via C. This approach is commonly used for long distance deliveries and helps provide a better utilisation of resources. A Crossdock is created for a To Location, From Location, Product Type and Via Location, for example Non Perishable deliveries from Rugby to Crosby should be delivered via Haydock.





4.3 Adjustment Reason Codes

Provides a list of valid adjustment reason codes, an adjustment reason code can be selected when performing a Manual Advance.



4.4 Reason Codes

This tab displays a list of valid Reason Codes and their usage.



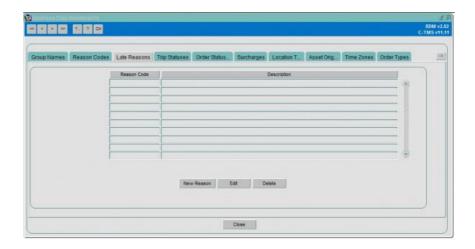
These codes can be used to record why a user has opted to perform a certain action, an example of this is when a user Reverses TI's they can enter the reason for the reversal. This table is now used to maintain non conformance codes for collections and deliveries.

If using Quarantine processing, you may set the action of new reason codes to "QUAR". This indicates that the reason code will add the item to quarantine, which may then be handled through the the Quarantine Maintenance screen.

4.5 Order Reason Codes

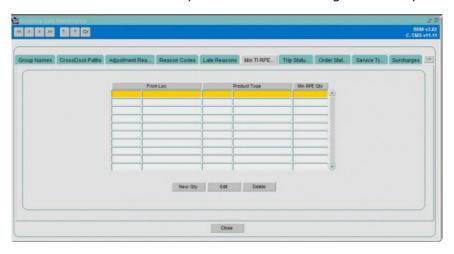
Displays a list of valid Order Reason Codes. These codes can be used in Trip Debrief to record a general order reason code e.g. for lateness.





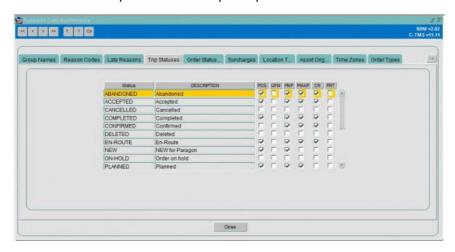
4.6 Min Ti RPE Quantity

Defines the minimum number of RPE's that should be placed on an order during Create TI's processing.



4.7 Trip Statuses

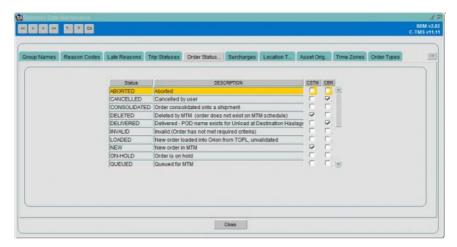
Displays a read only list of Trip status that are used within C-TMS, it also shows which options are set against a particular status, for example whether a carrier is required to set a Trip to a particular status.





4.8 Order Statuses

Displays a read only list of Order status that are used within C-TMS, it also shows which options are set against a particular status, for example Orders in that status can be Re-booked.



The CSTM checkbox is ticked if orders of the status can be sent to MTM.

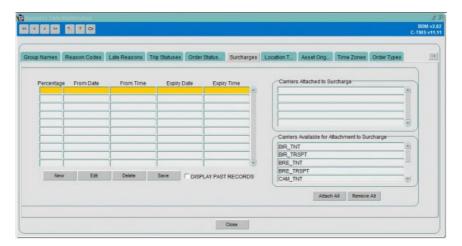
The CBR checkbox is ticked if orders of the status can be rebooked.

4.9 Service Types

Warning: This is an incomplete guide.

4.10 Surcharges

Fuel Surcharges are created on the Business Data Form's Surcharge tab. They specify a percentage surcharge to be calculated against all valid payments on a trip for an associated carrier whose fuel surcharge parameter date falls between the validity dates of the surcharge.



Trip level payments are flagged as subject to fuel surcharges on the Accounts Maintenance Form's Payments tab. Fuel Surcharges are viewed on the Payments Form and are calculated automatically by the ACC package at time of trip payment creation (either automatically from fixed routes etc, at time of status change or as Payments are raised manually (via Trip Summary / Finance tab etc)) regardless of whether or not there are manually rated payments on the trip (the other payments are not re-calculated if manual rating is detected).



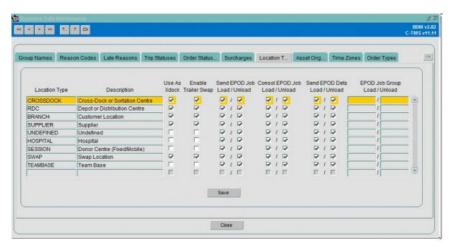
Note:

- Access permissions to the Business Data Form have not changed. Only users with new function
- ACC_AMEND_FUELSURCHAR_PYTTYPE_STATUS are able to set payments to be surcharged.

 New adm_system_parameter ACC_FUELSURCH_EVENTDATE is used to indicate the trip date that will be used to check for a valid surcharge (either TRIPSTART or TENDERED date).
- The new fuel surcharging payment types are FUELSurch (trip level) and Fuel-Charge (order level).

4.11 Location Types

You can use this tab to maintain the location types associated with the business in the system. These are used when creating new locations in the Locations maintenance screen.



You can create the location type with a description.

You can then maintain some default criteria against the location type:

- General
 - ◆ Use as Xdock
 - ♦ Enable Trailer Swap
 - ♦ Inventory Managed
 - ♦ Optional Loc Usage
- EPOD for use with the Aptean POD Calidus Edition system
 - Send Jobs Load/Unload whether these jobs are sent to C-ePOD on this activity.
 - ◆ Consol Jobs Load/Unload whether these jobs are automatically consolidated when sent to C-ePOD on this activity.
 - Send Dets Load/Unload whether these jobs are sent with details (items) to C-ePOD on this activity.
 - ◆ EPOD Job Group Load/Unload a specific job group to use when sending these jobs to C-ePOD on this activity.

4.12 XDock Paths

Warning: This is an incomplete guide.

4.13 Paragon Staging Posts

Displays specified routes from/to with (via) Staging Post locations as supplied via a CSV data file from Paragon Data. The imported data from Paragon, may be supplimented, edited, or deleted via the use of the named buttons within the tab.



4.14 Delivery Method

Warning: This is an incomplete guide.

4.15 Route Codes

Superseded by Fixed Route Maintenance.

4.16 Location Zones

You can use this to maintain zones in the system.



Zones may be used by various areas of the system (e.g. fixed routes) to determine where the location is grouped together, and therefore how to route to it from another location.

A zone can be maintained here with the following information:

- Zone ID a unique ID for this zone.
- Type Defines what the range is of one of:
 - ◆ Postcode
 - ♦ Planning Region
 - ♦ Postal Region
 - ♦ Country
 - ◆ Zone a zone already defined in the system.
 - ♦ Postal String
 - ♦ Suburb
- Country
- Town/Suburb
- From Range
- To Range
- Inactive
- Inc/Exc this flag indicates if the type of zone is being included or excluded from the location zone to enable greater flexibility to specify the delivery locations that are valid for the particular location zone.
- Customer
- Routing Code
- Cost Centre

 \P Note: When using Zones in the standard journeys for contracts, the system would have to look through all zones



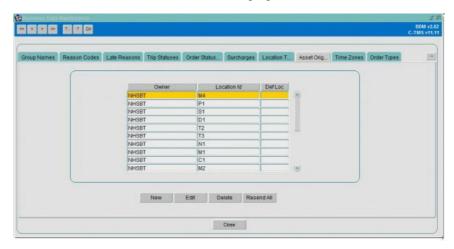
created on the system for other purposes like scheduling engine. Rather than consider zones that have not been defined for Finance, you may set up zones based on the areas for charging and click the "Rating" flag - the contracts function only looks at these zones.

Location Zones may also be imported through Imports:

• LOC ZONES

4.17 Asset Origins

This tab allows you to define the default location of assets belonging to customers.

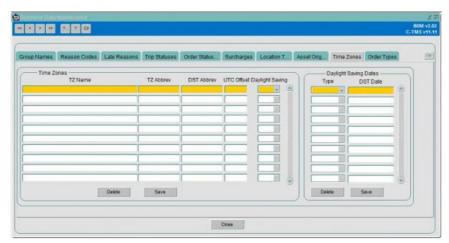


This is used only when using permanent asset tracking.

You can specify the customer (through a lookup), the location (through a lookup) and whether it is the default location for that customer.

4.18 Time Zones

This tab can be used to specify time zones used by the system to convert system dates and times into local dates and times. The business will need these to deal when planning and executing trips.



You can specify:

- TZ Name the name e.g. Greenwich Mean Time
- Abbrev an abbreviation e.g. GMT



- DST Abbrev an abbreviation of the daylight saving time for this time zone e.g. BST
- UTL Offset the number of hours or minutes offset.
- Daylight Saving whether daylight saving time is implemented in this time zone.
- Cost Centre a lookup is provided.

For each time zone with daylight saving, you can also specify the start or end of the daylight saving time.

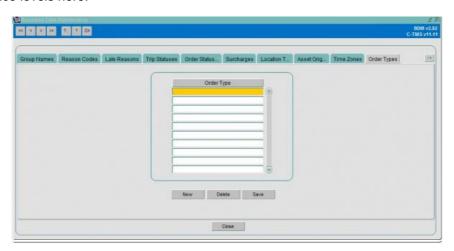
4.19 Order Types

This screen is used to maintain the different order types that exist within the business.



4.20 Service Levels

You can maintain service levels here.



You can enter:

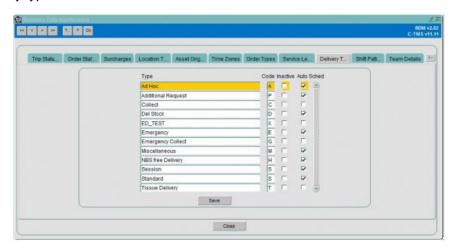
- Inactive
- Level
- Description
- Coll Offset
- Del Offset
- Early ColLate Col
- Early Del
- Late Del



These service levels settings will be used to default collection and delivery windows when orders are created with that service level.

4.21 Delivery Type

You can maintain delivery types here.



Delivery types are used against orders to group them, and are a critical part of order revenue generation from tariffs.

You can enter:

- Type
- Code
- Inactive
- Auto-Schec
- Do Not Rate
- Collect Saturday/SundayDeliver Saturday/Sunday
- EPOD Mode when using Aptean POD Calidus Edition (C-ePOD), and when configured to send different data by delivery type, this controls what mode to use i.e. how to map the data. A List of the mapping per type is available on Assist.

4.22 Transport Mode

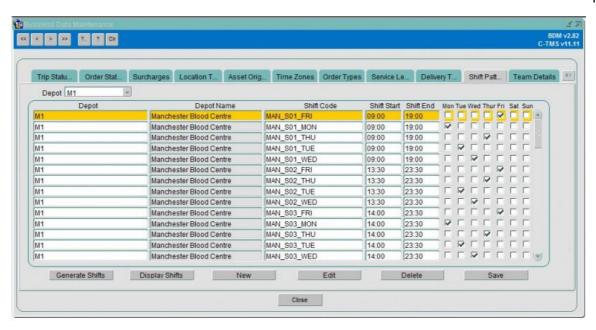
You can maintain transport modes here. Transport modes are used by fixed route scheduling to determine wehther an order should be scheduled onto a route (defined by the transport mode on the order and route)

You can enter the transport mode and description here.

4.23 Shift Patterns

You can maintain shift patterns on this tab on the Business Data Maintenance screen.





Shift patterns must be unique and are applied to a particular depot.

You can search for shifts for a depot, or see all.

To create a new shift press the **New** button. You can only create new shifts for the depots you are associated with.

To edit a shift press the Edit button. Only the days of the week and the times can be edited

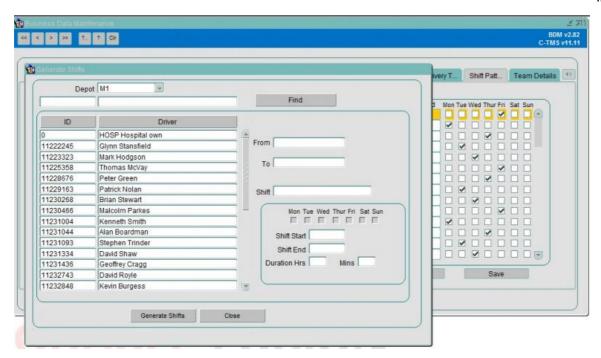
You can enter:

- Depot
- Shift Code Unique to the shift pattern.
- Shift Start time
- Shift End time
- Mon-Fri checkboxes to which days of the week this shift applies.

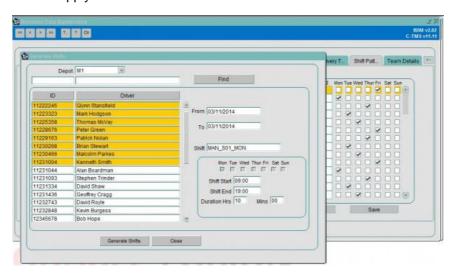
To delete a shift press the **Delete** button. Validation exists to ensure that you cannot delete a shift that has drivers associated with it.

You can assign shifts to drivers using the Resources maintenance screen, or you can generate shifts for multiple drivers in this screen using the **Generate Shifts** button.

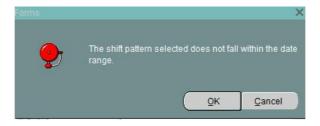




You will be prompted to enter a shift for the depot from a lookup, as well as a from and to date. You can then select all of the drivers to whom you wish to apply this shift and click **Generate Shifts**.



Validation exists to check that a driver is not already on a shift. If this occurs a message appears for each driver that cannot be allocated to the shift. All other drivers will be allocated. Further validation exists to check that one of the days between the first and last days entered corresponds to a day that the shift is associated with. If this occurs a warning message is shown as below:



Pressing the **OK** button will proceed to generate the shifts. Pressing the **Cancel** button will abandon the shift creation.

You can see all users assigned to a particular shift by pressing Display Shifts.





From this screen it is possible to change the search criteria to only bring back particular records. You can search on the driver, driver name, shift code and the from and to dates. Press the **Refresh** button to only bring back the records you are interested in. Press the **Clear Search Criteria** to bring back all records.

On this screen you have the following buttons

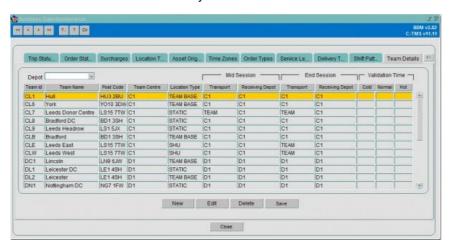
- New this allows you to create a single record for a single driver.
- Edit this allows you to edit a single record. Only the from and to dates can be changed.
- Delete this allows you to delete a single or multiple records.
- Save this saves any changes you have made.
- Close closes the screen and returns to the shift patterns screen.

You can also import Shift Patterns and assign shifts to drivers through Imports:

- SHIFT_PATT
- DRIVER_SHIFT

4.24 Team Details

Note: This is specific to session collection functionality.



Team master data will be created to link a team to a home depot for creating collection orders. The Team data including attributes to control the type of session that each team operates, whether the end session collection is required from transport, which depot the mid-session and end session collections should be delivered to and an optional validation period in minutes that that will control the planning for cold, normal and hot weather conditions.



If the related Team master data for a session record does not exist in C-TMS, the session record will be rejected by the interface validation functionality and not uploaded.

Session teams can be organised to run two or more different sessions concurrently. The team attributes controlling whether mid and end session collections and the depot (SHU or Manufacturing Centre) location derived from the team will apply to each and every session the team is assigned to.

As an optional entry, the Team Maintenance screen will allow an override validation period to be setup for cold, normal and hot ambient weather conditions. This will allow specific validation times for each team associated with sessions and will give NHSBT the flexibility to setup various operational scenarios, for example equipment at the sessions allows longer validation periods, or manufacturing needs a more regular 'trickle' of blood from sessions so the validation time is decreased.

You can use this tab to create Session teams.

You can select by Depot.

You can enter:

- Team ID
- Team Name
- Post Code
- Team Centre
- Location Type
- Mid Session details
 - ◆ Transport
 - ♦ Receiving Depot
- End Session details
 - ◆ Transport
 - ♦ Receiving Depot
- Validation Time
 - ◆ Cold
 - Normal
 - ♦ Hot

4.25 Storage Types

Warning: This is an incomplete guide.

4.26 Note Types

You can maintain location note types in this tab. You can then use these to add notes against a location.

4.27 Fixed Costs By Route

You can use this tab to enter a fixed cost against a route for a particular customer.

4.28 Booking Status

This tab allows you to maintain the booking types in the system. These are predominantly used by the CTL Customer Services screen.



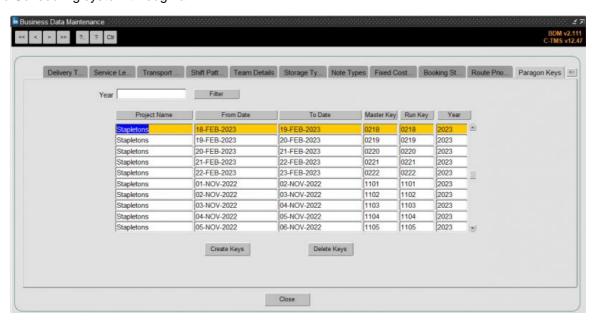
4.29 Route Priority

Note: This is specific to the Paragon Route Master (Strategic) interface.

You can use this tab to enter rout codes, priorities and cust off times.

4.30 Paragon Keys

This tab allows you to maintain Paragon Run Keys. **Note:** This is required when and specific to using the Paragon Routing and Scheduling system through an API.





5 Static Data

The Static Data module encompasses the maintenance of static data used by the system.

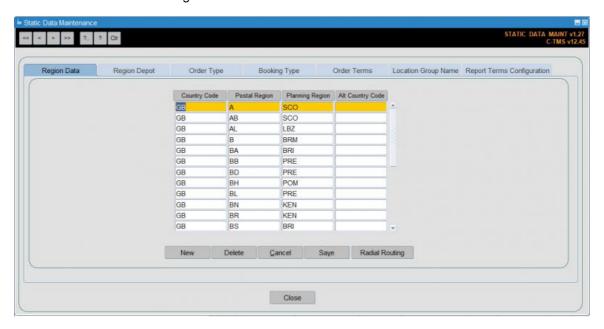
The data can be viewed, created, edited and maintained through the accompanying Static Data Maintenance Maintenance form.

You can access the screen through the Maintenance menu.

5.1 Tabs

5.1.1 Region Data

This tab allows for the maintenance of region data:



You can maintain the grouping of postal regions to planning regions.

Entries in this table control the setting of the 'Planning Region' against new locations. As new locations are created the Postal Region is set based on the Postcode stored against the address data.

The Postal Region can be dynamic based on the postcode format of the country - for the UK it takes the first 'character' based portion of the postcode e.g. L or BR.

The Postal Region from the location is then used to reference the matrix as entered in the Region Data tab and ascertain the correct Planning Region to store against the Location. It allows the grouping of one or more Postal Regions into a single Planning Region. An individual Postal Region cannot exist in more than one Planning Region.

The Planning Region can then be used in the planning process to filter the Order Well based on collection and delivery locations.

There are five buttons at the bottom of the screen:

- New Allows you create a new region.
- Delete Delete an existing region.
- Cancel Do not save any changes.
- Save Save any changes that you have made.
- Radial Routing Edit Radial Routing. Here you can add the type of radial routing (Collection, Delivery, Both or None), and the location types that are affected by this rule. This is optional.

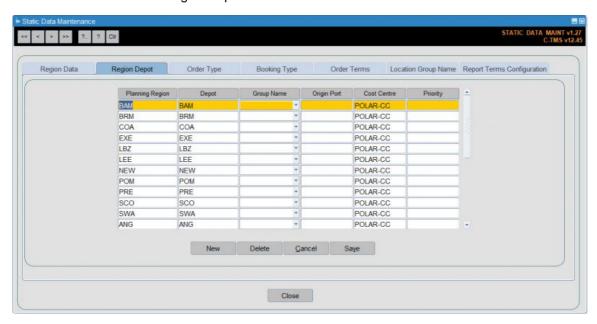


You can also import Region data through Imports:

• REGION DATA

5.1.2 Region Depot

This tab allows for the maintenance of region depot data:



You can define the depots that are responsible for each planning region.

Entries in this table control two C-TMS functions:

- Scheduling Engine identifying applicable Fixed Routes
- Order creation setting the group name

Planning Region to Depot matrix - defines which planning region areas (and ultimately groups of location addresses) are under the control/responsibility of a particular depot. One or more Planning Regions can be added under the control of a particular depot. This is largely for the identification of applicable Fixed Routes in automatic planning.

Planning Region to Group Name matrix defines which Group Name should be stamped against an order during any none manual order creation (e.g. Specific EDI flows, Portal etc). The order locations are used to identify the Planning Region of the Collection/Delivery location and the appropriate Group Name is identified. This ultimately controls the order visibility in the Planning Well depending on the user parameter configuration.

There are four buttons at the bottom of the screen:

- New Allows you create a new region depot.
- Delete Delete an existing region depot.
- Cancel Do not save any changes.
- Save Save any changes that you have made.

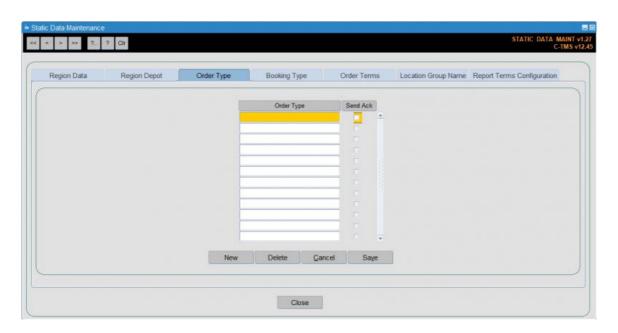
You can also import Region Depot assignment data through Imports:

• REGION DEPOT



5.1.3 Order Type

Warning: This is an incomplete guide.

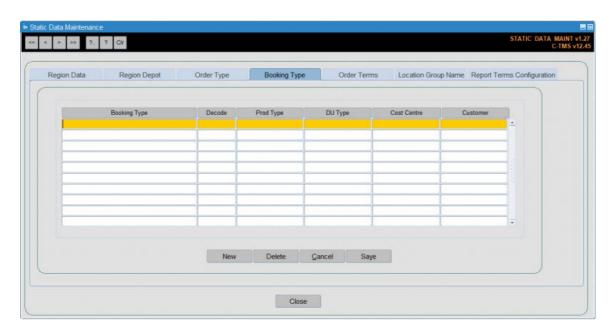


There are four buttons at the bottom of the screen:

- New Allows you create a new order type.
- Delete Delete an existing order type.
- Cancel Do not save any changes.
- Save Save any changes that you have made.

5.1.4 Booking Type

Warning: This is an incomplete guide.



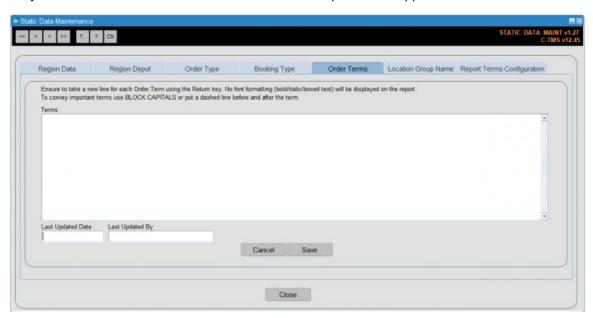
There are four buttons at the bottom of the screen:



- New Allows you create a new booking type.
- Delete Delete an existing booking type.
- Cancel Do not save any changes.
- Save Save any changes that you have made.

5.1.5 Order Terms

This tab allows you to maintain order terms. These are added to reports that support them.



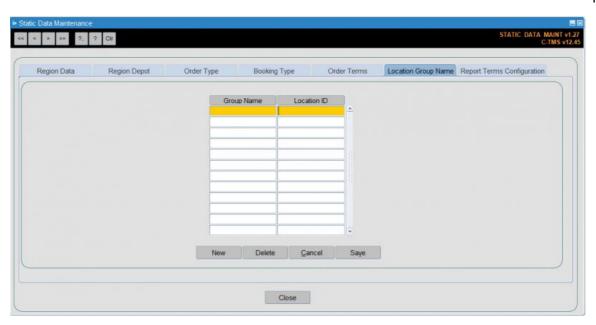
There are two buttons at the bottom of the screen:

- Cancel Do not save any changes.
- Save Save any changes that you have made.

5.1.6 Location Group Name

Warning: This is an incomplete guide.



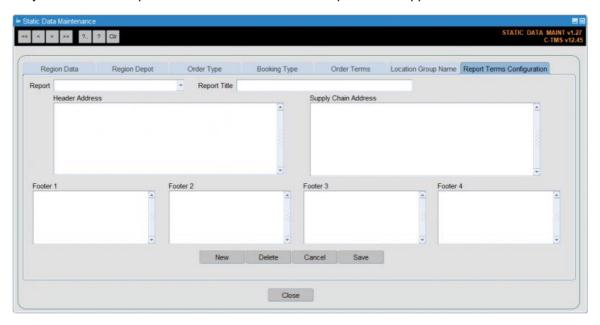


There are four buttons at the bottom of the screen:

- New Allows you create a new location group name.
- Delete Delete an existing location group name.
- Cancel Do not save any changes.
- Save Save any changes that you have made.

5.1.7 Report Terms Configuration

This tab allows you to maintain report terms. These are added to reports that support them.



There are four buttons at the bottom of the screen:

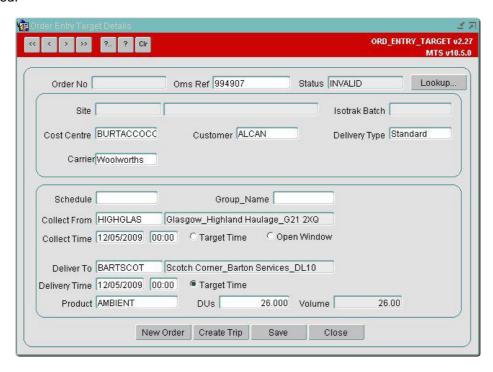
- **New** Allows you create new report terms.
- **Delete** Delete existing report terms.
- Cancel Do not save any changes.
- Save Save any changes that you have made.



6 Order Entry Targets

Warning: This is an incomplete guide.

The Order Entry Target module is used to detail the actual collection and delivery windows on which an order should be collected or delivered.



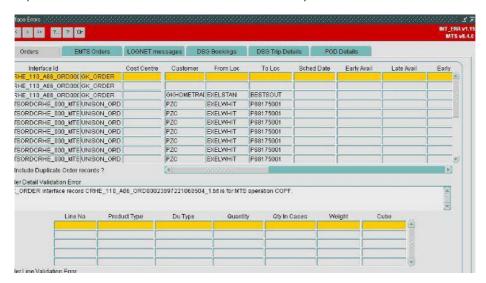


7 Orders Interface

Warning: This is an incomplete guide.

An FTP process has been created to transfer Order information from a source system into C-TMS. The orders arrive in CSV files and are processed into C-TMS with errors being reported to a new C-TMS screen for manual administration by the users.

Interface Errors screen (a new tab will be added for each new interface).



The Interfacing team should provide the interface data, extracting the necessary order data from the source system, constructing it into a CSV format consisting of a record header, order header and order detail or details lines and forward it to C-TMS where its arrival triggers an upload process. Each file contains exactly one order and is validated for structure on arrival to the server before invoking the appropriate C-TMS operation (DB) to process it.

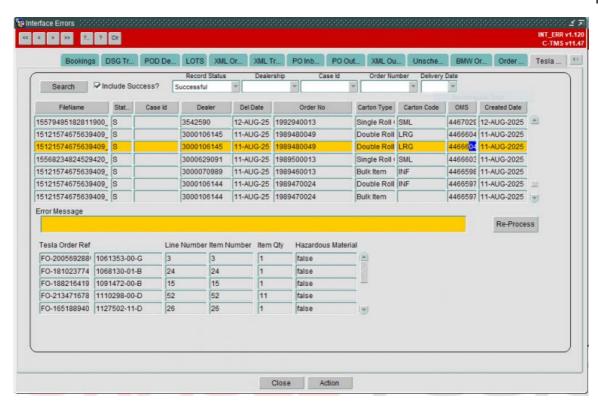
The interface is designed to be generic. C-TMS reads the header to determine the interface type before channelling it for processing. The CSV format is extracted into interface order header and interface order details tables. Errors during this upload halt processing and result in the error being written to the tables for viewing in the C-TMS Interface Errors screen. If successfully extracted, the order is validated for loading into the C-TMS orders tables. Errors are written to the interface table for viewing and the order is rolled back. Successes are committed to the orders tables and are available for normal C-TMS orders / trip processing etc.

The FTP interface is one way (from an external source to C-TMS). Errors displayed on the error screen are administered manually via contact between C-TMS and external systems and will either result in data changes or a resend of a corrected FTP file. The FTP file name is used as the interface identifier (int_record_id) enabling order records, interface table records and files to be traced back to their origins.

7.1 Tesla Orders Details

Tesla Orders EDI files can be managed through the Tesla Orders tab on the Interface Errors screen.





You can search using the header fields:

- Include Success a checkbox by default the screen only includes failures.
- All other criteria are drop-down lists:
 - ♦ Record Status
 - ◆ Dealership
 - Case Id
 - ♦ Order Number
 - Delivery Date

The screen displays:

- Filename
- Status S or F
- Case Id
- Dealer
- Del Date
- Order No
- Carton Type
- Carton Code
- OMS
- Created Date

You can sort the results by any of these columns.

Select a record on this results table and further information will be shown below:

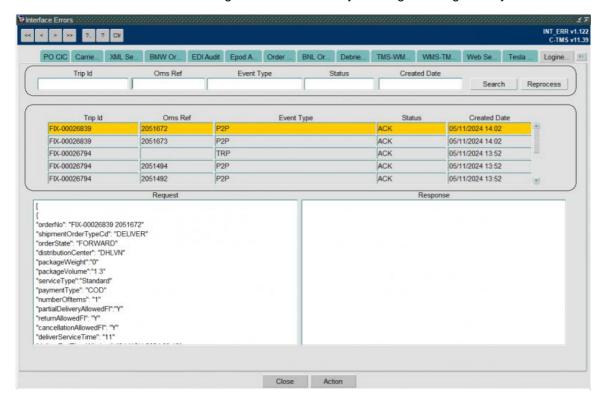
- Error message any associated errors whilst processing the file
- Pallet/Case Details:
 - ◆ Tesla Order Number
 - ◆ Line Number
 - ♦ Item Number
 - ♦ Item Qty
 - ♦ Hazardous Material indicator whether the material is hazardous.

If the record is failed, you can reprocess it with the **Re-Process** button.



7.1.1 LogiNext Details

This tab shows the interface messages and details of any messages to LogiNext systems.



The screen will display the details of all records from the new LogiNext audit detail described above.

You can filter the search using the search criteria in the top of the tab page and clicking **Search**.

You can reprocess the currently highlighted record by pressing the **Reprocess** button, this will then invoke the reprocessing function

Only failed outbound messages will be available to be reprocessed and an error will be shown if any other type of record is selected for reprocessing.

Note: You will not be able to edit data in this screen any errors with trips should be rectified in the planning screen.



8 Scheduling Engine

The scheduling engine is an automated process that will select unscheduled orders and apply them to the available trips or create new trips as required based on the routes that exist.

The fixed routes (for own fleet) and the carriers routes (for external carriers but also for own fleet parcel services) will be assessed based on rules to schedule the orders.

8.1 System Parameters

• 'AUTO_SCHEDULING'

A cost centre parameter that controls which orders are considered by the scheduling engine, the parameter must be set to 'Y' for the cost centre of the order for the order to be scheduling automatically.

• 'ENGINE RUNNING'

A cost centre parameter which will be set automatically to 'Y' by the schedule engine process when the process is being run for the database.

This system parameter will be set back to 'N' by the process once all of the available orders have been processed.

• 'MAINTAIN_SCHEDULE_DATES'

A cost centre parameter which will control if the order time windows will be derived for the 'XML' and 'CSV' orders.

The system parameter must be set to 'Y' for the cost centre of the order to be active.

• 'TRIP_PREVENT_PARCEL_CARRIER_ASSIGNMENT'

A cost centre parameter which will control if orders can be planned manually to a trip for a 'Parcel' carrier.

The system parameter must be set to 'Y' for the cost centre of the order to be active.

'TRIP_VALIDATE_PARCEL_ORDER_ASSIGNMENT'

A cost centre parameter which will control if orders are validated when they are planned manually to a trip for a 'Parcel' carrier.

The system parameter must be set to 'Y' for the cost centre of the order to be active.

• 'TRM_3PL_REROUTE'

A system parameter that can be set to 'Y' to enable the functionality in the Fixed-Drop Scheduling engine to plan the orders to the next available route.

• 'TMP_ENG_TRIP_PREFIX'

A system parameter that controls the prefix that the trips created from fixed drop scheduling drops will be prefixed with e.g. TMP, MAN, RTE etc.

If the trips are to be replanned by Paragon, set this to TMP. If the trips are not to be replanned, then set this to RTE (or some other easily recognizable prefix).

8.2 Scheduling Engine Control

The scheduling engine may be defined in the 'Scheduling Maintenance' screen.

To use the screen, the user must be logged in as 'EDI_OWNER' so that the process is started with the correct level of access control.



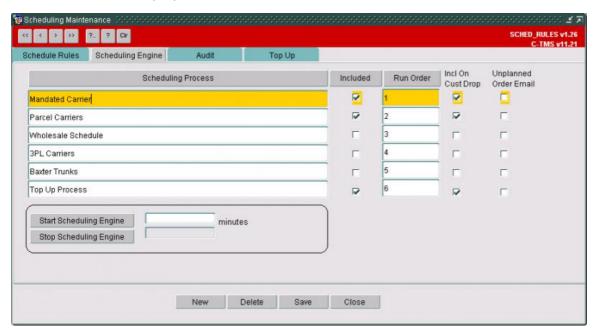
The screen allows users to start and stop the scheduling engine and select which functionality runs and the sequence in which the different aspects of the scheduling engine are run.

Note that if a process is not ticked as being 'Included' IT WILL NOT BE RUN.

The 'Audit' tab page will record each successful completion of the scheduling engine and will also display any errors which occurred during the processing of the orders.

The audit does not record why an order failed to schedule (because it would have to record why it failed to schedule with every route available).

There are different processes that the scheduling engine can use - 'Parcel Carriers', '3PL Carriers', 'Wholesale Schedule', 'Mandated Carriers', 'Top Up Process', 'Network Schedule' and 'NHSBT Schedule':



The 'Run Order' can be specified to the sequence in which each type of scheduling engine process will be run so that certain types of orders and carriers can be assessed preferentially.

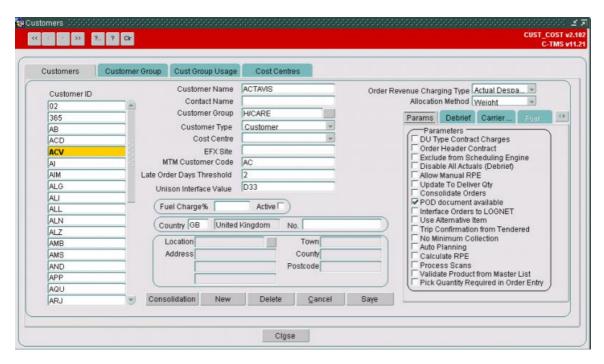
In this example, the 'Mandated Carrier' process will be run first.

8.3 Customer Settings

• 'Exclude From Scheduling Engine'

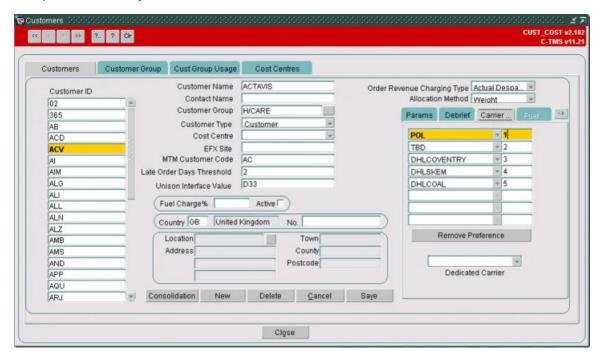
Customers must be actively excluded from the scheduling engine if they do not want to have their orders scheduled automatically:





• 'Carrier Preferences'

The carrier must exist as a preferred carrier for the customer of the order if the customer has a list of carriers that it will accept for the delivery of its orders:



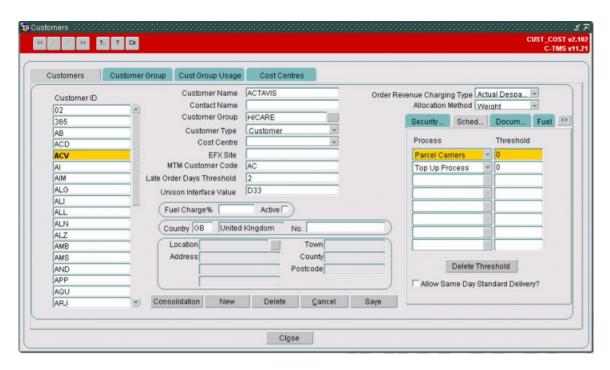
In this example, the 'POL' carrier will be assessed first and if that carrier cannot take the order, the 'TBD' carrier will be assessed next.

Note that if a customer has no preference, the orders for that customer may be delivered by any carrier without preference.

• 'Scheduling Threshold'

A threshold value may be set to exclude the order from the scheduling engine until a set period of time prior to its early delivery date and time:



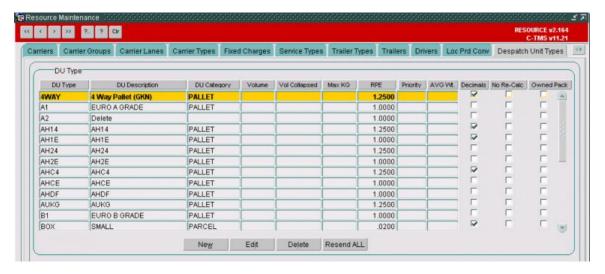


The number of minutes may be specified and a value of '0' will indicate that the order cannot be scheduled automatically in the particular aspect of the scheduling engine until the early delivery date and time has been reached by the system date and time (i.e. in the local time zone).

Note that if a threshold value is not specified that the order will effectively be valid for the aspect of the scheduling engine to process once it has been created, validated and set to 'UNSCHEDULED' status.

8.4 DU Category

The DU category can be specified to denote the type of despatch unit for planning purposes:



A DU category of 'PALLET' indicates that it is a pallet that would normally be transported by own fleet.

A DU category of 'PARCEL' indicates that it is a parcel that would normally be transported by a parcel carrier service by own fleet or by an external 'PARCEL' carrier.

Note that a DU type will have a DU category of 'PALLET' by default unless stated otherwise.

The DU category of an order will be set to 'PARCEL' based on the presence of a DU type having a DU category of 'PARCEL'.

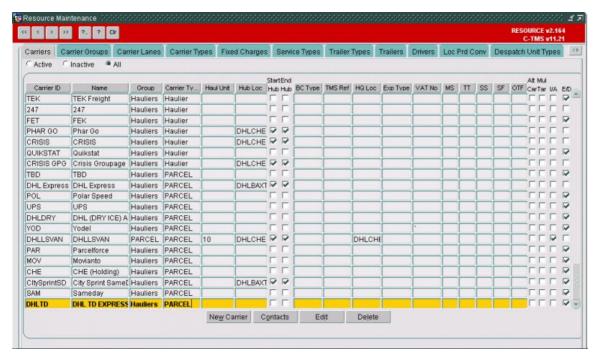


The DU category will then be used to decide which set of routes (fixed for 'PALLET' or carrier for 'PARCEL') to check for the derivation of the order time windows when the orders are created via the 'XML' and 'CSV' files.

Note that some 'PARCEL' carriers will be able to take 'PALLET' items should they be setup to do so in the 'Carrier Rules' screen for the DU types.

8.5 Carrier Type

The 'Carrier Type' will determine the scheduling engine process in which that carrier will be assessed:

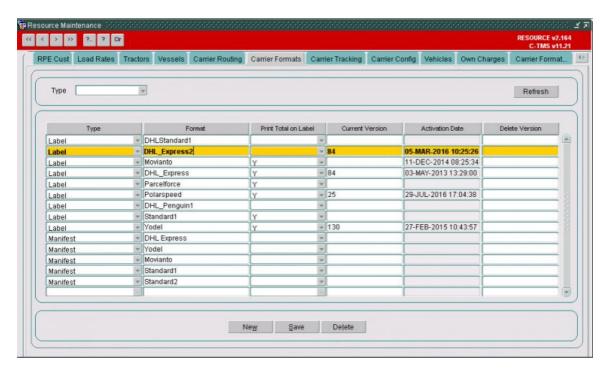


The 'Carrier Type' may be '3PL' or 'PARCEL' to apply the specific scheduling engine process.

8.6 Carrier Formats

Different formats can be setup for each carrier:





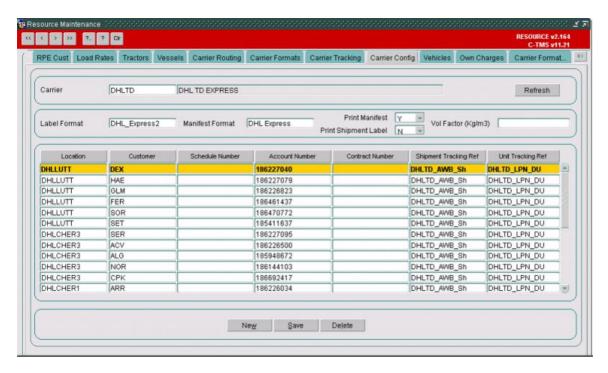
The current version of the gazetteer data can be stored for the label format.

The label format can be assigned to a routing format to obtain the gazetteer data:



The carrier can be configured to have a label format and a manifest format:

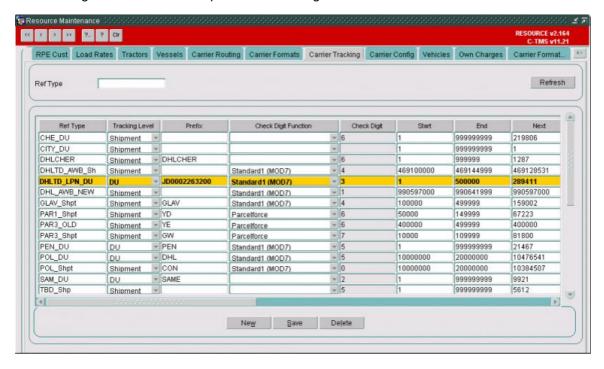




The physical manifest can also be requested to be printed automatically when the trip is despatched.

The tracking references can be applied by customer by depot.

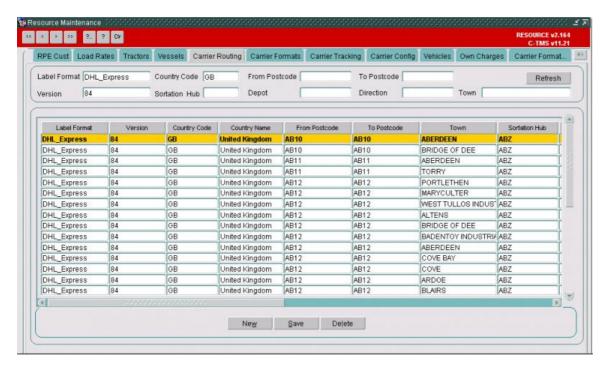
The tracking references can be updated with a range of values for the carriers:



8.7 Carrier Gazetteer

The gazetteer data can be imported for each carrier for the latest version to be applied:





The carrier routing data will be used for the production of the carrier labels and this data should be used to specify the carrier rules for ensuring that the orders are scheduled correctly.

Note that this data is not used in the scheduling engine or the derivation of the order time windows.

8.8 Carrier Rules

The carrier rules will apply to the assessment of the parcel carriers:

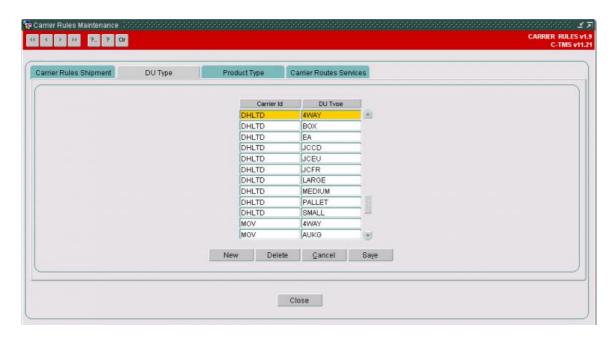
Shipment Size



The carrier must be able to transport the size of the shipment (i.e. based on the total for the order) based on the weight and the volume.

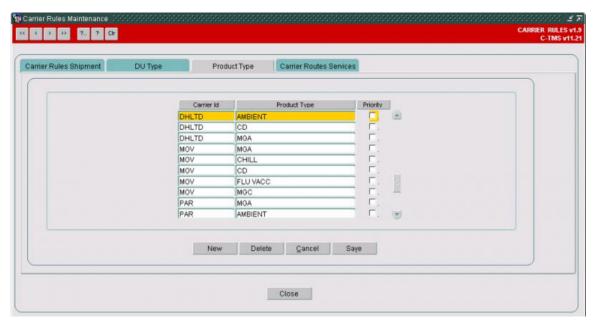
DU Type





The carrier must be able to transport the DU types that exist for the order lines (as packed and despatched).

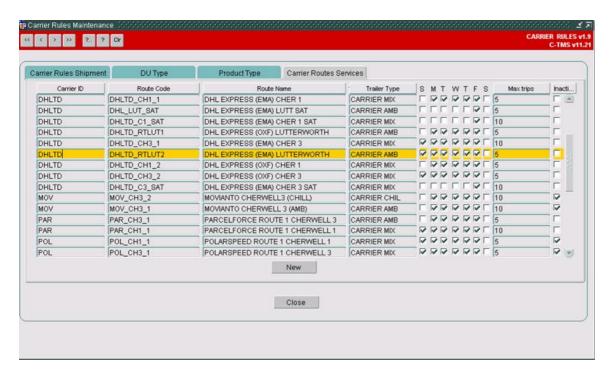
• Product Type



The carrier must be able to transport the product types that exist for the order lines (as packed and despatched).

• Service Level







The carrier route will indicate if the carrier can deliver the order from the source depot.

The source depot and ant cross-docking depots can be listed with a cut-off time to ensure that the order is available prior to the expected loading time of the vehicle.

The days of the week on which the route operates can be specified.

The type of trailer can be specified and further validation will be performed to ensure that the products for the order can be loaded onto the trailer for the trip for the route.

The carrier routes should be based on the gazetteer information that is provided by the external carrier to ensure that the carrier will be able to deliver the order on the specified date and by the specified time.

The service level of the order and the destination will be assessed to ensure that the delivery location is valid for the route.



The service level can be mapped to the appropriate service level for the carrier to indicate how it will be transported within the carrier's own network.

The 'Destination Type' and 'Destination' will indicate how the delivery location of the order is assessed:

'ZONE' indicates that there may be multiple locations that are valid for the route.

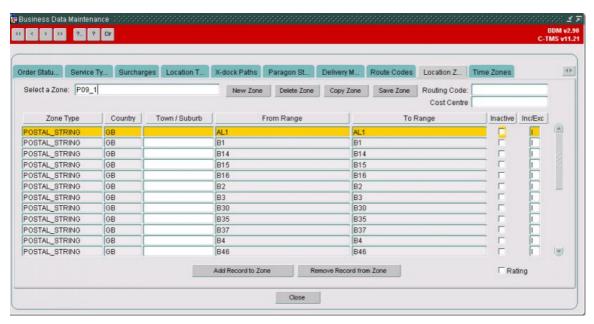
'COUNTRY' indicates that all orders for delivery in a country are valid for the route.

'LOCATION' indicates that orders just for that location are valid for the route.

Note that different destination types can apply for the same service level.

8.9 Location Zones

The location zones can be specified in the 'Business Data Maintenance' screen:



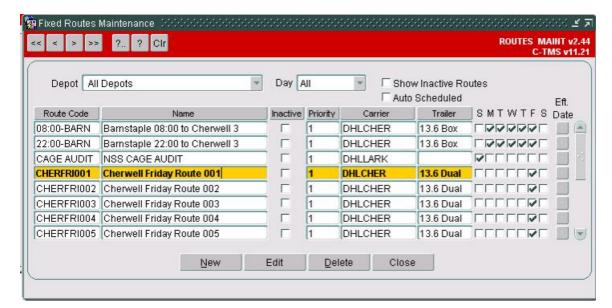
In this example, the 'P09_1' location zone incorporates various postcodes (using the prefix as a postal string) for the delivery locations.

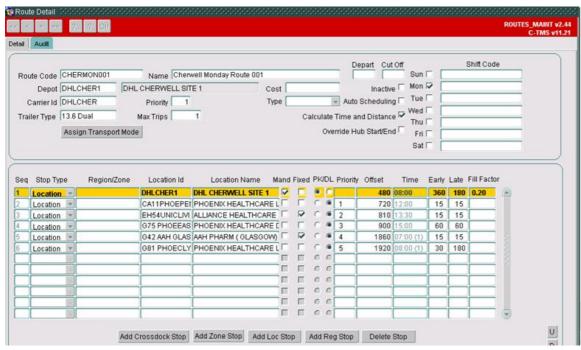
The 'Inc/Exc' flag indicates if the type of zone is being included or excluded from the location zone to enable greater flexibility to specify the delivery locations that are valid for the particular location zone.

8.10 Fixed Routes

The fixed routes will apply to the assessment of the own fleet carriers:







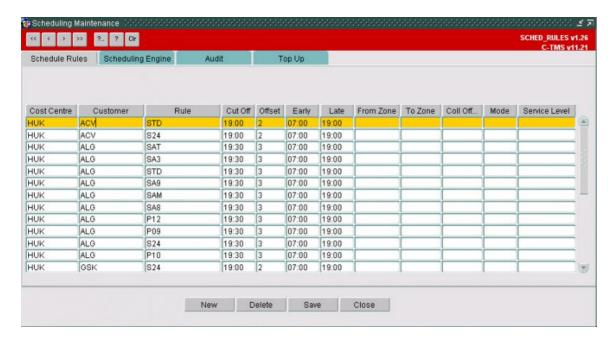
In this example, the route is being used to collect from, and deliver to, specific locations.

The 'Stop Type' can be specified to include 'Zone' as well as 'Location' to enable orders to be valid for the route without having to specify each location as a stop.

8.11 Schedule Rules

The schedule rules are used to calculate the time windows for the 'PARCEL' orders:





For example, 'HUK' orders will be provided with an early delivery date and the time windows will be calculated for that date and time.

The 'Rule' is the service level of the order.

The 'Offset' is a number of days for the delivery to be made (i.e. the order must be available 2 days before the delivery date for the 'STD' service level for the 'ACV' customer).

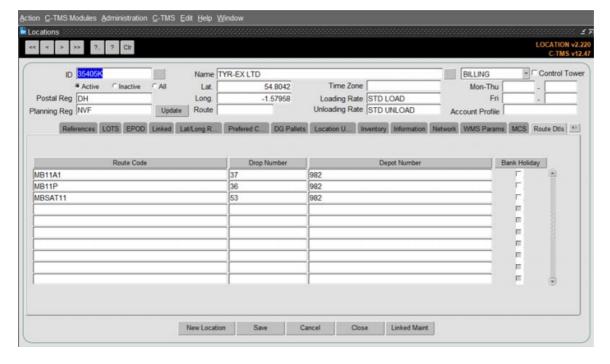
The 'Cut Off' is a time after which a day will need to be added for the expected delivery for it to be made.

Note that the weekends will be offset automatically.

8.12 Location Fixed Route Details

Note: Applies to fixed drop scheduling only.

Each location that can be planned as a destination may have multiple routes (run numbers) assigned to the location.





The routes can be specified as being applicable solely to bank holidays.

8.13 Order Time Window Derivation

The time windows can be derived for the orders that are created via the 'XML' and 'CSV' files by assessing the stock being ordered and the service level.

The assessment of the service level and the delivery type will be performed for the orders when they are created via 'CSV' or 'XML' files and the 'MAINTAIN_SCHEDULE_DATES' system parameter is 'Y' for the cost centre of the order.

The **DU** category of the order is used to decide whether to check the fixed routes for 'PALLET' or the schedule rules for 'PARCEL'.

'PARCEL' will only be specified if the order only contains DU types with a category of 'PARCEL'.

'PALLET' types will assess the fixed routes for a direct or a radial route for the early delivery date, the locations of the order and the mandated carrier if provided.

If the early delivery date is known the route will be checked that it is active on that day of the week.

Future early delivery dates will not offset the date:

Service Level 'Standard'

Delivery Type 'On Sched'

Early Avail SYSDATE

Late Avail Delivery Date at Late Target Time

Early Del Delivery Date at Early Target Time

Late Del Delivery Date at Late Target Time

Or

Service Level 'Standard'

Delivery Type 'Off Sched'.

Early Avail SYSDATE

Late Avail Delivery Date at 17:00

Early Del Delivery Date at 08:00

Late Del Delivery Date at 17:00

Same day early delivery date may offset the date:

Service Level 'Standard'

Delivery Type 'On Sched'

Early Avail SYSDATE

Late Avail Delivery Date at Late Target Time

Early Del Delivery Date at Early Target Time

Late Del Delivery Date at Late Target Time

Or



Service Level 'Standard'

Delivery Type 'Off Sched'.

Early Avail SYSDATE

Late Avail Delivery Date + 3 days at 17:00

Early Del Delivery Date +3 days at 08:00

Late Del Delivery Date + 3 days at 17:00

Note that the delivery date may also be offset to avoid the weekends so it may be +4 or +5 days.

Past early delivery date will offset the date:

Service Level 'Standard'

Delivery Type 'On Sched'

Early Avail SYSDATE

Late Avail Delivery Date + 3 days at Late Target Time

Early Del Delivery Date + 3 days at Early Target Time

Late Del Delivery Date + 3 days at Late Target Time

Or

Service Level 'Standard'

Delivery Type 'Off Sched'.

Early Avail SYSDATE

Late Avail Delivery Date + 3 days + 3 days at 17:00

Early Del Delivery Date +3 days + 3 days at 08:00

Late Del Delivery Date + 3 days + 3 days at 17:00

Note that the delivery date may also be offset to avoid the weekends so it may be +4 or +5 days.

No early delivery date will offset the date:

Service Level 'Standard'

Delivery Type 'On Sched'

Early Avail SYSDATE

Late Avail Next Delivery Date at Late Target Time

Early Del Next Delivery Date at Early Target Time

Late Del Next Delivery Date at Late Target Time

Or

Service Level 'Standard'

Delivery Type 'Off Sched'.

Early Avail SYSDATE



Late Avail Delivery Date + 3 days at 17:00

Early Del Delivery Date +3 days at 08:00

Late Del Delivery Date + 3 days at 17:00

Note that the delivery date may also be offset to avoid the weekends so it may be +4 or +5 days.

'PARCEL' types will use the delivery date, cost centre, customer and service level provided (or a default service level from 'OMS_DEFAULT_SERVICE_LEVEL') to assess the schedule rules.

An early delivery date will calculate the collection date using the delivery offset days for the schedule rule:

Early Avail Collection Date at 00:00

Late Avail Delivery Date at Late Time

Early Del Delivery Date at Early Time

Late Del Delivery Date at Late Time

No early delivery date will offset the date when before the cut-off time for the SYSDATE:

Early Avail SYSDATE at 00:00

Late Avail SYSDATE + Delivery Offset Days at Late Time

Early Del SYSDATE + Delivery Offset Days at Early Time

Late Del SYSDATE + Delivery Offset Days at Late Time

No early delivery date will offset the date when after the cut-off time for the SYSDATE:

Early Avail SYSDATE at 00:00

Late Avail SYSDATE + 1 day + Delivery Offset Days at Late Time

Early Del SYSDATE + 1 day + Delivery Offset Days at Early Time

Late Del SYSDATE + 1 day + Delivery Offset Days at Late Time

If SYSDATE is Friday the weekend will be offset at the start for the above calculations when no early delivery date is provided.

Note that the derived delivery date may also be offset to avoid the weekends.

'XML' orders will assess the above rules if not all of the order time windows are provided.

'CSV' orders will assess the above rules if not all of the order time windows are provided.

The delivery type of 'On Sched' and 'Off Sched' can be set for the 'CSV' and 'XML' orders but this code is not run elsewhere, therefore the order should not have changed automatically the delivery type when the order was unscheduled.

8.14 Scheduling using Parcel Carriers

The 'Parcel Carriers' will assess the carriers that have been setup with a 'Carrier Type' of 'PARCEL'.

The orders will be selected provided that the carrier accepts the type of goods that are being transported.

This process will either create a new 'PCL' trip for the order or it will add the order to an existing 'PCL' trip for the same route for the same delivery date minus the number of offset days for the service level.



The **capacity** of the current trip(s) for the route will be assessed against the **total RPE**, **weight and** volume of the order being processed:

- If there are no trips for the day for the route and the capacity of the trailer will not be exceeded by the order then a new trip will be created.
- If there is spare capacity then the current trip will be used.
- If there is no spare capacity and the total number of trips for the route for the day has reached the maximum number of trips for the route then the order will remain unscheduled.

The schedule of the trips will be based on the early delivery date and time of the order being processed minus the number of offset days for the service level of the order.

Note that the 'PCL' trips will be handed-off to an external carrier so they will be assigned to a **schedule for a previous** day based on the number of 'Offset Days' for the carrier route for the service level of the order.

The intention is to advise the external carrier when they need to collect the orders from the depot for delivery within their own network.

The orders for the 'Parcel' carriers can be cross-docked prior to their delivery trips.

The 'Auto Processed PCL' flag will be set if the order has been assessed for this aspect of the scheduling engine.

8.15 Scheduling using 3PL Carriers

The '3PL Carriers' will assess the carriers that have been setup with a 'Carrier Type' of '3PL'.

The orders will be selected provided that the carrier accepts the type of goods that are being transported.

The same logic will apply to the '3PL' carriers as to the 'Parcel' carriers and the orders for the '3PL' carriers can be cross-docked prior to their delivery trips.

The 'Auto Processed 3PL' flag will be set if the order has been assessed for this aspect of the scheduling engine.

8.16 Scheduling using Wholesale Schedule

The 'Wholesale Schedule' will assess the fixed routes to potentially cross-dock the orders multiple times prior to delivery.

There are 3 different types of trips that can be assessed for **unscheduled orders**:

Collection

The orders will be assessed based on the source and delivery locations of the order for any 'Cross-dock' stops that exist for a route.

• Trunk

The orders will be assessed based on the stops for collection from the current location of the order.

Direct

The orders will be assessed based on the stops for collection from the source location and delivery to the location/zone of the delivery location of the order.

These orders will not be cross-docked.

There are 2 different types of trips that can be assessed for partially scheduled orders:

• Trunk

The orders will be assessed based on the stops for collection from the current location of the order.



Radial

The orders will be assessed based on the stops for collection from the current location and delivery to the location of the delivery location of the order.

The capacity of the current trip(s) for the route will be assessed against the total RPE, weight and volume of the order being processed to decide if a trip can be used:

- If there are no trips for the day for the route and the capacity of the trailer will not be exceeded by the order then a **new trip** will be created.
- If there is spare capacity then the current trip will be used.
- If there is no spare capacity and the total number of trips for the route for the day has reached the maximum number of trips for the route then the order will remain unscheduled.

Note that is a 'PARCEL' order is being processed, it can be added to a 'RTE' trip but it cannot create a 'RTE' trip.

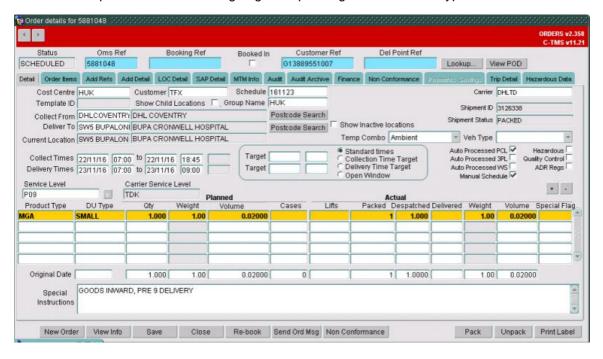
The schedule of the 'RTE' trips will be based on the schedule for the early delivery date and time of the order being processed.

The orders for the 'Wholesale' carriers can be cross-docked prior to their delivery trips.

The 'Auto Processed WS' flag will be set if the order has been assessed for this aspect of the scheduling engine.

8.17 Scheduling using Mandated Carrier

The orders that have a mandated carrier in the 'Carrier' field will be assessed for the appropriate '3PL, 'Parcel' or 'Wholesale' aspects of the scheduling engine depending on the 'Carrier Type' of the mandated carrier:

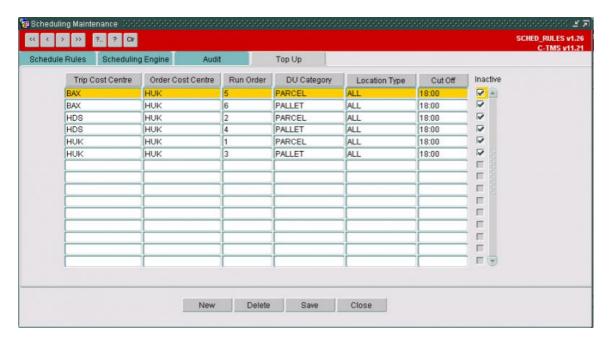


In this example, 'DHLTD' must be used to deliver the order.

8.18 Scheduling using Top Up Process

The 'Top Up Process' has parameters that can be used to decide which orders can be used to 'top-up' which trips:





In this example, the 'HUK' orders can be topped-up onto trips for 'HUK', 'HDS' and 'BAX' networks in that sequence.

The delivery location of the order will be used to assess onto which trip the order can be added and trunk trips can be created to ensure that the order is transported between depots in time for the departure of the delivery trip.

There must be an existing stop on the trip for the order to be added to the same stop on that trip.

The 'Master' locations will be suitable to ensure that the same location code is used in the different networks for the different cost centres for the orders.

8.19 Scheduling using Network Schedule

The 'Network Schedule' will be used to schedule orders between for collection into depots and delivery out of depots, or direct deliveries between supplier and customer locations, using the fixed routes and carrier routes.

This process may be used for cross-docking across country or between countries to include flight trips and sea crossings.

8.20 Scheduling using NHSBT Schedule

The 'NHSBT Schedule' is a specific process to assess the fixed routes and add orders to the trips that have been created for the fixed routes.

This process will be used to schedule orders up to a week in advance.

8.21 Scheduling using Fixed Drop Schedule

Warning: This is an incomplete guide.

The Fixed Drop scheduling engine is a specific process that schedules according to fixed drops on fixed routes.

The fixed drops are stored against each location.

The orders received MUST include an order reference "RUN_NUMBER" set to a valid route code, and that fixed route MUST have a roue end time.



The process can schedule:

- Desk collection jobs onto DSK trips
- Collection/Delivery radial jobs onto fixed route trips labelled as RTE trips (the prefix is configurable through system parameters).
- Trunk movements between depots
- 3rd-party trips routed onto trips labelled as 3PL trips.

Each RTE trip created will be marked with the fixed drop number (visible in the planning screen). Jobs will be placed on the trips in drop number sequence. CL stops will be marked as drop number 999, whilst any jobs automatically planned onto these trips by the route number will be marked as drop 998.

8.22 Scheduling Engine Processing

The different aspects of the scheduling engine will be run in sequence as described above.

Only the orders that have not been marked for manual scheduling, or that have previously been processed automatically, will be processed if the cost centre and the customer allow automatic scheduling.

8.23 Pack Confirmation/Labelling

There are 2 methods of scheduling the order ready for when it is being picked and packed and labelled:

• C-TMS Pack Confirmation

A 'Pack' button can be pressed in the 'Order Summary' and 'Order Details' screens to schedule the order and then print a label to a default printer (for the user and also for the carrier for the user).

These 'Pack' buttons are designed to be used for orders that have been entered manually in C-TMS rather than in the source warehousing system.

Note that the orders can be scheduled automatically when the scheduling engine is running and the orders can be scheduled without delay because the scheduling threshold will not apply to this packing process.

• WMS Pack Confirmation

A pack 'XML' file can be generated from the source WMS system (e.g. 'SAP') to pack the order and print a label optionally.

A pack 'CSV' file can be generated from the source WMS system (e.g. a 'CIPD' file from 'Unison') to pack the order and print a label optionally.

The EDI parameter 'PRINT_LABEL' must be set to 'Y' for a label to be printed to either the advised printer or a default printer for the user.

Note that the order for such pack confirmation must already be scheduled for the label to be printed in the required format for the carrier of the delivery trip.

Print Label

All of the labels, or a selection of the labels, may be printed or reprinted in the 'Print Label' screen in C-TMS.

However, a fresh set of the labels will be printed via the generation of a new pack 'XML' file from the source WMS system.

8.24 Tracking References

The tracking references will be generated for the labels as they are printed.

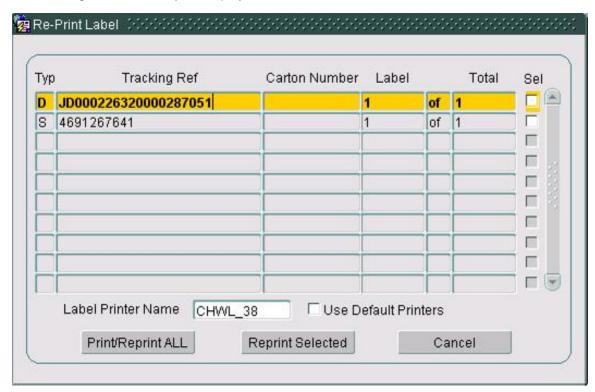


These tracking references will be printed on the labels and they will be used by the external carriers for tracking the items for the orders as they are being delivered.

Each carrier can have its own format and sequence numbers so that the labels and the tracking references are unique for that carrier.

The tracking references will be stored against the carton numbers if the order is packed via a 'CSV' file called 'CIPD' from 'Unison'.

The tracking references may be displayed in the 'Print Label' screen in the 'Orders' screen:



8.25 Unscheduling Orders

If an order is unscheduled from its delivery trip, the existing tracking references will be removed because the order will have to be potentially repacked and relabelled when it is rescheduled in case a different carrier is used to deliver the order.

The 'Manual Schedule' flag will be set to indicate that the order will not be reprocessed automatically by the scheduling engine to ensure that the order is not simply rescheduled onto the same trip.

8.26 Manual Trip Planning

The orders can be scheduled manually if they have failed to schedule automatically or they have been unscheduled for replanning.

The same rules can be applied for the manual planning to ensure that the order can be taken by the carrier, the 'TRIP_VALIDATE_PARCEL_ORDER_ASSIGNMENT' system parameter will control this validation when it is set to 'Y'.

The 'TRIP_PREVENT_PARCEL_CARRIER_ASSIGNMENT' system parameter can be used to prevent orders being assigned to trips for 'Parcel' carriers when it is set to 'Y'.



8.27 CITD Files

Files can be generated for the 'Unison' source WMS system to return the tracking references for storage against the packs that have been created there.

The file can be triggered when the trip status is updated to 'ACCEPTED' and the order has been packed in 'Unison' and a carton number has been provided.

8.28 Despatch Confirmation

A check can be performed when the trip is despatched in the trip planning screens to ensure that all of the orders on the trip have been fully packed.

The system parameter 'X' will control this validation for the trips for the external carriers.

Note that the unpacked orders will have to be unscheduled or packed before the trip can be despatched.

8.29 Physical Manifests

A physical manifest may be printed when the trip is updated to 'EN-ROUTE' status.

The physical manifest will be printed to the default printer for the user if the carrier of the delivery trip is setup to print a report.

8.30 Electronic Manifests

An electronic manifest may be generated as a 'XML' file when the trip is updated to a specified status and/or when it is updated to 'EN-ROUTE' status.

The trip status may be specified as an EDI parameter called 'STATUS' (e.g. 'PLANNED' and 'TENDERED').

Some carriers (e.g. 'Polarspeed') cannot accept multiple files for the same order so they will only send a single electronic manifest when the trip is 'EN-ROUTE'.

Other carriers will accept multiple updates as the trip is planned with more orders and when those orders are packed differently.

Only the changes since the last file was generated will be included in the next file for the specified trip status.

8.31 Paragon Considerations

There are limitations for using Paragon to plan all of the orders rather than to plan the orders for the own fleet and then allow the scheduling engine to plan the remaining orders and the orders that have been mandated for an external carrier:

- Paragon will need to assess the individual gazetteer data for the external carriers.
- Paragon will need to assess the shipment size, DU type and product type for the external carriers.
- Paragon will need to derive the carrier service level for the carrier based on the service level of the order.
- Paragon will need to ensure that a mandated carrier is used.
- Any orders that have been printed and that have generated a tracking reference will lose those references if they are unscheduled (which is what Paragon does to respin a trip).
- Some of the labels display a 'Trip ID' so they will need to be reprinted if the order is rescheduled (e.g. 'Standard', 'Penguin').
- Some of the labels display data from the carrier route code name and this route code will not be provided by Paragon (e.g. '(EMA)' and '(OXF)' are translated as the origin code for the DHL Express labels).



- The trip stop times will not be calculated for the external carriers based on the time windows of the orders on the stops but they will be calculated based on the distance and time from the previous stop.
- The trip stop times are used to advise the external carrier when the orders will be delivered in their network via the 'Electronic Manifest'.
- Files may be generated for the 'Electronic Manifest' when the orders are unscheduled temporarily.

8.32 Depot Sweep Processes

Warning: This is an incomplete guide.

The Depot Sweep EDI processes can move orders between schedules automatically if not completed.

These processes are most commonly associated with fixed drop scheduling and are useful for Paragon planning, as the schedule is linked to the Paragon working area for each day.

The fundamental principles are:

- Part of scheduling engine
 - ♦ Any order than cannot be planned to look for a further run on that day and automatically plan instead. The process will check the routes and change the order reference to plan onto a different run, reset the manual schedule flag and let the next schedule engine run pick it up. If no runs found on that day, then remains unscheduled (and will be carried forward on planning day end).
- Planning Day end
 - Any orders of any type not fully planned at the end of the day carried forward to next day (including non-working days). The scheduling engine process above will then pick up the order and plan according to the rules above.
 - ♦ Expected to be scheduled process once per day, on or around 1830-1900.
- Actual day end
 - Any DSK (Desk Collections) orders that have not been completed (debriefed) at end of day to carry forward to next day and planned automatically onto the next DSK collection trip.
 - Reset any TOTD orders and next day orders that remain unscheduled.
 - Expected to be scheduled process once per day, around (before) 2359.

This is the definition of the automated scheduling and carry-forward rules. It will also be possible to carry an order forward manually (for example, when determining on Monday that you will not deliver until Thursday, you can carry the order forward to Thursday?s schedule manually from the planning screen.

The depot sweep processes can be configured with parameters to control which depot is affected by the process, what route types are affected and what action to take, as shown below:

Parameter	Value	Purpose
DEPOT_SWEEP	Υ	Identifies that the EDI process is to perform the depot sweep.
DEPOT	blank or RDC location	Identifies the depot that is affected by this depot sweep, or all depots if blank.
ROUTE_TYPE	COLLECT_DESK	Identifies that the EDI process will assess the orders for the collection desks based on the run number of their route.
ROUTE_TYPE		Identifies that the EDI process will assess the orders for collection from the customers or for delivery to the customers based on the run number of their route.
ACTION	CARRY_FORWARD	Identifies that the EDI process will assess the orders and carry forward any unscheduled orders to the next day.
ACTION		Identifies that the EDI process will assess the orders and unschedule any incomplete orders from their incomplete trips and carry forward any unscheduled orders to the next day.

Note: The Route Type can include a list of types of routes that are separated by a comma.



8.33 Potential Developments

There are potential developments to enable the scheduling engine to be more specific for the operations:

- Include a matrix for the deliveries for the own fleet for the carrier routes and fixed routes to indicate when the location will accept the order.
- This matrix would be used to set the order time windows to use the next delivery date for the location should an invalid delivery date be provided.
- The gazetteer data can be assessed instead of the carrier routes if appropriate routes and zones cannot be maintained effectively.



9 SAVING

Warning: This is an incomplete guide.



10 Scheduling Engine Overview

The scheduling engine is an automated process that will select unscheduled orders and apply them to the available trips or create new trips as required based on the routes that exist.

The fixed routes (for own fleet) and the carriers routes (for external carriers but also for own fleet parcel services) will be assessed based on rules to schedule the orders.

10.1 System Parameters

'AUTO_SCHEDULING'

A cost centre parameter that controls which orders are considered by the scheduling engine, the parameter must be set to 'Y' for the cost centre of the order for the order to be scheduling automatically.

• 'ENGINE_RUNNING'

A cost centre parameter which will be set automatically to 'Y' by the schedule engine process when the process is being run for the database.

This system parameter will be set back to 'N' by the process once all of the available orders have been processed.

• 'MAINTAIN_SCHEDULE_DATES'

A cost centre parameter which will control if the order time windows will be derived for the 'XML' and 'CSV' orders.

The system parameter must be set to 'Y' for the cost centre of the order to be active.

• 'TRIP_PREVENT_PARCEL_CARRIER_ASSIGNMENT'

A cost centre parameter which will control if orders can be planned manually to a trip for a 'Parcel' carrier.

The system parameter must be set to 'Y' for the cost centre of the order to be active.

'TRIP_VALIDATE_PARCEL_ORDER_ASSIGNMENT'

A cost centre parameter which will control if orders are validated when they are planned manually to a trip for a 'Parcel' carrier.

The system parameter must be set to 'Y' for the cost centre of the order to be active.

• 'TRM_3PL_REROUTE'

A system parameter that can be set to 'Y' to enable the functionality in the Fixed-Drop Scheduling engine to plan the orders to the next available route.

• 'TMP_ENG_TRIP_PREFIX'

A system parameter that controls the prefix that the trips created from fixed drop scheduling drops will be prefixed with e.g. TMP, MAN, RTE etc.

If the trips are to be replanned by Paragon, set this to TMP. If the trips are not to be replanned, then set this to RTE (or some other easily recognizable prefix).

10.2 Scheduling Engine Control

The scheduling engine may be defined in the 'Scheduling Maintenance' screen.

To use the screen, the user must be logged in as 'EDI_OWNER' so that the process is started with the correct level of access control.



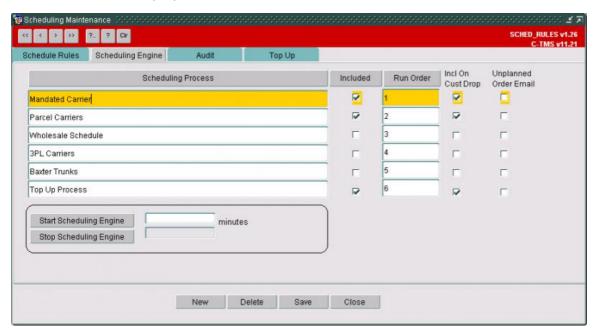
The screen allows users to start and stop the scheduling engine and select which functionality runs and the sequence in which the different aspects of the scheduling engine are run.

Note that if a process is not ticked as being 'Included' IT WILL NOT BE RUN.

The 'Audit' tab page will record each successful completion of the scheduling engine and will also display any errors which occurred during the processing of the orders.

The audit does not record why an order failed to schedule (because it would have to record why it failed to schedule with every route available).

There are different processes that the scheduling engine can use - 'Parcel Carriers', '3PL Carriers', 'Wholesale Schedule', 'Mandated Carriers', 'Top Up Process', 'Network Schedule' and 'NHSBT Schedule':



The 'Run Order' can be specified to the sequence in which each type of scheduling engine process will be run so that certain types of orders and carriers can be assessed preferentially.

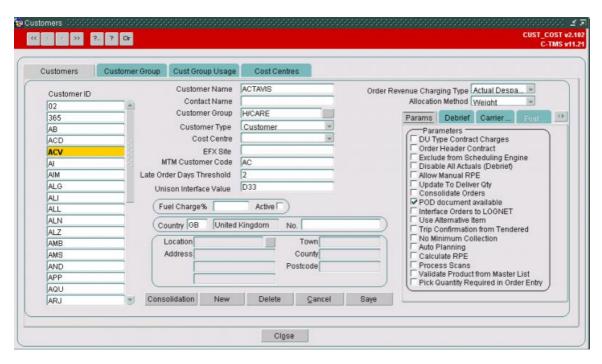
In this example, the 'Mandated Carrier' process will be run first.

10.3 Customer Settings

• 'Exclude From Scheduling Engine'

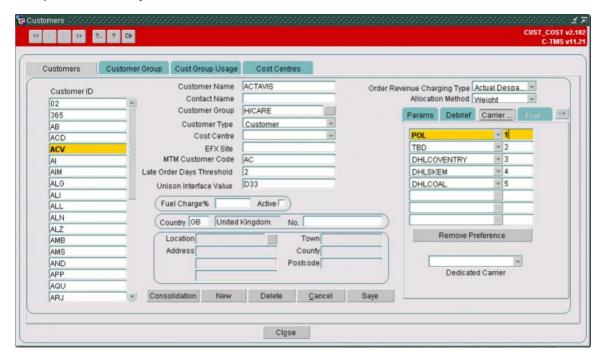
Customers must be actively excluded from the scheduling engine if they do not want to have their orders scheduled automatically:





• 'Carrier Preferences'

The carrier must exist as a preferred carrier for the customer of the order if the customer has a list of carriers that it will accept for the delivery of its orders:



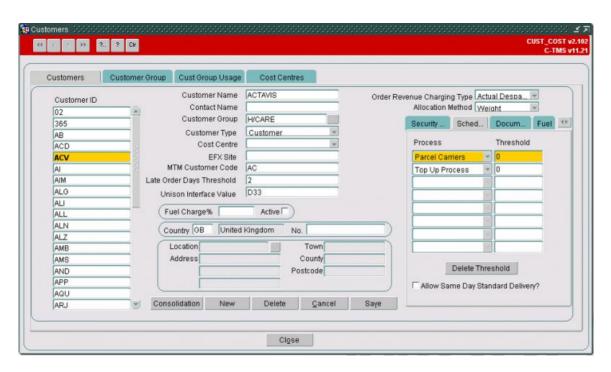
In this example, the 'POL' carrier will be assessed first and if that carrier cannot take the order, the 'TBD' carrier will be assessed next.

Note that if a customer has no preference, the orders for that customer may be delivered by any carrier without preference.

• 'Scheduling Threshold'

A threshold value may be set to exclude the order from the scheduling engine until a set period of time prior to its early delivery date and time:



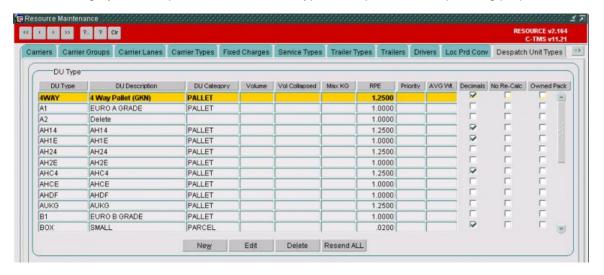


The number of minutes may be specified and a value of '0' will indicate that the order cannot be scheduled automatically in the particular aspect of the scheduling engine until the early delivery date and time has been reached by the system date and time (i.e. in the local time zone).

Note that if a threshold value is not specified that the order will effectively be valid for the aspect of the scheduling engine to process once it has been created, validated and set to 'UNSCHEDULED' status.

10.4 DU Category

The DU category can be specified to denote the type of despatch unit for planning purposes:



A DU category of 'PALLET' indicates that it is a pallet that would normally be transported by own fleet.

A DU category of 'PARCEL' indicates that it is a parcel that would normally be transported by a parcel carrier service by own fleet or by an external 'PARCEL' carrier.

Note that a DU type will have a DU category of 'PALLET' by default unless stated otherwise.

The DU category of an order will be set to 'PARCEL' based on the presence of a DU type having a DU category of 'PARCEL'.

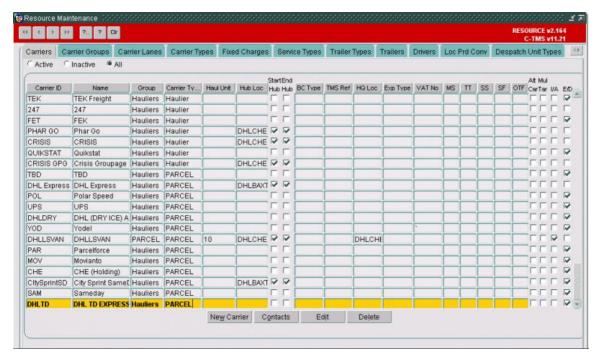


The DU category will then be used to decide which set of routes (fixed for 'PALLET' or carrier for 'PARCEL') to check for the derivation of the order time windows when the orders are created via the 'XML' and 'CSV' files.

Note that some 'PARCEL' carriers will be able to take 'PALLET' items should they be setup to do so in the 'Carrier Rules' screen for the DU types.

10.5 Carrier Type

The 'Carrier Type' will determine the scheduling engine process in which that carrier will be assessed:

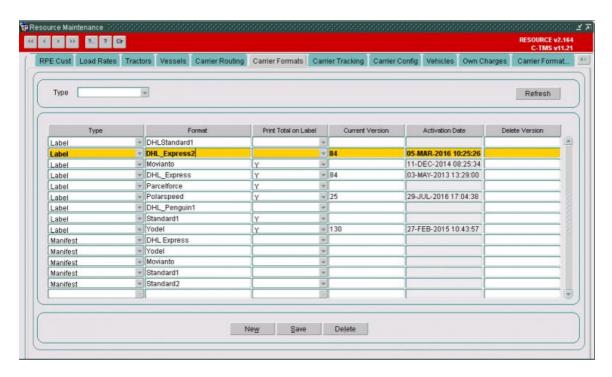


The 'Carrier Type' may be '3PL' or 'PARCEL' to apply the specific scheduling engine process.

10.6 Carrier Formats

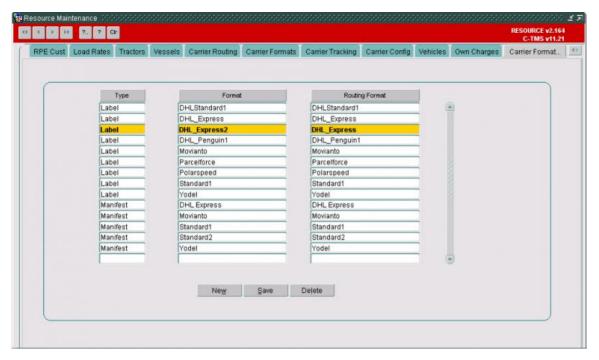
Different formats can be setup for each carrier:





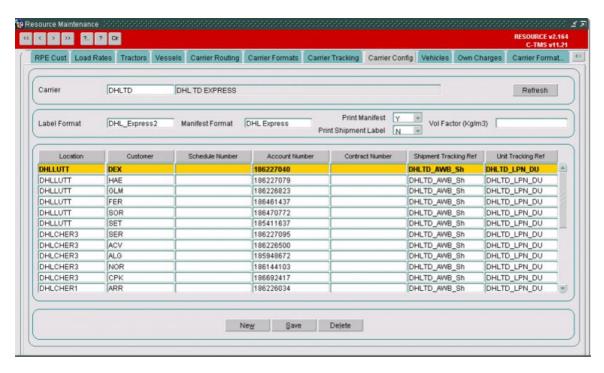
The current version of the gazetteer data can be stored for the label format.

The label format can be assigned to a routing format to obtain the gazetteer data:



The carrier can be configured to have a label format and a manifest format:

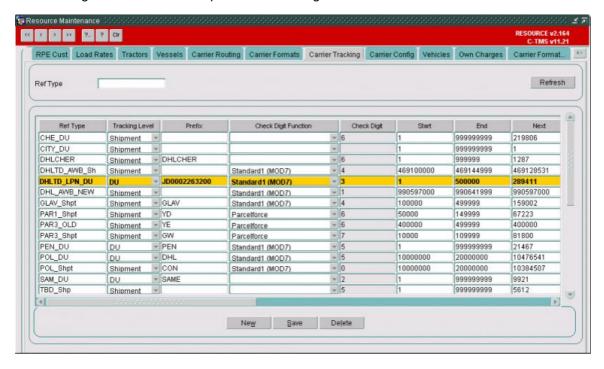




The physical manifest can also be requested to be printed automatically when the trip is despatched.

The tracking references can be applied by customer by depot.

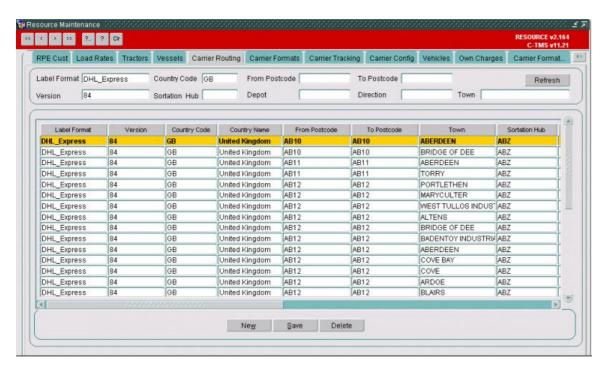
The tracking references can be updated with a range of values for the carriers:



10.7 Carrier Gazetteer

The gazetteer data can be imported for each carrier for the latest version to be applied:





The carrier routing data will be used for the production of the carrier labels and this data should be used to specify the carrier rules for ensuring that the orders are scheduled correctly.

Note that this data is not used in the scheduling engine or the derivation of the order time windows.

10.8 Carrier Rules

The carrier rules will apply to the assessment of the parcel carriers:

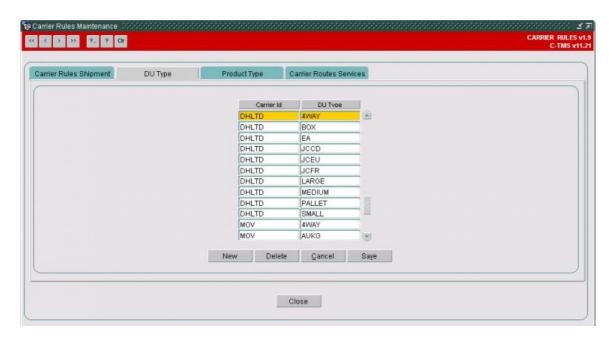
Shipment Size



The carrier must be able to transport the size of the shipment (i.e. based on the total for the order) based on the weight and the volume.

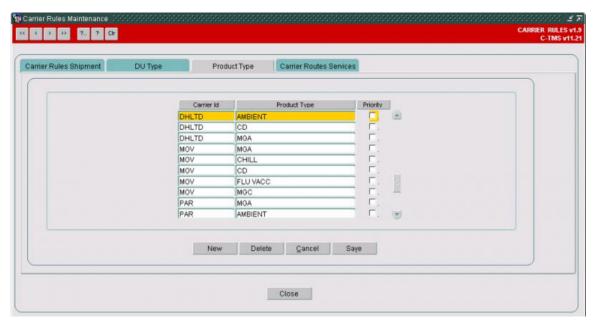
• DU Type





The carrier must be able to transport the DU types that exist for the order lines (as packed and despatched).

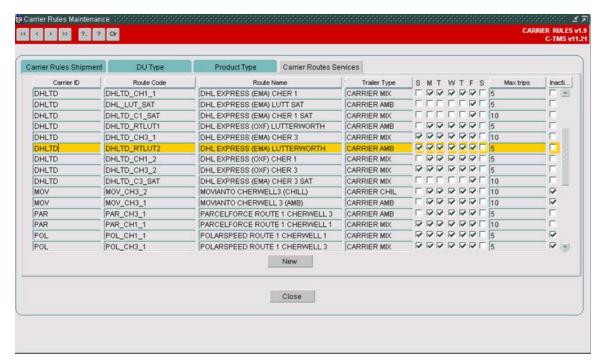
• Product Type



The carrier must be able to transport the product types that exist for the order lines (as packed and despatched).

• Service Level







The carrier route will indicate if the carrier can deliver the order from the source depot.

The source depot and ant cross-docking depots can be listed with a cut-off time to ensure that the order is available prior to the expected loading time of the vehicle.

The days of the week on which the route operates can be specified.

The type of trailer can be specified and further validation will be performed to ensure that the products for the order can be loaded onto the trailer for the trip for the route.

The carrier routes should be based on the gazetteer information that is provided by the external carrier to ensure that the carrier will be able to deliver the order on the specified date and by the specified time.

The service level of the order and the destination will be assessed to ensure that the delivery location is valid for the route.



The service level can be mapped to the appropriate service level for the carrier to indicate how it will be transported within the carrier's own network.

The 'Destination Type' and 'Destination' will indicate how the delivery location of the order is assessed:

'ZONE' indicates that there may be multiple locations that are valid for the route.

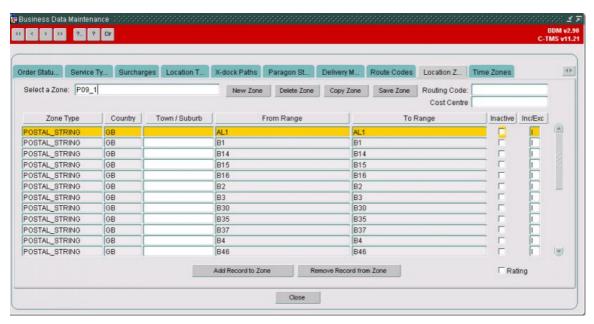
'COUNTRY' indicates that all orders for delivery in a country are valid for the route.

'LOCATION' indicates that orders just for that location are valid for the route.

Note that different destination types can apply for the same service level.

10.9 Location Zones

The location zones can be specified in the 'Business Data Maintenance' screen:



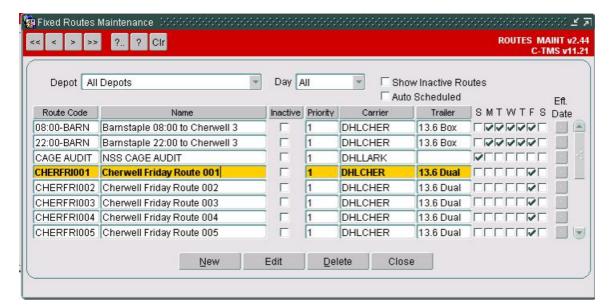
In this example, the 'P09_1' location zone incorporates various postcodes (using the prefix as a postal string) for the delivery locations.

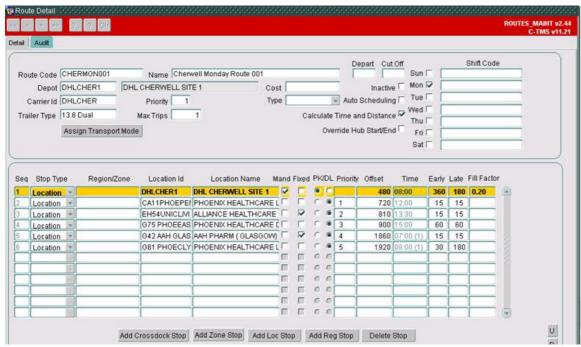
The 'Inc/Exc' flag indicates if the type of zone is being included or excluded from the location zone to enable greater flexibility to specify the delivery locations that are valid for the particular location zone.

10.10 Fixed Routes

The fixed routes will apply to the assessment of the own fleet carriers:







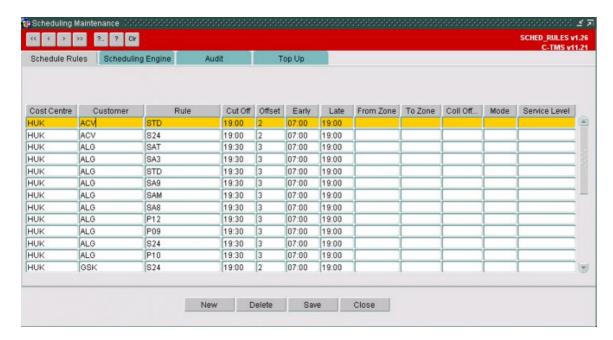
In this example, the route is being used to collect from, and deliver to, specific locations.

The 'Stop Type' can be specified to include 'Zone' as well as 'Location' to enable orders to be valid for the route without having to specify each location as a stop.

10.11 Schedule Rules

The schedule rules are used to calculate the time windows for the 'PARCEL' orders:





For example, 'HUK' orders will be provided with an early delivery date and the time windows will be calculated for that date and time.

The 'Rule' is the service level of the order.

The 'Offset' is a number of days for the delivery to be made (i.e. the order must be available 2 days before the delivery date for the 'STD' service level for the 'ACV' customer).

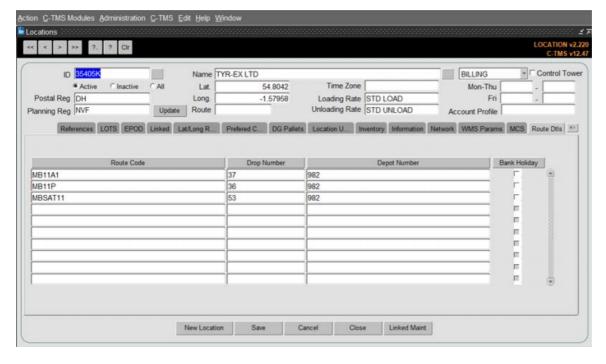
The 'Cut Off' is a time after which a day will need to be added for the expected delivery for it to be made.

Note that the weekends will be offset automatically.

10.12 Location Fixed Route Details

Note: Applies to fixed drop scheduling only.

Each location that can be planned as a destination may have multiple routes (run numbers) assigned to the location.





The routes can be specified as being applicable solely to bank holidays.

10.13 Order Time Window Derivation

The time windows can be derived for the orders that are created via the 'XML' and 'CSV' files by assessing the stock being ordered and the service level.

The assessment of the service level and the delivery type will be performed for the orders when they are created via 'CSV' or 'XML' files and the 'MAINTAIN_SCHEDULE_DATES' system parameter is 'Y' for the cost centre of the order.

The **DU** category of the order is used to decide whether to check the fixed routes for 'PALLET' or the schedule rules for 'PARCEL'.

'PARCEL' will only be specified if the order only contains DU types with a category of 'PARCEL'.

'PALLET' types will assess the fixed routes for a direct or a radial route for the early delivery date, the locations of the order and the mandated carrier if provided.

If the early delivery date is known the route will be checked that it is active on that day of the week.

Future early delivery dates will not offset the date:

Service Level 'Standard'

Delivery Type 'On Sched'

Early Avail SYSDATE

Late Avail Delivery Date at Late Target Time

Early Del Delivery Date at Early Target Time

Late Del Delivery Date at Late Target Time

Or

Service Level 'Standard'

Delivery Type 'Off Sched'.

Early Avail SYSDATE

Late Avail Delivery Date at 17:00

Early Del Delivery Date at 08:00

Late Del Delivery Date at 17:00

Same day early delivery date may offset the date:

Service Level 'Standard'

Delivery Type 'On Sched'

Early Avail SYSDATE

Late Avail Delivery Date at Late Target Time

Early Del Delivery Date at Early Target Time

Late Del Delivery Date at Late Target Time

Or



Service Level 'Standard'

Delivery Type 'Off Sched'.

Early Avail SYSDATE

Late Avail Delivery Date + 3 days at 17:00

Early Del Delivery Date +3 days at 08:00

Late Del Delivery Date + 3 days at 17:00

Note that the delivery date may also be offset to avoid the weekends so it may be +4 or +5 days.

Past early delivery date will offset the date:

Service Level 'Standard'

Delivery Type 'On Sched'

Early Avail SYSDATE

Late Avail Delivery Date + 3 days at Late Target Time

Early Del Delivery Date + 3 days at Early Target Time

Late Del Delivery Date + 3 days at Late Target Time

Or

Service Level 'Standard'

Delivery Type 'Off Sched'.

Early Avail SYSDATE

Late Avail Delivery Date + 3 days + 3 days at 17:00

Early Del Delivery Date +3 days + 3 days at 08:00

Late Del Delivery Date + 3 days + 3 days at 17:00

Note that the delivery date may also be offset to avoid the weekends so it may be +4 or +5 days.

No early delivery date will offset the date:

Service Level 'Standard'

Delivery Type 'On Sched'

Early Avail SYSDATE

Late Avail Next Delivery Date at Late Target Time

Early Del Next Delivery Date at Early Target Time

Late Del Next Delivery Date at Late Target Time

Or

Service Level 'Standard'

Delivery Type 'Off Sched'.

Early Avail SYSDATE



Late Avail Delivery Date + 3 days at 17:00

Early Del Delivery Date +3 days at 08:00

Late Del Delivery Date + 3 days at 17:00

Note that the delivery date may also be offset to avoid the weekends so it may be +4 or +5 days.

'PARCEL' types will use the delivery date, cost centre, customer and service level provided (or a default service level from 'OMS_DEFAULT_SERVICE_LEVEL') to assess the schedule rules.

An early delivery date will calculate the collection date using the delivery offset days for the schedule rule:

Early Avail Collection Date at 00:00

Late Avail Delivery Date at Late Time

Early Del Delivery Date at Early Time

Late Del Delivery Date at Late Time

No early delivery date will offset the date when before the cut-off time for the SYSDATE:

Early Avail SYSDATE at 00:00

Late Avail SYSDATE + Delivery Offset Days at Late Time

Early Del SYSDATE + Delivery Offset Days at Early Time

Late Del SYSDATE + Delivery Offset Days at Late Time

No early delivery date will offset the date when after the cut-off time for the SYSDATE:

Early Avail SYSDATE at 00:00

Late Avail SYSDATE + 1 day + Delivery Offset Days at Late Time

Early Del SYSDATE + 1 day + Delivery Offset Days at Early Time

Late Del SYSDATE + 1 day + Delivery Offset Days at Late Time

If SYSDATE is Friday the weekend will be offset at the start for the above calculations when no early delivery date is provided.

Note that the derived delivery date may also be offset to avoid the weekends.

'XML' orders will assess the above rules if not all of the order time windows are provided.

'CSV' orders will assess the above rules if not all of the order time windows are provided.

The delivery type of 'On Sched' and 'Off Sched' can be set for the 'CSV' and 'XML' orders but this code is not run elsewhere, therefore the order should not have changed automatically the delivery type when the order was unscheduled.

10.14 Scheduling using Parcel Carriers

The 'Parcel Carriers' will assess the carriers that have been setup with a 'Carrier Type' of 'PARCEL'.

The orders will be selected provided that the carrier accepts the type of goods that are being transported.

This process will either create a new 'PCL' trip for the order or it will add the order to an existing 'PCL' trip for the same route for the same delivery date minus the nunber of offset days for the service level.



The **capacity** of the current trip(s) for the route will be assessed against the **total RPE**, **weight and** volume of the order being processed:

- If there are no trips for the day for the route and the capacity of the trailer will not be exceeded by the order then a new trip will be created.
- If there is spare capacity then the current trip will be used.
- If there is no spare capacity and the total number of trips for the route for the day has reached the maximum number of trips for the route then the order will remain unscheduled.

The schedule of the trips will be based on the early delivery date and time of the order being processed minus the number of offset days for the service level of the order.

Note that the 'PCL' trips will be handed-off to an external carrier so they will be assigned to a **schedule for a previous** day based on the number of 'Offset Days' for the carrier route for the service level of the order.

The intention is to advise the external carrier when they need to collect the orders from the depot for delivery within their own network.

The orders for the 'Parcel' carriers can be cross-docked prior to their delivery trips.

The 'Auto Processed PCL' flag will be set if the order has been assessed for this aspect of the scheduling engine.

10.15 Scheduling using 3PL Carriers

The '3PL Carriers' will assess the carriers that have been setup with a 'Carrier Type' of '3PL'.

The orders will be selected provided that the carrier accepts the type of goods that are being transported.

The same logic will apply to the '3PL' carriers as to the 'Parcel' carriers and the orders for the '3PL' carriers can be cross-docked prior to their delivery trips.

The 'Auto Processed 3PL' flag will be set if the order has been assessed for this aspect of the scheduling engine.

10.16 Scheduling using Wholesale Schedule

The 'Wholesale Schedule' will assess the fixed routes to potentially cross-dock the orders multiple times prior to delivery.

There are 3 different types of trips that can be assessed for **unscheduled orders**:

Collection

The orders will be assessed based on the source and delivery locations of the order for any 'Cross-dock' stops that exist for a route.

• Trunk

The orders will be assessed based on the stops for collection from the current location of the order.

Direct

The orders will be assessed based on the stops for collection from the source location and delivery to the location/zone of the delivery location of the order.

These orders will not be cross-docked.

There are 2 different types of trips that can be assessed for partially scheduled orders:

• Trunk

The orders will be assessed based on the stops for collection from the current location of the order.



Radial

The orders will be assessed based on the stops for collection from the current location and delivery to the location of the delivery location of the order.

The capacity of the current trip(s) for the route will be assessed against the total RPE, weight and volume of the order being processed to decide if a trip can be used:

- If there are no trips for the day for the route and the capacity of the trailer will not be exceeded by the order then a **new trip** will be created.
- If there is spare capacity then the current trip will be used.
- If there is no spare capacity and the total number of trips for the route for the day has reached the maximum number of trips for the route then the order will remain unscheduled.

Note that is a 'PARCEL' order is being processed, it can be added to a 'RTE' trip but it cannot create a 'RTE' trip.

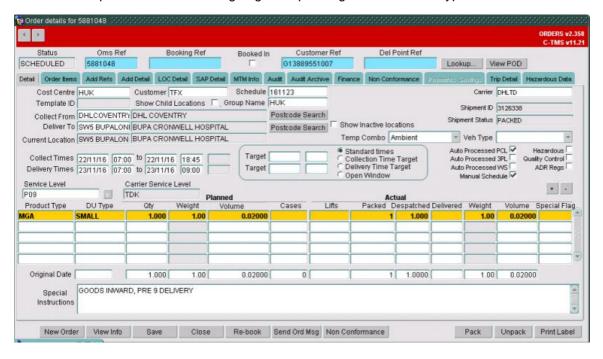
The schedule of the 'RTE' trips will be based on the schedule for the early delivery date and time of the order being processed.

The orders for the 'Wholesale' carriers can be cross-docked prior to their delivery trips.

The 'Auto Processed WS' flag will be set if the order has been assessed for this aspect of the scheduling engine.

10.17 Scheduling using Mandated Carrier

The orders that have a mandated carrier in the 'Carrier' field will be assessed for the appropriate '3PL, 'Parcel' or 'Wholesale' aspects of the scheduling engine depending on the 'Carrier Type' of the mandated carrier:

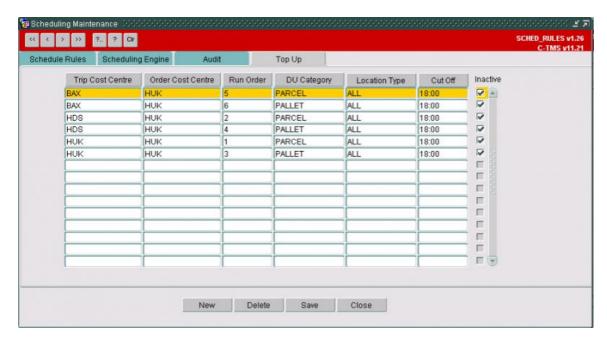


In this example, 'DHLTD' must be used to deliver the order.

10.18 Scheduling using Top Up Process

The 'Top Up Process' has parameters that can be used to decide which orders can be used to 'top-up' which trips:





In this example, the 'HUK' orders can be topped-up onto trips for 'HUK', 'HDS' and 'BAX' networks in that sequence.

The delivery location of the order will be used to assess onto which trip the order can be added and trunk trips can be created to ensure that the order is transported between depots in time for the departure of the delivery trip.

There must be an existing stop on the trip for the order to be added to the same stop on that trip.

The 'Master' locations will be suitable to ensure that the same location code is used in the different networks for the different cost centres for the orders.

10.19 Scheduling using Network Schedule

The 'Network Schedule' will be used to schedule orders between for collection into depots and delivery out of depots, or direct deliveries between supplier and customer locations, using the fixed routes and carrier routes.

This process may be used for cross-docking across country or between countries to include flight trips and sea crossings.

10.20 Scheduling using NHSBT Schedule

The 'NHSBT Schedule' is a specific process to assess the fixed routes and add orders to the trips that have been created for the fixed routes.

This process will be used to schedule orders up to a week in advance.

10.21 Scheduling using Fixed Drop Schedule

Warning: This is an incomplete guide.

The Fixed Drop scheduling engine is a specific process that schedules according to fixed drops on fixed routes.

The fixed drops are stored against each location.

The orders received MUST include an order reference "RUN_NUMBER" set to a valid route code, and that fixed route MUST have a roue end time.



The process can schedule:

- Desk collection jobs onto DSK trips
- Collection/Delivery radial jobs onto fixed route trips labelled as RTE trips (the prefix is configurable through system parameters).
- Trunk movements between depots
- 3rd-party trips routed onto trips labelled as 3PL trips.

Each RTE trip created will be marked with the fixed drop number (visible in the planning screen). Jobs will be placed on the trips in drop number sequence. CL stops will be marked as drop number 999, whilst any jobs automatically planned onto these trips by the route number will be marked as drop 998.

10.22 Scheduling Engine Processing

The different aspects of the scheduling engine will be run in sequence as described above.

Only the orders that have not been marked for manual scheduling, or that have previously been processed automatically, will be processed if the cost centre and the customer allow automatic scheduling.

10.23 Pack Confirmation/Labelling

There are 2 methods of scheduling the order ready for when it is being picked and packed and labelled:

• C-TMS Pack Confirmation

A 'Pack' button can be pressed in the 'Order Summary' and 'Order Details' screens to schedule the order and then print a label to a default printer (for the user and also for the carrier for the user).

These 'Pack' buttons are designed to be used for orders that have been entered manually in C-TMS rather than in the source warehousing system.

Note that the orders can be scheduled automatically when the scheduling engine is running and the orders can be scheduled without delay because the scheduling threshold will not apply to this packing process.

• WMS Pack Confirmation

A pack 'XML' file can be generated from the source WMS system (e.g. 'SAP') to pack the order and print a label optionally.

A pack 'CSV' file can be generated from the source WMS system (e.g. a 'CIPD' file from 'Unison') to pack the order and print a label optionally.

The EDI parameter 'PRINT_LABEL' must be set to 'Y' for a label to be printed to either the advised printer or a default printer for the user.

Note that the order for such pack confirmation must already be scheduled for the label to be printed in the required format for the carrier of the delivery trip.

Print Label

All of the labels, or a selection of the labels, may be printed or reprinted in the 'Print Label' screen in C-TMS.

However, a fresh set of the labels will be printed via the generation of a new pack 'XML' file from the source WMS system.

10.24 Tracking References

The tracking references will be generated for the labels as they are printed.

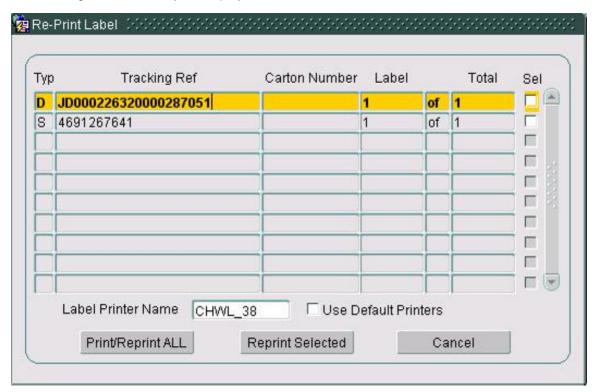


These tracking references will be printed on the labels and they will be used by the external carriers for tracking the items for the orders as they are being delivered.

Each carrier can have its own format and sequence numbers so that the labels and the tracking references are unique for that carrier.

The tracking references will be stored against the carton numbers if the order is packed via a 'CSV' file called 'CIPD' from 'Unison'.

The tracking references may be displayed in the 'Print Label' screen in the 'Orders' screen:



10.25 Unscheduling Orders

If an order is unscheduled from its delivery trip, the existing tracking references will be removed because the order will have to be potentially repacked and relabelled when it is rescheduled in case a different carrier is used to deliver the order.

The 'Manual Schedule' flag will be set to indicate that the order will not be reprocessed automatically by the scheduling engine to ensure that the order is not simply rescheduled onto the same trip.

10.26 Manual Trip Planning

The orders can be scheduled manually if they have failed to schedule automatically or they have been unscheduled for replanning.

The same rules can be applied for the manual planning to ensure that the order can be taken by the carrier, the 'TRIP_VALIDATE_PARCEL_ORDER_ASSIGNMENT' system parameter will control this validation when it is set to 'Y'.

The 'TRIP_PREVENT_PARCEL_CARRIER_ASSIGNMENT' system parameter can be used to prevent orders being assigned to trips for 'Parcel' carriers when it is set to 'Y'.



10.27 CITD Files

Files can be generated for the 'Unison' source WMS system to return the tracking references for storage against the packs that have been created there.

The file can be triggered when the trip status is updated to 'ACCEPTED' and the order has been packed in 'Unison' and a carton number has been provided.

10.28 Despatch Confirmation

A check can be performed when the trip is despatched in the trip planning screens to ensure that all of the orders on the trip have been fully packed.

The system parameter 'X' will control this validation for the trips for the external carriers.

Note that the unpacked orders will have to be unscheduled or packed before the trip can be despatched.

10.29 Physical Manifests

A physical manifest may be printed when the trip is updated to 'EN-ROUTE' status.

The physical manifest will be printed to the default printer for the user if the carrier of the delivery trip is setup to print a report.

10.30 Electronic Manifests

An electronic manifest may be generated as a 'XML' file when the trip is updated to a specified status and/or when it is updated to 'EN-ROUTE' status.

The trip status may be specified as an EDI parameter called 'STATUS' (e.g. 'PLANNED' and 'TENDERED').

Some carriers (e.g. 'Polarspeed') cannot accept multiple files for the same order so they will only send a single electronic manifest when the trip is 'EN-ROUTE'.

Other carriers will accept multiple updates as the trip is planned with more orders and when those orders are packed differently.

Only the changes since the last file was generated will be included in the next file for the specified trip status.

10.31 Paragon Considerations

There are limitations for using Paragon to plan all of the orders rather than to plan the orders for the own fleet and then allow the scheduling engine to plan the remaining orders and the orders that have been mandated for an external carrier:

- Paragon will need to assess the individual gazetteer data for the external carriers.
- Paragon will need to assess the shipment size, DU type and product type for the external carriers.
- Paragon will need to derive the carrier service level for the carrier based on the service level of the order.
- Paragon will need to ensure that a mandated carrier is used.
- Any orders that have been printed and that have generated a tracking reference will lose those references if they are unscheduled (which is what Paragon does to respin a trip).
- Some of the labels display a 'Trip ID' so they will need to be reprinted if the order is rescheduled (e.g. 'Standard', 'Penguin').
- Some of the labels display data from the carrier route code name and this route code will not be provided by Paragon (e.g. '(EMA)' and '(OXF)' are translated as the origin code for the DHL Express labels).



- The trip stop times will not be calculated for the external carriers based on the time windows of the orders on the stops but they will be calculated based on the distance and time from the previous stop.
- The trip stop times are used to advise the external carrier when the orders will be delivered in their network via the 'Electronic Manifest'.
- Files may be generated for the 'Electronic Manifest' when the orders are unscheduled temporarily.

10.32 Depot Sweep Processes

Warning: This is an incomplete guide.

The Depot Sweep EDI processes can move orders between schedules automatically if not completed.

These processes are most commonly associated with fixed drop scheduling and are useful for Paragon planning, as the schedule is linked to the Paragon working area for each day.

The fundamental principles are:

- Part of scheduling engine
 - ♦ Any order than cannot be planned to look for a further run on that day and automatically plan instead. The process will check the routes and change the order reference to plan onto a different run, reset the manual schedule flag and let the next schedule engine run pick it up. If no runs found on that day, then remains unscheduled (and will be carried forward on planning day end).
- Planning Day end
 - Any orders of any type not fully planned at the end of the day carried forward to next day (including non-working days). The scheduling engine process above will then pick up the order and plan according to the rules above.
 - ♦ Expected to be scheduled process once per day, on or around 1830-1900.
- Actual day end
 - Any DSK (Desk Collections) orders that have not been completed (debriefed) at end of day to carry forward to next day and planned automatically onto the next DSK collection trip.
 - Reset any TOTD orders and next day orders that remain unscheduled.
 - Expected to be scheduled process once per day, around (before) 2359.

This is the definition of the automated scheduling and carry-forward rules. It will also be possible to carry an order forward manually (for example, when determining on Monday that you will not deliver until Thursday, you can carry the order forward to Thursday?s schedule manually from the planning screen.

The depot sweep processes can be configured with parameters to control which depot is affected by the process, what route types are affected and what action to take, as shown below:

Parameter	Value	Purpose	
DEPOT_SWEEP	Υ	Identifies that the EDI process is to perform the depot sweep.	
DEPOT	blank or RDC location	Identifies the depot that is affected by this depot sweep, or all depots if blank.	
ROUTE_TYPE	COLLECT_DESK	Identifies that the EDI process will assess the orders for the collection desks based on the run number of their route.	
ROUTE_TYPE		Identifies that the EDI process will assess the orders for collection from the customers or for delivery to the customers based on the run number of their route.	
ACTION	CARRY_FORWARD	Identifies that the EDI process will assess the orders and carry forward any unscheduled orders to the next day.	
ACTION		Identifies that the EDI process will assess the orders and unschedule any incomplete orders from their incomplete trips and carry forward any unscheduled orders to the next day.	

Note: The Route Type can include a list of types of routes that are separated by a comma.



10.33 Potential Developments

There are potential developments to enable the scheduling engine to be more specific for the operations:

- Include a matrix for the deliveries for the own fleet for the carrier routes and fixed routes to indicate when the location will accept the order.
- This matrix would be used to set the order time windows to use the next delivery date for the location should an invalid delivery date be provided.
- The gazetteer data can be assessed instead of the carrier routes if appropriate routes and zones cannot be maintained effectively.



11 Scheduling Maintenance

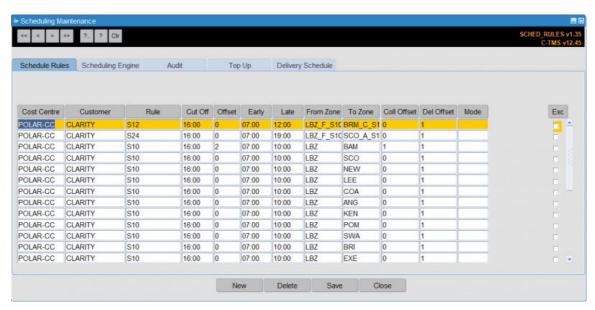
The Schedule Maintenance screen defines several items:

- Schedule Rules
- Scheduling Engine Processes.
- Top-up
- Delivery Schedule.

11.1 Schedule Rules Tab

You can maintain the schedule rules here.

Schedule rules determine collection and delivery windows for orders based on the service level, customer, cost centre and zones of the source and destination location of the order.



To create a record, you must define the following information:

- Cost Centre will be matched to the cost centre on the order
- Customer will be matched to the customer on the order
- Rule name for the rule record
- Cut off if an order is entered after this time, 1 day is added to each offset date
- Offset delivery offset which identifies the number of days added to the current date for the delivery window.
- Early Time used to set the early del window time
- Late Time used to set the late avail and late del window time
- Service Level will be matched to the service of the order
- From Zone will be matched based on the from location of the order falling within the Zone
- To Zone will be matched based on the to location of the order falling within the Zone
- Coll Offset collection offset which identified the number of days added to the current date for the collection window.
- Del Offset
- Mode
- Exc

When adding a new order, a function will access this table and return the relevant collection and delivery windows for the order, where a matching record is identified.

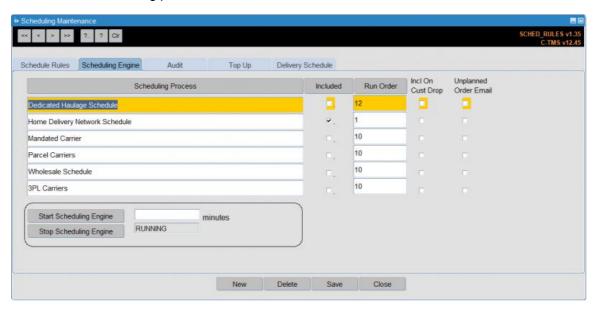
A record should be added to the schedule rules for every customer, cost centre combination covering the available zones. Zones may be created specifically for this table or existing Zones created for the scheduling engine or Finance charging may be re used. This table will only cover Standard service levels.

You can also import schedule rules through Imports:



11.2 Scheduling Engine Tab

You can configure which scheduling engines are running from this screen, and start or stop the scheduling engine process with the provided buttons. When starting, you can specify a number of minutes. Usually 3 to 5 minutes is often enough for this automatic scheduling process.



You can choose the following for each process:

- Included whether this process is included in the run.
- Run Order what order to run the included processes, smallest number first.
- Incl on Cust Drop
- Unplanned Order Email an email address to send an email to if an order lands and is not planned by the scheduling engine.

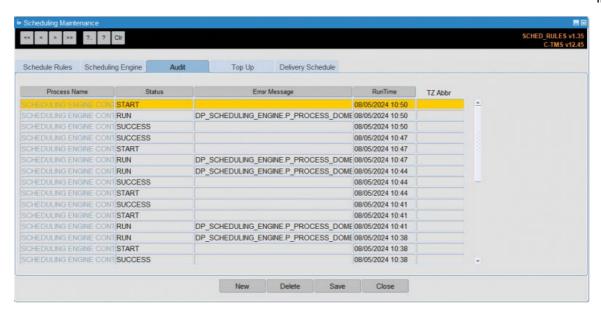
The available processes are:

- Dedicated Haulage Schedule
- Top Up Process
- Network Schedule
- NHSBT Schedule
- Dedicated Haulage Schedule
- Home Delivery Network Schedule
- Mandated Carrier
- Parcel Carriers
- Wholesale Schedule
- 3PL Carriers
- Baxter Trunks
- Van Fleet

11.3 Audit Tab

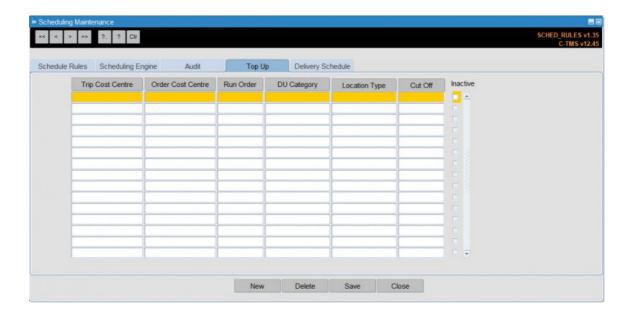
You can see auditing generated from the automatic scheduling engine process on this tab.





11.4 Top Up Tab

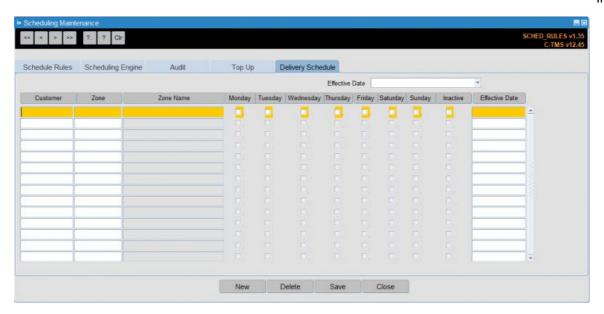
Warning: This is an incomplete guide.



11.5 Delivery Schedule Tab

Warning: This is an incomplete guide.





11.6 Further Configuration

The following system parameters affect this functionality:

Parameter	Description	Level
AUTO_SCHED_INACTIVE_DEPOTS	List the inactive depots to exclude from the fixed drop scheduling engine.	SYSTEM
ENGINE_RUNNING	Indicates whether the Scheduling Engine is running	SYSTEM
OMS_RESET_AUTO_PROC	Will the auto-processed flags of the order for the scheduling engine be reset when the early delivery date and time is changed? (Y/N)	COST_CENTRE
SCHED_ENG_PART_PLAN	Will the network scheduling engine allow orders to be partially planned?(Y/N)	COST_CENTRE
SCHED_EXC_SI	Exclude order with special instructions from engine	COST_CENTRE
TRM_EXCL_TIME_VALIDATION	Indicates if the available time of an order is not compared to the cut-off time for TRUNK or LINEHAUL routes in the network scheduling engine (Y/N).	SYSTEM
TRM_LOC_RADIAL_ROUTES	Indicates if a radial route that is stored for the location will be used in the scheduling engine instead of the location zones (Y/N).	SYSTEM
TRM_OFFSET_PUBLIC_HOLIDAY	Indicates if the order time windows and the scheduling engine will be offset for the public holiday at the country, depot or route level (Y/N).	SYSTEM
AUTO_SCHEDULING	Auto Scheduling of orders	COST_CENTRE
ORD_OMIT_PACK_SCHEDULING	Omit the scheduling of the order and only print the label when pack confirming.	COST_CENTRE
ORD_ON_SCHED_DEL_LOC	Du category to be assessed for exclusion from parcel scheduling	CUSTOMER
TRM_EXCL_REG_AUTO	Planning Regions to be excluded from Auto Scheduling	COST_CENTRE



12 SHIPMENT

Warning: This is an incomplete guide.



13 Static Data

The Static Data module encompasses the maintenance of static data used by the system.

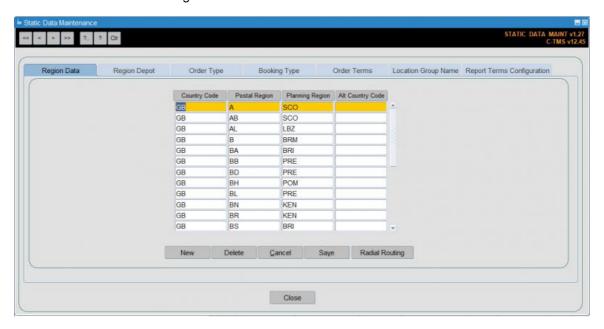
The data can be viewed, created, edited and maintained through the accompanying Static Data Maintenance Maintenance form.

You can access the screen through the Maintenance menu.

13.1 Tabs

13.1.1 Region Data

This tab allows for the maintenance of region data:



You can maintain the grouping of postal regions to planning regions.

Entries in this table control the setting of the 'Planning Region' against new locations. As new locations are created the Postal Region is set based on the Postcode stored against the address data.

The Postal Region can be dynamic based on the postcode format of the country - for the UK it takes the first 'character' based portion of the postcode e.g. L or BR.

The Postal Region from the location is then used to reference the matrix as entered in the Region Data tab and ascertain the correct Planning Region to store against the Location. It allows the grouping of one or more Postal Regions into a single Planning Region. An individual Postal Region cannot exist in more than one Planning Region.

The Planning Region can then be used in the planning process to filter the Order Well based on collection and delivery locations.

There are five buttons at the bottom of the screen:

- New Allows you create a new region.
- Delete Delete an existing region.
- Cancel Do not save any changes.
- Save Save any changes that you have made.
- Radial Routing Edit Radial Routing. Here you can add the type of radial routing (Collection, Delivery, Both or None), and the location types that are affected by this rule. This is optional.

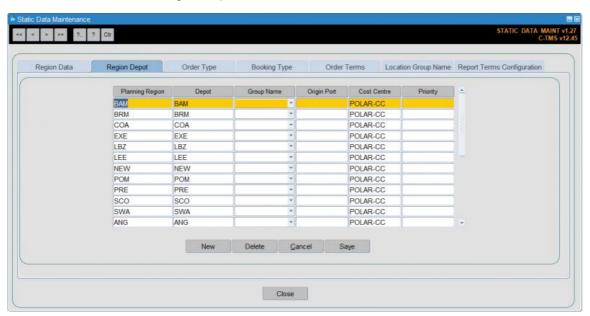


You can also import Region data through Imports:

• REGION DATA

13.1.2 Region Depot

This tab allows for the maintenance of region depot data:



You can define the depots that are responsible for each planning region.

Entries in this table control two C-TMS functions:

- Scheduling Engine identifying applicable Fixed Routes
- Order creation setting the group name

Planning Region to Depot matrix - defines which planning region areas (and ultimately groups of location addresses) are under the control/responsibility of a particular depot. One or more Planning Regions can be added under the control of a particular depot. This is largely for the identification of applicable Fixed Routes in automatic planning.

Planning Region to Group Name matrix defines which Group Name should be stamped against an order during any none manual order creation (e.g. Specific EDI flows, Portal etc). The order locations are used to identify the Planning Region of the Collection/Delivery location and the appropriate Group Name is identified. This ultimately controls the order visibility in the Planning Well depending on the user parameter configuration.

There are four buttons at the bottom of the screen:

- New Allows you create a new region depot.
- Delete Delete an existing region depot.
- Cancel Do not save any changes.
- Save Save any changes that you have made.

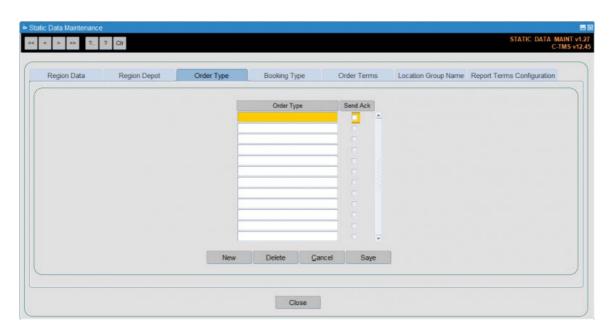
You can also import Region Depot assignment data through Imports:

• REGION DEPOT



13.1.3 Order Type

Warning: This is an incomplete guide.

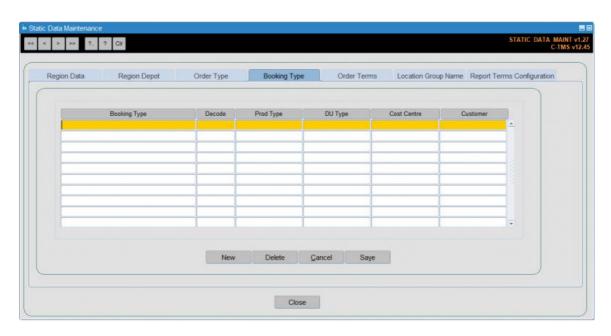


There are four buttons at the bottom of the screen:

- New Allows you create a new order type.
- Delete Delete an existing order type.
- Cancel Do not save any changes.
- Save Save any changes that you have made.

13.1.4 Booking Type

Warning: This is an incomplete guide.



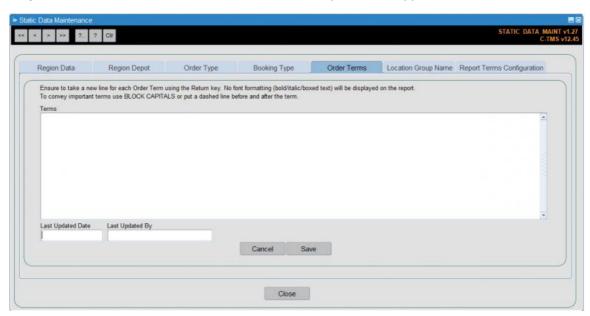
There are four buttons at the bottom of the screen:



- New Allows you create a new booking type.
- Delete Delete an existing booking type.
- Cancel Do not save any changes.
- Save Save any changes that you have made.

13.1.5 Order Terms

This tab allows you to maintain order terms. These are added to reports that support them.



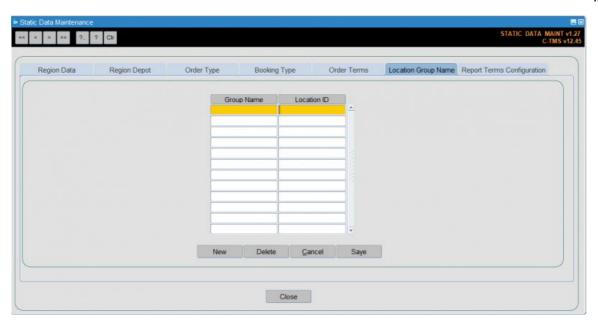
There are two buttons at the bottom of the screen:

- Cancel Do not save any changes.
- Save Save any changes that you have made.

13.1.6 Location Group Name

Warning: This is an incomplete guide.



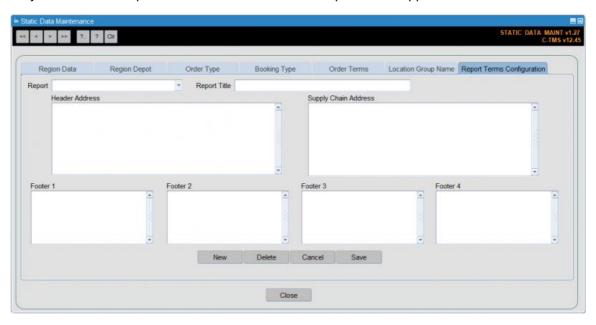


There are four buttons at the bottom of the screen:

- New Allows you create a new location group name.
- Delete Delete an existing location group name.
- Cancel Do not save any changes.
- Save Save any changes that you have made.

13.1.7 Report Terms Configuration

This tab allows you to maintain report terms. These are added to reports that support them.



There are four buttons at the bottom of the screen:

- **New** Allows you create new report terms.
- **Delete** Delete existing report terms.
- Cancel Do not save any changes.
- Save Save any changes that you have made.



14 Initial Setup Guide



15 Set Up C-TMS

Warning: This is an incomplete guide.

15.1 Initial Setup

Start using the OBS Administrative user

15.2 Basic Setup

- 1. Set up the Cost Centre. This should not be the same name as the customer group or the customers. Convention is to end it with "-CC". Ensure that it is not more than 10 characters (C-ePOD limitation).
- 2. Set up the Customer Group this is used to ring-fence Customers and Locations.
- 3. Customer create each customer (supplier) for the implementation, accepting the defaults generally. Link these customers to the customer group.
- 4. Planning Group from Business Data/Group Names, set up a planning group. This is used to group orders and filter the order well.

15.3 Geographical

- 1. Location Types work out and create the location types for the contract. "RDC" must be used for depots.

 "BRANCH" is usually good for deliveries to primary transport to customer distribution centres, "HOME" for home deliveries, "SUPPLIER" for customer locations, etc. Only "RDC" is absolutely required.
- 2. Locations Set up Locations by entering the Location Name, Address and assigning to the correct location type. Lat/Long and Timezone will be entered automatically if required. Ring-fence to the customer when creating, or select ALL if they apply to all customers (e.g. cross-dock depots within the transport network). At least the depots are required. Set loading rates. Default to Standard Load/Unload.
- 3. Regions and Region Depots should be setup, as shown below.

15.3.1 Regions and Region Depots

Owning Depot is defined as the depot that is responsible for planning a trip, and is used by access control to determine whether a planner should see an orders or trips for planning.

This logic depends on the creation of the following data:

- Create planning regions through postcode.
- Use Static Data Region Depot to link a planning region to a depot.
- Set up planning regions by postal region i.e. "L" could be assigned to a region "GBLIV" or "GBNW".

Locations created are automatically assigned to the planning region based on the postcode.

The postcode is extracted according to the rules applied against the Countries. So, for GB, the postal region is extracted. For example, for a location with an address "L24 1XZ", the postal region "L" is extracted, and for postcode "NG6 8UZ", the postal region is "NG" (Nottingham).

If you want to change this automatic assignment, this can be done in the CTMS Locations screen - change the planning region in the screen against the location and tick "Retain Planning Region" before saving - the new region will be saved and the system will not automatically reset it.

Users can then be assigned a default depot through Access Control. Your user can be based at a single depot (set through the BASED_AT user parameter), or your user can have access to all depots (set through the ALL_DEPOTS user parameter).



When a user has an assigned depot, most screens will automatically filter the data shown in the screens to show only the data matching the planning region or default depot. For example, the Planning screen will only show orders in the unscheduled order well from the planning regions owned by your depot, and trips from, to or through that owning depot configured against the user using the screen.

15.4 Admin User for the Customer

- 1. Using Access Control, create the admin user required just for that customer/transport network. Usually, this is easier to copy another user first.
- 2. Restrict the user to the home depot for that customer.
- 3. Assign the user to the correct group usually, this user is the Admin user, and should be assigned to the already-existing ADMIN group.
- 4. Switch to this user now and test access is OK.

15.5 Resources

Set up the following:

- 1. DU Types
- 2. Carrier Groups
- 3. Carrier Types
- 4. Carriers
- 5. Carrier rules for restrictions, DUs and product types
- 6. Trailer types
- 7. Tractor/Trailer or Vehicles
- 8. Drivers
- 9. Delivery Types/Service Levels use Standard if there are no specific requirements.
- 10. Products link to default DU types, and loading rates. Default to Standard Load/Unload.

The user can now be restricted to carrier, and system defaults for DU types and Product Types can be set up.

15.6 Accounts

- 1. Set up an Account for:
 - 1. Customers
 - 2. Cost Centre
 - 3. Carrier
- 2. Set up Invoicing Requirements for the customer.
- 3. Set up Currency per customer and carrier.
- 4. Set up a contract between:
 - 1. Cost Centre and Customer, for revenue. Note that a contract MUST be set up for an order to be valid, or you will not be able to change the order status.
 - 2. Cost Centre and Carrier, for trip cost.
- 5. Set up Tariffs as required. Basic distance, with this revenue being slightly higher per mile than the trip cost, usually provides good demo results. e.g. 60p/75p per mile.

At this point, the system will be capable of being used to create orders and trips.

15.7 Bespoke Setup

- Cross-dock Paths
- Fixed Routes
- Fixed Schedules
- Additional Users and User Groups adjust the Menus and Tabs required on the group if required.
- Execution systems/interfaces:
 - ♦ C-ePOD
 - ♦ Microlise SmartPOD



- **♦ TomTom WEBFLEET**
- ◆ FlexiPOD
- C-PORTAL TTM

15.7.1 Fixed Routes

Parameters:

• AUTO_SCHEDULING must be configured to "Y" for the cost centre

15.7.1.1 Domestic/Home Delivery

For a domestic-style delivery mode (JIT planning, plan to final depot and then wait for final mile planning):

Parameters:

• TRM_LOC_RADIAL_ROUTES - "N"

Schedule Rules:

- Set the scheduling engine to "Home Delivery Network Schedule"
- Start the scheduling engine (3 minutes for testing, up to 5-15 for live)

Zones:

• Set up zones to go from each depot's catchment areas to every other depot.

Locations:

• Set preferred carrier up against each RDC, typically every carrier that will pass through that location, but definitely ones that originate routes at that location.

Routes:

- Auto-processing, defined depot, trailer type, defined carrier, execution days, number of trips. Ensure that the MODE is set to TRUNK (or some other desired mode).
- Stops:
 - ◆ Stop 1 Location, Depot from which orders are currently based, all Mand, Fixed, PK and DL ticked, offset (number of minutes from midnight), Early and Late set to some minutes before/after the offset e.g. 90, Fill factor 1.0, PK cutoff half an hour before.
 - ♦ Stop 2 cross-dock stop, Zone for orders, location to cross-dock through, Mand and DL ticked, offset, Early and Late..
 - Repeat for return or onward journey.

Monitoring:

• Use the Schedule Rules Audit tab and refresh.

15.7.2 C-ePOD Settings

EPOD settings on:

- Customer
 - ♦ EPOD Enabled ticked on EPOD Params tab
- Location Type Default settings for locations of this type:
 - ◆ Send EPOD Job Load/Unload tick to send the jobs at location stops of this type to ePOD
 - Consol EPOD Job Load/Unload tick to consolidate the jobs at location stops of this type where the location is the same.
 - Send EPOD Dets Load/Unload tick to send the item details of jobs at location stops of this type to ePOD
 - ♦ EPOD Job Group Load/Unload tick to set a specific job group to EPOD for jobs at locations of this type.
- Location override the defaults above from the EPOD tab:



- ◆ Send EPOD Job Load/Unload tick to send the jobs at location stops of this type to ePOD
- ◆ Consol EPOD Job Load/Unload tick to consolidate the jobs at location stops of this type where the location is the same.
- ♦ Send EPOD Dets Load/Unload tick to send the item details of jobs at location stops of this type to ePOD
- ◆ EPOD Job Group Load/Unload tick to set a specific job group to EPOD for jobs at locations of this type.
- Carrier
 - ◆ EPOD Enabled ticked
 - ◆ Auto Debrief Col set to "N". For customer-collect carriers, set this to "Y".
 - ◆ Auto Debrief Del set to "N". For customer-collect carriers and some 3rd-party carriers with no debrief process, set this to "Y".
 - ◆ Send to ePOD Col set to "Y"
 - ♦ Send to ePOD Del set to "Y".
- Carrier Group
 - ♦ If a different ePOD Site is required per carrier, set the EPOD Site here. Depends on System Parameters as to whether this is sent.
- Drivers
 - ◆ Set EPOD User.

A job is required for the sending of tasks to C-ePOD, and a webservice is required to pick up the updates.

There are also many system parameters controlling the function of EPOD - search for EPOD in the parameter name.

Name	Level	Description
EPOD_COMPLETE_ON_RTD	COST_CENTRE	Complete Trip when RTD job sent back from epod
EPOD_CONSOLIDATION_LEVEL	COST_CENTRE	Level of job consolidation for epod
EPOD_DEPOT_JOBS	15 Y 5 I F IVI	EPOD Debrief jobs which load at or deliver to RDC locations
EPOD_ENROUTE_COLLECTIONS	SYSTEM	Set Trip to En-Route via ePOD Interface
EPOD_JOB_GROUP_FORMAT		Indicates whether the value passed in the EPL Job Group to EPOD is the Cost Centre (CC), Carried ID (CI), Customer Group (CG) or Customer (CU).
EPOD_SET_ACTUAL_SIGNATORY_BLANK	SYSTEM	Set EPOD actual signatory to blank (Y/N)?
EPOD_SITE_ID_FORMAT	SYSTEM	Indicates whether the value passed in the EPL Site ID to EPOD is the Database Name(DB), Cost Centre (CC), Carrier ID (CI) or Carrier Group (CA).
EPOD_VIEW_POD_URL	SYSTEM	URL for EPOD Documents
EPOD_WS_ADDRESS	SYSTEM	EPOD Web Service End Point
EPOD_WS_MESSAGE_FORMAT	SYSTEM	EPOD message format - can either be PARCEL or BULK to define where fields are sent in the web service message. MODE1 for LFS, MODE2 for general usage (NHSBT)
EPOD_WS_PASSWORD	SYSTEM	EPOD Web Service Login Password
EPOD_WS_TIMEOUT	SYSTEM	Number of minutes before a WS message will be set to Held
EPOD_WS_USERNAME	SYSTEM	EPOD Web Service Login Username

15.7.3 C-PORTAL TTM Settings

Predominantly against the customer.

