C-TMS Automotive RF Process

Aptean Ltd

Contents

1 C-TMS Automotive RF Process

Automotive RF Process

1.1 Messages

Message	From > To	Description
404	TMS > WCS	Order Preadvice Message which creates the TMS_Preadvice_Header and TMS_Preadvice_Detail records.
804	WCS > TMS	Order Creation module sends these as each item is scanned onto the order.
441	TMS > WCS	Item/Load Creation message. Should get one of these for each 804 message. I think this creates the TMS_Load* records.
442	TMS > WCS	Trip ready to load message which I presume updates the TMS_Load* records to ?Ready to Load? status (!).
841	WCS > TMS	Load Confirmation
431	TMS > WCS	Unload/Receipt message (only if x-docked)
432	TMS > WCS	Trip ready to unload.
831	WCS > TMS	Unload Confirmation.
441	TMS > WCS	Item/Load Creation message again. The process loops around again to the 3rd message above.
851	WCS > TMS	Asset (Item) Enquiry
451	TMS > WCS	Asset (Item) Enquiry Response
471	TMS > WCS	DU (Media) Type Updates
472	TMS > WCS	New Depot

1.2 Standing Data

Whenever DU Type information is changed in C-TMS then 471 messages are sent to WCS for all of the depots requiring WCS RF Cross-Docking containing this information for WCS to maintain its own Media Types against the corresponding depots.

Whenever a depot is marked as requiring WCS RF Cross-Docking functionality then a 472 messages is sent from C-TMS to create this new depot in WCS.

A button (Re-Send ALL) can then be pressed to send all of the DU Types to WCS for all of the appropriate depots including the newly marked one.

1.3 Order Creation

404 messages arrive at around 00:10 each night, showing the next 24 hours of orders to be fulfilled. There should be one per destination location.

Order Creation starts. This process is used to associate pallets/cages (i.e. containers or assets) to an order.

First, a label printer is requested.

Then a media type:

If re-usable Asset, the process requests the user to scan the Asset code (barcode on the cage). This is validated as being the right media type by passing a 851 message to CTMS and getting a 451 message from C-TMS in response.

If non-reusable, ID is generated by WCS.

RDT prompts for destination - WCS matches this to a destination and order on the Preadvice tables.

If OK, a label is printed (even if it?s a reusable Asset with a barcode), a Preadvice Item record is created, 804 message is sent.

Note: In CTMS, this associates the item to the order. If this is an asset, and Asset History record is NOT created at this stage, so there?s no audit that the Asset was ever put on the order until Loading.

Note: *If this is a reusable Asset, the item is added by with a sequence (generated from the number of times the asset has been used) to keep the item unique.*

1.4 Loading

Once the order reached a certain status in CTMS **Warning**: INFO REQUIRED, the order is planned on a trip and that trip is allocated a marshalling location (outbound bay) in CTMS, the system generates loading messages (441 or 442 messages - **Warning**: INFO REQUIRED.

This creates Load* records for the orders, trips and items at status C (Load Checked, or Ready For Loading, if you prefer).

Note: This refers to a previous process that was designed into Dunelm for Load Checking before Loading proper - this is no longer used.

User blind enters the trip ID.

User scans each item on the trip.

Note: *For Assets: Although the barcode scanned contains only the asset code without the unique sequence, and the messages sent to WCS contain this sequence, the RDT identifies these as checking for an asset on the trip that matches what we have of the ID. There should only be one, but if not, the system sorts them in reverse sequence and selects the top 1.*

An 841 message sent for each item scanned (*for Assets: the whole ID plus sequence is sent back*).

Note: There is some functionality to Unload an item on RDT - **Warning**: INFO REQUIRED

Once complete, trip is marked as En Route.

Note: For Assets, at scanning, an Asset History record is created showing the Asset as In Transit at this stage.

1.5 Delivery

At this stage, CTMS generates messages to Microlise.

For Assets: Only the Asset ID (not the sequence) is sent to Microlise for delivery.

Microlise scans each item at destination and sends back a message to CTMS upon completion.

Order is marked as Complete.

1.6 Unloading

At that depot, Receipt could now start:

Warning: INFO REQUIRED