Aptean

WCS WMS Oracle User Guide

WCS - 3.4

30th April 2025 - 1.0
Reference: UG 106181

Contents

1 Wavelink Client Support

The purpose of this document is to provide clients with instruction to maintain Wavelink Client on their Devices.

1.1 Creating a Host connection

1. Click Windows Button ( )

2. Launch the **Wavelink** Client.

The client main screen appears.

Figure 1. The Main Screen

3. Tap the **Add New** icon.

The Edit Connection dialog box appears.

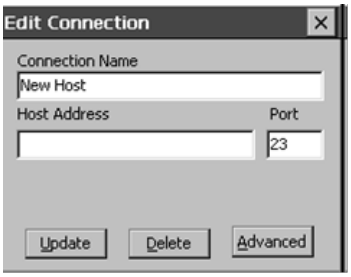

Figure 2. The Edit Connection Dialog Box

4. In the Connection Name text box, type the name of your connection e.g. **Larkhall Test 2** .

   This name appears beneath the host icon in the client main screen.

5. In the Host Address text box, type the IP address of your Wavelink server e.g. **10.162.132.105**

6. In the Port text box, type the port number of your Wavelink Server's port e.g. **2002**

7. Click **Update** to confirm the settings.

The Wavelink Client creates the new host connection. The name of the connection appears beneath the corresponding icon in the client main screen.

2 Android Setup Guide

2.1 Downloading the Android App

Side-load the Barcoders Android application on your device.

- Enter URL in Google Search or Chrome, or scan the barcode in above, or scan using Zebra Xing scanner app.

```
https://www.barcoders.com/app-release.apk
```

- Download APK (confirm if asked)
- Confirm name if asked.
- Open Downloaded APK (from open/install button or from notification drag down from top of screen or from Apps/Downloads or from Apps/Files).
- Confirm installing.
- If prompted confirm settings to allow installing unsafe apps, then return to * above.
- Install - confirm install location if requested (accept default)

The application will be named "Warehouse Terminal" and have a green Barcoders icon for its graphic. Drag to the home screen for easy access.

2.2 Configuring the Android App

- When you start the APK for the first time, it will display an IP address pointing to our RFServer here. You?ll need to change it to point to the IP address of your Android RFServer. To do this navigate to https://www.barcoders.com/make-server-barcode.php and generate a barcode PNG for the IP address of your Android RFServer. Print it out and scan it at the step above. You may have to exit and get back in for it to recognize the new IP address.
- When the menu come up, select the bottom option and test.

2.3 Zebra Enterprise Keyboard

Zebra provide a freely-downloadable enterprise keyboard that can be configured for function key presses.

https://www.zebra.com/gb/en/products/software/mobile-computers/enterprise-keyboard.html

https://www.zebra.com/us/en/support-downloads/software/productivity-apps/enterprise-keyboard.html

https://techdocs.zebra.com/enterprise-keyboard/4-1/guide/about/

https://www.zebra.com/us/en/support-downloads/software/productivity-apps/enterprise-keyboard-designer.html

There are two versions:

- Version 1.6 does not allow function keys. Only works on Android 5 below

- Version 4 allows function and special keys to be set up. Only works on Android 6 above.

Versions should be downloaded from the links above. Alternatively, these can be supplied by Aptean for sideloading.

2.3.1 General Configuration

After installation, the keyboard must be enabled.

- Go to Settings/System/Languages/On-screen Keyboard/Manage On Screen Keyboard.
- Enable Enterprise Keyboard.

On devices with a physical keyboard:

- Exit and return to any app that allows the popup keyboard and display it.
- Click the keyboard icon in the bottom right.
- Enable "Show Virtual Keyboard".

2.3.2 Zebra EKB v1.6

Guide: https://techdocs.zebra.com/enterprise-keyboard/2-0/guide/settings/

Function keys can be set up on this standard keyboard (on this or the later version).

- Go to Settings/System/Languages/On-screen Keyboard/Manage On Screen Keyboard.
- Click Enterprise Keyboard.
- Click Remapping
- Pick the key to be remapped on which layout - there are 4 on Numeric, 1 on Alpha and one on Symbol that can be remapped.
- Remap the key to output Unicode (U+24BB)

The remapped key will then display as an F on the keyboard.

You can then hit the F key - an F will appear, and then you can enter the number keys 1-9 and hit ENTER - this will enter the selected function key e.g. the remapped key, plus 8 plus ENTER will send F8.

2.3.3 Zebra EKB v4.x Configuration

Creation of full keyboard layouts can be completed through the Zebra EKB Designer. This tool allows creation of multiple keyboard layouts.

- Guide:
  - https://techdocs.zebra.com/enterprise-keyboard/latest/guide/settings/
  - https://techdocs.zebra.com/ekd/1-9/guide/about/
- Keycodes: https://techdocs.zebra.com/mx/keymappingmgr/
- Download:

https://www.zebra.com/us/en/support-downloads/software/productivity-apps/enterprise-keyboard-designer.html

You will need to deploy to each device. This can be through:

- The EKD application itself, device by device.
- Sideload, through ADB, device by device.
- Your chosen MDN software if it supports it.

The blow guide focusses on deploying a pre-created custom keyboard layout through the EKD software. You will need:

- The EKD software
- The keyboard layout
- A direct connection between the device and the PC running the software.

The sample SAP project works perfectly on supported devices - download from here:
https://techdocs.zebra.com/ekd/latest/samples/.

- Get the keyboard layout project from URL or pre-created (MC3x-FKeys)
- Start EKD
- Load the project
- Select a layout
- Connect the device to your computer
- Send to the device

Alternatively, this designer keyboard can be sideloaded onto the device into the following area:
/enterprise/device/settings/ekb/config

Once the keyboard is loaded, the layout must be enabled.

- Got to DataWedge
- Select the profile associated to your app (in this case BC-AndroidTerminal-v2)
- Click the Enterprise Keyboard section
- Ensure Enabled is checked.
- Click Select Layout
- Choose "qwertylayout" as the default under the loaded EKD layout project (MC3x-FKeys)

Now the standard keyboard will be the selected custom keyboard layout.

The keyboard supports

- Alpha uppercase and lowercase layouts
- Accessible numbers and symbols when long-pressing keys
- Symbols layout
- Numeric Only layout
- Functions layout, supporting
    - Numbers
    - Function Keys
    - ESC key
    - Cursor Keys
    - and more.

When displayed, the keyboard will start on alpha layout.

- Use the Caps or ABC key to switch between Alpha Uppercase and Lowercase.
- Use the 123 key to switch to numeric
- Use the FUNC key to switch to function and control keys (including cursor keys)
- Use the /*?# key to switch to symbol keys.

3 Android Usage

3.1 Downloading the Android App

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```
https://www.barcoders.com/app-release.apk
```

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3.2 Configuring the Android App

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- When the menu come up, select the bottom option and test.

3.3 Using the app

3.3.1 Main Screen

When the application starts, you will be presented with an initial connection screen, which will then display all installed systems, usually as follows:

- (Customer) TEST system
- (Customer) LIVE system
- (Customer) LIVE system - site 2

You can click the Cancel button to exit the menu, and the back button to exit the app completely.

3.3.2 Settings

Application settings can be accessed by long-pressing anywhere on the screen.

This will show you a menu allowing you to modify the media volume or access the settings.

The following settings are supported (also indicating recommended values):

- **Voice** settings:
  - *Enable Voice* - default Disabled. Can be enabled to read all dialogue and error messages.
  - *Reading speed* - default 5. Recommended: 6
- **Display** settings
  - *Enable Image Popups* - default Disabled. Recommended: Disabled.
  - *Image Popup Duration (seconds)* - default 2. Recommended: 2.
- **Network** settings
  - *Connection Timeout (seconds)* - default 10. Recommended: 10.
- **Monitoring** settings
  - *Log Outbound Data* - default to Off, can set to On.

3.3.3 Keyboard

You can use the device's keyboard and scanner to enter data. You can also call up a pop-up keyboard by pressing anywhere on the screen.

The application will ensure that you can see the data being entered on the screen.

Clicking the Android Back button, pressing anywhere on the screen or entering test with the tick or Enter key on the keyboard will hide the keyboard.

The application will use the configured Android system keyboard. Note that the default Android keyboard does not support the following:

- Function keys
- CLR/ESC button
- Cursor buttons.

Zebra provide a freely-downloadable enterprise keyboard that can be configured for function, control and cursor key presses (depending on your Android version). This may be used on any device, with or without a physical keyboard.

Where the application uses function keys, the function keys may be used on any physical or popup keyboard.

The Android Back button (either physical or on the screen) is used as the CLR or ESC button.

Note: On some devices, the physical cursor UP and DOWN keys do not work as expected. In this case, use the Zebra Enterprise Keyboard for the cursor keys.

3.4 Scanner

The scanner on your device will be enabled by default for all fields.

Long-pull the trigger to scan barcodes - the scanner will stop once it has red the barcode.

If Voice is enabled, a short-pull of the trigger will repeat the last phrase that the device spoke.

3.5 Troubleshooting

When using the app on a wireless device, the application being used is subject to the connectivity of the device to the network and to the application. If there are any issues with the network connectivity or the app cannot be accessed, the application will display the main screen, showing "Error Connecting". Ensure that you have a network connection, then hit any key on any physical or popup keyboard to reconnect

4 Forcing Additional Wavelink Licenses

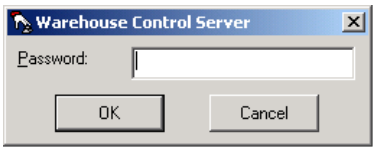
4.1 Preparation

Ensure that all RDT users are logged off the system.

4.1.1 Re-start WCS-Server application

Log on the WCS Server machine and locate the WCS-Server application:

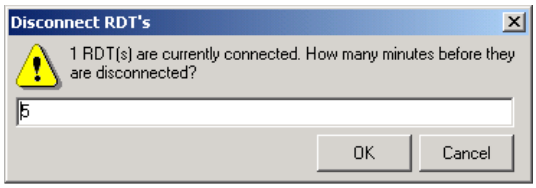
To stop, click the '**X**' in the corner:



Enter the password.

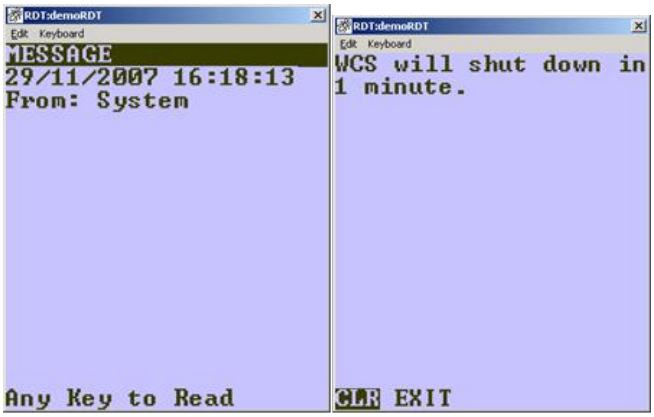
Click '**OK**'

If any RDT users are connected, you will be prompted how long to wait before logging them off:



If you enter 0, the WCS-Server application will exit immediately without informing any connected RF users.

If you leave a positive number of minutes in here, the WCS-Server will commence a countdown on the screen, and will send each connected RF user a message, to exit the system immediately.

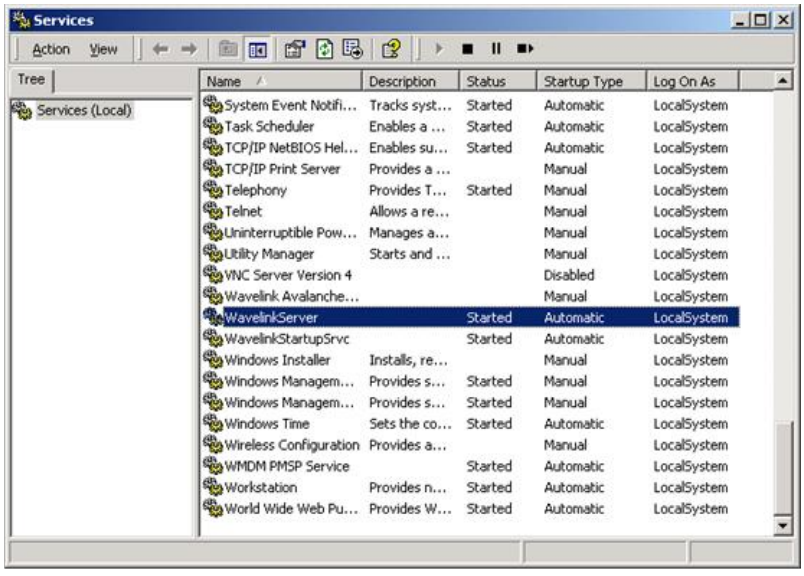


To restart the WCS-Server application, choose the application from the *Start menu/Programs/Warehouse Control Server/WCS Server* shortcut.

When the server restarts, the WCS will reconnect to any RDT users when they next press a key:

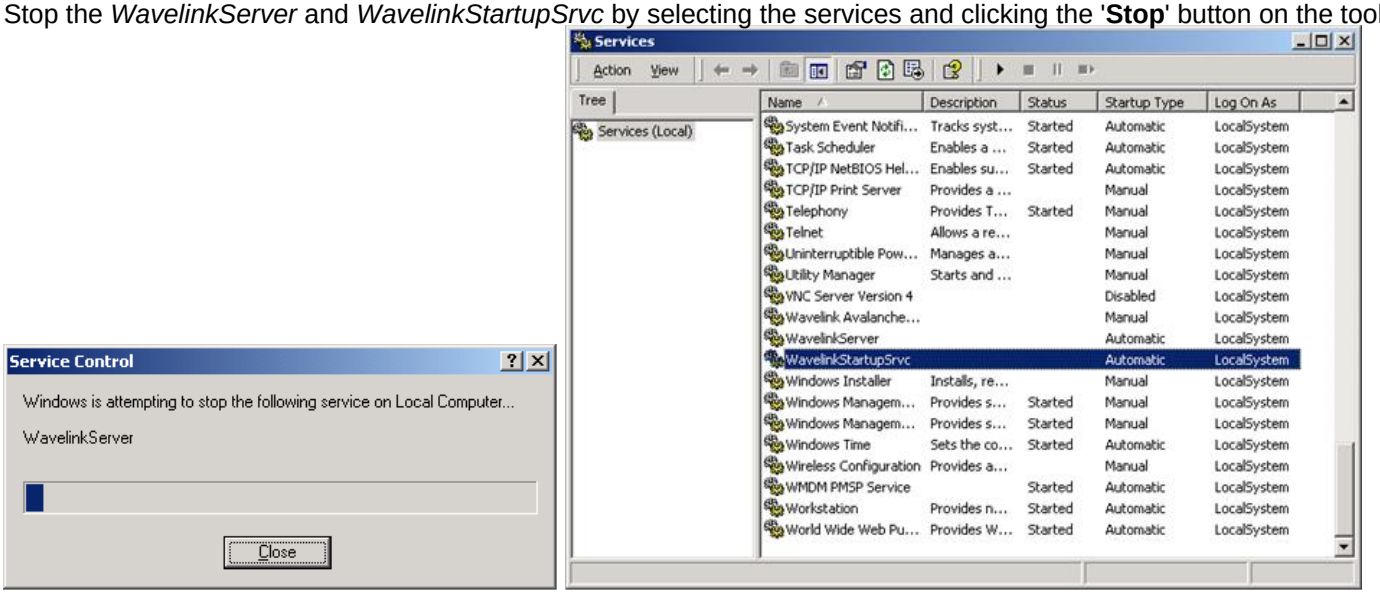
4.1.2 Stop and Start the Wavelink Services

Note: Restarting the Wavelink services will forcibly disconnect any users currently connected. Any users disconnected in this way may require their locks clearing through the WCS Maintenance application (if they were performing a task when forcibly disconnected). It is also possible that RF applications that have been forcibly disconnected in this way may not be killed efficiently by the operating system. Therefore these orphaned or 'spinning' processes may need to be killed manually - see Appendix A

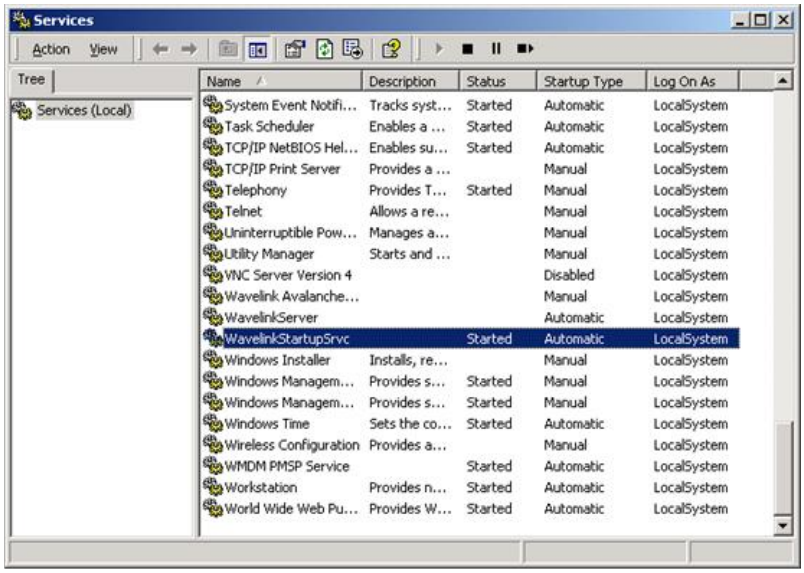


Start the Services control panel by clicking on *Start/Settings/Control Panel/Administrative Tools/Services*.

Stop the *WavelinkServer* and *WavelinkStartupSrvc* by selecting the services and clicking the '**Stop**' button on the toolbar:

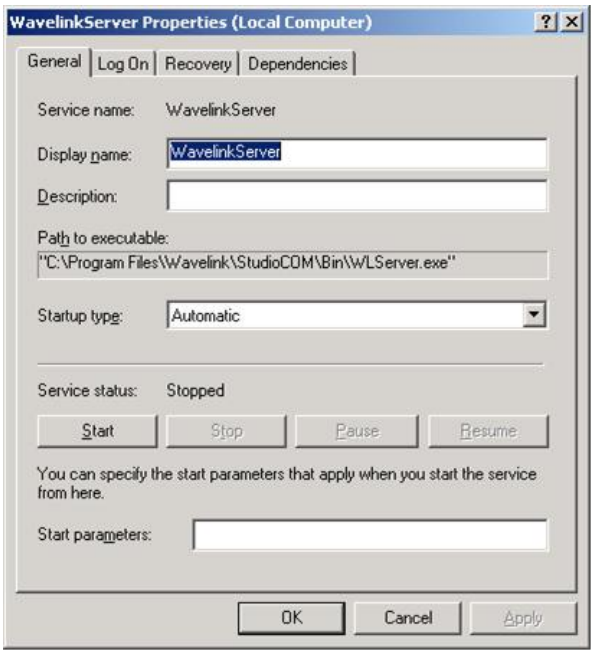


Start the *WavelinkStartupSrvc* Service by selecting the service and pressing the '**Start**' (play) button on the toolbar.

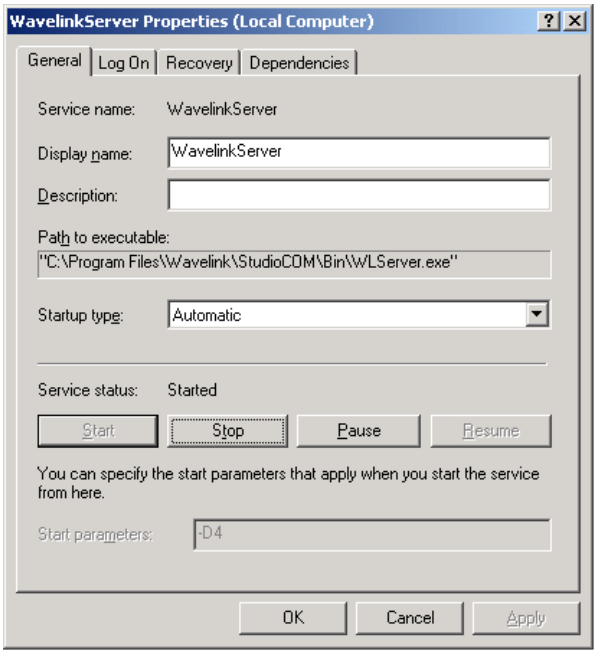


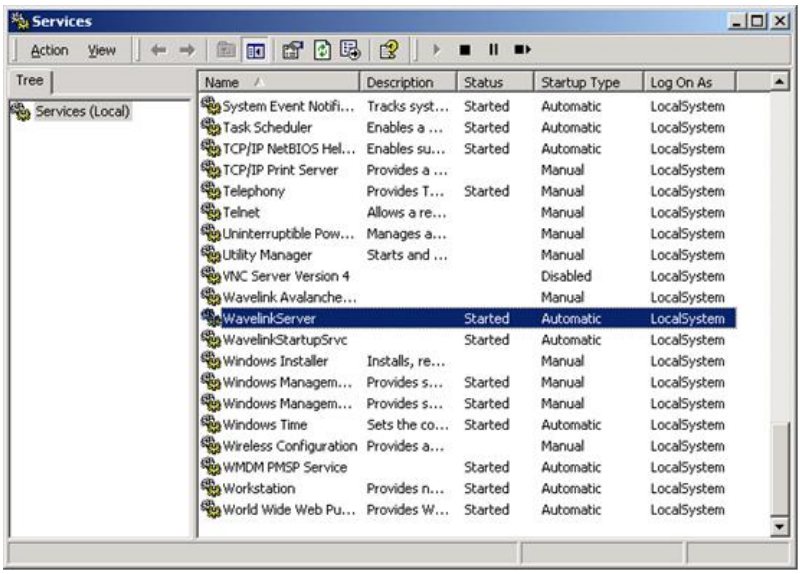
Start *WavelinkStartupSrvc* Service by selecting the service and pressing the '**Start**' (play) button on the toolbar.

Note: At this point, you may want to enable extra diagnostic messages in Wavelink, to help resolve the problem. If so, **do not** start the process this way, but right-click on the Wavelink service and choose *Properties* from the pop-up menu.



Enter -D4 in the Start parameters, then click '**Start**':





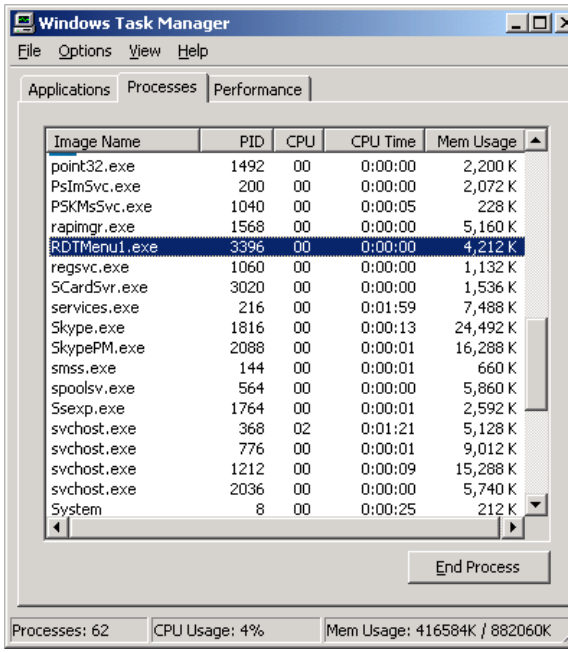
Note: The Debug levels for Wavelink Server are:

Debug Level	Purpose
0	No debug messaging at all
1	Notifies the event log and the WaveLink log files of the WaveLink server start-up and termination.
2	Level 1 messages plus major application errors
3	Level 2 messages plus minor application errors and warnings
4*	Level 3 messages plus current action messages.

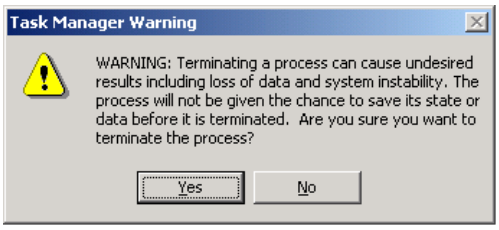
*Level 4 debugging also enables the WaveLink API debug messaging.

4.2 Appendix A: Killing Orphaned RDT Processes

Run Windows Task Manager:



Orphaned processes will be named 'RDTMenu1.exe' and will be constantly taking a large amount of CPU. Once these have been identified, click on the RDTMenu1 processes taking the CPU and click '**End Process**'.



Click '**Yes**' - this will kill the process.

If necessary, repeat this process to kill all the orphaned RDTMenu1 processes.

5 Introduction

This document is intended for the use of training users in the use of the Calidus 3*pl* system, when the Calidus 3*pl*-Mobile system is implemented. This guide should be used by super-users and testing teams during initial set-up.

This document assumes that the installation has taken place (as described in the document C3PL-M Installation Guide) and that set-up has occurred and a connection established to the Calidus 3*pl*.

A familiarity is required of the use of the Calidus 3*pl*.

6 System Overview

6.1 Operation

As can be seen from the diagram, Calidus 3*pl* runs on a UNIX server, while Calidus 3*pl*-Mobile runs on a Windows Server in this implementation.

In the diagram, Calidus 3*pl* has been split into three areas.

The non-shaded area is the manual Calidus 3*pl* system, being the screens and methods currently used to enter and confirm tasks.

The wavy shaded area shows the portion of Calidus 3*pl* that sends messages to the WMS interface. These are covered in great detail in following sections.

The dotted area contains Calidus 3*pl* RDT update programs that automatically do the work of the confirmation processes in manual Calidus 3*pl*. For example, one of these processes might confirm movements; another might confirm orders as picked. They work by receiving confirmation of tasks completed from Calidus 3*pl*-Mobile. Those messages (of tasks to be completed, and confirmation of tasks completed) are sent by the interface.

Both systems have an interface; Calidus 3*pl*'s is referred to as the WMS interface, Calidus 3*pl*-Mobile's as the WCS interface. Both need transmitters (to send their messages) and receivers to get messages back. As can be seen from the diagram, Calidus 3*pl* sends messages to Calidus 3*pl*-Mobile's receiver program, WCS Server through an Oracle Advance Queue. When messages are being sent back to Calidus 3*pl*, Calidus 3*pl*-Mobile's transmitter program, also WCS Server, sends messages to Calidus 3*pl* by enqueuing messages on Oracle Advance Queues in the WMS database.

The third part of the interface consists of the Merge processes. In Calidus 3*pl*, these consists of many processes which we route messages to using the Queue Reader processes. These route the messages to the Merge processes (dotted area of the RDT update programs).

So, let's look at the progression of tasks through this system from start to finish. For this example, we'll use a simple housekeeping pallet movement.

When the task (move pallet 1 from A to B) is raised, the message is passed to the WMS Interface Queue. The Queue passes the information to the WCS Server. Note: Only when the message is fully processed is this removed from the queue, ensuring messages are never lost).

Once WCS's receiver has the message, merges the message to the database. This identifies the type of message (a pallet movement), and checks that everything is OK about the message's contents. When satisfied of the contents, the task is put in the main WCS database, ready for use.

When an RDT user requests a task, and they are to be allocated movement tasks, WCS will allocate the closest movement to that user's location, or in priority order. In our example, this means they are given the movement we raised on Calidus 3*pl*. They are told to get the pallet 1 from location A and take it to location B, there scanning the check digits of the destination for confirmation.

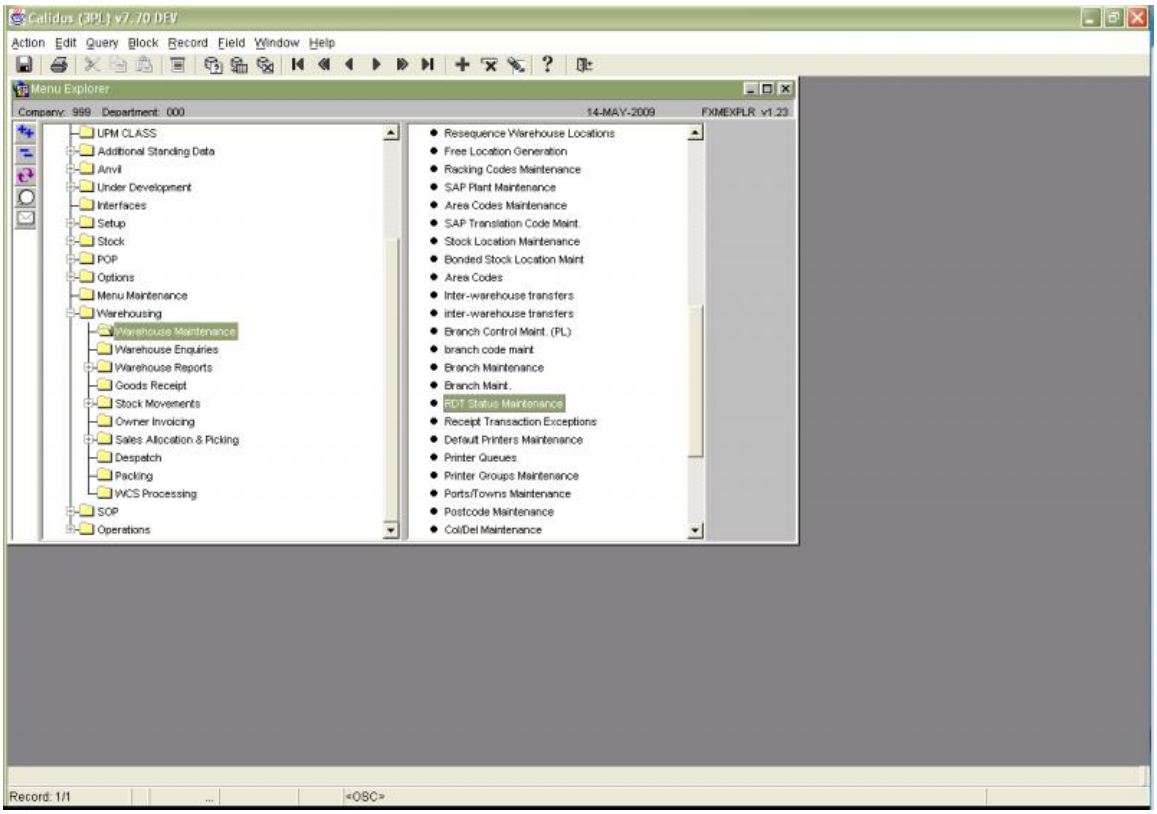
Once they have completed the task, Calidus 3*pl*-Mobile sends a completion message to the Calidus 3*pl* receiver queue.

The Queue Reader associated to the queue identifies the type of message, in our example, a movement completion message. The message is then routed to the correct RDT update process. Again, messages are only removed from the queue when correctly processed.

The RDT update process examines the contents of the message for validity, and then updates all the Calidus 3*pl* data files that you would expect if it was confirmed manually in the Pallet Move Confirmation screen.

7 RDT Control Processes

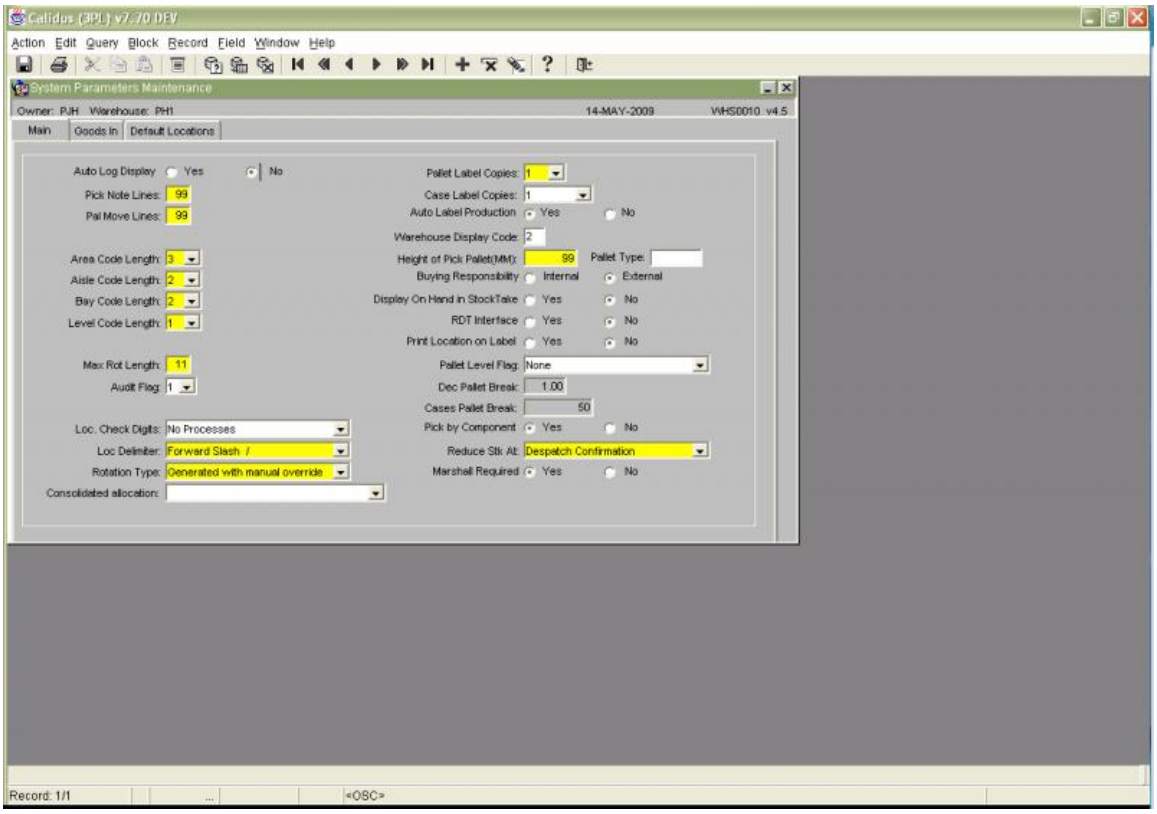
7.1 Menus



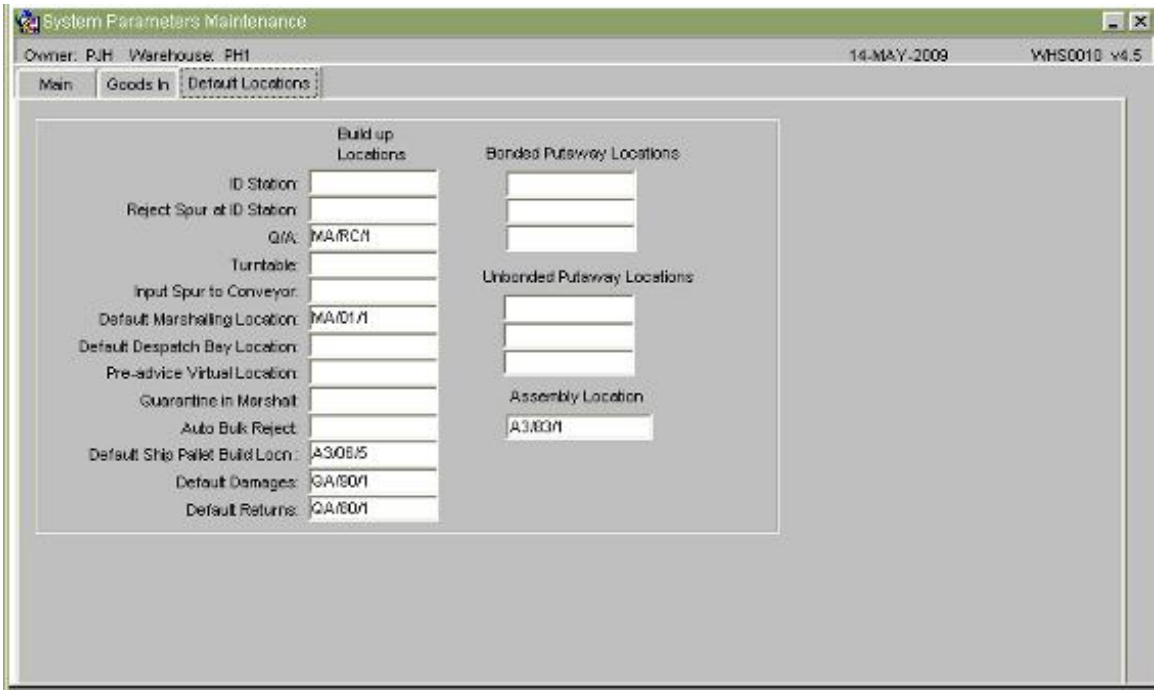
The menu is normally located on the top flexible menu.

7.2 System Parameters

In order to send RDT messages or tasks to Calidus 3*pl*-Mobile, the Calidus 3*pl* system must be informed that the Interface to Calidus 3*pl*-Mobile is present. This is enabled via the 'RDT Interface' flag on system parameters.



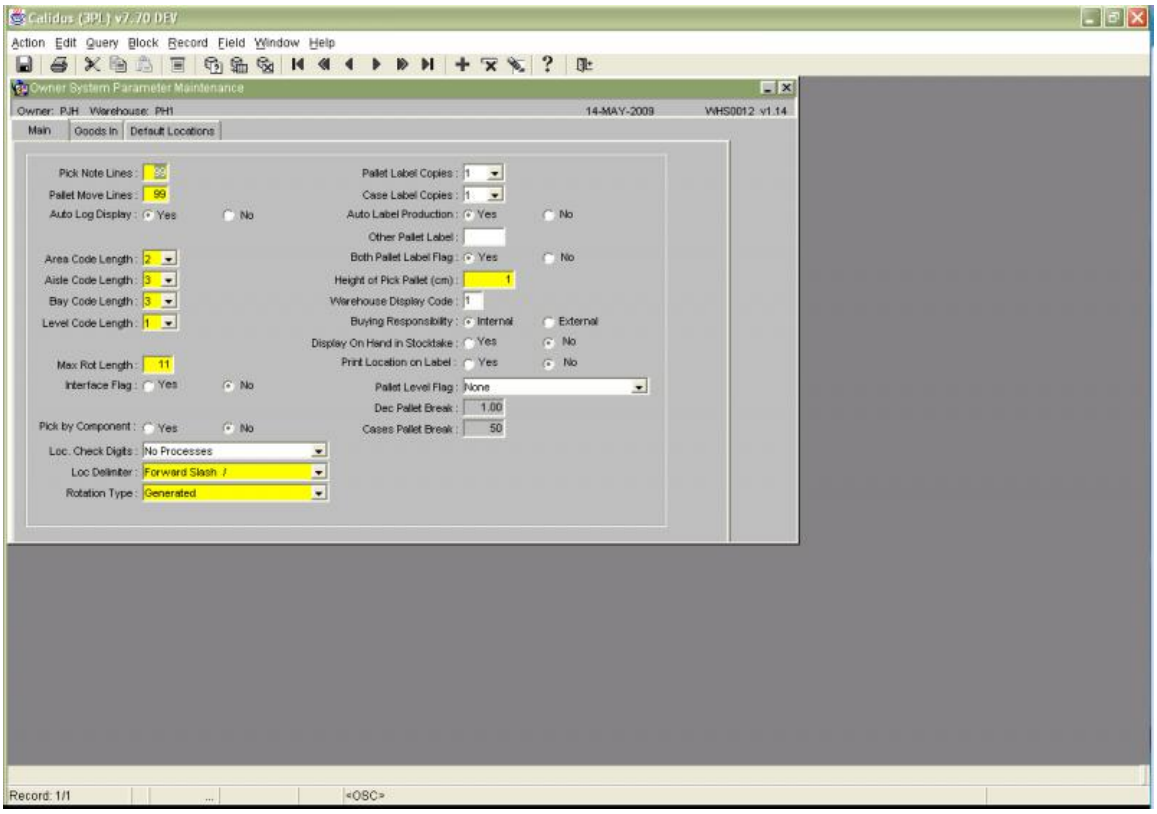
Click on the Default Locations tab to identify the default locations required.



Build up location 3 (Q/A) is the default putaway location, if the putaway algorithm finds no locations. Location 6 is a Default Marshalling Location, used by pick list and allocation.

7.3 Owner parameters

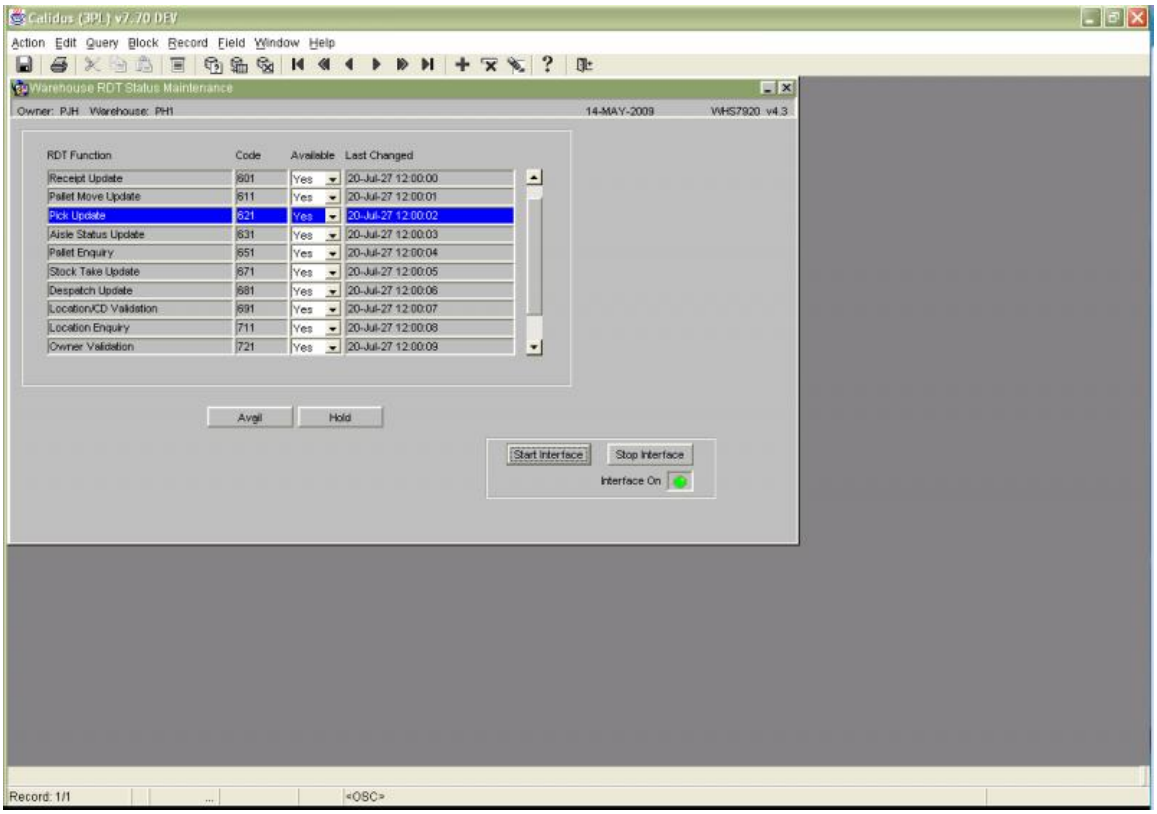
An RDT Interface flag also exists per Owner or Stockist. With this flag, we are able to determine whether, even if the warehouse allows RDT operations, the owner allows RDT operations.



In all ways, this bank of screens operates in the same way as the System parameters screens, described above.

7.4 RDT Status Maintenance Screen

This screen is the major control screen for RDTs in Calidus 3*pl*



Each line controls not only the running of the update process in Calidus 3*pl*, but also the availability of the functions to standard Calidus 3*pl* processing. So, for example, if the Pallet Receipt Update availability flag is 'Y', you have the ability to send receipt preadvice messages to WCS. If it is 'N', you can't send those messages.

The use of the availability flags in the system will be explained for each sending process described in the next section.

Use 'Start Interface' to start the RF interface programs.

Use 'Stop Interface' to stop the RF interface programs.

The light below these buttons indicates whether the interface is on or off.

The use of this screen should be limited to System Administrators only.

8 SENDING DATA

8.1 Standing Data tables

See the C3PL-M Setup guide, for details of how this data is used in the Calidus 3*pl*-Mobile.

Various data tables on Calidus 3*pl* need to be sent to Calidus 3*pl*-Mobile. These tables are:

- Employees
- Truck Types
- Pallet Types
- Location Types
- Reason Codes
- Receipt Types
- Aisles Status/Aisles
- Stock information

The maintenance screens for these tables can be found (by default) on the Warehouse maintenance menu. The exception to this is the Stock Maintenance screen, normally found on the Stock menu.

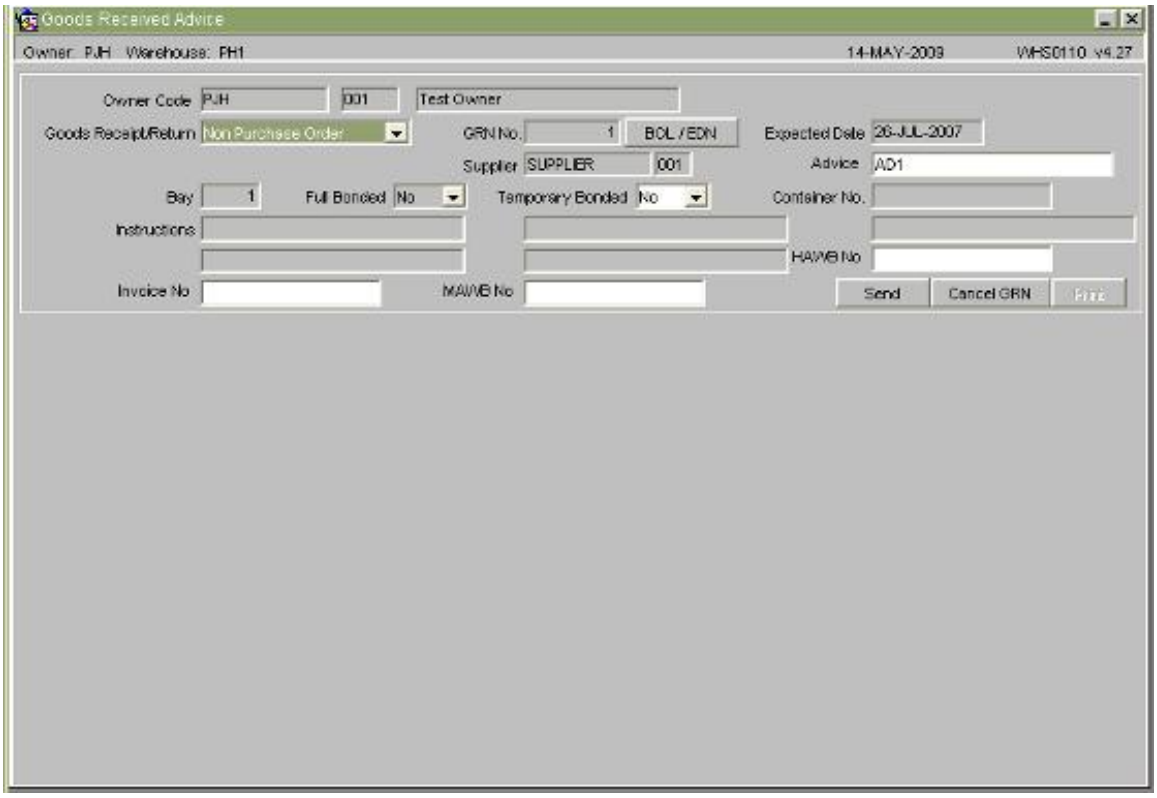
To perform an initial send of the data to Calidus 3*pl*-Mobile, enter the form and find data. Once found, click the Send button on the form, which will only be visible if the Interface flags for the owner and warehouse are enabled. The whole file will be sent.

Also, during normal use of the screens, any added or deleted data is sent to Calidus 3*pl*-Mobile, to keep the files accurate. Simply use the screen as normal, and the data will be sent, as long as the interface flags are turned on.

8.2 Preadvices

Enter the preadvice as normal, either with or without pallet details.

Once all details have been entered, click the 'Send' button on the main preadvice screen. Tasks per pallet will be sent to Calidus 3*pl*-Mobile. You can only send preadvice records this way if the availability flag of the Pallet Receipt Update process is set to 'Y'.



Sending the preadvices to Calidus 3*pl*-Mobile need only be done this way if the Goods had not been preadvised via EDI. In this process, all messages will be automatically sent to Calidus 3*pl*-Mobile on receipt of the EDI.

Once pallets have been received on Calidus 3*pl*-Mobile and sent back to Calidus 3*pl* they will automatically be updated.

Note: In unexpected scenarios (e.g. unexpectedly received pallets) the Goods Receipt Note will NOT be automatically confirmed as received. The pallets, which have processed correctly, will have been confirmed but no action will have been taken on other pallets. You will still be able to put the correctly processed pallets away. In order to confirm the GRN fully, you must access the GR Confirmation screen and use the Confirm process there. Until this action is taken, the GRN will continue to appear on diagnostic reports. See section 5.2 for more details.

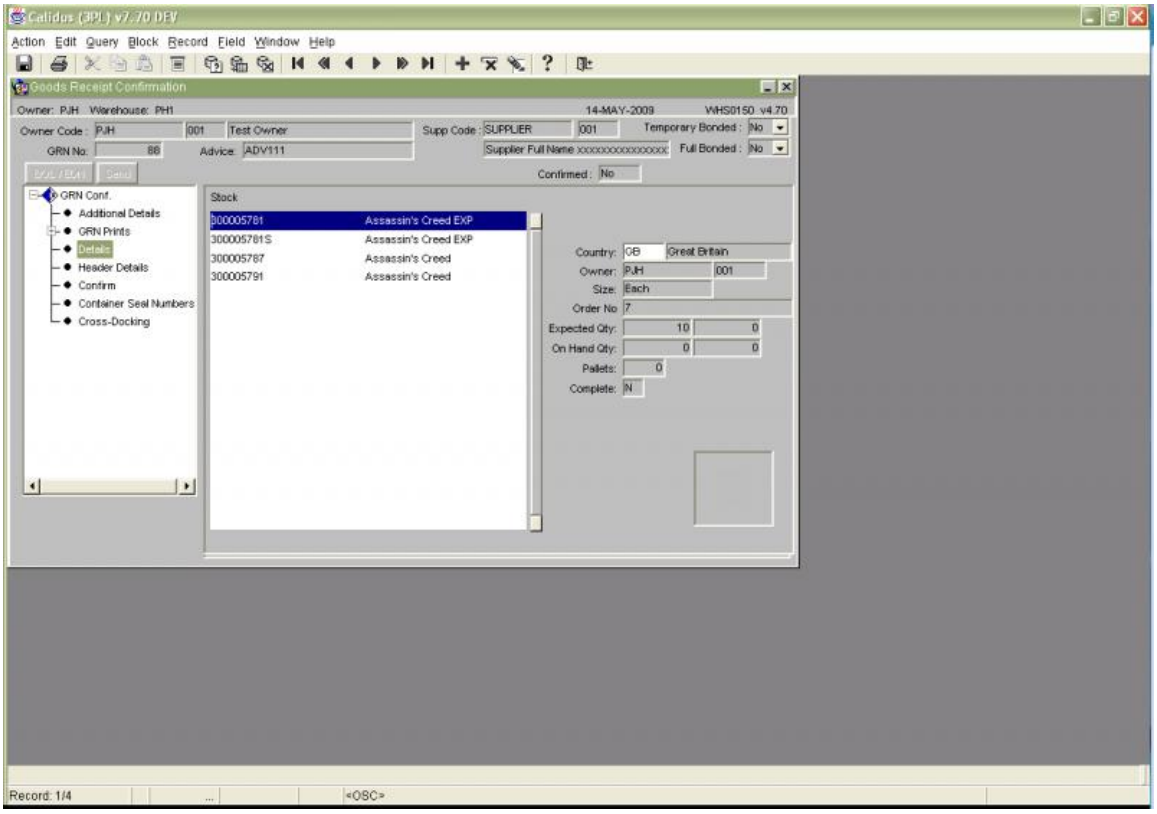
8.3 Putaways

When the Goods Receipt has been processed on Calidus 3*pl*-Mobile, update messages are sent back to Calidus 3*pl*. The Pallet Receipt Update program, controlled by the RDT Start/Stop screen processes these. When the program processes the receipt messages, it will generate a putaway location for the pallet automatically. This is sent through to Calidus 3*pl*-Mobile as a putaway task.

If a location cannot be found for the pallet, the putaway location will default to the third build-up location on system parameters, the Q/A location.

If, however, you have the availability flag of the Pallet Receipt Update process set to 'N' and the flag for Movement/Putaway Update process set to 'Y', you can send putaway messages a different way.

When the flags are set up this way, preadvice messages can't be sent to WCS, but putaway messages can. When you have created the goods receipt in Calidus 3*pl*, enter locations as normal in Goods receipt confirmation.

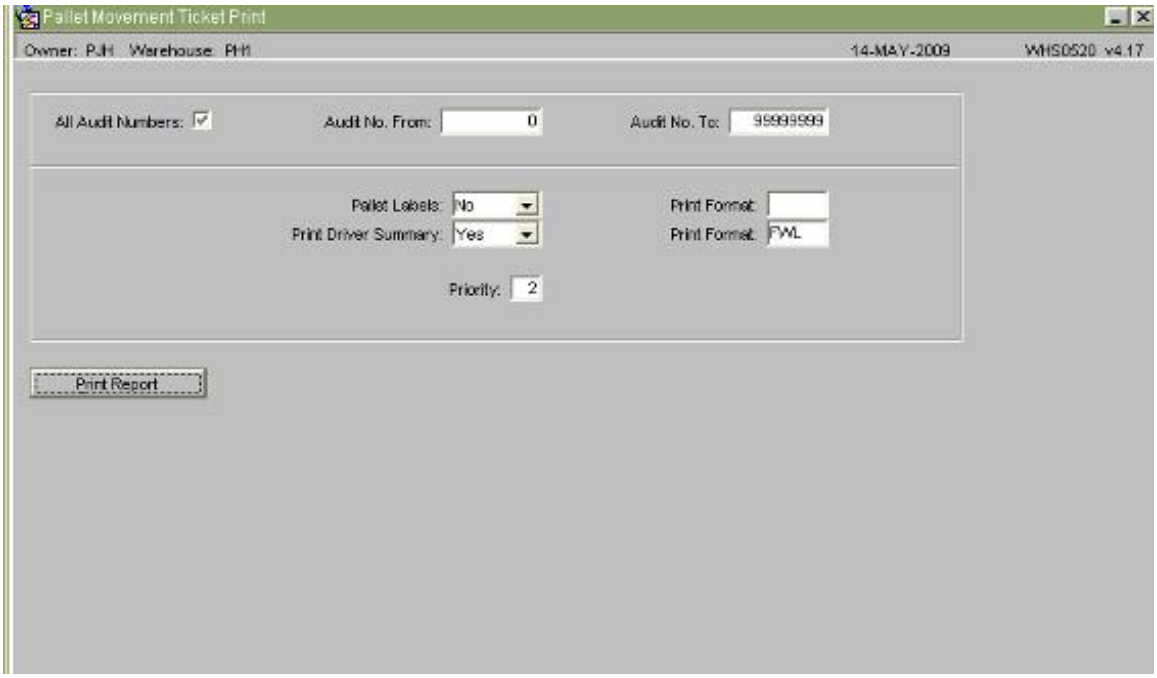


When the 'Confirm' option is chosen, the receipt is confirmed and then putaway messages are sent to Calidus 3*pl*-Mobile, with the locations that you specified.

Once the putaway messages have been processed, the pallets will be available in the system.

8.4 Pallet Moves

Pallet movements sent to Calidus 3*pl*-Mobile are processed in almost exactly the same way as normal. Pallet movements are raised via the Pallet Movement Request screen as normal. In the Ticket Print screen, you will be prompted for two extra items:



If you do not want to print the move ticket, enter 'No' at the appropriate prompt. You must then enter a priority for the messages. This priority will indicate how quickly the messages are processed in Calidus 3*pl*-Mobile. The values range from 2 (the highest) to 9 (the lowest).

After this entry, the request is processed as normal, but with movement messages being sent to Calidus 3*pl*-Mobile.

8.5 Replens

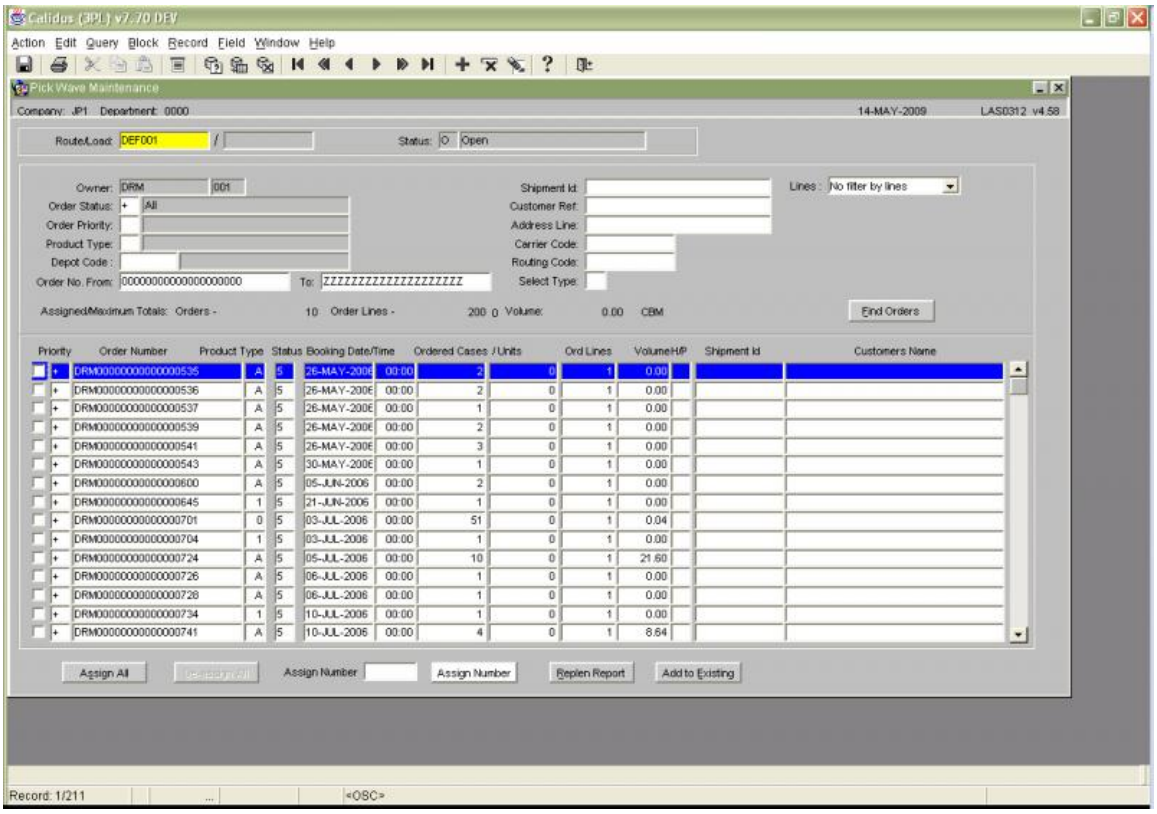
Replenishments are processed in the same way as pallet movements.

8.6 Picks

Pick tasks are sent to the RDTs at the normal pick list stage. This stage can be reached through a number of screens, the most common being the Pick Wave screen.

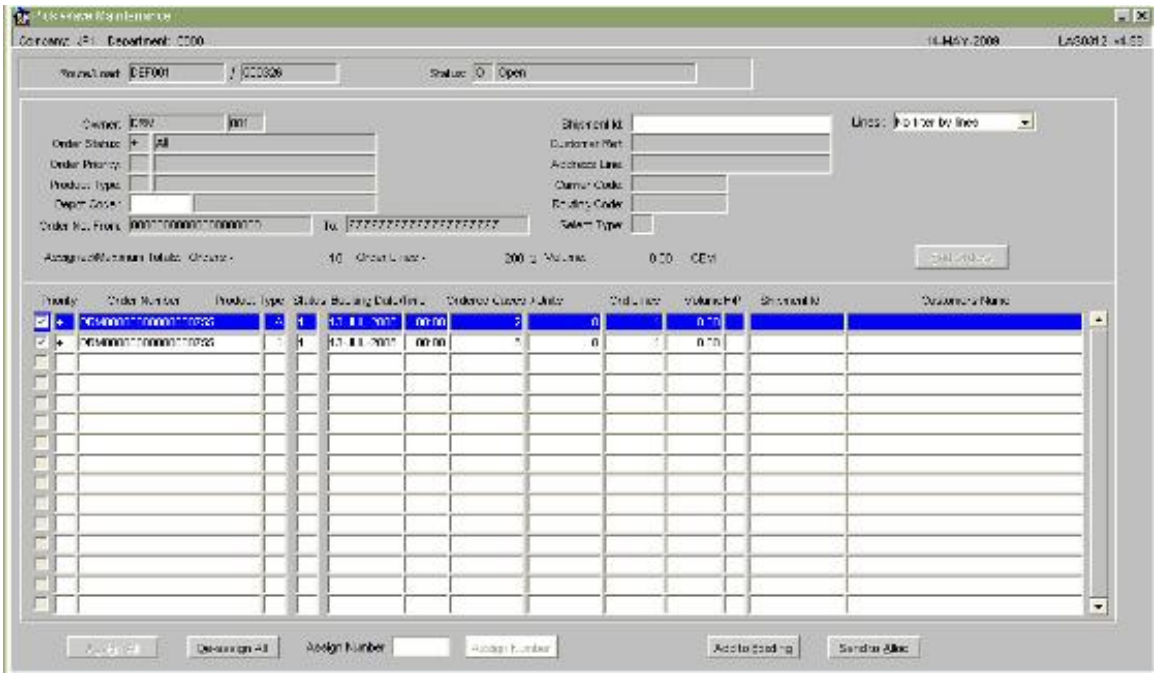
8.6.1 Pick Wave

Orders can be found and allocated to a Pick Wave, using this screen.



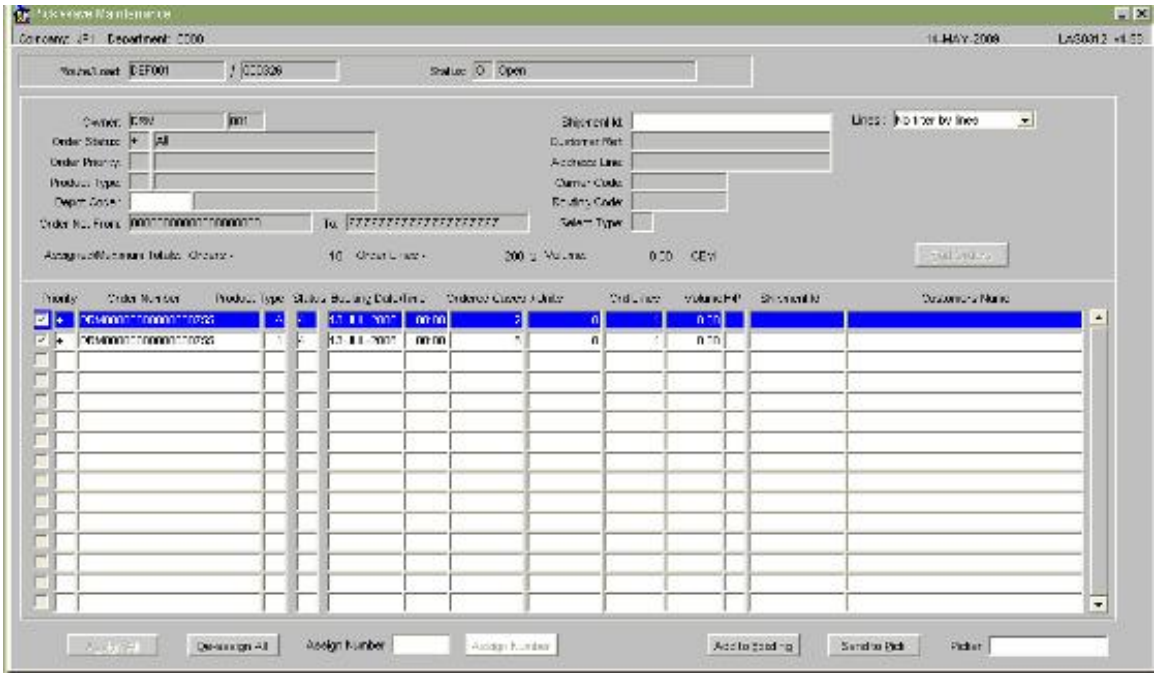
Enter a default load then click 'Find Orders' to display the orders. Criteria can be entered here to narrow down the orders to be found.

Once found, assign the orders to the Load using the check box next to the order, then save.

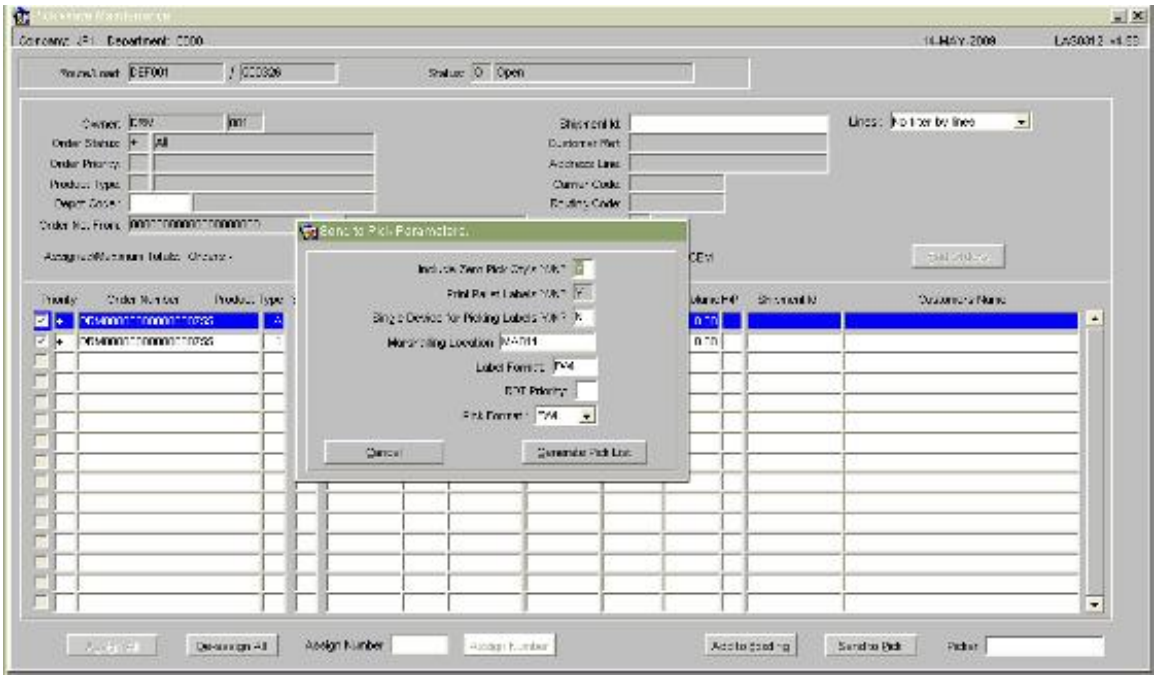


Click the 'Send to Alloc' button to allocate the load.

Once allocation is complete, the order can be pick listed using the 'Send To Pick' button.



If the load is to be pre-assigned to one picker, the employee ID of this picker can be entered in the Picker field before sending to pick.

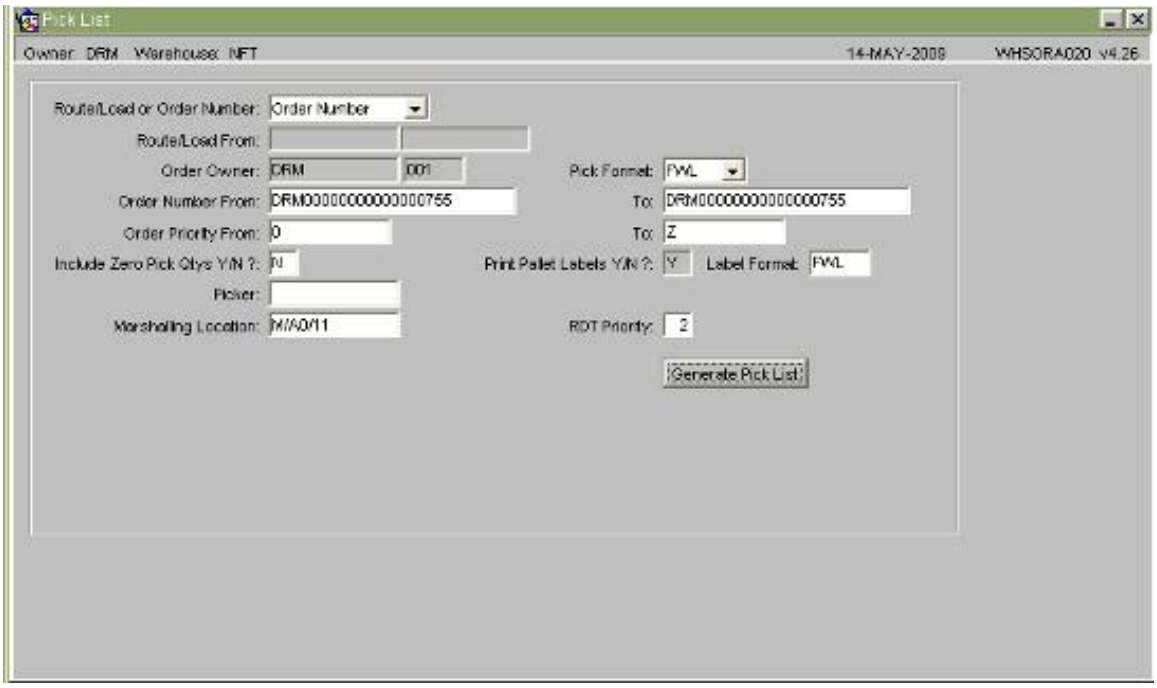


The Marshalling location is the lane to which you wish the picked pallets to go. If one is not entered, the system will default the location to the Default Marshalling Location in the system parameters screen. The RDT priority affects how quickly the pick tasks will be allocated to a picker. As with other RDT process priorities, this can be set from 2 to 9, 2 being the highest priority.

When you have chosen the parameters, click the 'Generate Pick List' button. This will produce a paper pick list if desired, and will also transfer the pick tasks to Calidus 3pl-Mobile for completion.

8.6.2 Pick List

If you allocate and pick list by separate processes in the menus, you will be prompted to enter the extra parameters at the Pick List stage:



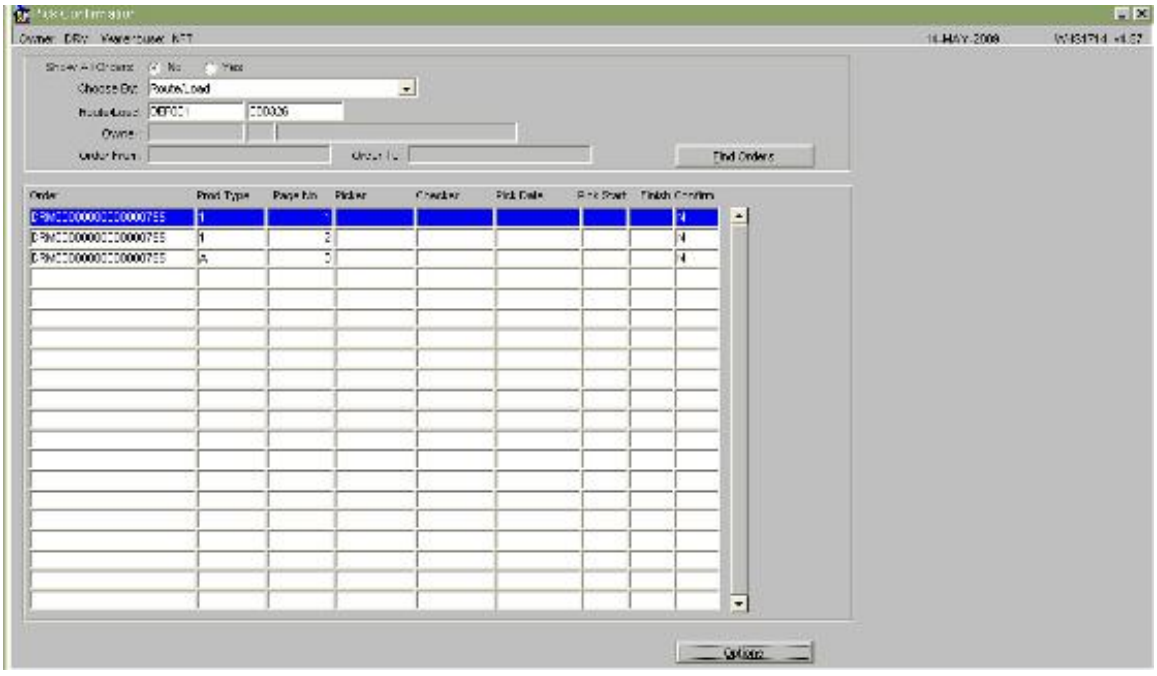
The Marshalling location is the lane to which you wish the picked pallets to go. If one is not entered, the system will default the location to the Default Marshalling Location in the system parameters screen. The RDT priority affects how quickly the pick tasks will be allocated to a picker. As with other RDT process priorities, this can be set from 2 to 9, 2 being the highest priority.

When you have chosen the parameters, click the 'Generate Pick List' button. This will produce a paper pick list if desired, and will also transfer the pick tasks to Calidus 3pl-Mobile for completion.

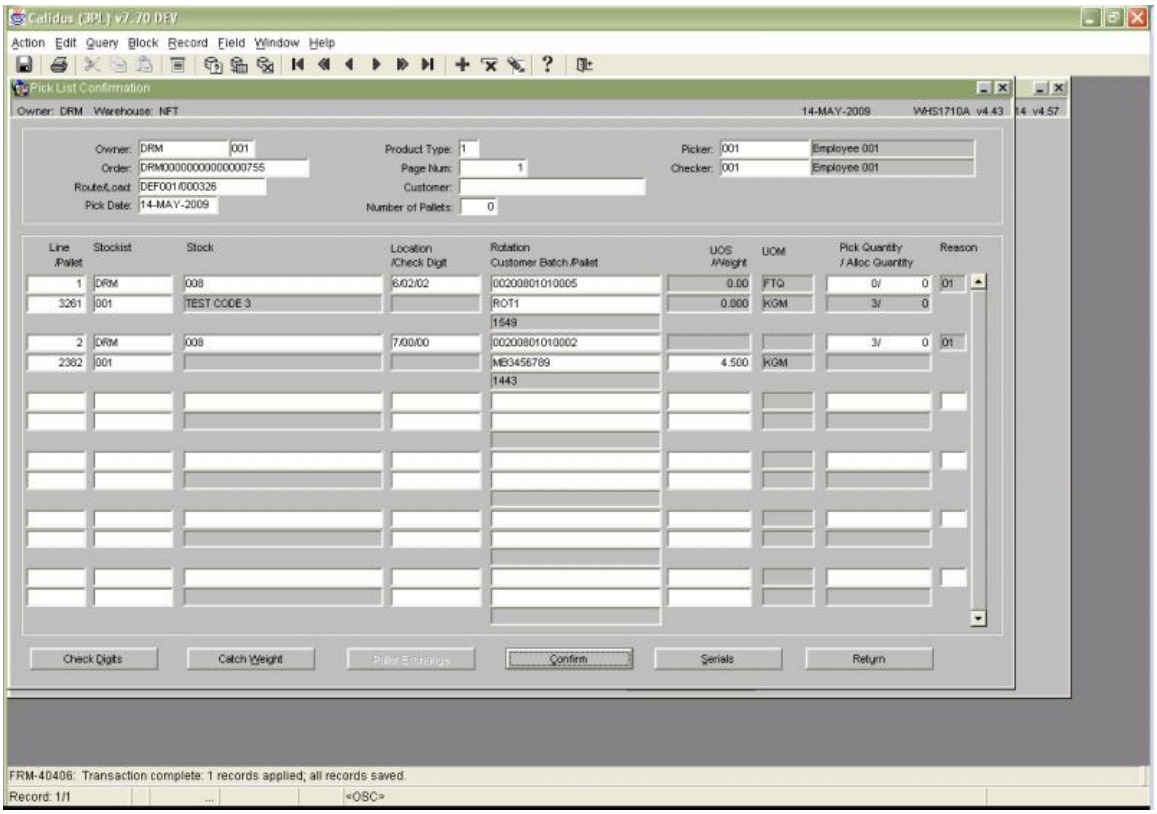
8.7 Pick Modifications

If you have short-picked an item or the pickers have not found some pallets, these tasks will be sent back to Calidus 3*pl*, and will reduce the amount picked. The shortfall must be appended onto the order. This is achieved by adding lines at pick confirmation, but without confirming the order.

First, find the order in the Pick confirmation by route/load/order screen:



Select the required page of the order. You will be taken to the confirm screen.

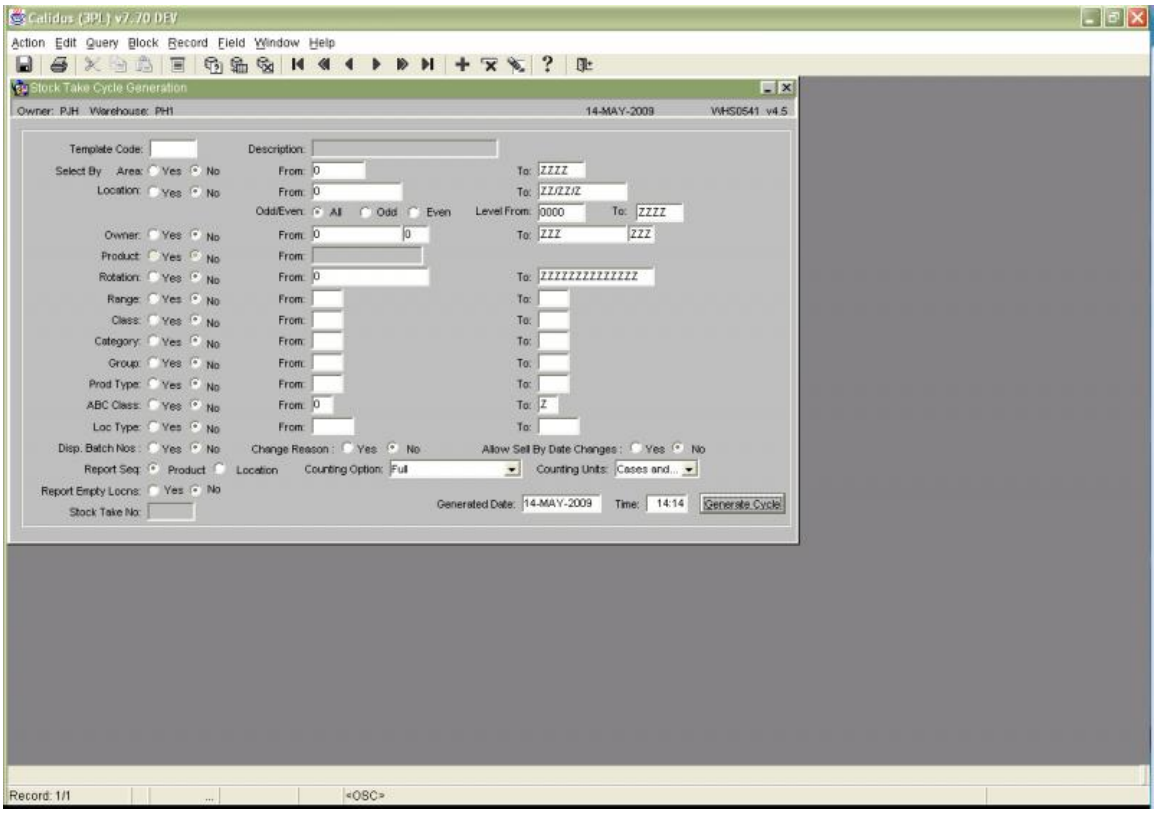


From here, append lines to the order as normal, but do not confirm the page. When saved, the appended pick task will be sent to Calidus 3*pl*-Mobile for processing. When completed, the task will be returned and updated automatically by Calidus 3*pl*.

Pick tasks that have been manually short-picked or confirmed will also be interfaced to Calidus 3pl-Mobile, to reduce or remove the pick tasks outstanding.

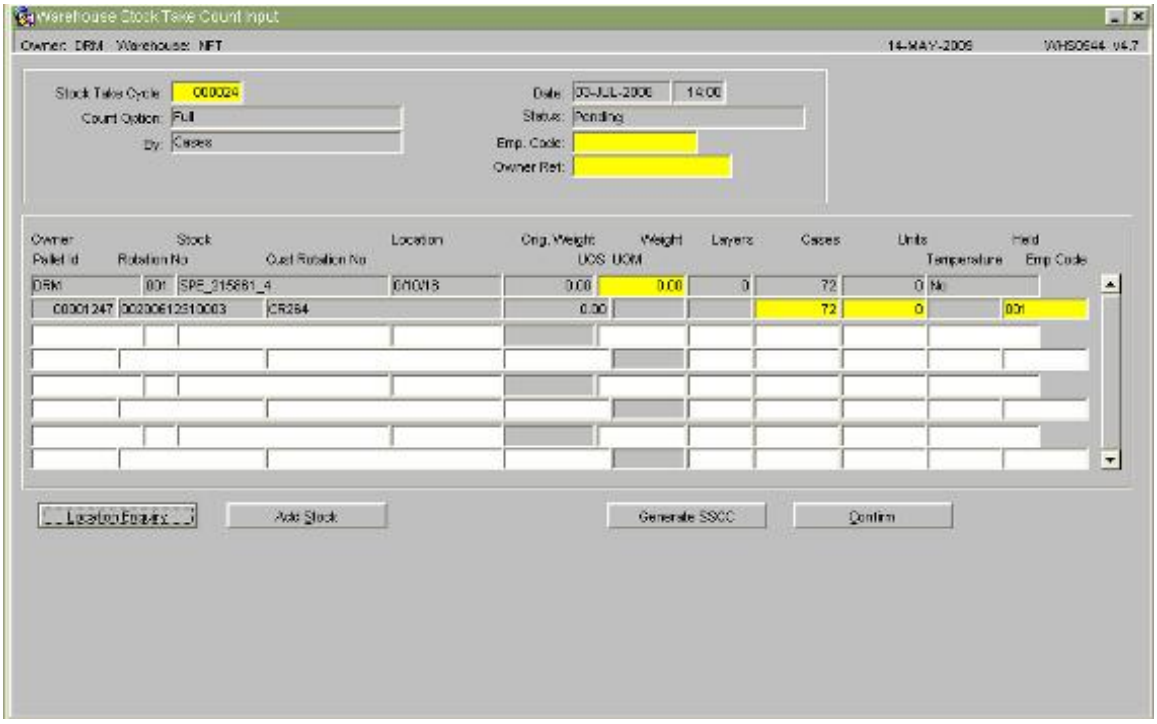
8.8 Stock Check

Generate the stock check cycle as normal in the generation screen. For messages to be sent to Calidus 3*pl*-Mobile, the interface flag (either from owner or system parameters) must be set, and the stock check availability flag and owner check flags must also be set in the RDT start/stop screen.

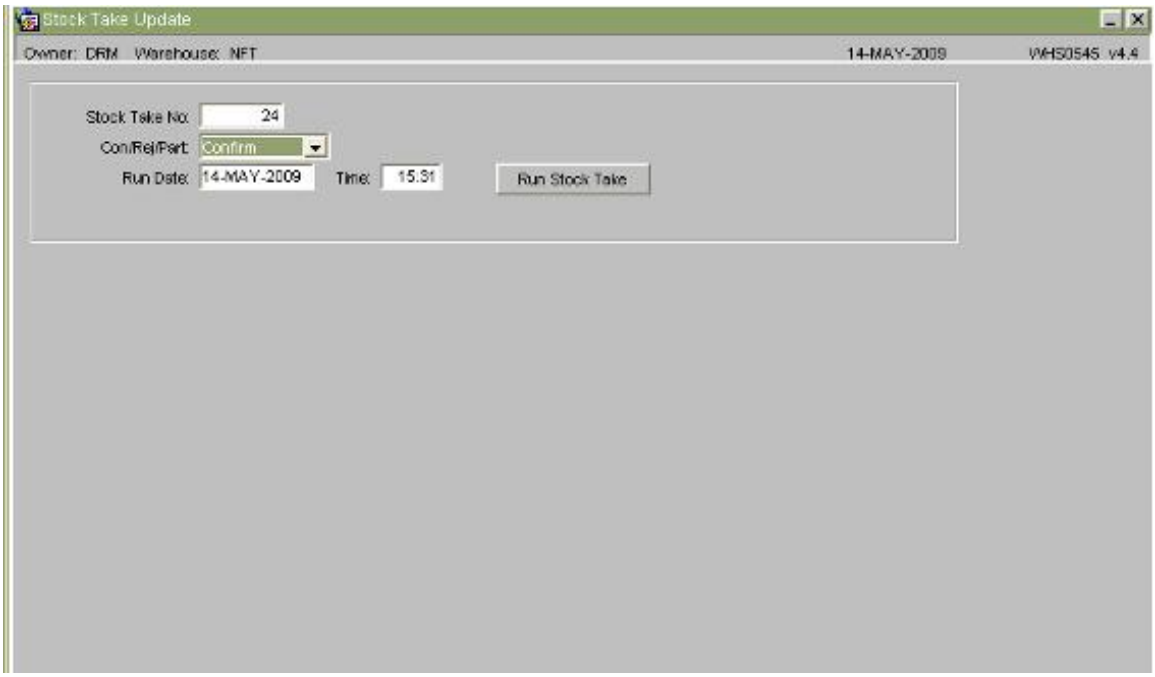


The cycle will either be a full stock check or a partial stock check. If neither, the stock check will be assumed to be a partial, or pre-advised, check.

Once stock details have been checked on the RDTs, the information is sent back to Calidus 3*pl* and updated into the stock take count input screen.



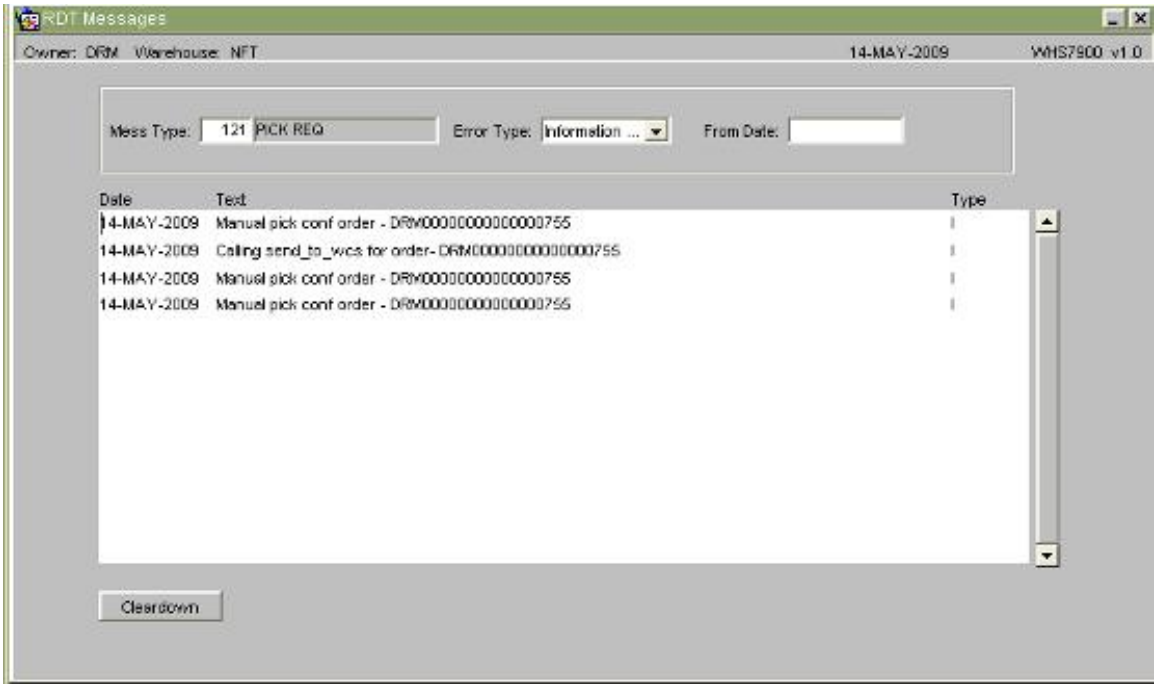
Once the data is checked for consistency, the cycle can be confirmed (using the 'Confirm' button), making it ready for updating, using the Stock Take Update screen.



Good counts should be confirmed. If unsure about the counts, the cycle can be rejected or partially confirmed. In a partial confirmation, any records that were correct are confirmed, and any with modifications are left on the stock cycle.

9 Receiving Procedures

9.1 Receipt Transaction Exceptions

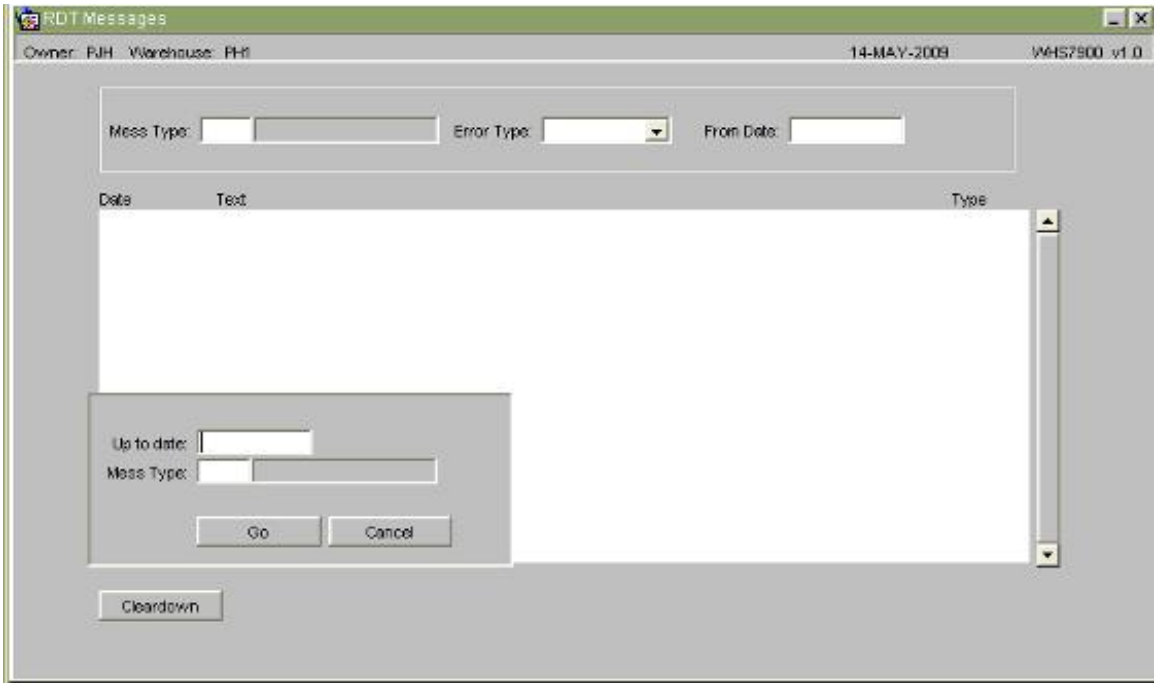


Message types allow you to choose which processes' messages you want to see on the report. A full list will be shown.

The error type allows you to choose from a range of message levels:

- Informational (type 'I') - Some processes write away messages to the report, showing successful completion of update. These are informational messages.
- Warning (type 'W') - Warnings show data that may need to be fixed, but the line has been updated anyway.
- Error (type 'E') - Errors show records that cannot be updated. The reason will be shown in the description. Data with errors must be entered and updated manually through the normal manual update screens.
- Debug messages (for support)
- All (type 'A') - All of the above.

You are prompted to choose a Date From. This will default to today's date.



The 'Cleardown' button shows the parameters required so that the exceptions log can be cleared. This should be done on a regular basis. By default, no clear-down is done. If you choose to do the clear-down, you are prompted to enter a date. All data before this data will be deleted. Take care using this function as, once deleted, the exceptions data cannot be recovered.

9.2 Diagnostics processes

In addition to the above report, several diagnostics reports exist that will aid in identifying possible problems:

- For GRNs:
- GRN's not putaway confirmed
- GR Discrepancies Report
- GRN's advised not confirmed
- For Orders:
- Order (status) report
- Unconfirmed Orders
- Unconfirmed Pick Pages Report
- For Moves:
- Unconfirmed Movements
- Outstanding Movements Report

Additionally, the Data Extraction Suite allows the user to design reports to examine all of this data.

Various enquiries exist in the system, which will also aid identification:

- All stock movements enquiries
- Customer Pallet ID Enquiry
- Pallet Enquiry
- Order Enquiry