

Hand Held Screens - Main Menu

The following Specifications are based upon existing PHP applications which have been designed to meet the Data Capture requirements of a wide range of Clients.

Most Clients specify that the design of the screens must offer the following features:

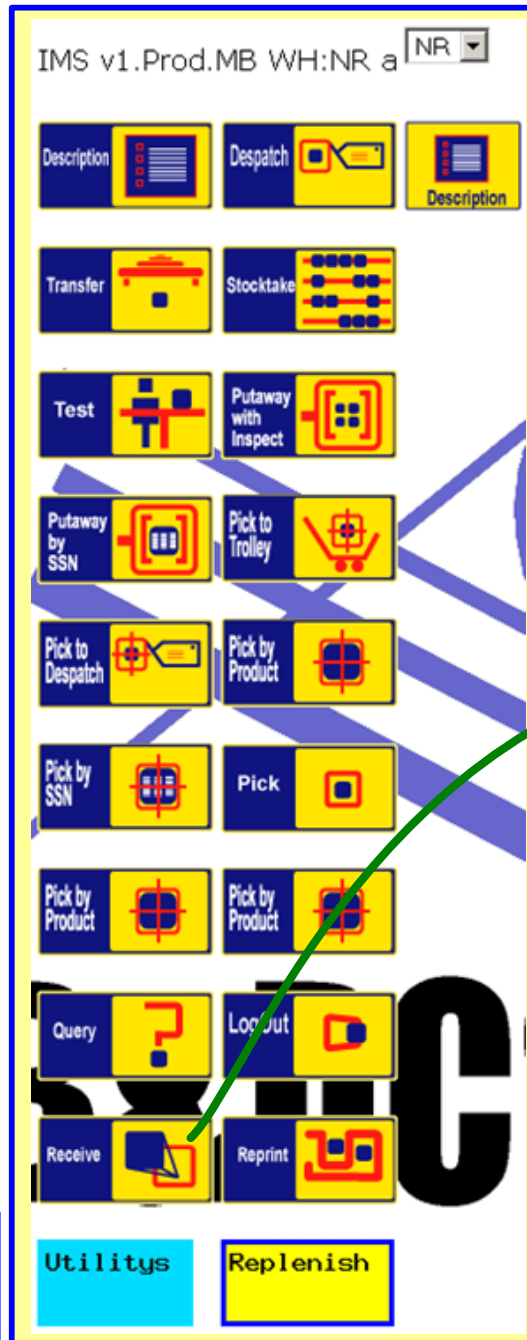
- Easy to read in both bright sunlight and poorly lit Warehouses. We need to be careful with colour selections and font sizes.

- Intuitive where Users are able to operate with little training. This also means they are prompted where possible before they can send incorrect data to the MINDER Server.

- If on-screen keyboard data entry is required (versus Barcode Scanning) we must position the input fields at least 50% up from the bottom edge as this is where the SIP will appear and Users do not like having to move the Keyboard around.

- Where possible if data capture must be by keyboard that both SIP and the Hand held terminal keys can be used. Users prefer to have a choice of input.

We use a Graphics Artist to prepare the Menu icons. Not all Options have been prepared but will be changed in future upgrades.



All MINDER database updates are performed via Transactions which trigger a stored procedure and not by direct field inserts or updates.

MINDER keeps a copy of successfully processed Transactions in the TRANSACTIONS_ARCHIVE table where we use for Audit trail Reporting.

These Specifications use one layout pattern that shows how data is to be populated into the Transactions.

Note: these layout patterns were based upon the USER_ID only accepting 8 bytes whereas MINDER allows for 10 bytes.



Hand Held Screens - Receive Delivery

WAREHOUSE RECEIVE DOCK

Operator opens up a 20' or 40' Shipping Container or Truck load of Inventory and places these onto Pallets (if not already palletised) and where each pallet has only one Product Code unless receiving SSN Inventory (Non-Product Load).

If Inventory has Lot or Batch or Use-By Dates then it must be stacked only one type per pallet.

We use term 'Load' to indicate Inventory that has not been Ordered from the Sender using a 'Purchase Order', 'Return Order', 'Work Order' or 'Transfer Order'. E.g Ex leased IT equipment which has been returned for Replenishment or inventory owned by a 3rd party.

Recording Delivery details is all about how the Shipment arrived at the Warehouse but not (yet) recording what is inside the Delivery.

Display according to selected Order Type (see previous page)
'Purchase Order', 'Load', 'Load Product', 'Return Order', 'Work Order', 'Transfer Order'.

Either:
User may enter a valid GRN (must look-up GRN Table) if previously booked-in Receipts.
Then display if found the GRN Details: Owner, Carrier, Veh. Reg, Pallets and Container Feilds. No changes allowed.

Or
If left blank System will generate new GRN

Either:
User may enter a valid Order No (must look-up PURCHASE_ORDER Table and check that Order still has Open status).

Or
If **NOT AN ORDER** (but a Load Type) then may be left blank as System will generate new Load Number

W*M DELIVERY

Type: **Purchase Order**

GRN No: PA

Order No: P000123



Sent By: AVOCADO UNO

Carrier: AIRROAD

Veh.Reg: ABC123

Shipped Date: 31/01/06

Owned By: Fresh Produce Group

Label Printer ID

Line No of Order - will be used as part of ISSN Barcodes

Dropdown list of Suppliers from Person Table where **PERSON_TYPE** = 'CS' - Company Supplier or 'IS' - Individual Supplier or 'LE' - Leasee.
Plus **GRN_Type** = 'Load Non-Product' (LD) or 'Load Product' (LP).
If **GRN_Type** is an *_Order then Supplier is specified within Order details hence grey out dropdown list.

Dropdown list from CARRIER Table

Enter the Date Consignment Shipped from Sender. OPTIONAL Entry Field. Use Date Picker.

Owned By from dropdown list COMPANY Table. Default to CONTROL.COMPANY_ID -> COMPANY.DESCRPTION



Back to Main Menu

If the GRN is entered (and exists) then Hand Held proceeds to VERIFY Screen

Delivery CONNOTE Screen

B&DCS

Hand Held Screens - Receive Delivery Connote - Hire and Comment Entry



If 'Yes' selected for Shipping Container then User enters No. and Type e.g. '40 Foot'

Note we do not have Transaction Type ready to pass CONTAINER_NO and SHIP_CONTAINER_TYPE to the GRN Table. Will be part of GRNDL

W*M CONNOTE X

Type: **Purchase Order**

GRN No: PA

Order No: P000123

Shipping Container: ☐ No ☐ Yes

40'

Consignment /AWB/Del. Docket No.
CN-12346ABCDEF

Received: 10 Packages

Damaged Flag: ☐

Back Accept Continue

W*M HIRE X

Type: **Purchase Order**

GRN No: PA

Order No: P000123

Hire Pallets: NONE 0

Hire Packaging: CHEP

Hire Packaging Type:

Fold-down Crate Size #1

PackagingCrate Qty: 100

Back Comment Accept

W*M HIRE X

Type: **Purchase Order**

GRN No: PA

Order No: P000123

Enter Comments (Max 80 chars)

STOCK FOUND -
CLEANUP OF NEW
PREMISES AT SMITH ST

Back Accept

Comment Accept

Comment Button.
Pop-up
Comments input .
Locate above SIP
region to save
User having to
move panel.

**Send GRNCC
Transaction after
GRN is entered or
created by GRND**

Back to
GRN
Delivery
Screen

17d_continue.gif

01d_accept.gif

15d_comment.gif

Send GRND Transaction

Enter the Air Way Bill,
Consignment Note or
Delivery Docket
Number used by
Sender.
**MANDATORY. If
none then user must
enter 'NA'.**

Enter total Packages
received should match
Consignment Note total
(Default=1).
MANDATORY FIELD

**MANDATORY - Received Hire
Packaging Crates**
Dropdown list from OPTIONS
Table where **GROUP_CODE** =
'PACK_OWNER',
CODE = 'NO', 'CH', 'LO', 'OW',
'UN' and matching
DESCRIPTION's = 'NONE',
'CHEP', 'LOSCAM', 'OWN',
'UNKNOWN'.
If > 'NONE' then **must Enter Qty**
of Crates received.

'Damaged' Flag is used by
BlueScope Steel to Report for
closer inspection of the Delivery

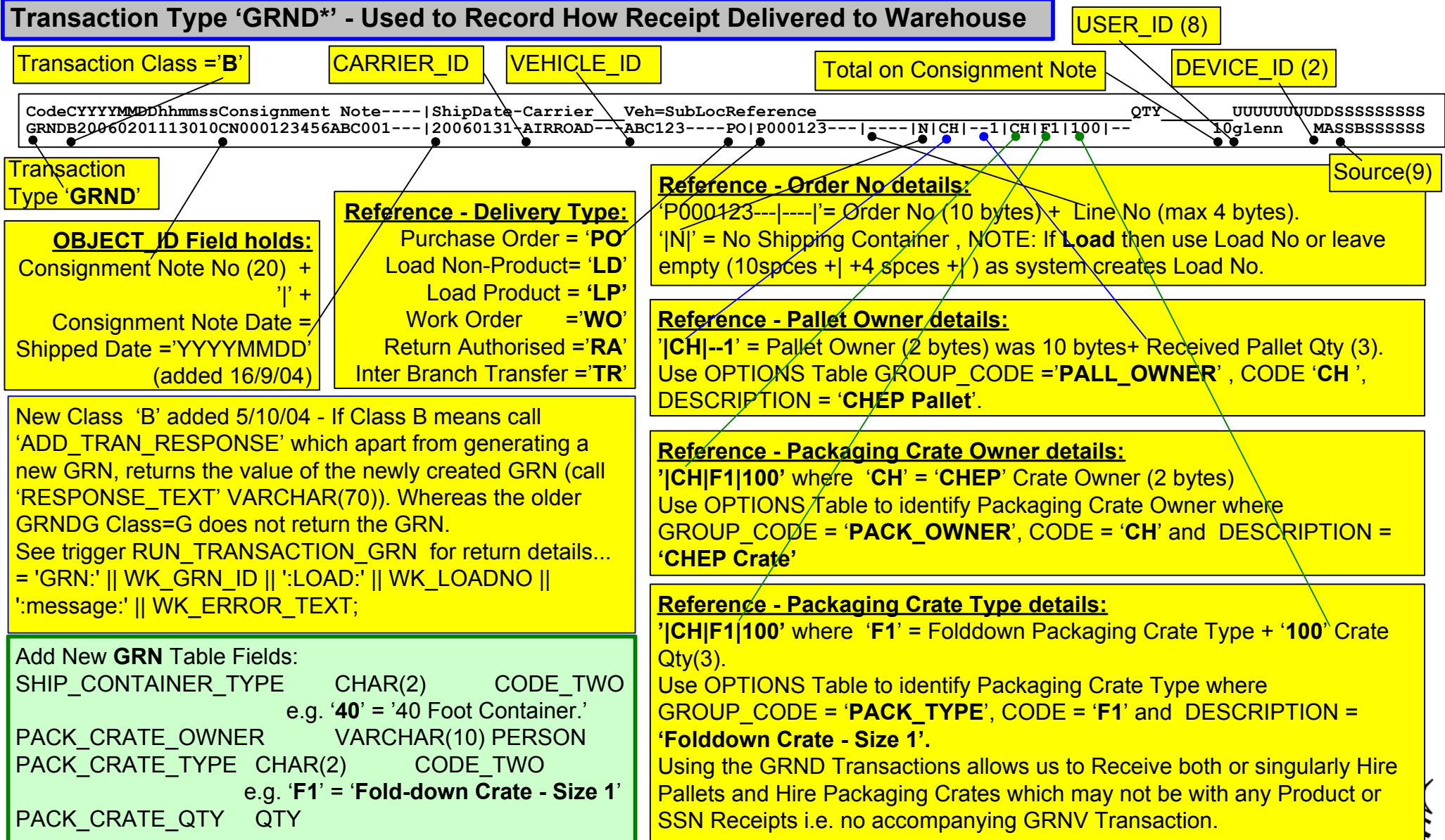
MANDATORY - Received Hire Pallets
Dropdown list from OPTIONS Table where **GROUP_CODE** =
'PALL_OWNER',
CODE = 'NO', 'CH', 'LO', 'OW', 'UN' and matching
DESCRIPTION's = 'NONE', 'CHEP', 'LOSCAM', 'OWN', 'UNKNOWN'.
If > 'NONE' then **must Enter Qty** of Pallets received.

MANDATORY - Received Hire Packaging Crate Types
Dropdown list from OPTIONS Table where **GROUP_CODE** =
'PACK_TYPE',
CODE = 'NO', 'F1', 'F2', 'F3' and matching
DESCRIPTION's = 'NONE', 'Fold-down Crate - Size #1', 'Fold-down
Crate - Size #2', 'Fold-down Crate - Size #3', 'UNKNOWN'.
If Crate Hire > 'NONE' then **must Enter Crate Type**.

Send GRND - Goods Receival Notification - Delivery Details Transaction

V3.8 MINDER Transactions are key to updating the MINDER Database system. They are inserted by Delphi, Java and Hand Held Applications into the TRANSACTIONS Table. Stored procedures then update the Database and provide Audit trail. Note: '|' is a delimiter and is only found inside of some Transaction Fields. All v3.8 Transaction have fixed length (138 bytes) and fixed field layout. V4.0 has variable lens.

Transaction Type 'GRND*' - Used to Record How Receipt Delivered to Warehouse



Send Transactions - Update Comments GRNCC, Print GRN Labels GRNDL



Transaction Type = GRNCC - Records a Comment about Goods Delivered to Warehouse

This Transaction is called when a User needs to add a Comment to the GRN Record. Cannot sent unless the User has entered a valid GRN or a GRNDB Transaction has been processed and returns the GRN needed by the GRNCC Transaction.

```
CodeCYYYMMDDhhmmssGRN COMMENTS (40BYTES) -----GRN-NO---GRN-COMMENTS (40) -----QQQQQQQQUUUUUUUUDDSSSSSSSS
GRNCC20030902113010STOCK FOUND - CLEAN UP OF NEW PREMISES AGRN01234--T SMITH ST-----1glenn MASSBSSSSSS
```

SUBLOCATIN Field holds:
GRN (10) from previous GRND* Transaction

OBJECT_ID(30)+LOCATION(10)+Reference(40) Fields holds complete Comment:
'STOCK FOUND - CLEANUP OF NEW PREMISES AT SMITH ST'

GRNDL = Used to Update GRN, GRN_ORDER Tables + Print GRN Labels - Must have GRN or send GRND to create a GRN

**Must send GRNDL Transaction if
CONTAINER_NO populated**

This Transaction enables a GRN Labels to be printed (one per Connote Package quantity). CONTROL Table 'DEFAULT_GRN_LABELS' > 0 to allow Printing of GRN Labels. Cannot sent until a GRNDB Transaction has been processed as this returns the GRN needed by the GRNDL Transaction. This feature is only used by APCD to date. These Specifications will be modified in the future when required. Ignore for Fresh Produce Group.

Load or Order (and sometimes called 'Job') Number

**Total GRN Labels required.
If allowed by CONTROL**

```
CodeCYYYMMDDhhmmssGRN-----| Spare---OWNER_ID--SUPPLIERIDRference QTY UUUUUUUUDDSSSSSSSS
GRNDL20060201113101GRN01234-----|-----FRESHPROD-AVOCADOUNOPO|P000123---|FUTURE SHIP_CONT_NO-|TY|PA 10glenn MASSBSSSSSS
```

**Class = 'L'
added 09/05/06**

**GRN as
returned from
GRNDG or B
above**

LOCATION Field holds:
OWNER_ID (10),
SUB_LOCATION Field holds
SUPPLIER_ID (10)

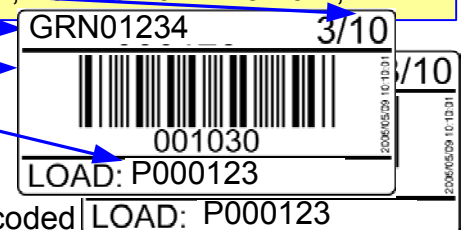
Reference Field holds:
'PO' = Purchase Order, 'P000123---' = Order No (10 bytes) + '|'
FUTURE SHIP_CONT_NO(20) + '|' + TYPE(2) + '|' + Printer ID (2)
Note no Line No.

Create 'GRN.txt' Label Data file for use by BarTender to print from e.g.
"001030","GRN01234","P000123","FRESH PRODUCE GROUP","10","2006/02/01 11:31:01","PA"

The 'GRN.txt' file is created in a Folder which is monitored by Commander and triggers BarTender to print a label using the data from the text file.

System uses Database
Generator
GRN_LABEL_NO = Barcode
on label

Owner Name = 'FRESH PRODUCE
GROUP' but not used on small label



10 Labels sequentially Barcoded LOAD: P000123

Hand Held Screens - GRN & GRN_ORDER Tables

The GRNDB Transaction creates or updates a GRN Record except for the Comment Field.
 THE GRNCC Transaction adds the Comment to GRN Record but only up to max 255 bytes.
 The GRNDL Transaction is used to create Barcode Label printer text file 'GRN.txt'

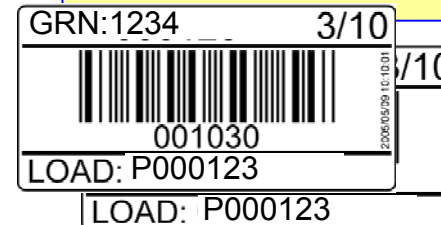
CREATE TABLE GRN

GRN	'1234'
GRN_TYPE	'PO'
TOTAL_QTY_PACKS	'1'
PACK_EAN_SSCC	
CARRIER	'AIRROAD'
VEHICLE_ID	'ABC123'
AWB_CONSIGNMENT_NO	'CN-12346ABCDEF'
GRN_PALLET_QTY	'0'
DELIVERY_DOCKET	
PALLETS_YN	'N'
CONTAINER_NO	'FUTURE SHIP_CONT_NO'
COMMENTS	'STOCK FOUND - CLEANUP OF NEW PREMISES AT SMITH ST'
GRN_PRINTED	
USER_ID	'glenn'
DEVICE_ID	'MA'
GRN_DATE	'01/02/2006 11:30:10AM'
ORDER_NO	'P000123'
ORDER_LINE_NO	'1'
RETURN_ID	'AVACADOUNO'
SHIPPED_DATE	'31/01/2006'
RECEIPT_FLAG	'F'
LAST_UPDATE_DATE	'01/02/2006 11:30:10AM'
LAST_LINE_NO	'1'
LAST_PALLET_NO	'10'
SHIP_CONTAINER_TYPE	'40' // Future release
PACK_CRATE_OWNER	'CHEP'
PACK_CRATE_TYPE	'F1'
PACK_CRATE_QTY	'100'
PRIMARY KEY (GRN)	

Example data from previous pages

CREATE TABLE GRN_ORDER

(
GRN	'1234,
ORDER_NO	'P000123',
GRN_LABEL_NO	'001030'
)	
CREATE TABLE GRN_ORDER	
(
GRN	'1234,
ORDER_NO	'P000123',
GRN_LABEL_NO	'001033'
COMPANY_ID	'FRESHPROD'
SUPPLIER_ID	'AVOCADOUNO'
CREATE_DATE	'01/02/2006 11:31:01AM'
CREATED_BY	'glenn'
PRIMARY KEY (GRN_LABEL_NO)	

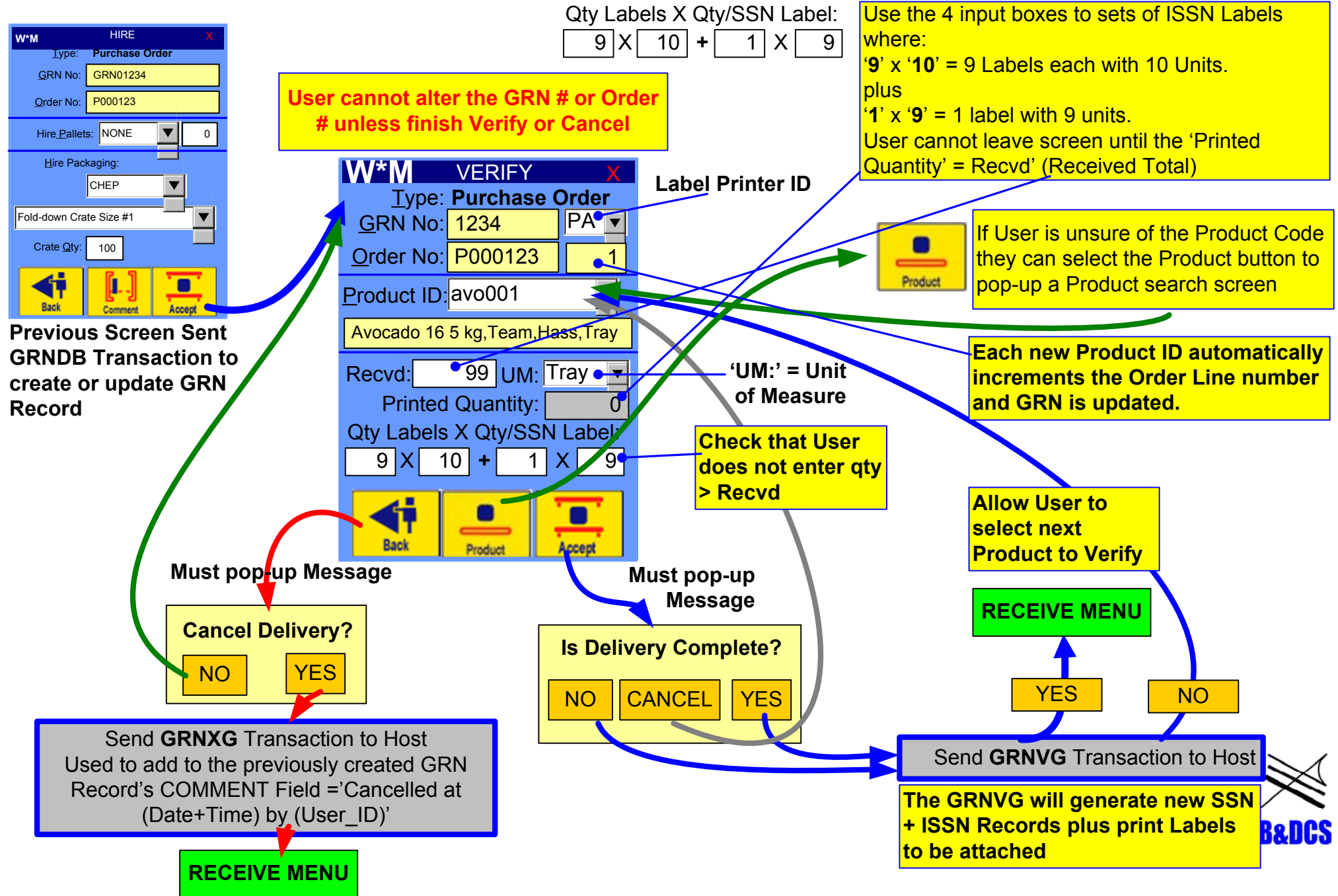


The GRN Labels are now attached one/Package

Add New GRN Table Fields:

LAST_LINE_NO	INTEGER
LAST_PALLET_NO	INTEGER
SHIP_CONTAINER_TYPE	CHAR(2) CODE_TWO
	e.g. '40' = '40 Foot Container.'
PACK_CRATE_OWNER	VARCHAR(10) PERSON
PACK_CRATE_TYPE	CHAR(2) CODE_TWO
	e.g. 'F1' = 'Fold-down Crate - Size 1'
PACK_CRATE_QTY	QTY

Hand Held Screens - Verify What has been Received



Send **GRNVG** Transaction to Host

W*M		VERIFY		X	
Type: Purchase Order					
GRN No:		1234		PA	
Order No:		P000123			
Product ID:		avo001			
Avocado 16 5 kg,Team,Hass Tray					
Recvd:		99		UM: Tray	
Printed Quantity:		0			
Qty Labels X Qty/SSN Label:					
9		X		10	
		+		1	
		X		9	
					
Back		Product		Accept	

|--9|---10|---1|---9| = 1 x SSN Record + 10 x ISSN Records to be created each with SSN_Original Qty = 99 and 10 Labels to be printed on Printer = 'PA'

