Collaborative Demand Portal (CDP)

Process Flow driven User Guide

Version 7.0
January 2012

Table of Contents

User Guide for Collaborative Demand Portal (CDP)

Base Functionality

CDP provides functionality to manage a company's customers. It provides a collaborative Demand Portal for the plants and its customers to interact in real time. Through the portal all the players in the demand chain will get full visibility in to:

- Sales Orders
- Shipments
- Receipts
- Inventory
- Metrics
- KPI
- Notifications

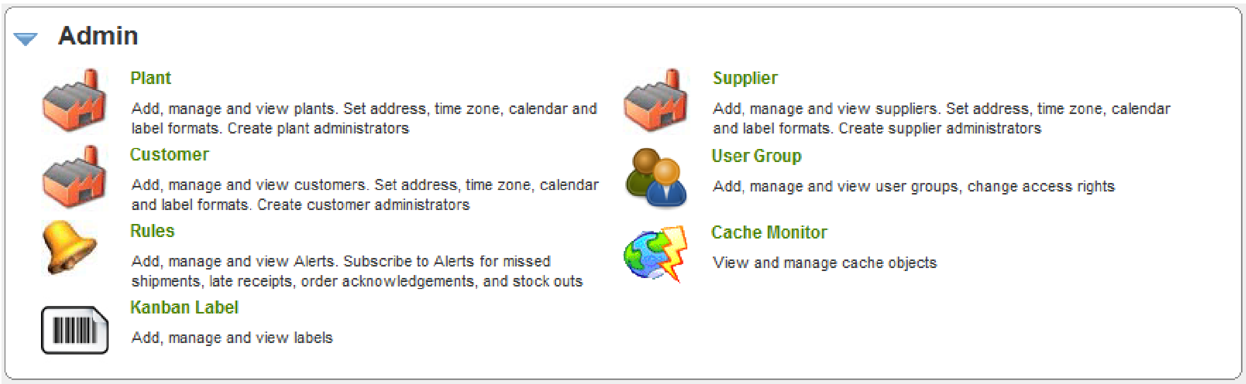
The portal supports consumption driven replenishment model with the customers. The main focus of this portal is for the plants to get demand signals when their customers use their goods. Secondly plants wish to get visibility in to their customer's on hand inventory, risk of the customers running out of parts and real time metrics.

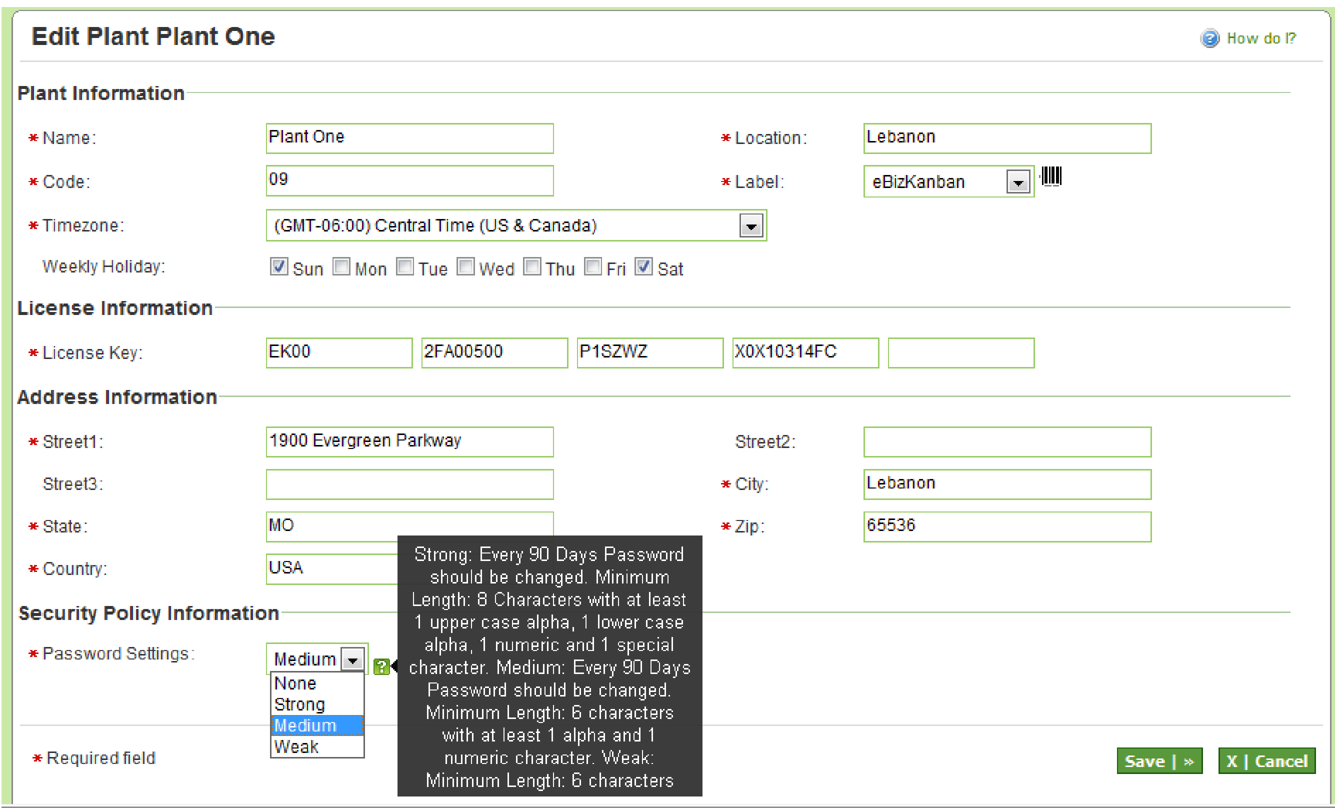
At the same time Customers will get better visibility in to where their orders are, notifications on late and short shipments, real time risk of stocking outs and analysis of inventory sizing.

The portal will help build trust between the plants and their customers and ultimately reduce the overall inventory in the chain while increasing the inventory velocity.

Setting up a plant

This is the first step in starting the deployment of CDP. This task is normally performed by Ultriva consultant.





While creating the plant there are few defaults that could be set:

- The time zone
- # of working days
- Security policy. Ultriva supports three levels of passwords. Strong, Medium and Weak. Once set at the plant level this will be enforced for every user.
    - Strong
        - Every 90 days password should be changed
        - Minimum length: 8 Characters

- Password should contain: 1 upper case alpha, 1 lower case alpha, 1 numeric and 1 special character
- Medium
  - Every 90 days password should be changed
  - Minimum length: 6 Characters
  - Password should contain: 1 alpha and 1 numeric characters
- Weak
  - Minimum length: 6 Characters

<u>Note</u>: CDP can also be set up by adding this module to an existing plant running CSP through a change in license key. This helps the customers to get one holistic view of supplier and customer management in a single portal.

As the plant is set up an overall administrator is also created. This user could be a system administrator, an App Administrator or a Plant Administrator.

The responsibility of the administrator is to create role based users – primarily customer service people to start with and then follow up with Planners/Schedulers, Warehouse personnel and other related roles.

Creating Customers

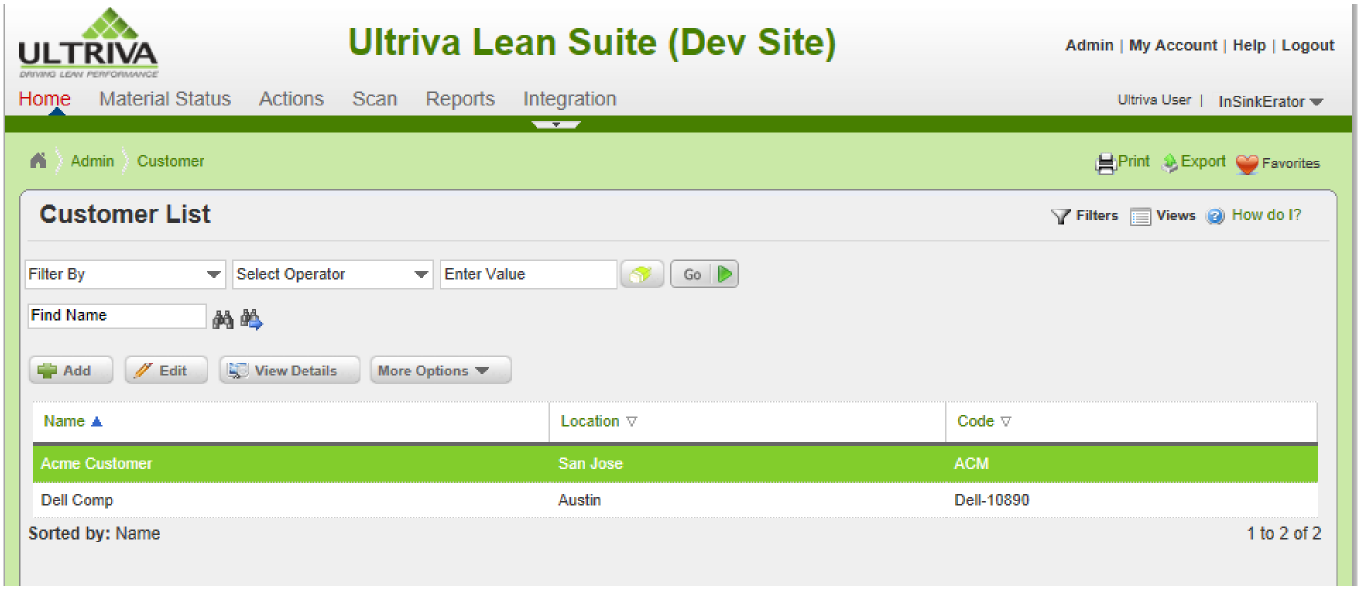
Ultriva allows plants to create customers either at the system level and associate with the plant or directly create at the plant level. To create a customer

- Login to the application as an App Admin or Plant Admin
- Click on the ADMIN menu at the top
- Open the Customer Admin panel as shown below

Adding a customer

- Click on Customer from the above panel
- If you are creating a first customer then it will start with Add customer button

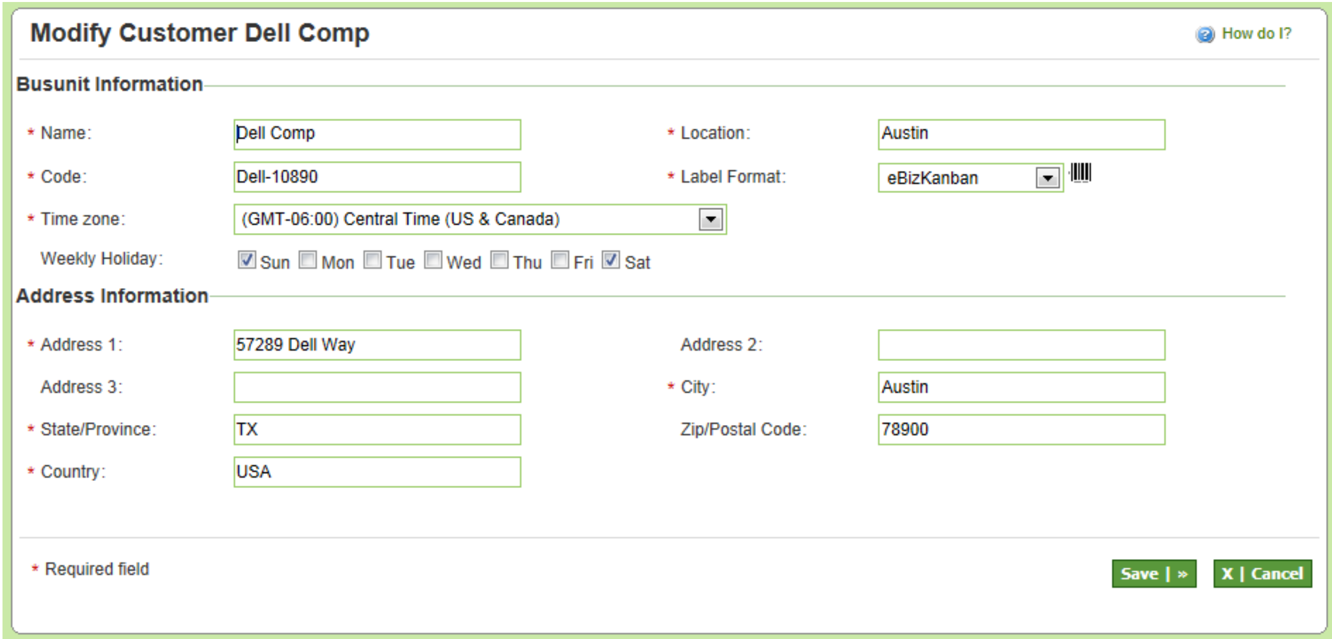
- If you already have created customers then the following list will be shown



You can either add a new customer by clicking ADD button on the top. You can also select an existing customer and edit the information by clicking on the EDIT button above.

The screen below shows the information to be entered for creating a customer.

- Enter Name
- Enter Location
- Enter Customer Code
- Select Label format
- Select Time Zone
- Enter customer's address
- Click Save



Creating an Item

After creating a customer, the next step is to associate the Finished Goods parts to one or more customers. For plants that are already using Ultriva to manage finished goods, it is a matter of just associating them to the respective customer(s).

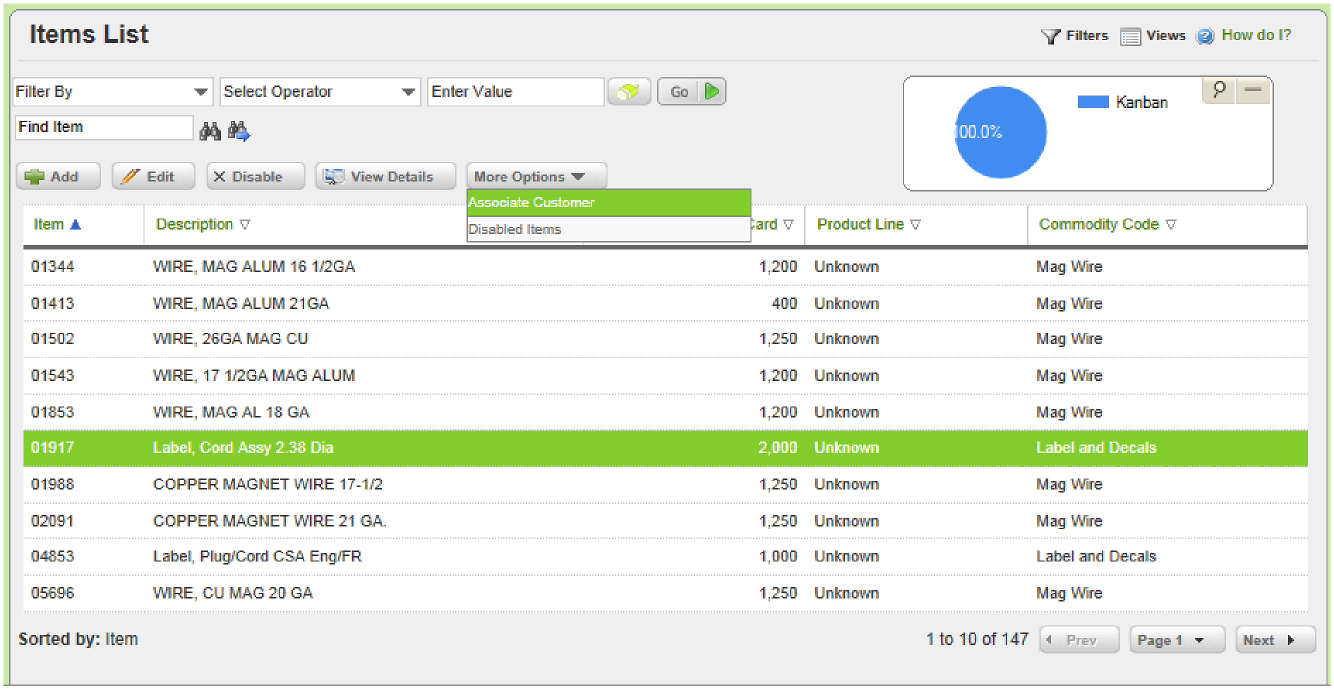
To do so:

- Login to the application as an App Admin or Plant Admin
- Click on the ADMIN menu at the top
- Open the Customer Admin panel as shown below

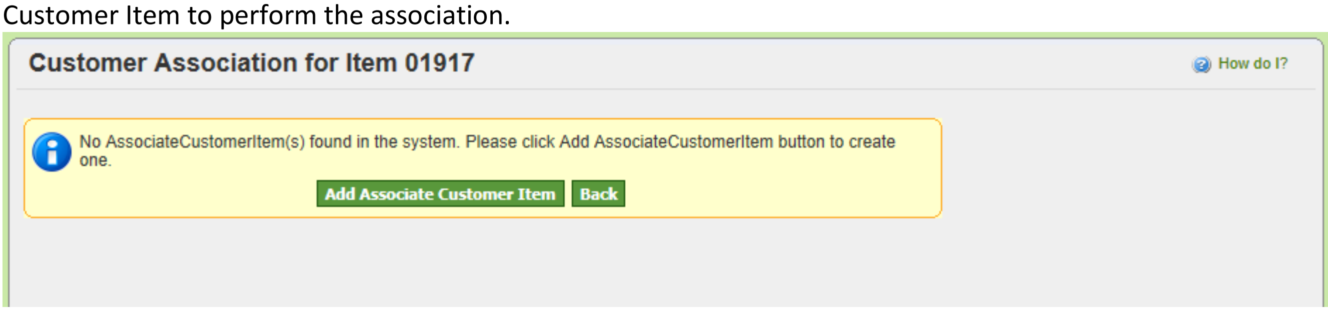
Associating an Item

- Click on Item
- The following list will be displayed if there are existing supplier items

- Select an Item
- Click on More Options button on top
- Select “Associate Customer” sub menu



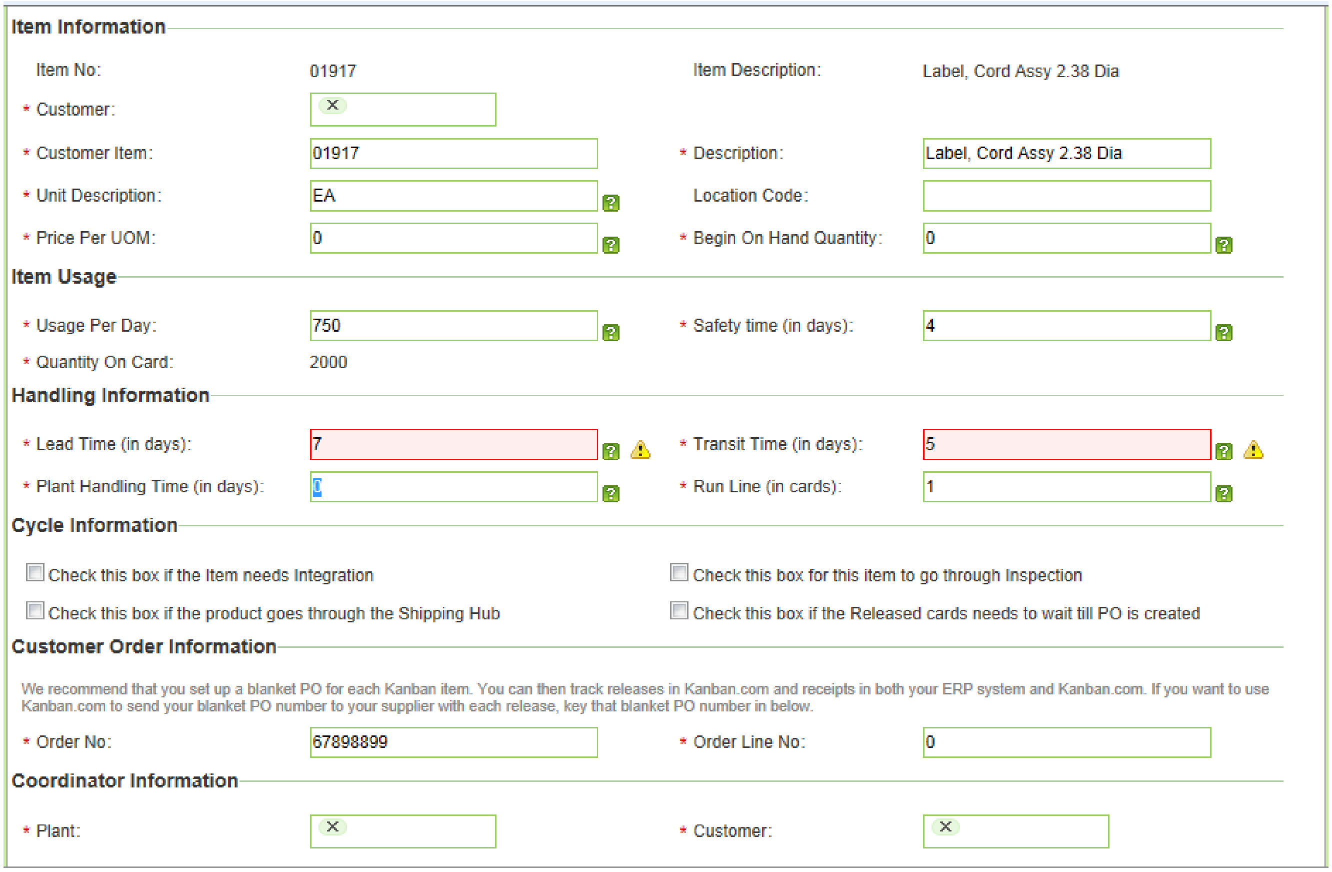
If the item is not mapped to any customer, the following screen will be displayed. Click Add Associate Customer Item to perform the association.



The following screen will be displayed to establish all the parameters for that customer loop:

- Item Number and Item Description will be automatically populated
- Customer Item, Customer Item Description, Unit Description and Location Code will be automatically populated as well but can be edited
- Enter the customer name
- Enter Price per UOM
- Enter Begin On Hand Quantity
- Enter Usage Per Day
- Enter Safety Stock Days
- The Lot size is automatically derived from the part master
- Enter the lead time committed to the customer
- Enter the transit time committed to the customer

- Enter the plant handling time (pick, pack and ship) if any
- Enter Runline (if the lot size is smaller than minimum quantity the customer wants) in a single shipment
- Enter the Sales Order # and line # if it is a blanket order
- Associate a CSR at the plant level
- Associate a user at the Customer

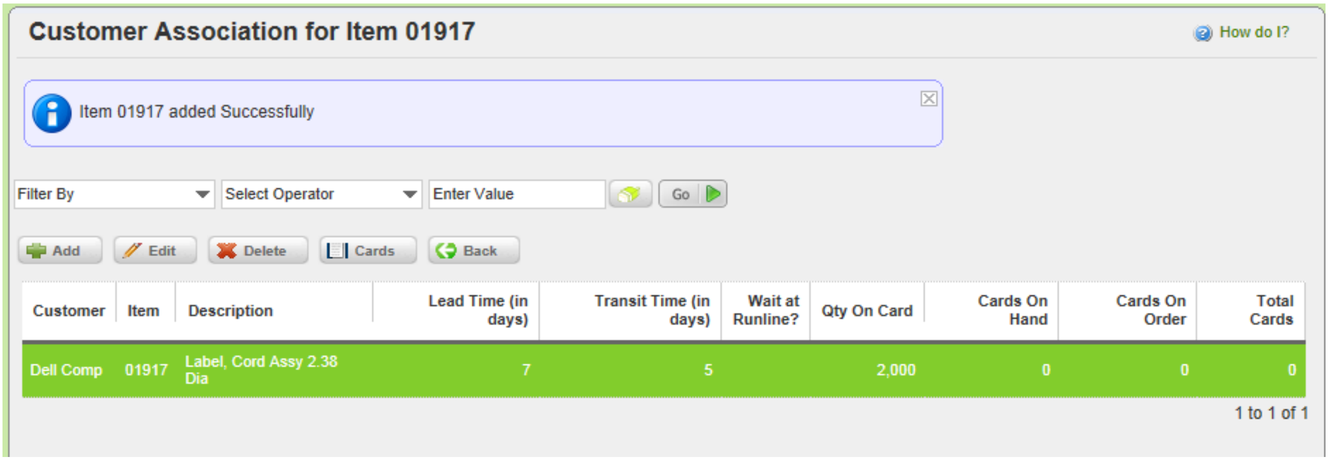


There are four configuration options available:

- Check this box if this is integrated with your ERP
- Check this box if the goods have to wait at Customer’s dock for inspection
- Check this box if the shipment has to be consolidated at Ship Hub
- Check this box, if the customer’s signal has to wait for a discrete P.O.

- Once all the fields have been entered, Click SAVE

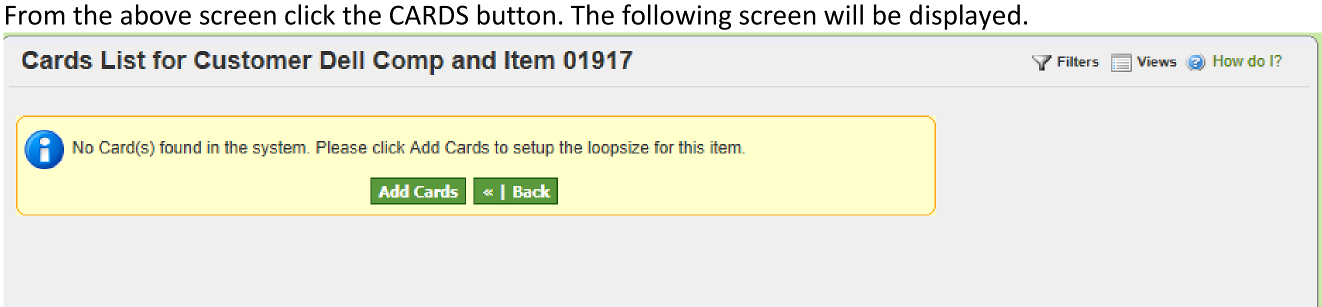
The following confirmation screen will be displayed showing that the part is now associated with the customer.



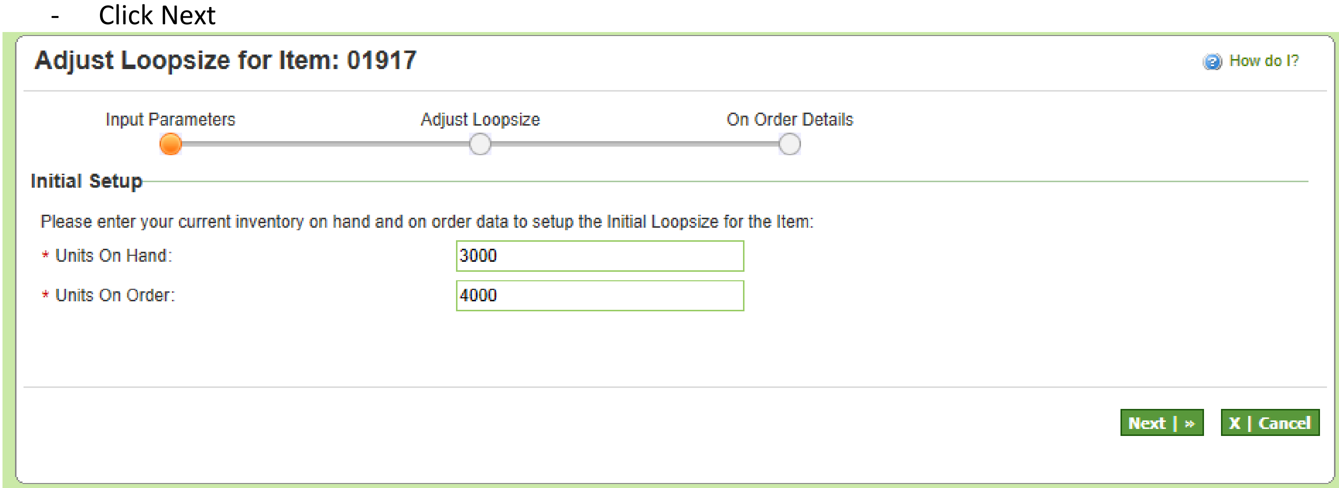
Ultriva allows you to size the loop for a part with each customer. For e.g. one customer usage may be 100 pieces per day with 7 days lead time and 2 days transit time, while another customer's usage may be 200 pieces per day with 7 days lead time but with 15 days transit time. Ultriva allows you to use these parameters to set up number of cards for each customer.

Here's how the cards are generated.

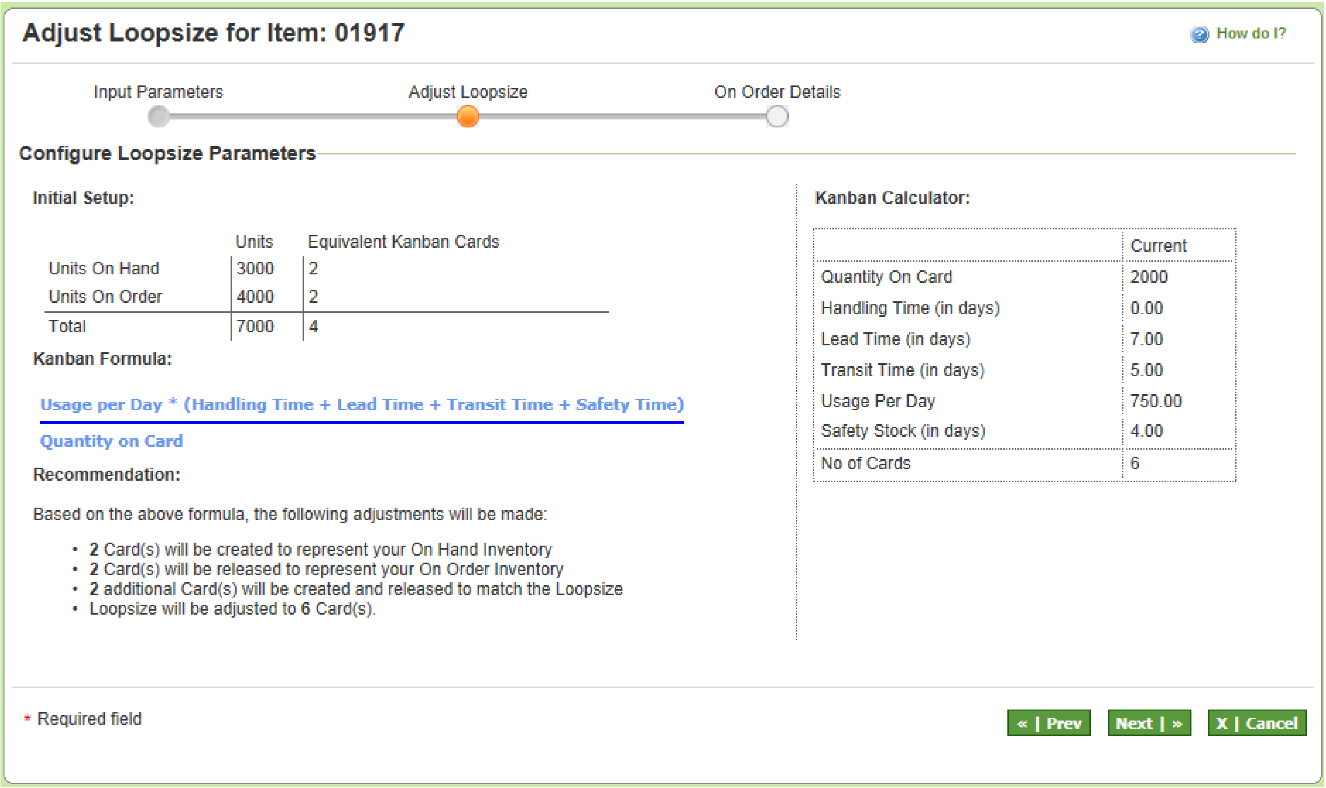
From the above screen click the CARDS button. The following screen will be displayed.



- Click Add Cards
- Enter the units on hand at the customer
- Enter the open orders with the plant
- Click Next



The system will automatically compute the total number of cards and set them up appropriately. The On hand cards at the customer and Open orders to the plant.


Adjust Loopsize for Item: 01917

How do I?

Input Parameters | Adjust Loopsize | On Order Details

Configure Loopsize Parameters

Initial Setup:

	Units	Equivalent Kanban Cards
Units On Hand	3000	2
Units On Order	4000	2
Total	7000	4

Kanban Formula:

Usage per Day * (Handling Time + Lead Time + Transit Time + Safety Time)

Quantity on Card

Recommendation:

Based on the above formula, the following adjustments will be made:

- **2** Card(s) will be created to represent your On Hand Inventory
- **2** Card(s) will be released to represent your On Order Inventory
- **2** additional Card(s) will be created and released to match the Loopsize
- Loopsize will be adjusted to **6** Card(s).

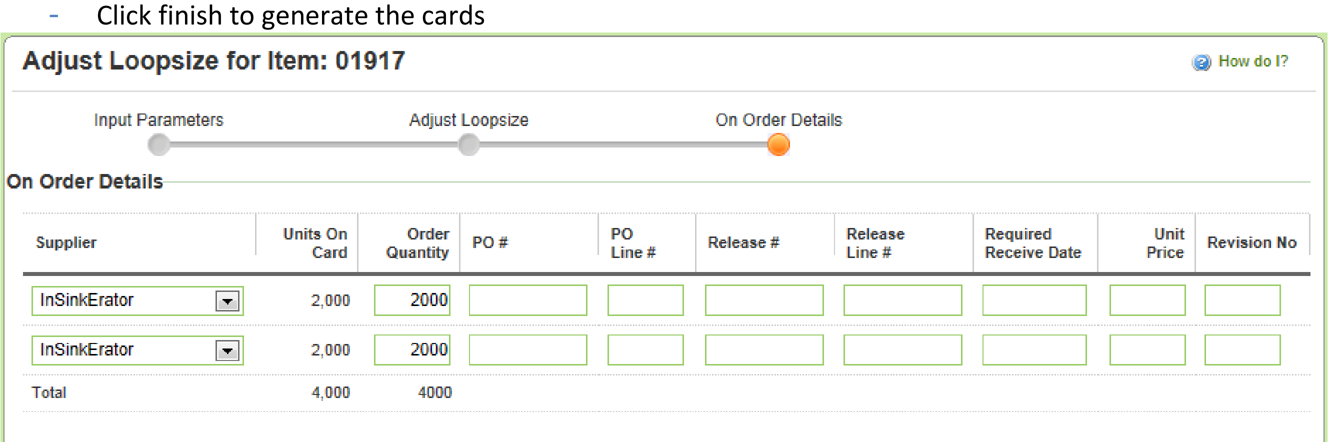
Kanban Calculator:

	Current
Quantity On Card	2000
Handling Time (in days)	0.00
Lead Time (in days)	7.00
Transit Time (in days)	5.00
Usage Per Day	750.00
Safety Stock (in days)	4.00
No of Cards	6

* Required field

« | Prev　Next | »　X | Cancel

- Review the data and click Next
- The following screen will allow you to enter the information in the open P.O prior to sending them to the plant
- Click finish to generate the cards


Adjust Loopsize for Item: 01917

How do I?

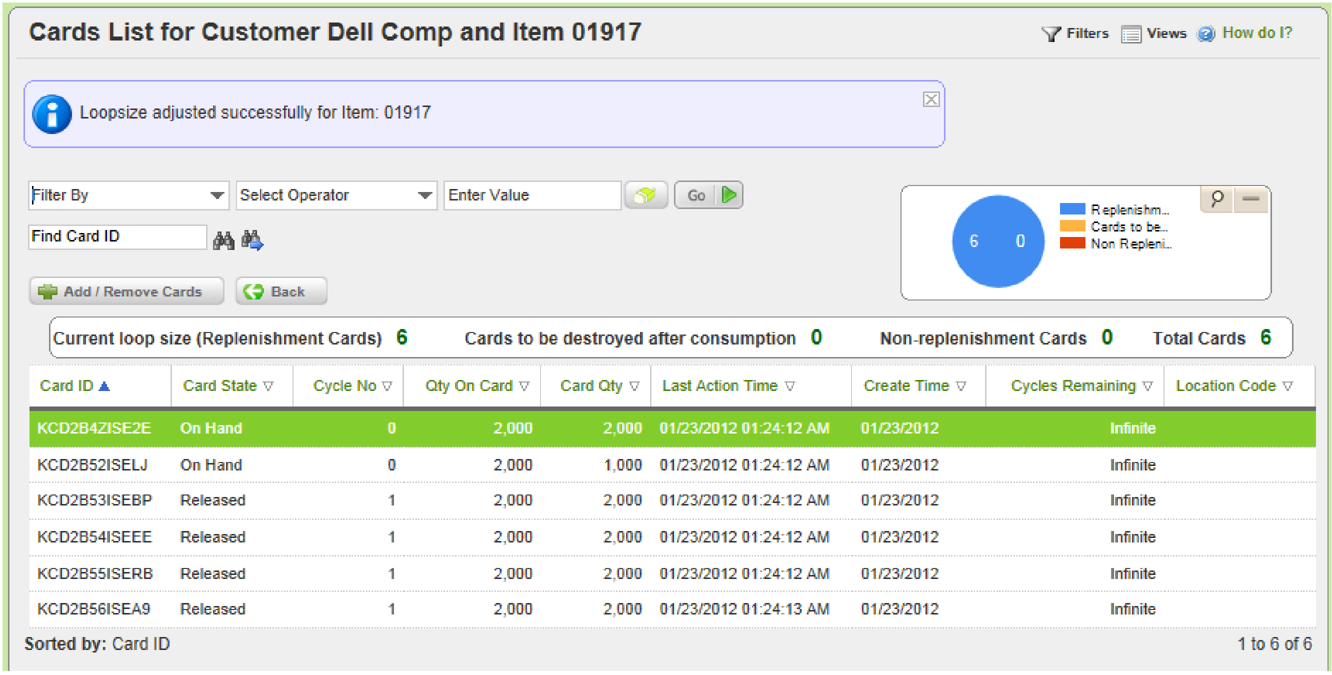
Input Parameters | Adjust Loopsize | On Order Details

On Order Details

Supplier	Units On Card	Order Quantity	PO #	PO Line #	Release #	Release Line #	Required Receive Date	Unit Price	Revision No
InSinkErator	2,000	2000							
InSinkErator	2,000	2000							
Total	4,000	4000							

These cards will be sent to the plant for replenishing the finished goods. The goal is to sync the open Sales Orders with cards.

The following screen will be displayed which will show the list of cards that has been created.



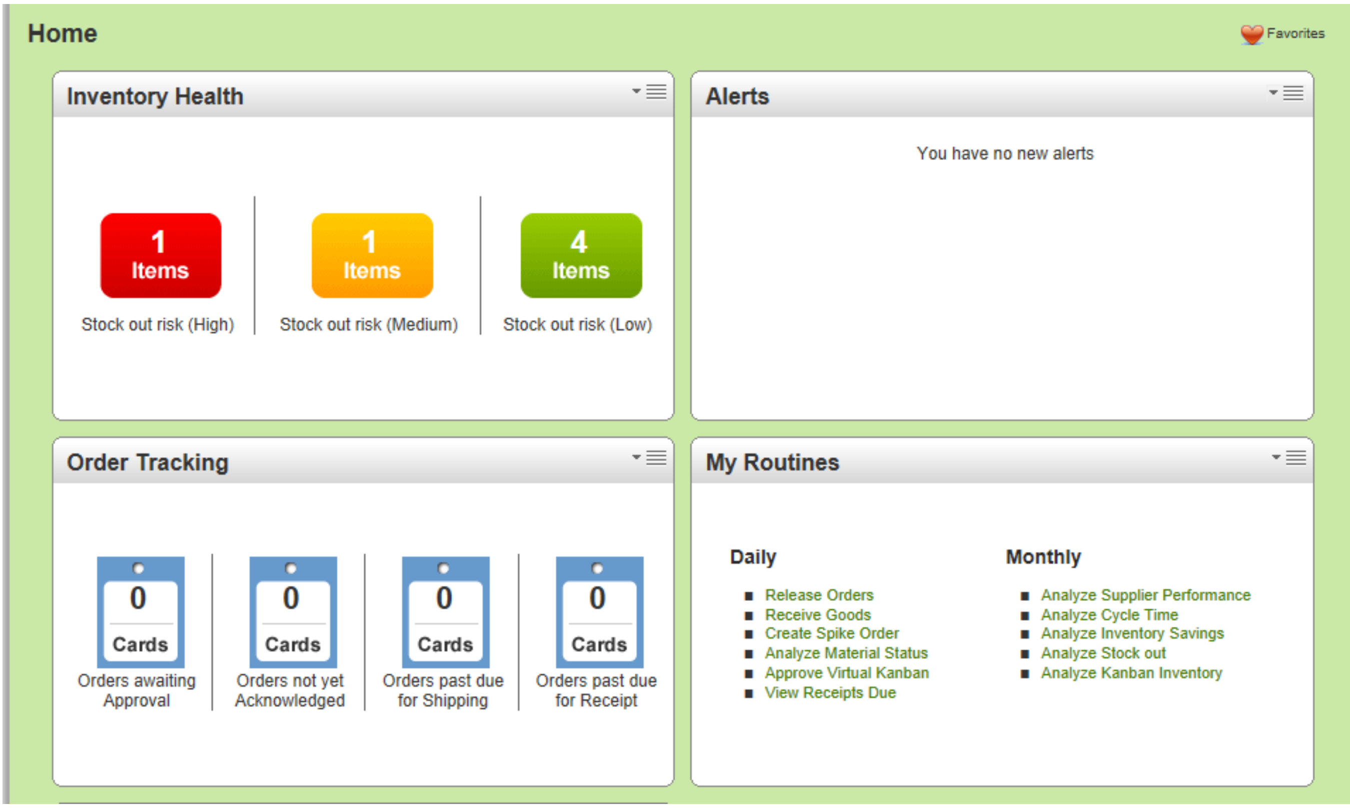
Customer View

CDP acts as a collaborative tool between the plants and their customers. Like the plants their customers get full visibility in to where their order is at any time.

Customer users can login to the CDP portal to view the parts they are replenishing from their suppliers. In the current version, the replenishment happens when a lot size is consumed by the customer. Customers trigger this replenishment either through a scan at the point of use or using the screen to denote the consumption.

When the customer logs in to CDP, they see the home page as shown below. This home page gives them a very high level view of their orders and inventory. There are four panels which open up.

- The Inventory health panel indicates the risk of running out of parts. The rules are defined by the plants/customers such that when the on-hand at customers goes below a certain level, the part turns from Green to Yellow to Red. This happens in real time as the customer consumes goods and receives new shipments
- The Alerts panel generates exception alerts when something goes wrong. For e.g. when the plant fails to ship on time or it over or under ships the customer gets the alert in the browser and/or via email. Customer could also get a notification when the part moves from yellow to Red.
- The Order tracking panel is for overdue orders. Customers can see how many orders are past due for acknowledgements, shipments and receipts.
- The My Routines panel allows customer users to organize their tasks but creating a daily/weekly/monthly task list. This panel will display the short cuts for those tasks thereby improving their productivity



Releasing an Order

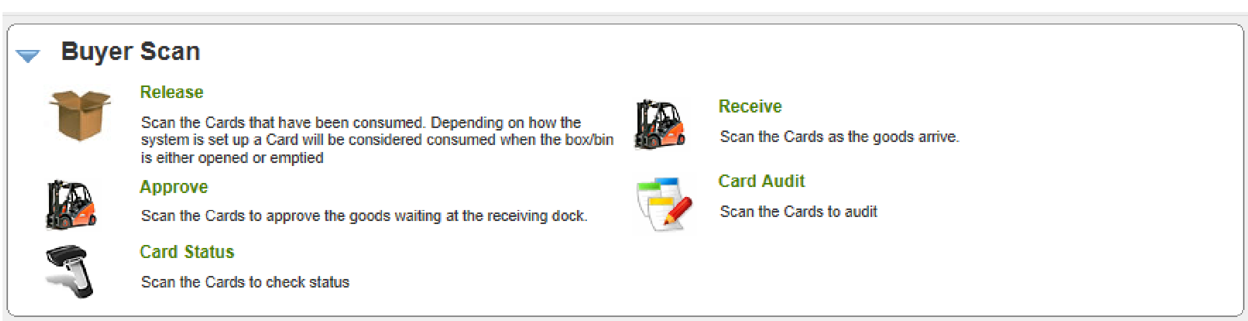
Customers normally perform two key tasks in CDP. They release orders and receive goods.

Release Scan

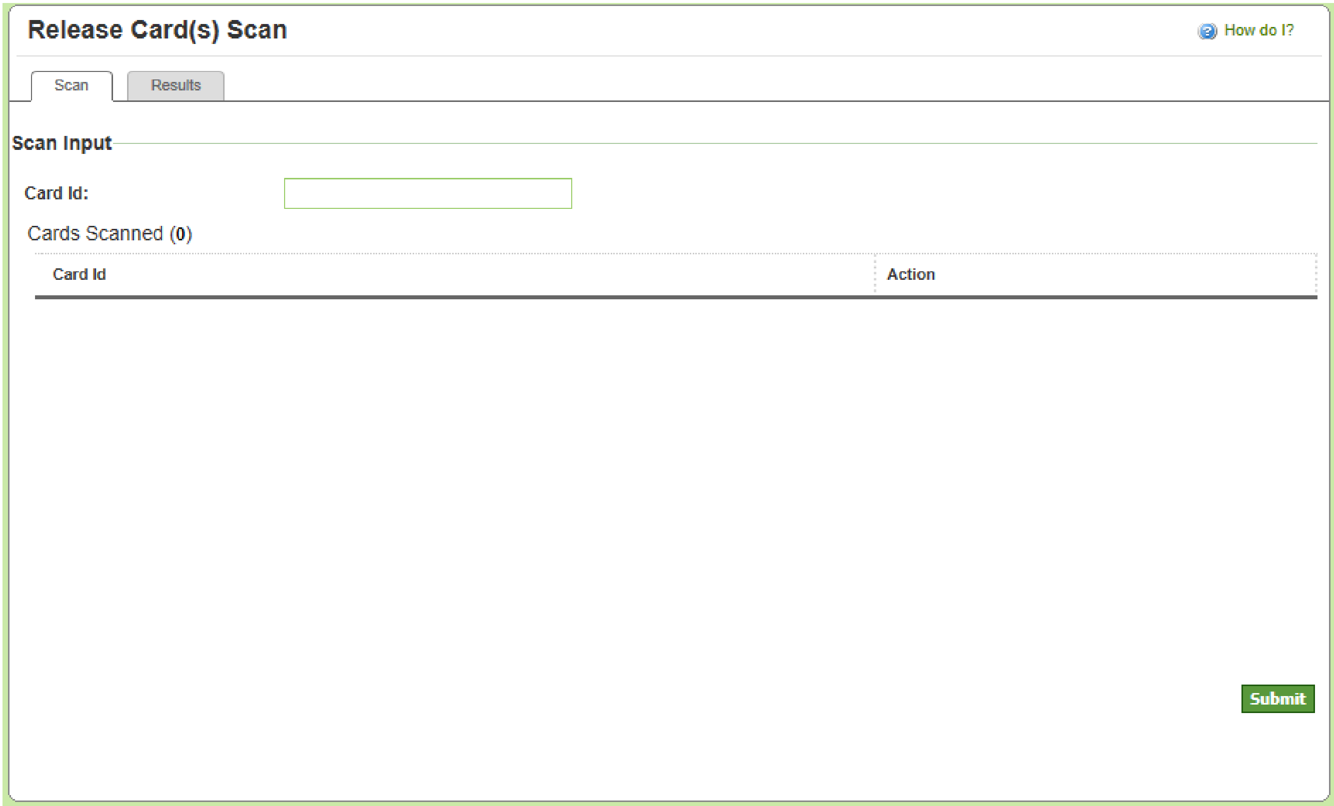
Customers can release the order by simply scanning the RELEASEID.

The simple scan will be using a Keyboard wedge scanner.

- Login to CDP as a receiving dock (or customer user)
- Click SCAN on the top menu
- It will open the following menu



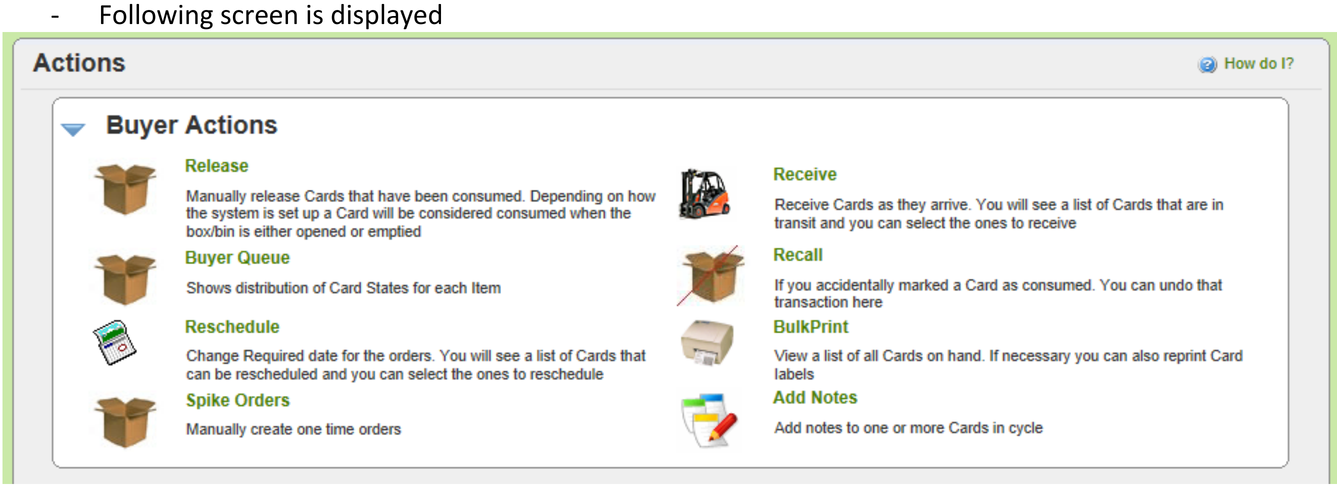
Click Release and following screen will open. Scan the RELEASEID. Click Submit.



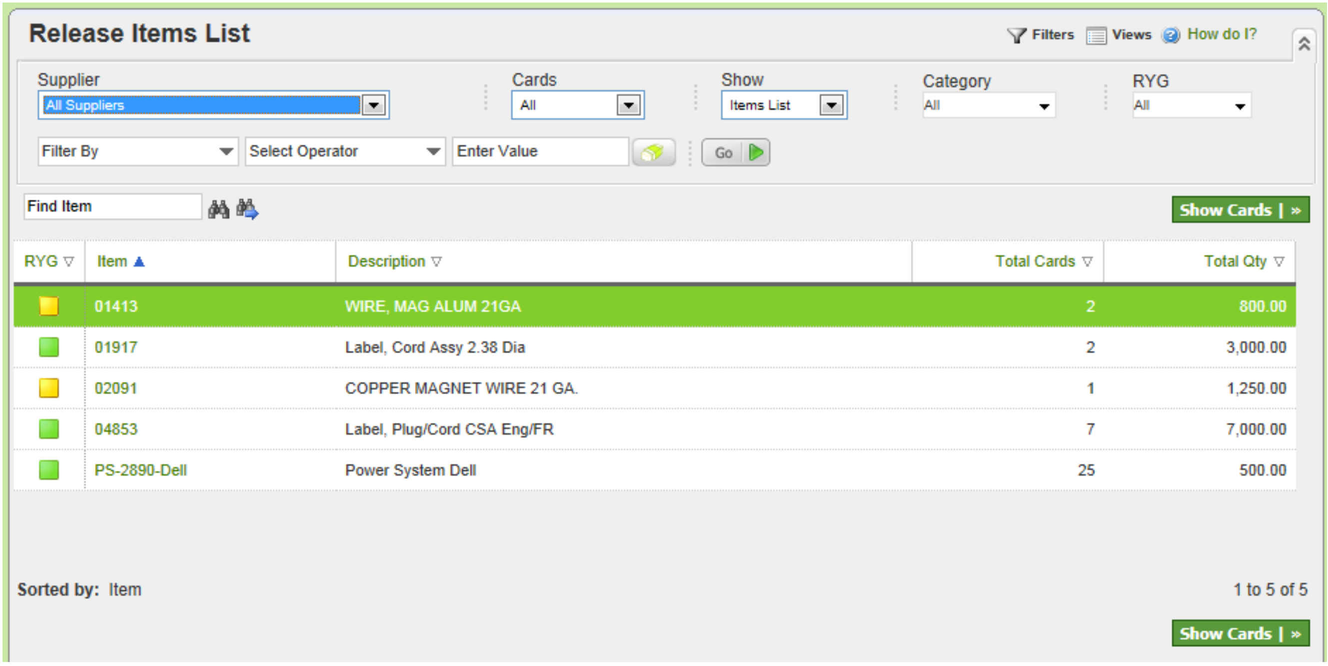
Manual Release

They can perform the release through the Actions Menu shown below.

- Login as a customer user
- Click Actions on the Top menu item
- Following screen is displayed

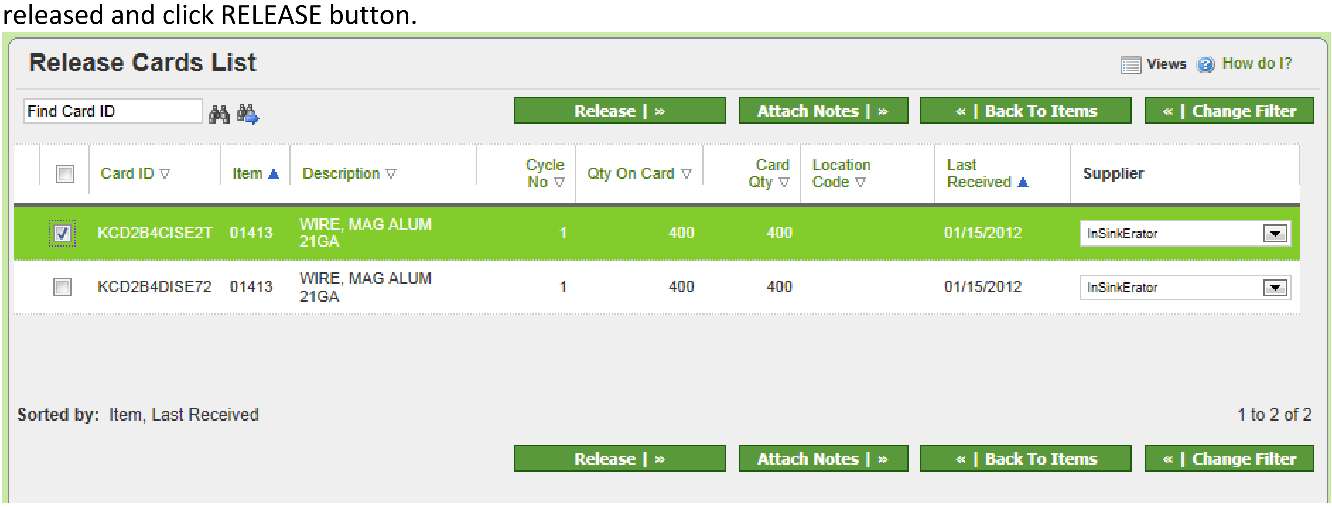


Click RELEASE to trigger a signal to the plant for replenishment. The following screen will be displayed.

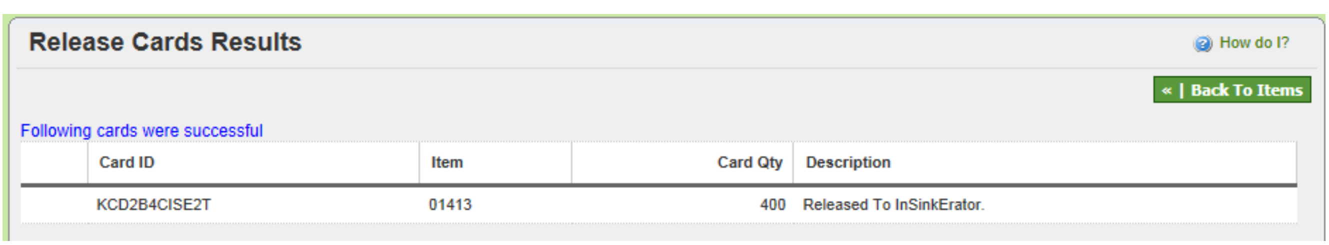


Users can select and Item and click Show Cards or change the SHOW drop down from ItemList to CardList and click GO.

The following cards that are on hand ready for consumption will be displayed. Check the card to be released and click RELEASE button.



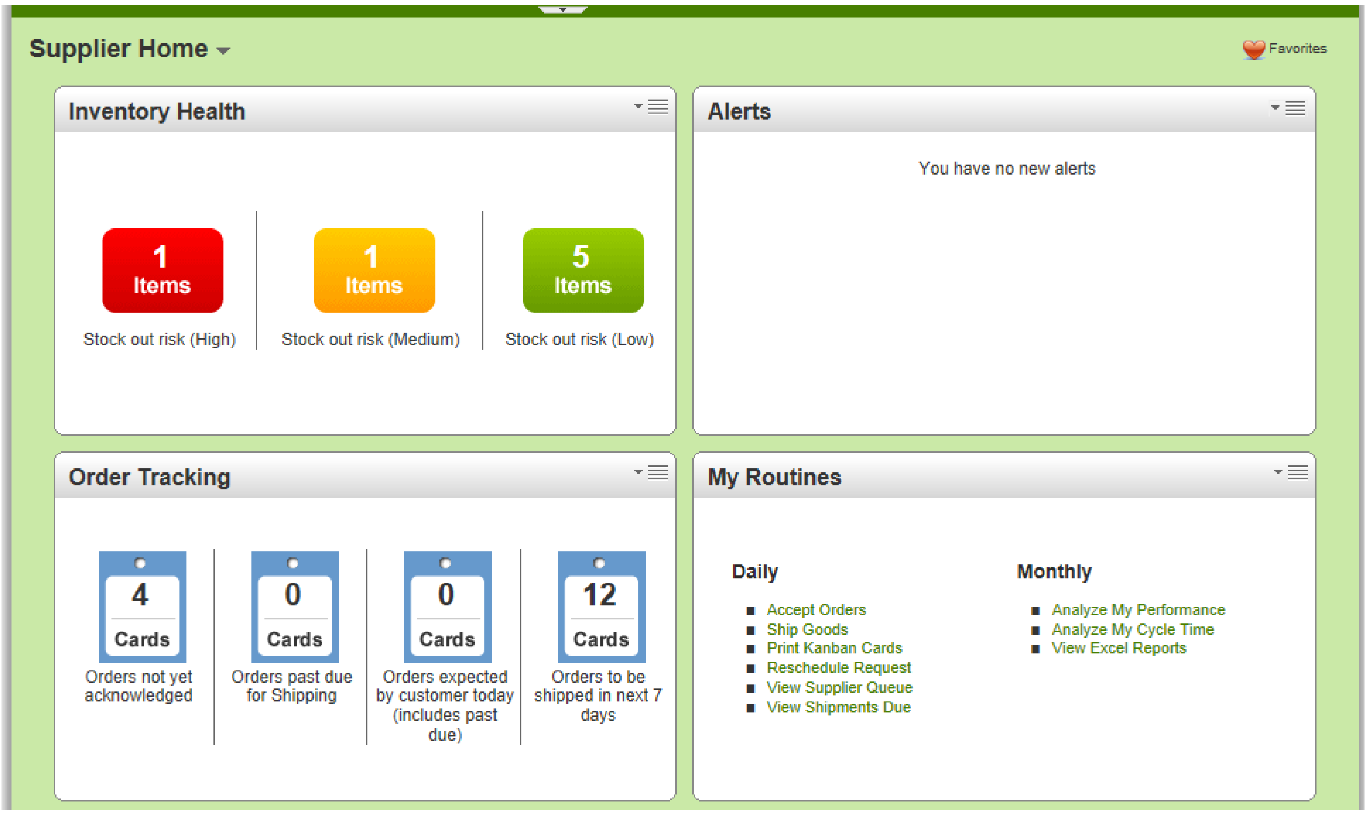
Following confirmation will be displayed on successful release of the signal.



Plant View

Plant will get a consolidated view of all the demands that the customer is sending to them. This consolidated view will help them to optimize their production schedules.

The home page will give the same view as the customer but for all the customers. So the inventory health panel will show consolidated RYG for each loops. What this means is as follows:
Consider a FG part XYZ. For customer A this part may be in RED while for customer B, this part may be in yellow. So when the plant see this, it will show one in Red and one in Yellow, even though it is the same part.

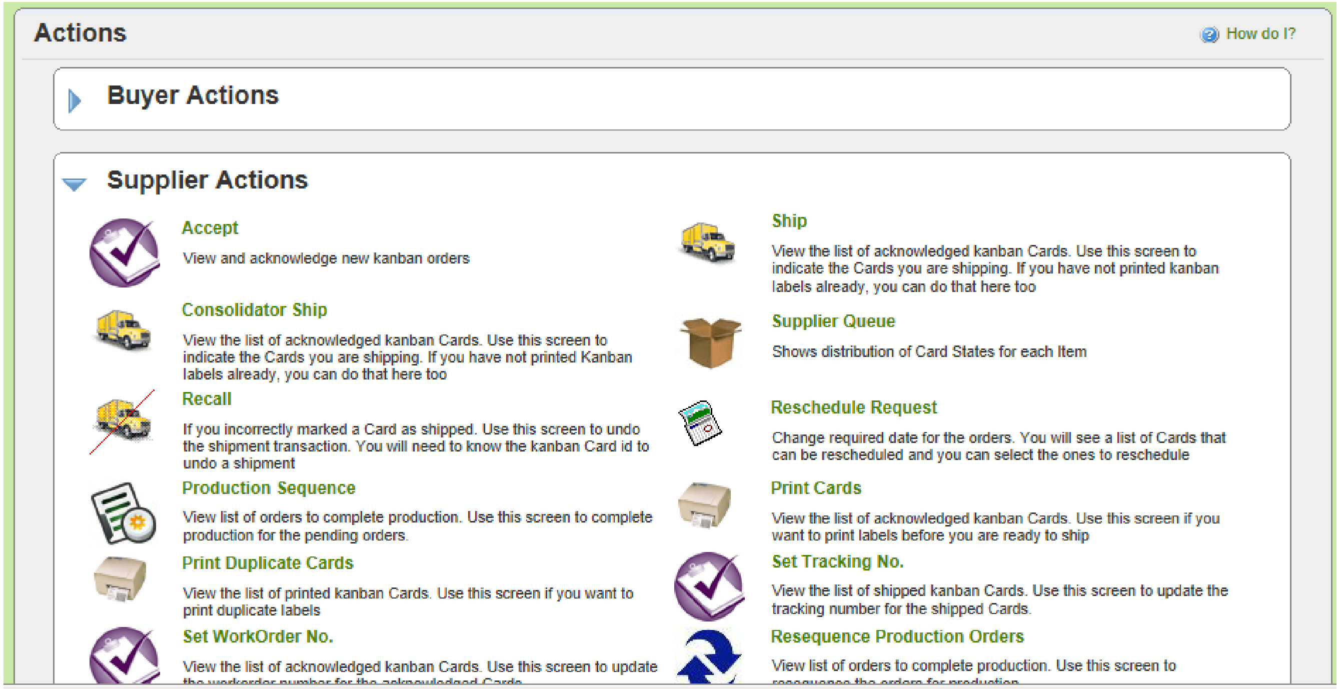


On the order tracking panel, it will show consolidated past due orders for all the customers.

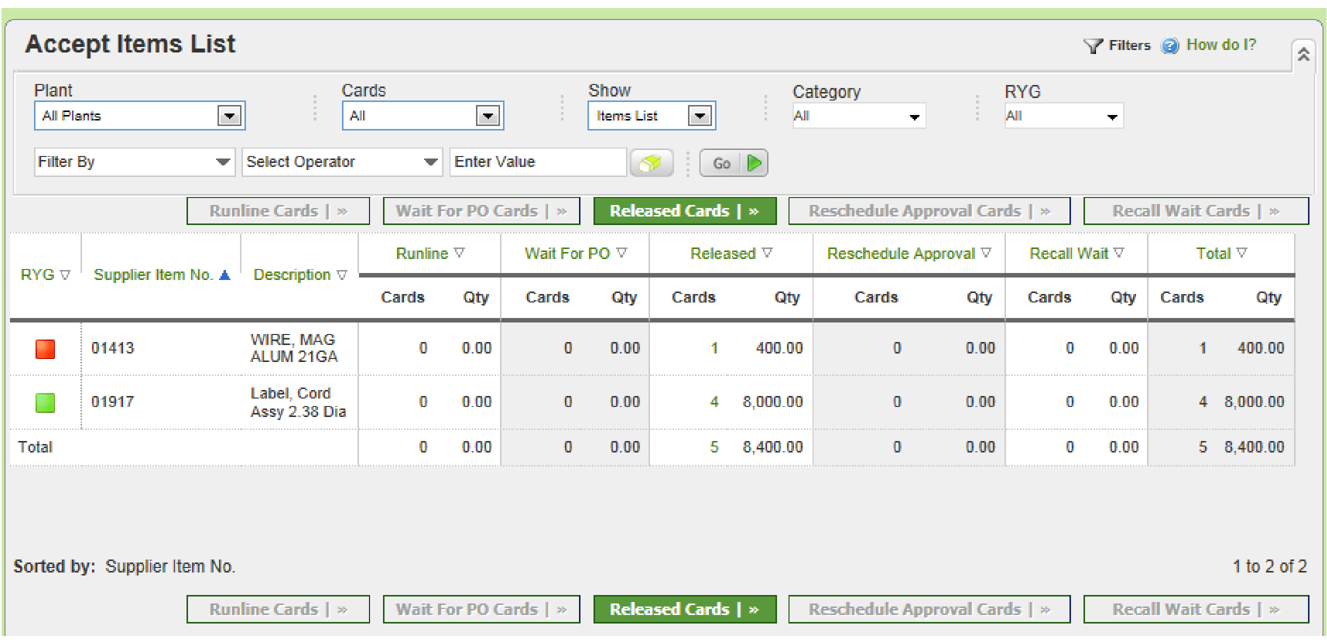
Accepting the Order

Plant user will normally perform three key tasks. Accepting or acknowledging the order, Shipping the goods and Printing the label. They can perform these actions through the Actions Menu shown below.

- Login as a plant user
- Click Actions on the Top menu item
- Open the Supplier Actions
- Following screen is displayed

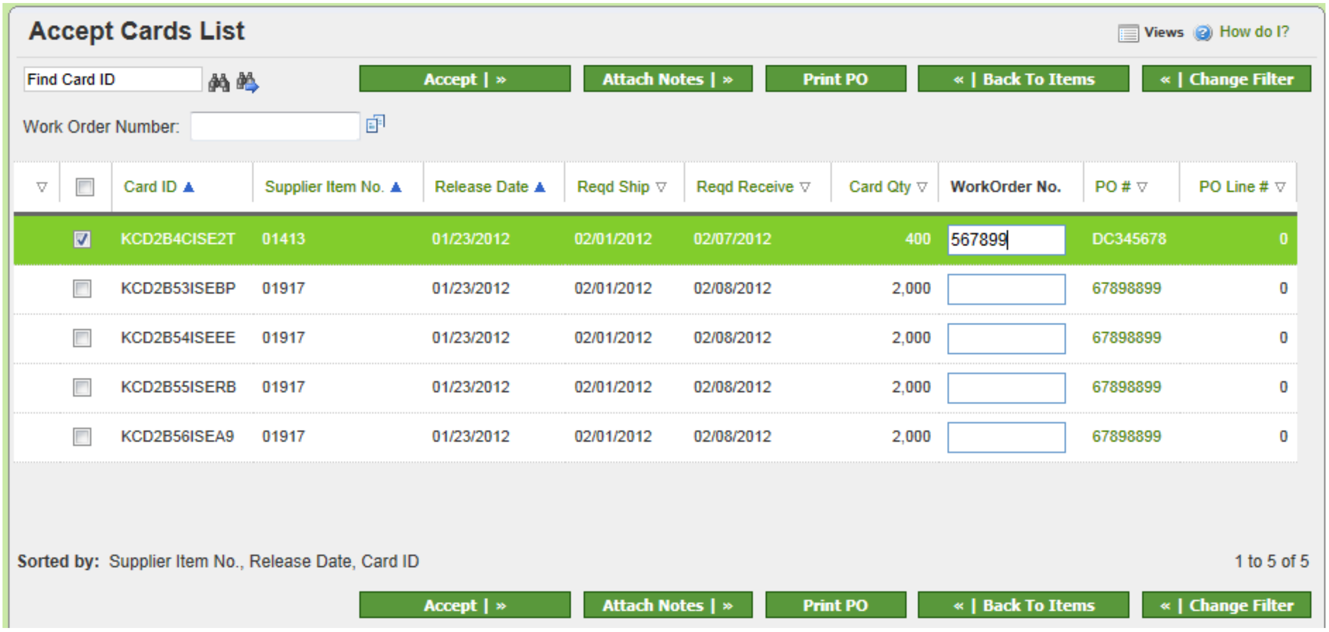


The first action is to accept the cards. Clicking on ACCEPT will display the following screen



RYG	Supplier Item No.	Description	Runline		Wait For PO		Released		Reschedule Approval		Recall Wait		Total	
			Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty
	01413	WIRE, MAG ALUM 21GA	0	0.00	0	0.00	1	400.00	0	0.00	0	0.00	1	400.00
	01917	Label, Cord Assy 2.38 Dia	0	0.00	0	0.00	4	8,000.00	0	0.00	0	0.00	4	8,000.00
Total			0	0.00	0	0.00	5	8,400.00	0	0.00	0	0.00	5	8,400.00

Click on Released Cards button. All the cards that have been released by customer(s) and ready to accept will be displayed as shown below:



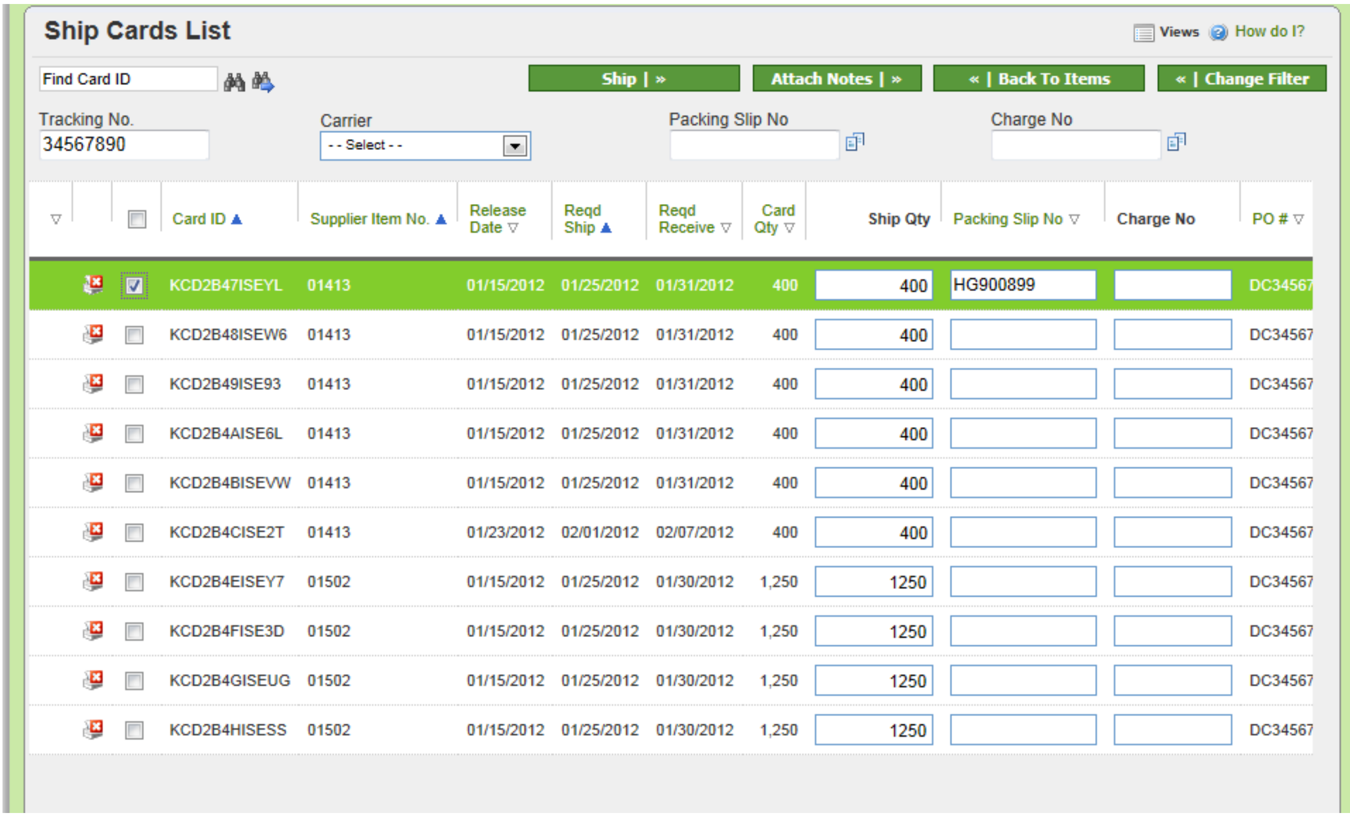
Check the card(s) to accept. Enter your internal work order if necessary. Click Accept to acknowledge receipt of this order. You will get a notification that card is successfully accepted.

At this point, these are orders and ready to be produced. Normally using integration these orders are populated in to the ERP system which then schedules the order in to production either using MRP or Ultriva's Lean Factory Management (LFM) module.

Shipping Goods

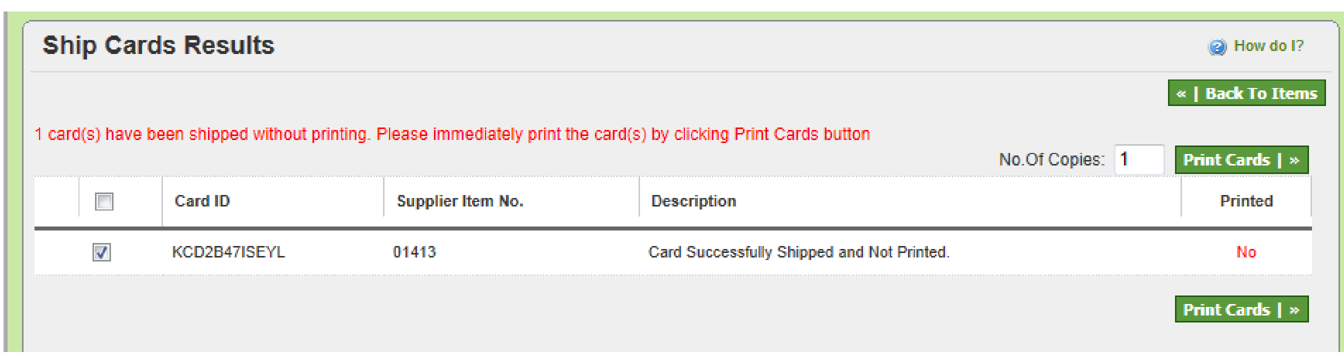
When the goods are ready for shipment, plant user can login in to the CDP and do the shipment. Multiple options are supported in Ultriva to perform the shipment.

- While sending the sales order to ERP Ultriva can also send the ReleaseID. This becomes a key cross reference between the two systems
- For plants which prints its own label, they can include this Release ID in the label so that there is no need for them to print it from CDP
- If the shipment is done in ERP and the label is printed through the ERP system (including the ReleaseID), then CDP can be updated via integration. No additional work need to be done in CDP
- If none of this is automated, then the plant can click SHIP from action menu shown above.
- The following screen will be displayed listing all the cards that has been accepted and ready for shipment.



Check the cards to be shipped enter the tracking number, enter the packing slip number and traceability number if necessary and then click SHIP button.

The following screen will be displayed confirming successful shipment.



Click the PRINT CARDS button to print the shipping label. Stick the label to the lot and move it out to shipping dock.

Receiving goods by the customer

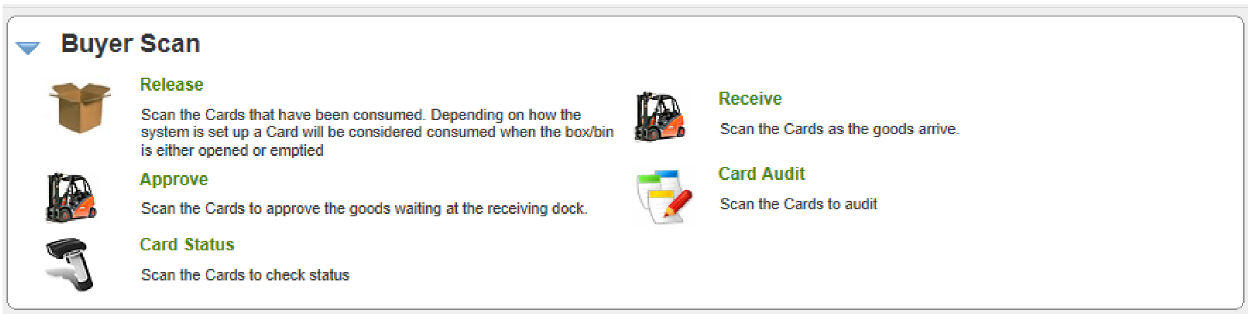
Customers can receive the goods in to their receiving dock or consignment location by scanning the RELEASEID.

Release Scan

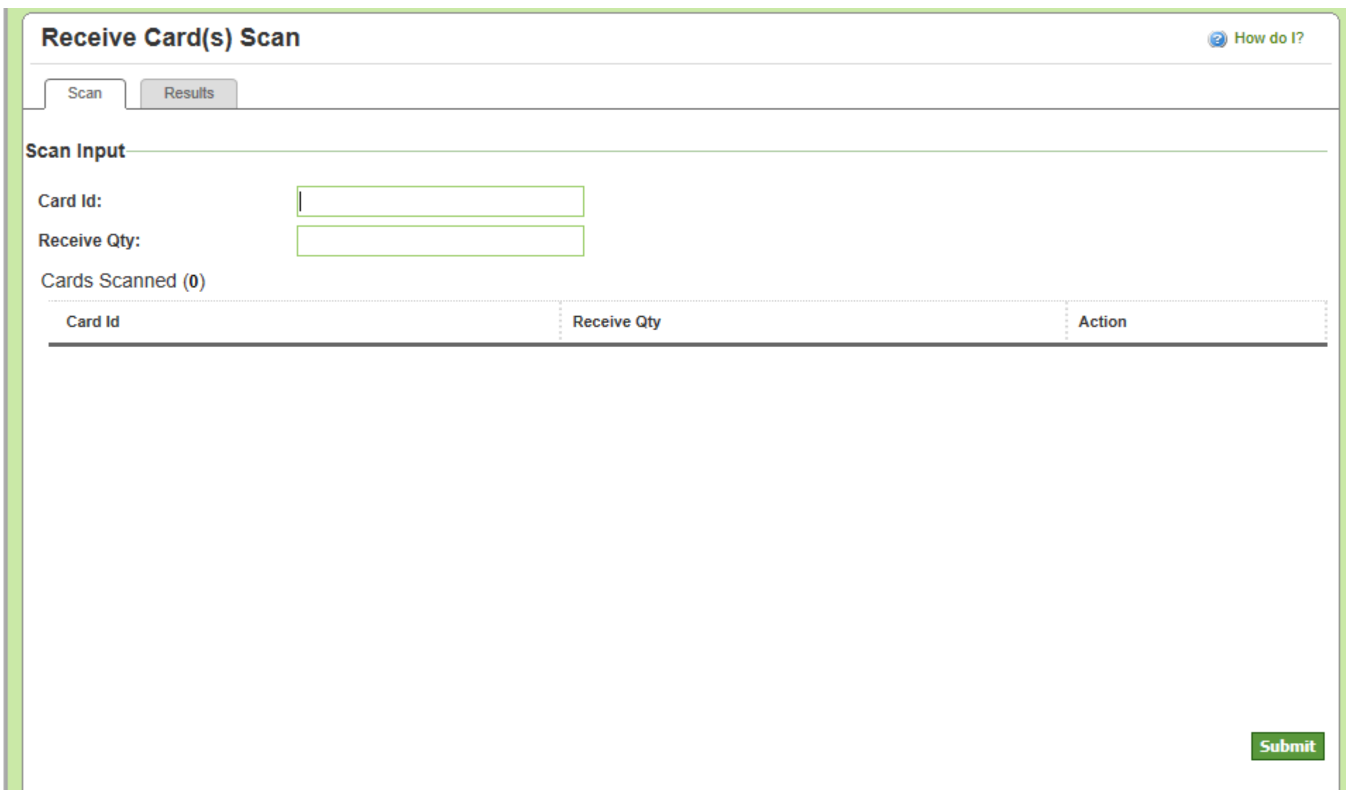
Two types of scanners are supported in CDP - Keyboard wedge scanner and Handheld Mobile scanner

The simple scan will be using a Keyboard wedge scanner.

- Login to CDP as a receiving dock (or customer user)
- Click SCAN on the top menu
- It will open the following menu



Click Receive and following screen will open. Scan the RELEASEID. Change the receive quantity if need be and click Submit.

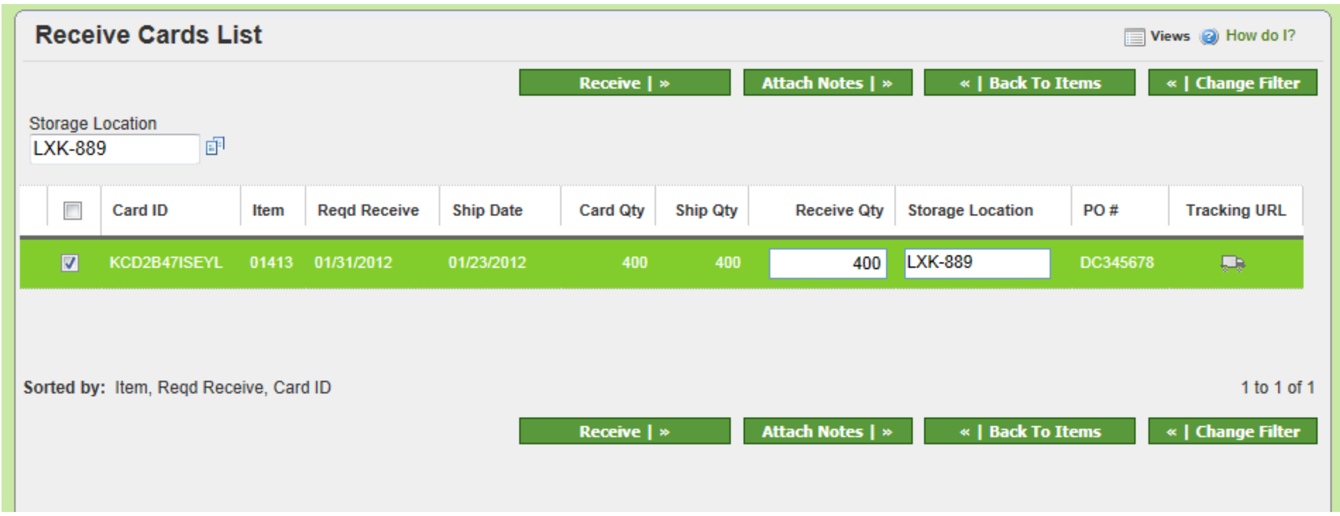


Mobile Scanners can also be used to receive the goods which will not require a PC . The handheld mobile scanner will allow the user to login and complete the transaction.

Once received it will show on hand at the customer and card cycle will be complete.

Manual Receive

Alternatively, Customers can receive these goods through a manual entry as shown below



Enter the warehouse location code if necessary and click Receive. A confirmation screen stating that card was successfully received will be displayed.

Reports

Please refer to the Reports Reference guide for details. All the Buyer Reports will work for Customer and all the Supplier Reports will work for Plants.

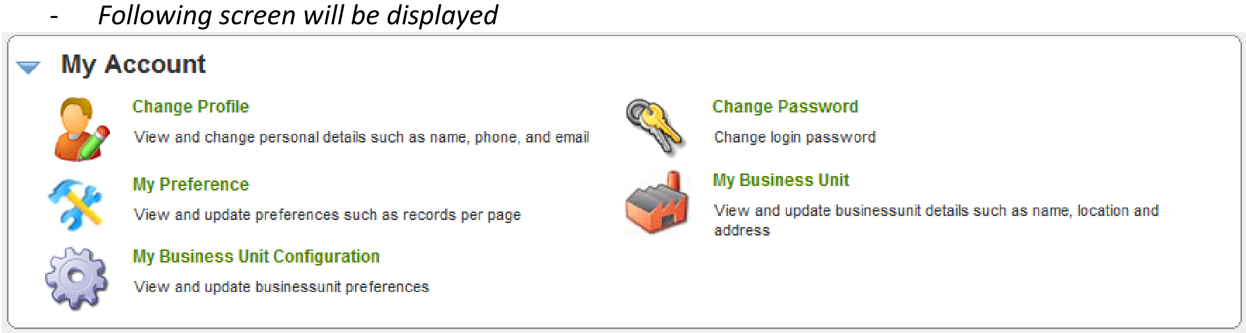
Plant Configuration (Optional)

Configuring the Plant

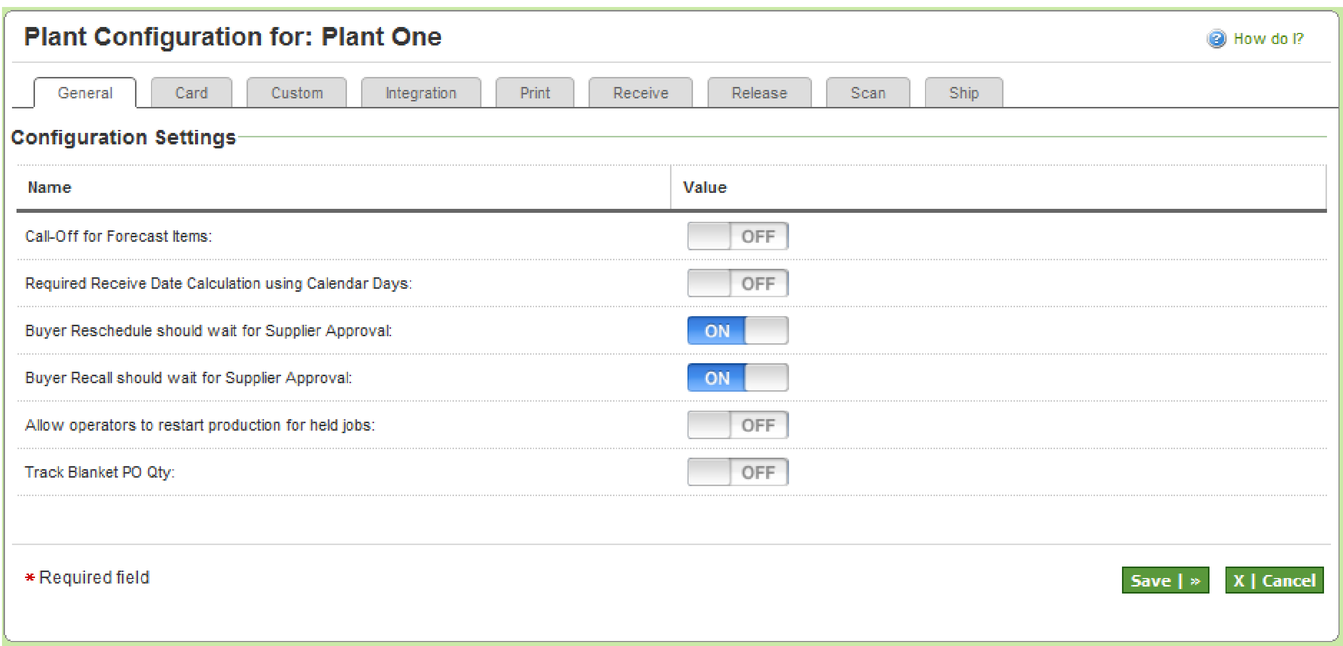
(NOTE: This will continue to change as we make changes to the software)

If you are the administrator for the Plant here are the steps to choose configuration options:

- *Click on "My Account" menu from the top right hand corner*
- *Following screen will be displayed*



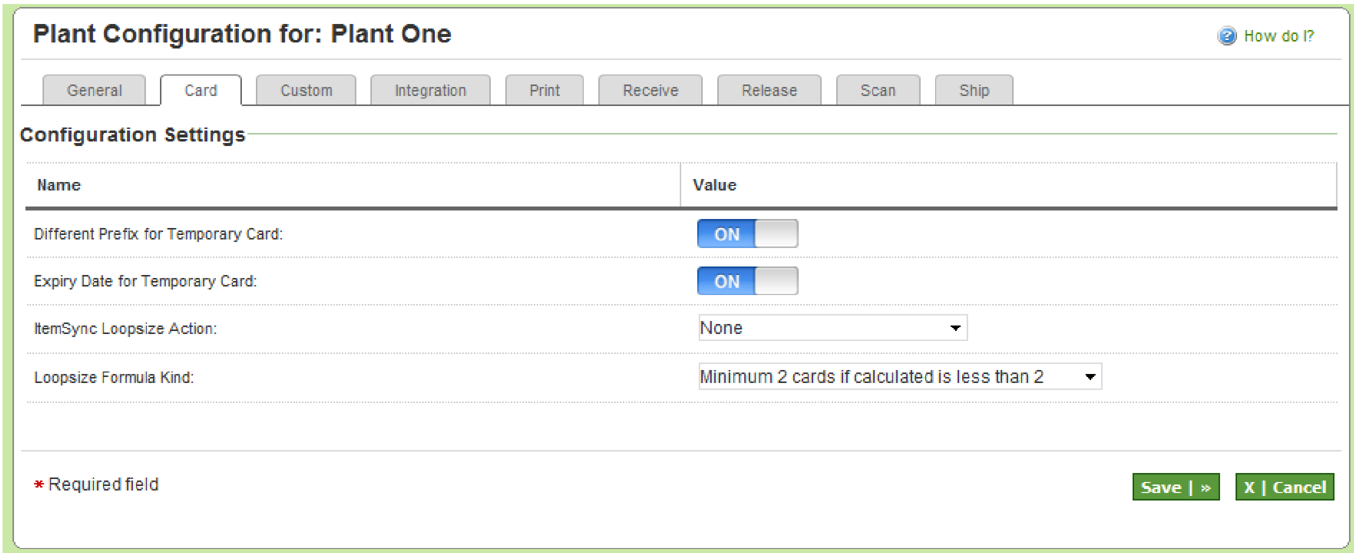
- *Select "My Business Unit Configuration"*
- *Following screen is displayed.*
  The options displayed for plant business units. Most of the options may be common for the plant as well as work centers. As we explain each tab we will highlight them accordingly.
- *The following tabs are available in the configuration:*
  - *General – Mostly generic plant level options*
  - *Card – Options at the Card level*
  - *Custom – Specific to work centers*
  - *Integration – Options specific to integration*
  - *Print – Options supporting Printing*
  - *Receive – Options that can be set for supporting Receiving process*
  - *Release – Options that can be set for supporting Releasing process*
  - *Scan – Options that can be set for supporting Scanning process*
  - *Ship – Options that can be set for supporting Shipping Process*



General Options tab:

- *Call-off for Forecast Items* – Not relevant for Kanban parts. Unique functionality to engineered to manufacture and long lead time parts
- *Required Receive Date Calculation using Calendar Days* – Ultriva normally computes Required Receive date based on the business calendar set in the business unit. This option when set on will compute using calendar days instead
- *Buyer Reschedule should wait for Supplier Approval* –When set to ON, buyer will not be able to unilaterally reschedule a card that is accepted by the supplier. The work flow kicks in to ensure that the supplier approves prior to changing the date in the system
- *Buyer Recall should wait for Supplier Approval* - When set to ON, buyer will not be able to unilaterally recall a card that is accepted by the supplier. The work flow kicks in to ensure that the supplier approves the recall.

- *Allow operators to restart production for held jobs* – In the default mode, if the operator puts the job on hold, then only a supervisor can reset that job. If this option is set to ON, then that overrides the default and allows operator to reset the job
- *Track Blanket PO Quantity* – In the supplier mapping screen user can input the blanket P.O. quantity. If this flag is set to ON, then Ultriva tracks the releases against this blanket quantity and monitors the balance quantity available. Using respective alerts Ultriva can notify the planner/buyer that they may be running out of blankets before it actually happens.

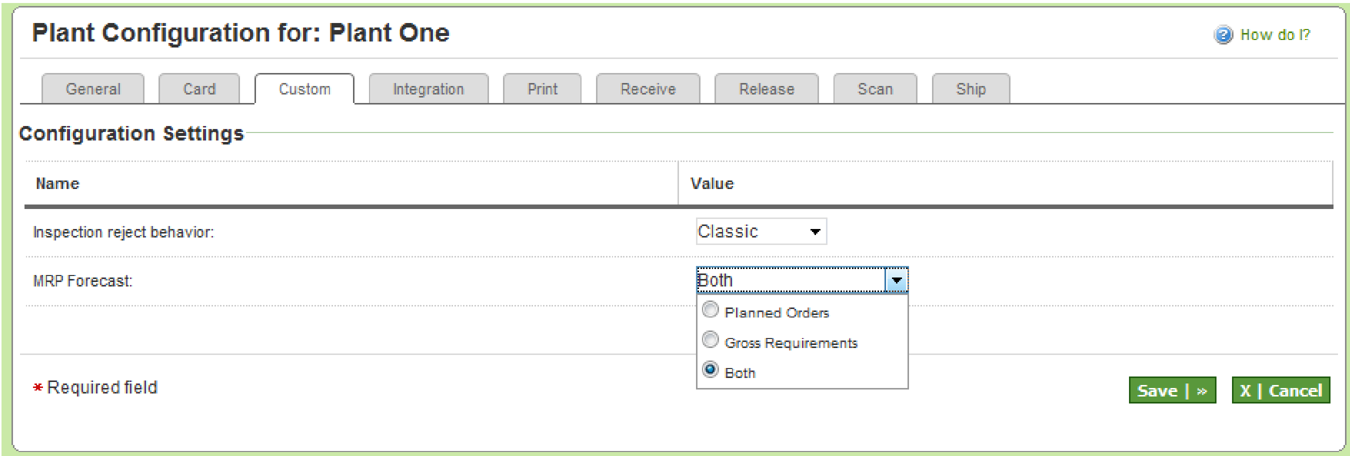


Card Option Tab:

- *Different Prefix for Temporary Card* - If this feature is set to ON, then temporary cards (like spike card and seasonal cards) will have a different prefix so that they can be visually identified
- *Expiry date for temporary card* – If this feature is set to ON, then the system will keep track of temporary cards by time instead of number of cycles. For e.g. you can set seasonal cards for 30 cycles or for 90 days depending on whether this flag is turned ON or OFF
- *ItemSync Loopsize Action* – This option determines the behavior of change in Usage Per Day in the Item sync files

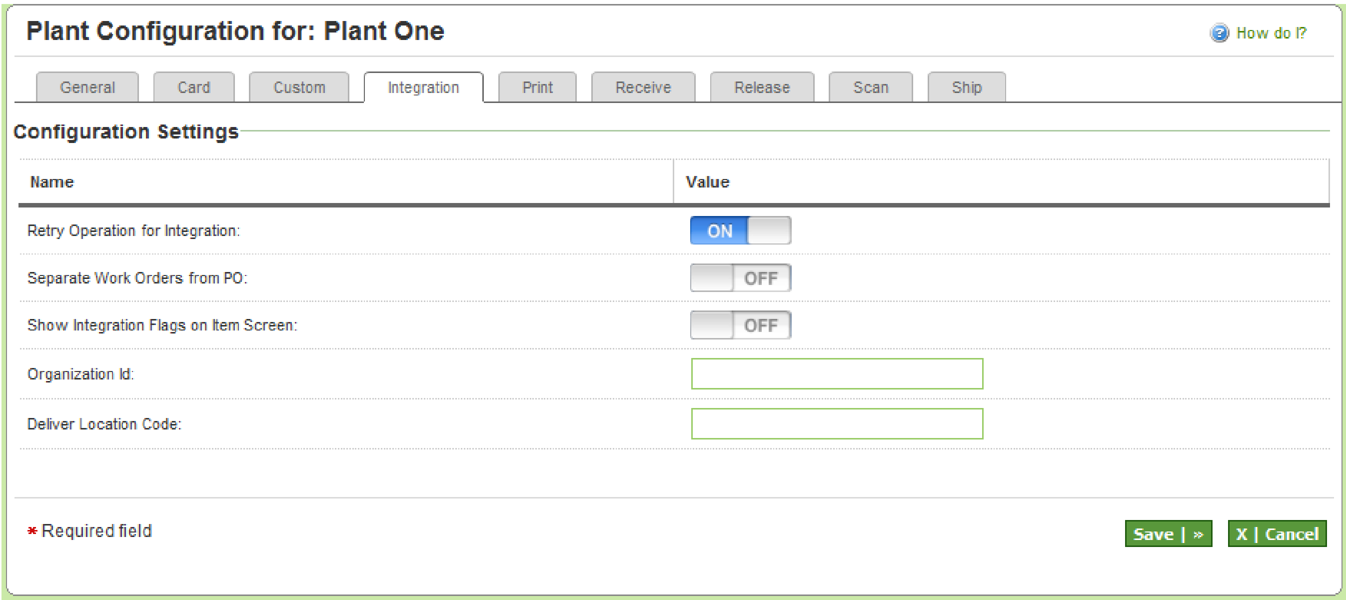
-
    - None – Ultriva updates the usage per day but does not resize the loop size. i.e. adding or deleting cards
    - All – Ultriva updates the usage per day but also adds or sets cards to delete based on the change
    - On Increase and Log Decrease – Ultriva updates the usage per day. If the usage per day has gone up then it adds the cards and releases them to the supplier. If the usage per day has gone down, it logs the decrease but does not set cards to delete
- *Loop Size Formula Kind* – This determines whether a minimum number of cards should be set. The options are:

- Minimum of 2 cards. This means that if the Kanban calculator determines that total number of cards is less than 2 cards, the system will still create a minimum of two cards
- No Adjustments – Use the calculator – If this option is selected then the number of cards will exactly match the calculated number of cards



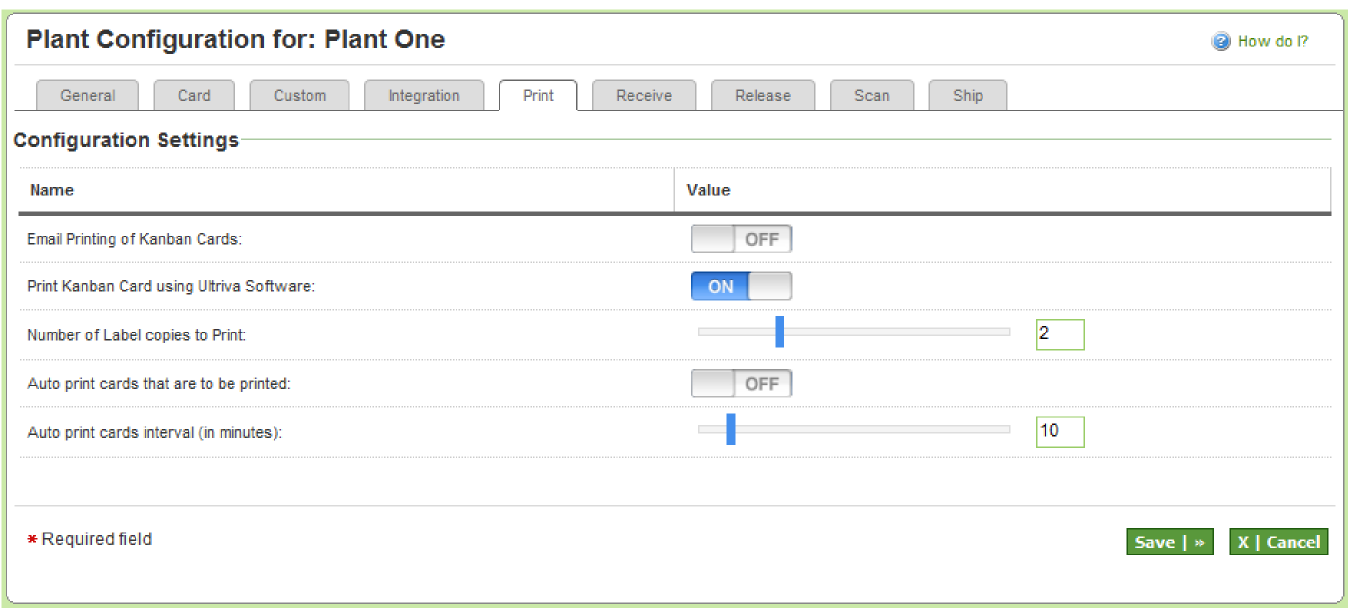
Custom Tab:

- *Inspection reject behavior* - The options are :
  - Classic – If selected then the rejected cards are automatically sent back to the Suppliers
  - Manual – If selected the cards will wait on Reject with an option for user to either rework or send the card back to supplier
- MRP Forecast – Setting this flag will determine what data will be displayed in the MRP Orders panel in the home page. The options are:
  - Planned Orders – The home page will display all the planned orders received from MRP. Users will be able to convert these planned orders in to Firm orders by releasing them in Ultriva.
  - Gross Requirements – The home page will display the forecasts for all the parts in the system. In the event there are multi-sourcing of the suppliers, the system will automatically distribute the forecasts based on the split defined in the Supplier mapping screen for that ITEM
  - Both – This will allow the users to toggle between planned orders and Gross Requirements if both data sets are being sent by MRP.



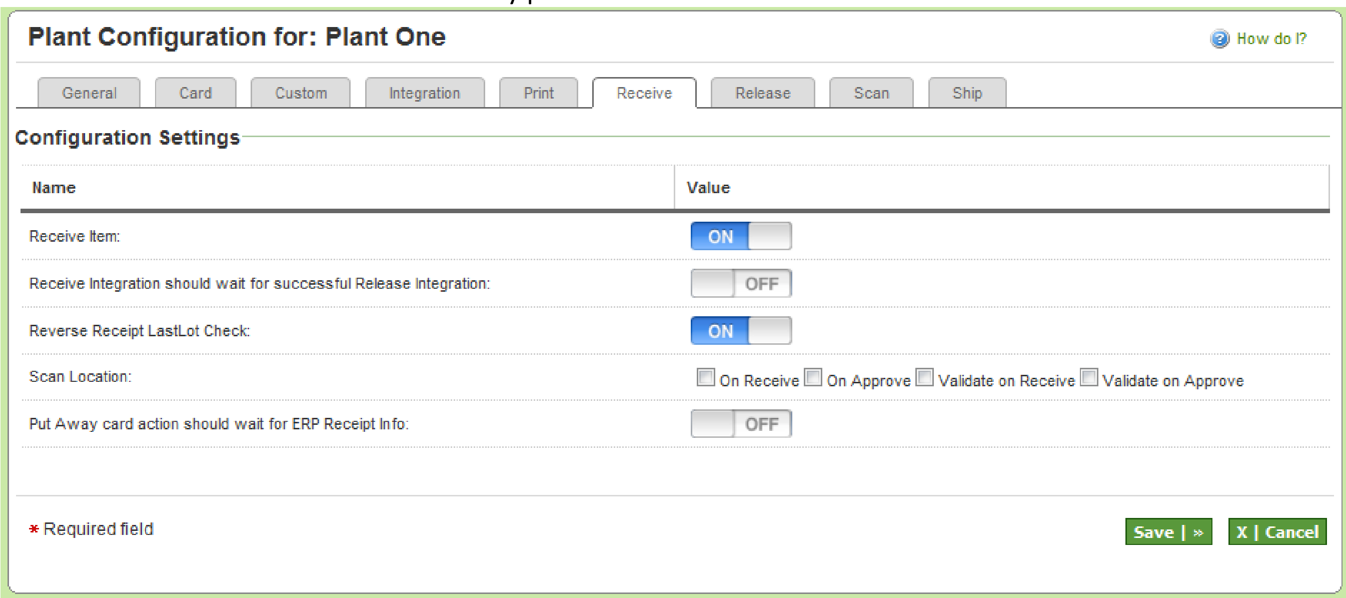
Integration Tab:

- *Retry operation for integration* – This could be set to ON or OFF. If set to ON, then the user will have the ability to retry a failed transaction
- *Separate Work Orders from P.O.* – If set to ON then purchase orders and work orders can be interfaced during integration
- *Show Integration Flags on Item Screen* – If set to ON, then in the Item edit screens the integration flags will be displayed
- *Organization ID* – If a different code than what is set up in the Work Center is needed for integration the same can be entered here
- *Deliver Location Code* – if there is a generic delivery location at this work center then the same can be entered in this screen



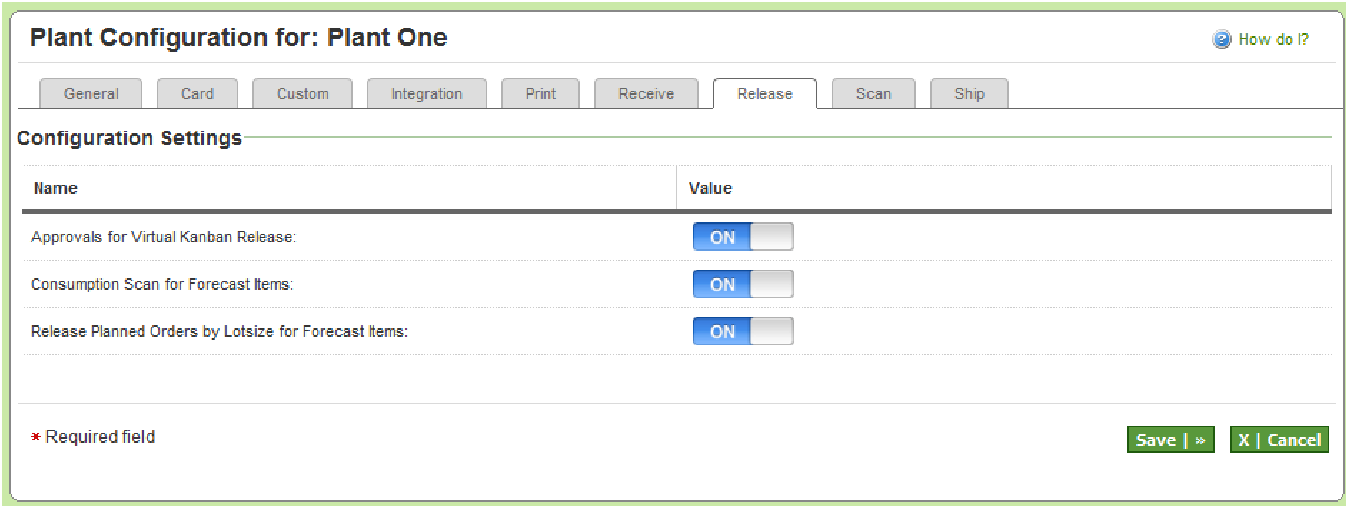
Print Tab:

- *Email printing of Kanban Cards* – Ultriva provides an option to email the label for remote printing at the supplying location. If this flag is set to ON, for each card an email is sent with a hyperlink. Supplier user can then click the link and print the card
- *Print Kanban card using Ultriva software* – This is the standard default option
- *Number of label copies to print* – This s a global setting for the plant. If it is set to more than 1, then that many copies will be printed every time the card is printed
- *Auto Print cards that are to be printed* – This provides an option to accumulate the cards for the time interval (described below) and then prints them automatically
- *Auto print cards interval (in minutes)* - As described above the cards will be accumulated during this interval and then automatically printed



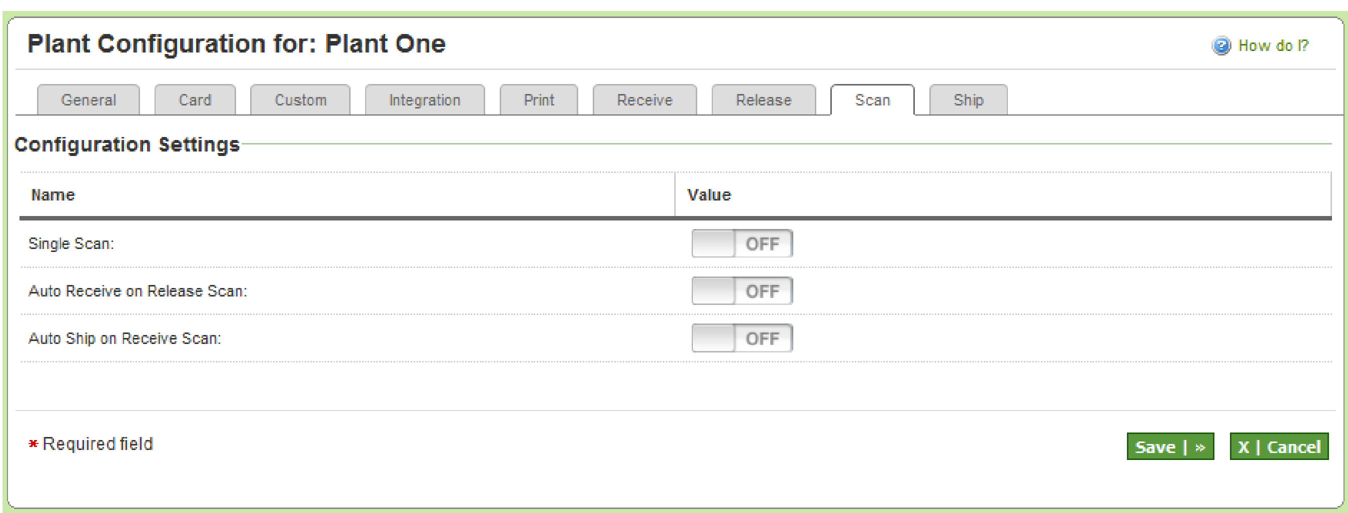
Receive Tab:

- *Receive Item* – If this is set to ON, then the Item is automatically received on shipment
- *Receive Integration should wait for successful release integration* – This is normally set to ON to ensure that ERP transaction integrity is maintained. i.e. Unless the order is created the receipt against that order cannot take place.
- *Reverse receipt last lot check* – If the receipt data is coming for ERP and the data consists of only quantities and not lot number, then this allows the ERP to signal that the last lot against this P.O. is received. Ultriva will then close the P.O. and the cards associated with that
- *Scan Location* – You can enable all the locations where the scan could take place. This will help to enable Keyboard wedge scan or mobile scan as appropriate
- *Put Away Card action should wait for ERP receipt Info* – This is just controlling the preceding process is completed prior to putting the goods away.



Release Tab:

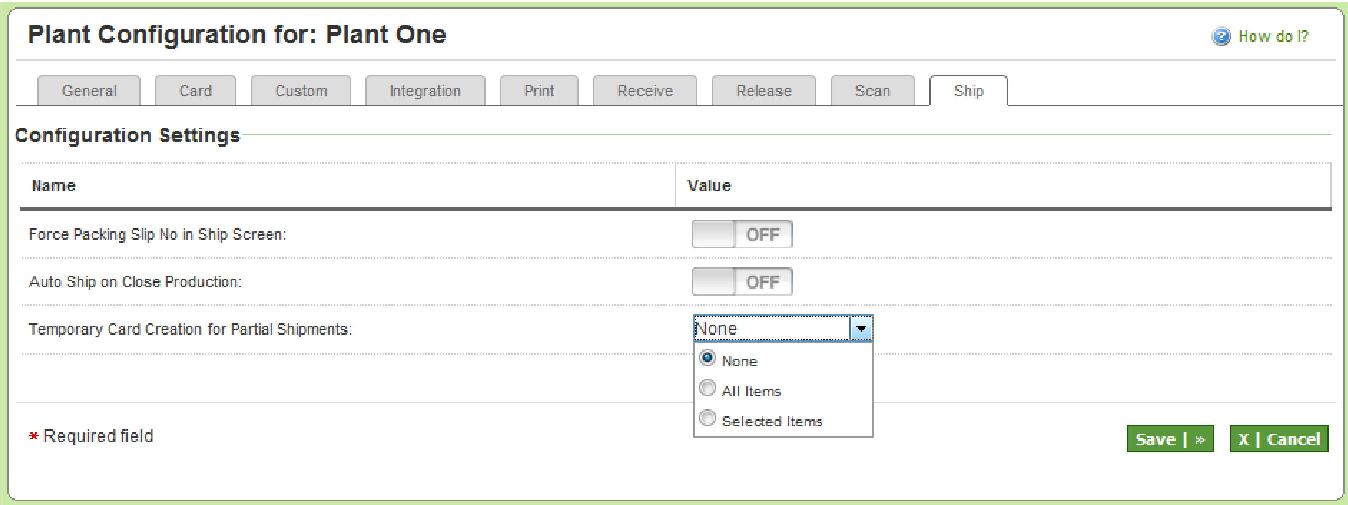
- *Approve for virtual Kanban release* – Virtual Kanban feature in Ultriva uses on-hand inventory in ERP to trigger a Kanban signal to the supplier or supplying work center. If this flag is set to ON, then this signal will wait for approval before being sent to supplier or supplying work center.
- *Consumption scan for forecast item* – Ultriva can provide the same metrics – RYG, demand changes, cycle time calculations etc. for Forecast items if users scan the goods at the point of use. If this flag is set to ON, then Ultriva holds the forecast cards from destroying at the point of receipt but destroys the card on the scan.
- *Release Planned Orders by Lotsize for Forecast Items* – One option Ultriva provides to release orders in standard lot sizes even for forecast items. If this flag is set to ON then Ultriva will automatically take the total quantity and automatically convert to lot sizes before releasing it to Suppliers.



Scan Tab:

- *Single Scan* – This applies only for Keyboard Wedge scanning. If it is set to ON, then each transaction will be automatically committed. If it is set to OFF then the scans can be committed in a batch

- *Auto Receive on Release Scan* - If this is set to ON, then it automatically completes the missed receive transactions at the point of consumption. So on the floor the scan is not causing an error.
- *Auto Ship on Receive Scan* – If this flag is set to ON, then Ultriva automatically completes the ship transaction at the receiving dock when receiving goods. Again this is to prevent transactions from erroring out.



Ship Tab:

- *Force Packing Slip in Ship Screen* – if customer wants supplier to always enter the packing slip # at the time of shipment, then this flag should be set to ON
- *Auto Ship on Close production* – This is only for internal work centers. When set to ON, then when the operator closes a schedule on the production sequence screen, then the Ship transaction is completed so that materials can be moved to the consuming location
- *Temporary Card creation for partial items* – Normal Kanban/Forecast items behavior is to ship a full card, even if supplier's ship short. The assumption is short shipment will lead to faster consumption cycle and therefore card will be released quickly. However Ultriva provides an option whereby a child card can be created for partial shipments and left at supplier for fulfillment. i.e. Assume that this flag is set for all items or selected items. If the card quantity is 100 pieces for the selected item and the supplier ships 80 pieces, then Ultriva will automatically create a child card for 20 pieces and put it "in process" state at the supplier.