Collaborative Supply Portal (CSP)

Process Flow driven User Guide

Version 7.0
July 2011

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User Guide for Collaborative Supply Portal (CSP)

Base Functionality

CSP provides functionality to manage a company's global supply chain. It provides a collaborative supply portal for the plants and its suppliers to interact in real time. Through the portal all the players in the supply chain get full visibility in to:

- Purchase Orders
- Shipments
- Receipts
- Inventory
- Metrics
- KPI
- Notifications
- Forecasts

The portal supports multiple forms of material replenishments as listed below:

- Standard purchase orders: Orders generated by ERP
- Planned demand: Planned purchase orders generated during MRP run
- Consumption driven replenishment: Orders generated through Kanban signals or virtual Kanban signals
- Consignment/VMI: Signals generated through pulling material from consignment or vendor managed inventory

Lastly portal supports transactions driven by bar codes and/or RFID while integrating with ERP for master data synchronization and transactional updates.

This document details:

- how to set up the supply chain loop between the plants and their global supply chain
- how to send orders through the portal
- what the supplier needs to do to collaborate
- What KPIs can be computed
- How to focus on eliminating stock outs
- How to right size the inventory
- How the supplier benefits from using the portal

Setting up a plant

This is the first step in starting the deployment of CSP. 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.
  - o 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

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 buyers and planners to start with and then follow up with material handlers, Kanban coordinators, receiving dock people and other related roles.

The next step to take will be to set up suppliers. How to add suppliers will be determined by whether it is a single plant implementation or multi-plant implementation. The other criteria would be whether the suppliers are shared by more than one plant i.e. Are the same suppliers supplying to multiple facilities within the organization.

In the context of this documentation we will assume that suppliers will be shared by more than one plant.

Configuring the Plant
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*
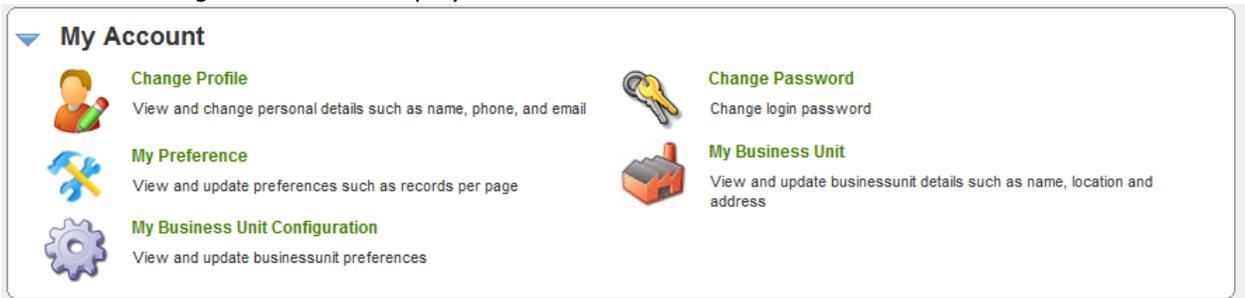
- *Select "My Business Unit Configuration"*
- *Following screen is displayed.*
  The options displayed for plant business units. Most of the options may be common for the plant as well as work centers. As we explain each tab we will highlight them accordingly.
- *The following tabs are available in the 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*

- o *Receive – Options that can be set for supporting Receiving process*
- o *Release – Options that can be set for supporting Releasing process*
- o *Scan – Options that can be set for supporting Scanning process*
- o *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

-
    o   None – Ultriva updates the usage per day but does not resize the loop size. i.e. adding or deleting cards
    o   All – Ultriva updates the usage per day but also adds or sets cards to delete based on the change
    o   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:
    o   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
    o   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.

Plant Configuration for: Plant One   ⓘ How do I?

| General | Card | Custom | Integration | Print | Receive | Release | Scan | Ship |

Configuration Settings

Name	Value
Force Packing Slip No in Ship Screen:	OFF
Auto Ship on Close Production:	OFF
Temporary Card Creation for Partial Shipments:	None ▾
	⦿ None
	○ All Items
	○ Selected Items

＊ Required field   Save | »   X | Cancel

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.

Creating suppliers

Ultriva provides an opportunity for the customers to define a pool of suppliers at the system level and then associate them at the plant level. This methodology allows the corporate purchasing or supply chain executives to get a view of consolidated spend by supplier or performance by a supplier across plants.

Adding a Supplier at the corporate level
Let us start with setting up a supplier at the corporate level:
- Login as system administrator

:

- Click Supplier and a list of suppliers will be displayed

- Click Add
- Enter the vendor information
    - Name
    - Location
    - Vendor code as set in ERP
    - Time Zone they are located in
    - Supplier's work days (5, 6 or 7 days)
    - Complete address

Create New Supplier

Supplier Information

* Name:	XYZ Supplier	* Location:	Kentucky
* Code:	XYZ-9090	* Label Format:	eBizKanban
* Timezone:	(GMT-06:00) Central Time (US & Canada)		
Weekly Holiday:	☑ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☑ Sat		

Address Information

* Address 1:	345 Major	Address 2:	
Address 3:		* City:	Louisville
* State/Province:	KY	* Zip/Postal Code:	79018
* Country:	USA		

* Required field

Save | »   X | Cancel

- Ultriva allows the suppliers to print shipping labels from the application when they ship goods. These labels can be defined by the customer. If there are multiple labels available, then select an appropriate label. Sample label is shown below:
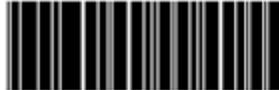
-
- These labels are designed to customer's needs at the time of initial implementation. Size of the label (4x6 or 6x8 or 2x4), contents on the label (Part number, P.O. number delivery location, Quantity etc.) and layout of the label can be customized
- Click Save
- The following screen will be displayed as a result

Many suppliers can be added either manually as shown above or through a back end process via a file upload. (Refer to the integration documentation for this process)

Associating corporate suppliers to the plant

Next step is to login to the plant and associate the suppliers at the plant level

- Login to the plant
- Click ADMIN button at the top right hand corner
- Click SUPPLIER from the menu list
- Following screen will be displayed

From More Options click Associate Supplier

	Name ▲	Location ▽	Code ▽	Site Id	Label	Auto Receive	Auto Start First Operation	Ship Using Shipment Module	Print Using Ultriva Software	Adjust Calculated Required ShipDate to EOD
☐	MagAero	Ontario	A677899		eBizKanban ▼	☐	☐	☐	☑	☐
☐	McCrary Metal Polishing, Inc.	Port Jefferson	80897		EmersonCNA2D ▼	☐	☐	☑	☑	☐
☐	Osco Jackson	Jackson, OH	55697		EmersonCNA ▼	☐	☐	☑	☑	☐
☐	Ronfeldt Mfg.	Apodaca, Nuevo Leon	14626		EmersonCNA2D ▼	☐	☐	☑	☑	☐
☐	Sedco, Inc.	Adrian MI	13590		EmersonCNA2D ▼	☐	☐	☑	☑	☐
☐	Sidney Scroll - Plant 8	Sidney OH	00804		EmersonCNA2D ▼	☐	☐	☑	☑	☐
☐	Temp Supplier	Dayton	T-677889		eBizKanban ▼	☐	☐	☐	☑	☐
☐	Therm-O-Disc	China	12443		EmersonCNA2D ▼	☐	☐	☑	☑	☐
☐	Whirlaway Corporation	Wellington, OH	16063		EmersonCNA2D ▼	☐	☐	☑	☑	☐

Click Show Unassigned suppliers and search for XYZ supplier that we created at the system level

Assign Supplier List for Plant One

Filter By ▼   Select Operator ▼   Enter Value

XYZ

Assign   Back

	Name ▲	Location ▽	Code	Site Id	Label	Auto Receive	Auto Start First Operation	Ship Using Shipment Module	Print Using Ultriva Software	Adjust Calculated Reqd ShipDate to EOD
☐	Osco Portsmouth	Portsmouth			eBizKanban ▼	☐	☐	☐	☑	☐
☐	Scroll Compressors Mexico	Reynosa MX			eBizKanban ▼	☐	☐	☐	☑	☐
☐	Sidney Scroll	Sidney OH			eBizKanban ▼	☐	☐	☐	☑	☐
☐	Sisme	Italy			eBizKanban ▼	☐	☐	☐	☑	☐
☐	Totomak	Izmir Turkey			eBizKanban ▼	☐	☐	☐	☑	☐
☐	Totomak Casting	Izmir			eBizKanban ▼	☐	☐	☐	☑	☐
☐	Verhoff Machine & Welding, Inc	Continental			eBizKanban ▼	☐	☐	☐	☑	☐
☑	XYZ Supplier	Kentucky	V-1800-		eBizKanban ▼	☐	☐	☑	☑	☐

Sorted by: Name   11 to 18 of 18   ◄ Prev   Page 2 ▼   Next ►

- Check the box
- Enter the vendor code that is unique to that plant (if it is different from corporate)
- Select a different label type if necessary
- Check "Ship using shipment Module" if the supplier will be using Ultriva's portal to ship
- Check "Print using Ultriva Software", if the supplier will be printing shipping label from the portal.
- Click "Assign"

Assigned Supplier List for Plant One

How do I?

The selected Supplier(s) are assigned successfully

Filter By ▼ | Select Operator ▼ | Enter Value | Go ▶

xyz 🔍🔍

Show Unassigned Suppliers | Update | ✖ Remove | ◀ Back

☐	Name ▲	Location ▽	Code ▽	Site Id	Label	Auto Receive	Auto Start First Operation	Ship Using Shipment Module	Print Using Ultriva Software	Adjust Calculated Required ShipDate to EOD
☐	Ava Scroll	Ava, MO	00398		EmersonCNA2D ▼	☐	☐	✔	✔	☐
☐	Bettcher Mexico	McAllen	70126		EmersonCNA2D ▼	☐	☐	✔	✔	☐
☐	Deerfield Mfg	Mason, OH	34313		EmersonCNA2D ▼	☐	☐	✔	✔	☐
☐	EHMD	McAllen	12588		EmersonCNA ▼	☐	☐	✔	✔	☐
☐	Freudenberg	Troy, OH	49724		EmersonCNA2D ▼	☐	☐	✔	✔	☐
☐	Fundilag	Torreon, MX	58494		EmersonCNA ▼	☐	☐	✔	✔	☐
☐	Fusite Div	Cincinnati	12670		EmersonCNA2D ▼	☐	☐	✔	✔	☐
☐	GGB North America	Thorofare, New Jersey	73750		EmersonCNA2D ▼	☐	☐	✔	✔	☐
☐	Grenada Stampings	Grenada MS	14420		EmersonCNA2D ▼	☐	☐	☐	✔	☐
☐	Kurz Kasch	Miamisburg, OH	13212		EmersonCNA2D ▼	☐	☐	✔	✔	☐

Sorted by: Name

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Creating Supplier users

The next task is to create a supplier administrator who can then manage all the activities for that supplier:

- Create and manage users
- Set up supplier calendar with appropriate holidays
- Set up item numbers if they are different from customer item numbers
- Set up the supplier preferences and configuration

To create a supplier administrator (or a supplier user) do the following:

- Click the Admin button from the top right hand corner
- Click Supplier from the menu list

- Following screen will be displayed
- Select the supplier
- Click "More Options" button and select users

For a new supplier the following screen will be displayed. Click Add User to create a new user. If there are existing users then a list will be displayed. Click ADD button to create a new user

In the Create user screen enter the relevant information. The following information is important:
- Email – Make sure the correct email is entered as all the notifications will be sent to this email
- Time zone – Make sure the correct time zone for the user is selected. Otherwise the date time may be out of sync
- Account Type: Ultriva is role based system. The menus and the buttons are controlled by the role assigned to the user. So it is important to pick the correct role.
- Password – depending on the plant settings (Strong, Medium or Low), the password should be created
- Password settings – It is a good idea to force the user to change the password when they login the first time

Create User for XYZ Supplier

How do I?

Personal Information

✱ First Name:	Rick	MI:	
✱ Last Name:	Chavez		
✱ Work Phone:	7890008000	Mobile Phone:	
✱ Email ID:	rchavez@xyzsupplier.com	Locale:	English (United States)
✱ Timezone:	Inherit From Owner Business Unit		

Account Information

✱ User ID:	rchavez	Business unit:	XYZ Supplier
✱ Account Type:	Supplier Administrator Show Privilege	Buyer Code:	

Password Information

Password must be greater than 6 character(s).
Password must contain at least 1 number and at least 1 character(s).
Every 90 days your Password will expire.

✱ Password:	●●●●●●●●	✱ Confirm Password:	●●●●●●●●

☐ User must change password at next logon
☑ Password never expires

Application Access Information

○○ - Not Set   ● - Set Allow   ● - Set Deny   ✔ - Allowed   ✖ - Denied

Application Name	Current Access	Allow	Deny
Supplier	✔	●	○

✱ Required field

Save | »   X | Cancel

Clicking save will create a user. For the sake of this documentation we have created two users – one is a supplier administrator and the other is supplier user as shown below.

User List for XYZ Supplier

Filters   Views   How do I?

ℹ User gtrenton added Successfully   ⊠

Filter By	Select Operator	Enter Value		Go ▶

Find User ID

Enabled
Disabled
100.0% .0%

Add   Edit   Disable   View   More Options ▼   Back

▽	User ID ▲	First Name ▽	Last Name ▽	Email ID ▽	Work Phone ▽	Buyer Code ▽	Last Login On ▽
✎	gtrenton	Gail	Trenton	gtrenton@xyzsupplier.com	67800000900		04/04/2011
✔	rchavez	Rick	Chavez	rchavez@xyzsupplier.com	7890008000		04/04/2011

Sorted by: User ID   1 to 2 of 2

Additional suppliers can be created through the same manual process or all the suppliers can be created through a file based batch process called supplier sync.

Once the suppliers are in the system the next step is to create the Items that will be supplied by these suppliers.

Creating an Item

To create an Item:
- Click on Admin at the top right hand corner
- Click on Item from the menu list
- If there are already existing items, then the list will be displayed
- Click Add to create a new item

The creation of item involves two datasets. The first one is Item specific and second one is Item-Supplier specific. Let us look through each data set.

Item specific dataset:

- Item Number – Same as the item (or part) number in ERP/MRP
- Item Description – Same as the item (or part) description in ERP/MRP
- Revision Number – If the item (or part) has a revision number defined in ERP/MRP
- Handling time – This is the time that it takes for the material to move from the receiving dock to the storage location. Normally it is left as zero unless the raw material warehouse is outside the four walls of the factory floor
- Location Code – This is dedicated location for that item (or part) in the warehouse or at point of use
- ABC code – An optional grouping code
- Price per UOM – Purchase price or transfer price (if the supplier is another plant) defined in the ERP/MRP

New Item

| Base Information | UOM Information | Notes | Custom Field List |

Item Information

✱ Item No:	ADG-89090-12	✱ Description:	Rotor 125-12	
Revision No:	Rev6.12	✱ Handling Time:	0	(in days)
Location Code:	MD-677-1490	ABC Code:		
✱ Price Per UOM:	128.75	✱ Category:	Kanban	
✱ Re-order cards when:	Open Box (First unit consumed)	Lot Number Tracking:	None	

Coordinator Information

✱ Item:	ultrivauser ×	Purchase:	

Usage Information

✱ Usage per Day:	100	✱ Safety Time:	5	(in days)
✱ Quantity On Card:	125			

Group Information

Product Line:	53 Frame 5G Motors	Commodity Code:	None

Tolerance Information

✱ Ship Quantity:	0	✱ Receive Qty:	0

Card Cycle Settings

☐ Check this box for this item to Wait at Dock
☐ Check this box for this item to Wait for Put Away
☐ Check this box to Force Tolerance for this item
☐ Consignment Item
Temporary card will be created for Partial Shipment - **No**

-

- Category – There are three categories or types of replenishment that are supported in Ultriva.
    o Kanban – This type classifies the items as pure consumption driven replenishment where the consumption is communicated through a scanner or through a manual entry
    o Virtual Kanban – This type classifies the items as pure consumption driven replenishment where the consumption is communicated via on hand inventory from ERP/MRP on a predefined frequency
    o Forecast/MRP – This type classifies for orders generated by MRP. The planned orders or direct P.O.s will be initiated after each MRP run.

✱ Category:	Kanban ▼	?
	Kanban	
Lot Number Tracking:	Forecast	
	Virtual	

-
- Re-order cards when – This is valid only if the category is set to Kanban. There are two option:
    o Open Box – the consumed signal for replenishment will be triggered when the first piece is taken out of box or bin
    o Empty Box – the consumed signal for replenishment will be triggered when the last piece is taken out of box or bin. If Re-order cards is set to Empty Box then during the computation of the Kanban sizing an additional card is automatically created.

- -
- -
- -

- Lot Number Tracking – The three options are None, Required at Ship, Required at Receive. Default is "None", which means no tracking options. The options show up during Ship or Receive depending on what the other options are set to

- -
- -

- Item Coordinator –username of the buyer responsible for the item.
- Purchase Coordinator – username(s) of other users (planners, purchasing agents etc.) associated with the item
- Usage per day – defines the average daily demand. i.e. the estimated consumption of this part at this current location
- Safety time – amount of safety stock to be carried in number of days. i.e. if the days are defined as 5 and Usage Per Day is 100, then the safety stock will be 500 units
- Quantity on Card – this is the standard lot size from the supplier or the standard lot size of consumption
- Product line – a method of grouping the items like a product family
- Commodity code – a method of assigning predefined commodity code to the Item
- Ship Quantity Tolerance – This setting allows the supplier to ship + or – the set quantity. For e.g. if the tolerance is set to 10 units and lot size is 100 units, then the supplier will be allowed to ship between 90 – 110 pieces without being alerted as over/under shipment.
- Receive Quantity Tolerance - This setting allows the receiving dock person to receive + or – the set quantity. For e.g. if the tolerance is set to 10 units and lot size is 100 units, then the receiver will be allowed to receive between 90 – 110 pieces without being alerted as over/under receipt.
- Card Cycle settings:

  o Check this box if this Item to Wait at Dock – This allows goods to wait for inspection.
  o Check this box for this item to wait for Put Away – This allows goods to be waiting to be delivered to a location

- o Check this box to Force tolerance for this item – When this is checked then suppliers will be forced to ship with in the tolerance specified. This prevents suppliers from over/under shipping
- o Consignment Item – When checked the interface to ERP behaves differently. In the default mode when the goods are consumed the release signal is send to supplier and a P.O. (and/or P.O. line) is created. When the goods are received a P.O. receipt transaction is created in ERP and inventory is accounted for. However when this box is checked the inventory the receipt and release transaction behave differently. When goods are received at dock, the scan moves the goods to consignment but does not generate the P.O. Receipt transaction in ERP. When the customer pulls the material from consigned location to point of use, Ultriva generates a P.O Receipt transaction in ERP and accounts for the inventory. At the same time it also releases a signal to supplier to replenish the consignment

Mapping supplier to the Item
Supplier specific dataset:

Supplier Information

* Supplier:	XYZ Supplier ×	* Supplier Item No.:	ADG-89090-12
* Description:	Rotor 125-12	* Min. Order Cards:	0
* Default Carrier:	ETD	* Card Allocation:	100 (in %)
* Supplier User:	rchavez ×		
Additional Contacts:	gtrenton ×		

Lead Time Information

* Lead Time:	12 (in days)	* Transit Time:	3 (in days)

PO Information

PO #:		PO Line #:	0
PO Release#:		PO Release Line #:	
* PO Type:	◉ Discrete ○ Blanket		
Blanket Qty:	0	Blanket End Date:	04/04/2011

Card Cycle Settings

☐ Check this box if the Released cards needs to wait till Run Line is reached
☐ Check this box if the item goes through the Shipping Hub
☐ Check this box if the Released cards needs to wait till PO is created

* Required field   Save | »   X | Cancel

- Supplier – Type the supplier Name
- Supplier Item No. - This is automatically populated (same as the Item No. entered above). However, the supplier can edit this field and enter their Item No. if necessary
- Description - This is automatically populated (same as the Item description entered above). However, the supplier can edit this field and enter their Item description if necessary
- Minimum order cards – If there is a minimum order quantity for the suppliers then this field is set. For e.g. if the lot size is 50 units and suppliers minimum order quantity is 250 units, then this field is set to 5.

-
- Card Allocation – Ultriva support multiple sourcing for a single item. For e.g. if the item is dual sourced, then at the time of set up customer can define the splits (50-50, 60-40 etc.). When this is defined Ultriva will automatically distribute the orders (Kanban signals) in defined proportion by computing the split during each order generation
-
- Default Carrier – Customer can set a default carrier for transportation if required. When supplier ships goods, the default carrier will pop up
- Supplier user – Associate with the user, like a CSR, who will be responsible for the customer items.
- Additional contacts – Additional users who can be involved in shipping the goods or printing the labels or managers who monitor the systems can be added as well
- Lead Time – This is the supplier's stated lead time to ship.
- Transit time – This is the estimated transit time based on agreed upon mode of transport.
-

-
-
- P.O. # - Ultriva supports blanket P.O or discrete P.O. Most of the cases the P.O. # is obtained through ERP integration at the time of Kanban release to the supplier. In the event where customer is using a blanket P.O. and P.O. line, they can enter it here. Every time a card is released this blanket P.O. information is sent to the supplier and the goods are received against this.
- Blanket Quantity – Ultriva provides a warning mechanism for the blanket P.O.s. Customers can define the quantity specified in a blanket P.O. Ultriva will keep track of the releases and set it off against the blanket quantity. When blanket quantity goes down to less than one month of potential order quantities, it generates the alert to the buyer to reset the blanket quantity
- Blanket End Date – Similar to blanket quantity Ultriva raises an alert one month prior to the expiration date.

-
- Card Cycle Settings

- o Released cards need to wait till run line is reached – when this box is checked then the cards wait in an intermediate stage till minimum number of cards (defined above) is met. Suppliers would be able to see the Kanban signals coming through but cannot accept these cards till the run line is reached
- o Item goes through the shipping hub – If logistics requires consolidation or containerization then this box can be checked. Ultriva holds the card between "In Process" and "In Transit" states. When the consolidation is completed a scan will move the card to "In Transit" state
- o Released cards need to wait till P.O. is created – When Ultriva is integrated with ERP system then on release of the card the interface program requests P.O. # from ERP. If this box is checked then the card is held in an intermediate state till ERP generates the P.O.

- - Click Save to complete the Item creation and supplier mapping

Sizing Kanban and creating cards

When the save button is pressed for creating a new item, the screen is navigated to the next step of creating Kanban Cards as shown below. Click Next.

When a new item is set up as a Kanban item, it is important to create a current state in Ultriva that matches the inventory status. This means that the on hand inventory and open purchase orders for that item should be set up in the system. Typically you walk the floor and identify the on hand quantity while look at the MRP system to get the released open P.O.s. Enter the information and click Next.

Adjust Loopsize for Item: ADG-89090-12 ❓ How do I?

Input Parameters ———●——— Adjust Loopsize ○

Initial Setup

Please enter your current inventory on hand and on order data to setup the Initial Loopsize for the Item:

* Units On Hand: 650

* Units On Order: 1600

[Next | »] [X | Cancel]

The cards are created based on the following logic:
- *System sizes the number of cards based on the defined Kanban parameters in Item master using the formula described above*
- *It assigns the equivalent cards (lot/bin sizes) to on hand units*
- *It assigns the equivalent cards (lot/bin sizes) to on order units*
- *Exceptions*
  - *If the total number of cards calculated is more than the units defined (On hand + On order), then additional cards are sent to the supplying location as new orders. This is the case above*
  - *If the total number of cards calculated is less than the units defined (On hand + On order), then additional cards are created to do the following:*
    - *If units on hand is greater, then additional cards are created and card delete count is set to equivalent of the excess cards*
    - *If units on order is greater, then additional cards are created and released to the suppliers and card delete count is set to equivalent of the excess cards*

Kanban Calculator

Adjust Loopsize for Item: ADG-89090-12   ⓘ How do I?

Input Parameters   Adjust Loopsize

Configure Loopsize Parameters

Initial Setup:

	Units	Equivalent Kanban Cards
Units On Hand	650	6
Units On Order	1600	13
Total	2250	19

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:

- 6 Card(s) will be created to represent your On Hand Inventory
- 13 Card(s) will be released to represent your On Order Inventory
- 3 Card(s) will be marked for Delete to destroy after consumption.
- Loopsize will be adjusted to **16** Card(s).

Kanban Calculator:

	Current
Quantity On Card	125
Handling Time (in days)	0.00
Lead Time (in days)	12.00
Transit Time (in days)	3.00
Usage Per Day	100.00
Safety Stock (in days)	5.00
No of Cards	16

＊ Required field   « | Prev   Finish | »   X | Cancel

In the scenario shown on the screen above 3cards will be marked for deletion as the total number of cards created exceeded the defined sizing. No further orders will be sent to suppliers till the 3 cards are consumed.

After reviewing the data click Finish. The following screen will be displayed which lists all the cards created along with their current states. Some points to note:
- At the top of the card list it shows the details of the Kanban Cards are listed
  - Current loop size (replenishment cards) – This shows what is the right loop size based on the defined parameters
  - Cards to be destroyed after consumption – This shows the excess inventory in the system that will be adjusted as the consumption happens. This could be the result of initial set up or an ongoing resizing based on lesser demand or lowering lead times or reduction in safety stock
  - Non-replenishment cards – This shows the number of cards that are not permanent cards. These cards could be created for spike orders or to support seasonal demand
  - Total cards - this is the sum of replenishment and non-replenishment cards in the system
  - Earliest expiration date – Non-replenishment cards are created with expiration dates. For e.g. a spike card will have an expiration date set at the end of order cycle while a seasonal card may have the expiration set for a longer period (60 days, 90 days etc.). This shows the date after which card(s) are set for deletion.
- When the cards are created initially the cycle is set to zero

- If there is a default location defined at the Item level, then that is automatically displayed in the card list.
- All cards are defined as infinite cycle cards as the system will determine when and which card to delete
- Quantity on Card shows the last received quantity
- Card Quantity shows the defined lot size
- Card State shows where the card is - on hand, released (waiting to be accepted), in process, in transit or at Dock

Cards List for Item ADG-89090-12

Filters | Views | How do I?

Loopsize adjusted successfully for Item: ADG-89090-12

Filter By | Select Operator | Enter Value | Go

Find Card ID

Add / Remove Cards | Update Location | Print | Back
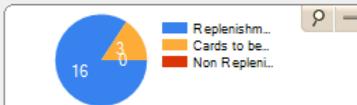
Current loop size (Replenishment Cards) **16**   Cards to be destroyed after consumption **3**   Non-replenishment Cards **0**   Total Cards **19**
Earliest Expiration Date **N/A**

Card ID ▲	Card State ▽	CycleNo ▽	Qty On Card ▽	Card Qty ▽	Last Action Time ▽	Create Time ▽	Cycles Remaining ▽	Location Code ▽
KCD3TP8CNAHA	On Hand	0	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TP9CNANF	On Hand	0	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TPACNARY	On Hand	0	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TPBCNAAJ	On Hand	0	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TPCCNAMP	On Hand	0	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TPDCNAQE	On Hand	0	125.00	25	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TPECNAFB	Released	1	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TPFCNAL9	Released	1	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TPGCNAB4	Released	1	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490
KCD3TPHCNADN	Released	1	125.00	125	04/04/2011	04/04/2011	Infinite	MD-677-1490

Sorted by: Card ID   1 to 10 of 19 ◄ Prev Page 1 ▼ Next ►

At the top of the card list screen it shows that 3 cards will be destroyed upon consumption. This means that the first three lots when consumed will not trigger a release signal to the suppliers. The system will right size the Kanban based on the defined parameters before it releases replenishment signals to the supplier.

Replenishment and Non-replenishment cards
Ultriva allows two types of card types:
- Replenishment cards: These are infinite cycle cards which cycle through the system till they are set for deletion

- Non-Replenishment cards: These are temporary cards which are used for spike orders or for seasonal replenishment. Spike orders are deleted after one cycle is completed. Seasonal cards are deleted at the end of their expiration date.

Seasonal Cards

An example of seasonal card is shown below:
- Select item from Admin
- Select the item and click cards from More Options
- Select Add Non-Replenishment cards
- Following screen will be displayed

- Enter the number of non-replenishment cards
- Enter Expiration date
- Select whether you are creating this card to match existing inventory or you are creating this card as a new order to be released to the supplier
- Click Next and the following screen is displayed

Adjust Loopsize for Item: ADG-89090-12   ? How do I?

Select Options   Configure Parameters   Release Parameters

Specify Release parameters

* Supplier: XYZ Supplier ▼

Required receive date   04/26/2011   Leave blank for using system calculated date

Release notes   Spike order

* Required field   « | Prev   Finish | »   X | Cancel

- You will have an option of releasing the order with specific receive-date and any notes if necessary.
- In this case we are releasing a spike order which is expected to be received on 4/26/2011 and will be destroyed by 4/29/2011 (as shown in the previous screen)
- Click Finish to release the spike card

Spike Cards

Similar to the spike card, we are showing below how to add an existing inventory in to the system.
- Enter the number of cards
- Enter the card expiration date
- Enter the amount of inventory to be added. It could be a full or partial lot size depending on what is on the floor
- Click Finish to add the inventory

Adjust Loopsize for Item: ADG-89090-12

Select Options — Configure Parameters — Release Parameters

Add Non Replenishment Cards

Current Loopsize:

Current Replenishment Cards	16
Cards to be destroyed after consumption	0
Non-replenishment Cards	2
Total Cards	**18**

Next Steps:

* Please enter the number of Non-replenishment cards to be added: `1`

* Please enter expiry date for the cards to be added: `04/15/2011`

◉ Existing Inventory Quantity on Card: `125`

◯ Release to Supplier

---

* Required field

« | Prev   Finish | »   X | Cancel

As you can see in the card list displayed below, the earliest date when the next card will be deleted is shown:

Editing the Item and associated suppliers:

- Click Admin menu at the top right hand corner
- Select Item from the menu list
- The following Screen will be displayed
- Click Edit to change any parameters in the Item master
- To edit the supplier, select the item and click Associate supplier from More Options as shown below:

Items List

- Following screen will be displayed. Select the supplier and click edit to change supplier information

- Following screen will be displayed

Setting the Kanban signal to wait for P.O
- In the edit screen check the box (last one) that enables the work flow to wait for P.O to be entered (either manually or through integration) before the supplier can accept the orders
- Click Save

Releasing orders:

Ultriva supports multiple modes of releasing orders. There are two types of triggers for ordering process:
- Kanban Triggers– These are for parts that are set as "KANBAN" in Ultriva. The orders will be triggered by
    o Scanning – Order can be triggered by scanning the label at the point of use
    o Manual Release – If there is no scanning available, then user can perform the same function through the screen input
        ▪ Click on Action
        ▪ Select Release from the menu
        ▪ Following screen will be displayed

Manual Release

        ▪ Select the item and click Show Cards
        ▪ Following screen with the list of cards that are on-hand will show up

Release Cards List

Find Card ID

[Release | »] [Attach Notes | »] [« | Back To Items] [« | Change Filter]

	Card ID ▽	Item ▲	Description ▽	CycleNo ▽	Qty On Card ▽	Card Qty ▽	Location Code ▽	Last Received ▲	Supplier
☑	KCD3TP8CNAHA	ADG-89090-12	Rotor 125-12	0	125.00	125	MD-677-1490	-	XYZ Supplier ▾
☐	KCD3TP9CNANF	ADG-89090-12	Rotor 125-12	0	125.00	125	MD-677-1490	-	XYZ Supplier ▾
☐	KCD3TPACNARY	ADG-89090-12	Rotor 125-12	0	125.00	125	MD-677-1490	-	XYZ Supplier ▾
☐	KCD3TPBCNAAJ	ADG-89090-12	Rotor 125-12	0	125.00	125	MD-677-1490	-	XYZ Supplier ▾
☐	KCD3TPCCNAMP	ADG-89090-12	Rotor 125-12	0	125.00	125	MD-677-1490	-	XYZ Supplier ▾
☐	KCD3TPDCNAQE	ADG-89090-12	Rotor 125-12	0	125.00	25	MD-677-1490	-	XYZ Supplier ▾

Sorted by: Item, Last Received

1 to 6 of 6

[Release | »] [Attach Notes | »] [« | Back To Items] [« | Change Filter]

- Select the cards to release by checking the box and pressing the Release button
- The following two screens shows the results based on the status cards

Release Cards Results

How do I?

[« | Back To Items]

Following cards were successful

	Card ID	Item	Card Qty	Description
🖉	KCD3TP8CNAHA	ADG-89090-12	125	This card was marked for deletion and it has completed the life count, so, the Release did not take place.

- The above screen shows what happens on release under one of the two conditions
  - A resizing has reduced the Kanban size and set some cards for deletion
  - A non-replenishment card which is expiring. It could be a spike card which is one cycle or a seasonal card which could be time fenced.
- The following screen is the normal result screen which will be displayed when the order signal is sent to the supplier

Release Cards Results

How do I?

[« | Back To Items]

Following cards were successful

	Card ID	Item	Card Qty	Description
🖉	KCD3TPBCNAAJ	ADG-89090-12	125	Released To XYZ Supplier and Waiting for PO.

-
-

MRP Orders

- MRP Triggers – These are for parts that are set as "FORECAST" in Ultriva. Through the integration MRP sends planned orders to Ultriva. This will be displayed in Ultriva's home page as shown below:

MRP Forecasts Planned Orders

3076 Cards	2565 Cards	4637 Cards
Past + 7 Days	Next 7 days	Future

MRP Recommendations

0 Cards	0 Cards	0 Cards
Defer Orders	Expedite Orders	Cancel Orders

Flowchart:

- MRP
- Loads Orders in to Ultriva
- Planned Orders
- Buyer Releases in Ultriva
- Get P.O. # from MRP
- Firm Orders
- Electronic Orders to the supplier through Portal
- Supplier Acknowledgement
- Supplier Reschedule (if necessary)
- Buyer Approves Reschedule — No
- Yes → Buyer Approves Reschedule
- No → Supplier prints labels (Lot level or Master label)
- Yes → Supplier prints labels (Lot level or Master label)
- Supplier ships goods
- Goods are scanned for receipt at dock
- Goods wait for inspection
- P.O. Receipt generated in MRP
- Goods moved to on hand

  - The planned orders could be for any planning interval in to the future. Every MRP run will overwrite the previous loaded data except for the orders that are already released to the supplier

- o MRP Recommendations – These are the recommendations sent by MRP on previously committed orders. For e.g. MRP could recommend to defer, expedite or cancel orders that have been issued during the previous interval
- o Buyers can click on any range to see the order lines and take action on them. The screen displayed below is the result of next seven days:

- o The item list showed consists of plans for Kanban and forecast items. However plans for Kanban items are for viewing purposes only. The plans for Forecast items can be converted in to firm orders by buyers. This view can be seen on a daily (7 days), weekly (7 weeks) or monthly (7 months) based on what is picked under the VIEW list in the top
- o This data can also be viewed by start date or due date based on the tabs selected. Addition filters can be set by Supplier, Item type and specific items.
- o By selecting the first item the following screen will be displayed
- o The list shows all the orders for the 7 day period for that item
- o It is also possible to click on the Total Orders for a specific date to view all the orders across all items
- o You can check one or more item, change the due date and/or order quantities if required
- o If the item is multi-sourced then the buyer will have an option to change the supplier as well, if required
- o When ready click the Release button
- o If the system is set to release in standard lot sizes, Ultriva will automatically convert the total order quantity for the item in to defined lot sizes before releasing them. Each lot size will be converted in to a separate order line item

MRP Forecasts Detail

	ItemNo ▲	Description ▽	Start Date ▽	Due Date	Exception Code ▽	Suggested Qty ▽	Balance Qty	Order Qty	Supplier
☑	001-0456-00	Quest Main Bearing	06/21/2011	07/14/2011	51	432.00	432.00	432.00	Sidney Scroll - Plant 8 ▼
☐	001-0456-00	Quest Main Bearing	06/22/2011	07/15/2011	51	420.00	420.00	420.00	Sidney Scroll - Plant 8 ▼
☐	001-0456-00	Quest Main Bearing	06/23/2011	07/16/2011	51	833.00	833.00	833.00	Sidney Scroll - Plant 8 ▼
☐	001-0456-00	Quest Main Bearing	06/24/2011	07/17/2011	51	218.00	218.00	218.00	Sidney Scroll - Plant 8 ▼
☐	001-0456-00	Quest Main Bearing	06/25/2011	07/18/2011	51	859.00	859.00	859.00	Sidney Scroll - Plant 8 ▼

Sorted by: ItemNo

1 to 5 of 5

- The result will be displayed as shown below. The lot size in for the release item is 160 pieces. Hence the 432 is converted in to three line items.

MRP Forecasts Release Results

Release Status: Success

Card ID ▽	ItemNo ▽	Supplier Name ▽	Due Date ▽	Description ▽
KCD48WSCNA4P	001-0456-00	Sidney Scroll - Plant 8	07/14/2011	Card successfully released to supplier: Sidney Scroll - Plant 8
KCD48WTCNA9E	001-0456-00	Sidney Scroll - Plant 8	07/14/2011	Card successfully released to supplier: Sidney Scroll - Plant 8
KCD48WUCNAWB	001-0456-00	Sidney Scroll - Plant 8	07/14/2011	Card successfully released to supplier: Sidney Scroll - Plant 8

Supplier work flows
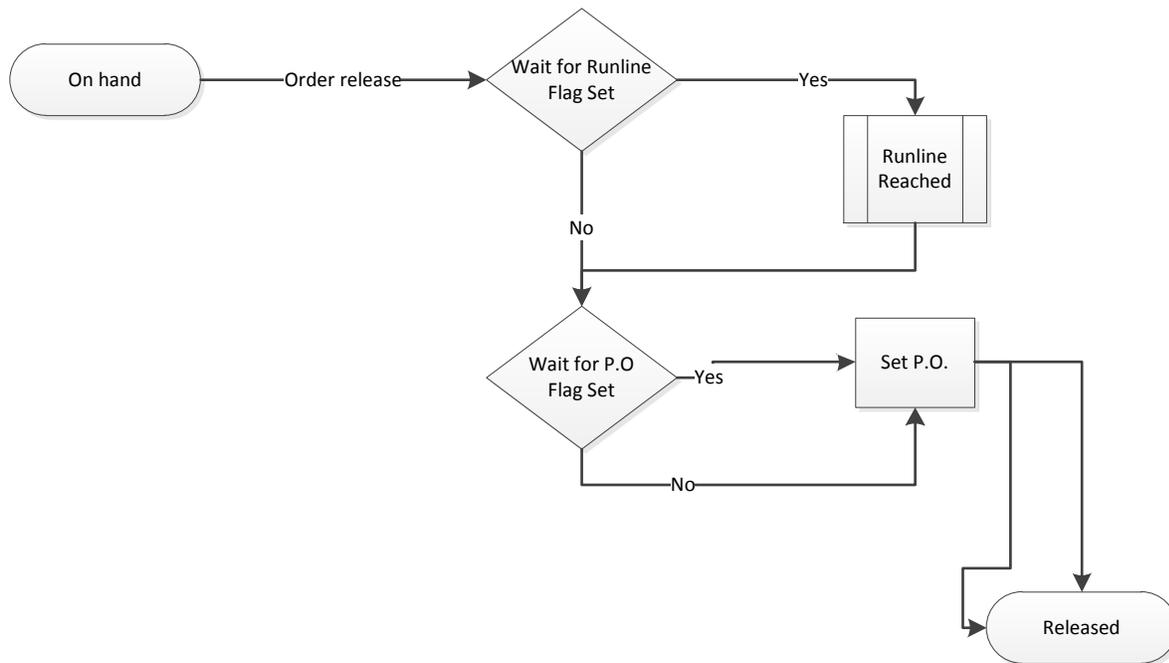
Supplier work flows can be changed by setting two flags in Associate supplier Screen;
- Force the order to wait for P.O.
- Force the cards to accumulate in runline.
- The steps to accomplish these tasks are as follows:
  o Login as buyer
  o Click on ADMIN menu at the top right hand corner
  o Select Item from the menu list
  o A list of items will be displayed.
  o Select the item to edit and pick Associate Supplier from More Options
  o Select the supplier and click edit
  o Following screen will be displayed

Edit Item ADG-89090-12 mapped to Supplier XYZ Supplier

Supplier Information

* **Supplier:** XYZ Supplier
* **Supplier Item No.:** ADG-89090-12
* **Description:** Rotor 125-12
* **Min. Order Cards:** 3
* **Default Carrier:** ETD
* **Card Allocation:** 100 (in %)
* **Supplier User:** rchavez ✕

Additional Contacts: gtrenton ✕

Lead Time Information

* **Lead Time:** 12 (in days)
* **Transit Time:** 3 (in days)

PO Information

PO #:

PO Line #: 0

PO Release#:

PO Release Line #:

* **PO Type:** ● Discrete ○ Blanket

Blanket Qty: 0

Blanket End Date: 04/04/2011

Card Cycle Settings

☑ Check this box if the Released cards needs to wait till Run Line is reached
☐ ~~Check this box if the item goes through the Shipping Hub~~
☑ Check this box if the Released cards needs to wait till PO is created

* Required field

[Save | »] [X | Cancel]

- o Check the last box at the bottom to set the flag "Wait till P.O is created"
- o Check the firs flag at the bottom to set the flag "Wait for Runline is reached"
- o Enter the number of runline cards in the field Min. Order Cards as shown above

- The other configuration option is setting the item to wait for runline. Let us configure the system and test the behavior

Release Cards Results

[« | Back To Items]

Following cards were successful

	Card ID	Item	Card Qty	Description
📎	KCD3TPCCNAMP	ADG-89090-12	125	Released To XYZ Supplier and Waiting At Runline.
📎	KCD3TPDCNAQE	ADG-89090-12	125	Released To XYZ Supplier and Waiting At Runline.

Supplier Actions

The supplier has to perform two key actions in Ultriva. One is to acknowledge order by accepting the orders and two to ship the accepted orders on the required ship date. Optionally supplier can reschedule the orders if necessary. Similarly if the buyer initiates the reschedule then the supplier will have the option to accept or reject the reschedule. Finally prior to physically shipping supplier can print the shipping label in Ultriva and stick those labels in the boxes. We will detail how each of these actions are performed in Ultriva.

Accepting Orders

The first step the supplier has to do is to accept the orders. (Buyer will have an option to set the supplier in an Auto Accept mode, in which case they don't have to perform this action). Suppliers can get to this screen one of two modes:
- From the home page they can click "Order not yet acknowledged" from the Order Tracking panel or "Accept Orders" from My Routines panel as shown below
- Alternatively users can click Action from the top line menu and select Accept from the menu list

- The following screen will be displayed
- When the order is released the orders could be in any one of the states
    o Waiting for P.O. to be created
    o Waiting for Runline to be reached
    o Released cards (waiting to be accepted)
- Unless it is in the Released Cards state the supplier will not be able to accept the cards.
- The following screen shows orders waiting for P.O.s and Released cards waiting to be accepted

Accept Items List

			Wait For PO		Runline		Released		Reschedule Approval		Recall Wait		Total	
RYG	Supplier Item No.	Description	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty
🟩	ADG-89090-12	Rotor 125-12	3	375.00	1	125.00	6	725.00	0	0.00	0	0.00	10	1,225.00
Total			3	375.00	1	125.00	6	725.00	0	0.00	0	0.00	10	1,225.00

Filters How do I?

Plant: Plant One | Cards: All | Show: Items List | Category: All | RYG: All

Filter By | Select Operator | Enter Value | Go

Wait For PO Cards | » | Runline Cards | » | Released Cards | » | Reschedule Approval Cards | » | Recall Wait Cards | »

Waiting for P.O. state

- When cards are in this state, the supplier will be able to view the cards but cannot accept them. As shown below they can see all the details related to the cards but there is no action button.

Cards Waiting For PO List

Views How do I?

Find Card ID | « | Back To Items | « | Change Filter

▽	Card ID ▲	Supplier Item No. ▲	Release Date ▲	Reqd Ship ▽	Reqd Receive ▽	Card Qty ▽	PO # ▽	PO Line # ▽
✏	KCD3TPCCNAMP	ADG-89090-12	04/04/2011	04/20/2011	04/25/2011	125		0
📎	KCD3TPDCNAQE	ADG-89090-12	04/04/2011	04/20/2011	04/25/2011	125		0
📎	KCD3TPECNAFB	ADG-89090-12	04/04/2011	04/20/2011	04/25/2011	125		0

- When the Released Cards are waiting for P.O. creation then an action has to take place prior to supplier accepting the cards
    - An integration with ERP will move it to released cards state
    - If there is no integration then the buyer can manually set the P.O. by doing the following:
        - Login as the buyer
        - Click Action and select SET P.O. from the menu list. Following screen will be displayed
        - Select the item and click show cards
        - Following screen will be displayed

- Check the box, enter the P.O., P.O. line, release number, release line number as appropriate
- Click Set P.O button
- Following results screen will be displayed

Waiting for Runline state

- Unlike Waiting for P.O. state, the supplier can not only view the cards that are waiting but can override if necessary by selecting the cards and accepting them as shown below

- If the buyer decided to accept these cards then the system will warn them about their override but still provide an option to confirm the override as shown below

Accept Waiting At Runline Cards Results

? How do I?

« | Back To Items

Please note that you are overriding the minimum Run Line requirement. Do you still want to accept these cards?

		Card ID	Supplier Item No.	Release Date	Reqd Ship	Reqd Receive	Card Qty	PO #	PO Line #	WorkOrder No.
✎	☑	KCD3TPFCNAL9	ADG-89090-12	04/04/2011	04/20/2011	04/25/2011	125		0	

Confirm | »

- Once confirmed the cards will be moved to In Process state from where the supplier can ship the goods

Accept Waiting At Runline Cards Results

? How do I?

« | Back To Items

Following cards were successful

	Card ID	Supplier Item No.	Description
✎	KCD3TPFCNAL9	ADG-89090-12	Runline Card accepted and waiting for PO.

Accept Items List

Filters ? How do I? ≫

Plant	Cards	Show	Category	RYG
Plant One ▾	All ▾	Items List ▾	All ▾	All ▾

| Filter By ▾ | Select Operator ▾ | Enter Value | 🔄 | Go ▷ |

Wait For PO Cards | »   Runline Cards | »   **Released Cards | »**   Reschedule Approval Cards | »   Recall Wait Cards | »

RYG	Supplier Item No.	Description	Wait For PO		Runline		Released		Reschedule Approval		Recall Wait		Total	
			Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty
🟩	ADG-89090-12	Rotor 125-12	4	500.00	0	0.00	6	725.00	0	0.00	0	0.00	10	1,225.00
Total			4	500.00	0	0.00	6	725.00	0	0.00	0	0.00	10	1,225.00

- When the supplier goes back to the Accept items list, he will see that runline cards have moved and there are none waiting in the queue.

Rescheduling of orders by the supplier

- Ultriva provides an option for the supplier to reschedule the orders (cards) that they have accepted.
- To perform that action do the following:
  o Login as supplier
  o Click Actions from the top menu
  o Select Reschedule Request from the menu list and the following screen will be displayed.

- o Select the orders and request a new ship date
- o Click Reschedule
- o Following result screen will be displayed

- The rescheduled cards are in an intermediate state waiting for the buyer to approve. An alert would be sent to buyer as soon as supplier initiates a reschedule

Approval of supplier reschedule

- Buyer can do the following to approve the reschedule
    - o Login as the buyer
    - o Click on Action
    - o Select Approve Supplier Reschedule Request
    - o Following screen will be displayed which shows all the items which has reschedule request

Approve Supplier Reschedule Items List Filters Views How do I?

Supplier	Cards	Show	Category	RYG
XYZ Supplier	All	Items List	All	All

Filter By | Select Operator | Enter Value | Go

Show Cards | »

RYG	Item	Description	Total Qty	Total Cards
	ADG-89090-12	Rotor 125-12	250.00	2

- o Click on Show Cards
- o Following screen with the order lines which need approval are displayed

Approve Supplier Reschedule Cards List Views How do I?

Find Card ID   Approve | »   Reject | »   Attach Notes | »   « | Back To Items   « | Change Filter

▽	☐	Card ID ▲	Item ▲	Description ▽	Supplier Name ▽	Release Date ▽	Reqd Ship ▽	Reqd Receive ▲	Card Qty ▽	New Req Ship Date ▽	New Req Receive Date
	☑	KCD3TPMCNAC8	ADG-89090-12	Rotor 125-12	XYZ Supplier	04/04/2011	04/20/2011	04/25/2011	125	04/14/2011	04/19/2011
	☑	KCD3TPNCNAPA	ADG-89090-12	Rotor 125-12	XYZ Supplier	04/04/2011	04/20/2011	04/25/2011	125	04/14/2011	04/19/2011

- Buyer has an option to either approve the request or reject the request
    - o Approval of request will change the required ship date to the newly requested date and move it to In Process state, ready for shipment of goods
    - o Following screen shows the results of the approve action

Approve Supplier Reschedule Cards Results How do I?

« | Back To Items

Following cards were successful

	Card ID	Item	Description
	KCD3TPMCNAC8	ADG-89090-12	Supplier Reschedule Successfully Approved.
	KCD3TPNCNAPA	ADG-89090-12	Supplier Reschedule Successfully Approved.

- o Rejection will retain the original date and move the card to In Process state, ready for shipment of goods
-

Approve Supplier Reschedule Cards List Views How do I?

Approve | »   Reject | »   Attach Notes | »   « | Back To Items   « | Change Filter

	☐	Card ID	Item	Description	Supplier Name	Release Date	Reqd Ship	Reqd Receive	Card Qty	New Req Ship Date	New Req Receive Date
	☑	KCD3TPMCNAC8	ADG-89090-12	Rotor 125-12	XYZ Supplier	04/04/2011	04/14/2011	04/18/2011	125	04/28/2011	05/03/2011

- o Following screen shows the results of the reject action

Reschedule request by the buyer

Buyer initiating a reschedule
- Ultriva provides an option for the buyer to reschedule the orders (cards) that have been accepted by the supplier.
- To perform that action do the following:
  - o Login as buyer
  - o Click Actions from the top menu
  - o Select Reschedule from the buyer action menu list and the list of items which has cards with the supplier will be displayed.
  - o Select the item to be rescheduled and click show cards
  - o Following screen with the list of cards for the item pending at the supplier will be displayed

  - o Select one of more cards
  - o Change the required receive date

- o Click Reschedule
- o Following results screen will be displayed

Reschedule Cards Results   How do I?

« | Back To Items

Following cards were successful

	Card ID	Item	Description
🖉	KCD3TPMCNAC8	ADG-89090-12	Please call the supplier *Rick Chavez* and request that he/she accept the new Required Receive Date changes.

- In the default mode this card will be put back in the waiting to accept state for approval by supplier. However there is a configuration flag which if set will authorize the buyer to override and change the Required Receive date
- For this example the configuration is default and hence the rescheduled card waits at the to be accepted state.
- Supplier will get a notification stating that buyer has requested a reschedule

Supplier approval of Buyer Reschedule
- Supplier can approve the reschedule by doing the following:
  - o Login as supplier
  - o Click Action from the top menu
  - o Select ACCEPT from the supplier action menu list
  - o Following screen will be displayed showing that there is one card to be accepted that is in the Reschedule Approval state

Accept Items List   Filters How do I?

Plant	Cards	Show	Category	RYG
Plant One	All	Items List	All	All

Filter By | Select Operator | Enter Value | | Go ►

| Wait For PO Cards | » | Runline Cards | » | Released Cards | » | **Reschedule Approval Cards | »** | Recall Wait Cards | » |

			Wait For PO		Runline		Released		Reschedule Approval		Recall Wait		Total	
RYG	Supplier Item No.	Description	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty	Cards	Qty
🟩	ADG-89090-12	Rotor 125-12	0	0.00	0	0.00	0	0.00	1	125.00	0	0.00	1	125.00
Total			0	0.00	0	0.00	0	0.00	1	125.00	0	0.00	1	125.00

  - o Supplier can click on the button to see the buyer's request as shown below

Accept Waiting For Reschedule Approval Cards List

Views | How do I?

| Accept \| » | Attach Notes \| » | Print PO | « \| Back To Items | « \| Change Filter |

Work Order Number:

		Card ID	Supplier Item No.	Release Date	Reqd Ship	Reqd Receive	Card Qty	PO #	PO Line #	WorkOrder No.
✎	☑	KCD3TPMCNAC8	ADG-89090-12	04/04/2011	04/07/2011	04/12/2011	125		0	

- o Supplier can accept it. If not supplier has to call the buyer to discuss alternate options. Unlike the buyer (in the supplier reschedule request), supplier has not option to reject the request
- o When approved the following results screen will be displayed and the card will be moved to In Process state, ready for shipment of goods

Accept Waiting For Reschedule Approval Cards List

How do I?

« \| Back To Items

Following cards were successful

	Card ID	Supplier Item No.	Description
🖉	KCD3TPMCNAC8	ADG-89090-12	Card Buyer Reschedule Successfully Accepted.

Shipping of Goods by the supplier

The next in the flow of materials is the shipment of orders. Ultriva allows suppliers to ship the orders from the portal, print labels and move the orders to In Transit mode.

- To accomplish this do the following:
  - o Login as the supplier
  - o Click Action from the top menu
  - o Select Ship from the supplier action menu list
  - o Following screen with the list of shipments that are ready to be shipped will be displayed

Ship Items List

Filters | Views | How do I?

Plant	Cards	Show	Category	RYG
Plant One	All	Items List	All	All

Filter By | Select Operator | Enter Value | Go

Show Cards | »

RYG	Item	Description	Total Cards	Total Qty
🟩	ADG-89090-12	Rotor 125-12	11	1,350.00

- o Select the item to be shipped and click Show Cards
- o All the cards for that item will be displayed as shown below

- o Enter the tracking number
- o Select the Carrier
- o Enter the packing slip number (optional)
- o Enter the charge (traceability) number (optional)
- o Change the ship quantity if necessary. Please note that changes to the ship quantity will prompt a confirmation prior shipment, if the quantity is outside of the tolerance set in the item master
- o Attach notes if necessary
- o Click Ship
- o Ultriva allows the labels to be printed prior to shipping or immediately following the shipping.
- o In the ship screen above the second column shows whether the label is already printed or not (black for printed and red square for not printed)
- o In this example we shipped a card that is already printed
- o So the result screen shows that the card is shipped and it is already printed

Printing Labels

o If the user tries to print the card again then it will print but marked as duplicate as shown below

o In the above example the user is shipping the card that is not printed.
o The following result screen shows the warning that card has been shipped but the label has not been printed yet.

Ship Cards Results How do I?

« | Back To Items

1 card(s) have been shipped without printing. Please immediately print the card(s) by clicking Print Cards button

		Card ID	Supplier Item No.	Description	Printed
📎	☑	KCD3TPPCNAJ6	ADG-89090-12	Card Successfully Shipped and Not Printed.	No

Print Cards | »

- o Select the card and click print cards to print the label
- o The label will be printed on the respective printers – thermal or laserjet. Customer can develop a set of labels and assign specific labels to respective suppliers. Their assigned label with the relevant data will be printed as shown below

Goods Receipt

Ultriva supports a multi-step work flow from physical receipt of goods at the receiving dock to delivering the goods at the storage location or point of use. There are three high level options that are supported:
- Directly moving the goods to on-hand
  - o If there are dedicated locations at the plant for the raw materials coming in from the supplier, then Ultriva can print these locations on the shipping label. So when the goods come in through the dock, they are scanned and delivered to the location. From Ultriva work flow perspective, the card (or order) moves from "In Transit" to "On-hand"
- Goods waiting to be put away
  - o At the item level, if the flag is set for the goods to wait for put away then this work flow kicks in. In Ultriva when the goods are scanned at receiving dock, the card (or order) moves from "In Transit" to "Put Away".

- o Another scan when the goods are moved to the location/point of use the card (or order) will move from "Put Away" to "On-Hand"
- Goods are waiting to be inspected
  - o At the Item level, if the flag is set for goods to wait for inspection, then this work flow kicks in. Setting the inspection flag will automatically set the "Put Away" flag as well. In Ultriva when the goods are scanned at the receiving dock, the card (or order) moves from "In Transit" to "Received at Dock".
  - o After inspection the user approves/rejects the goods. The approved goods are moved to "Put Away" state. They are then moved to the storage location or point of use

The work flow defined above is displayed in the process map below:
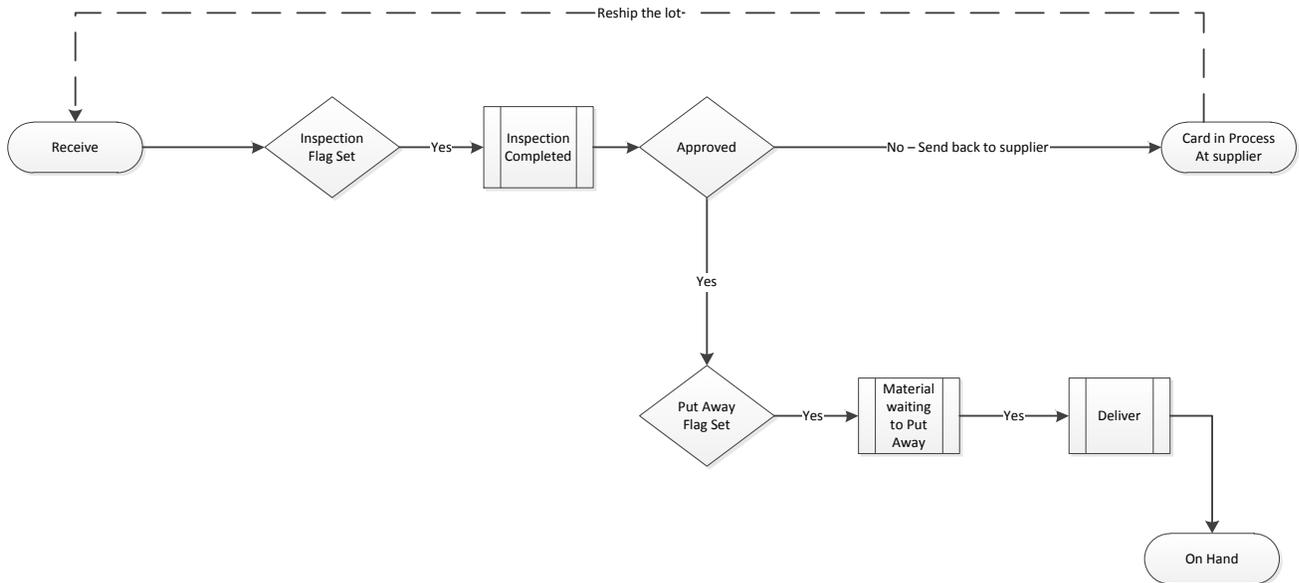
NOTE: If inspection flag is set to YES, then Put Away flag is automatically set to YES

Receiving the goods at the dock

In Ultriva the goods are received using a scanner. The scanner could be key board wedge scanner or mobile scanner or RFID reader. The mobile scanner will display the following:

Receiving dock user scans the card and the shipped quantity is automatically filled. If the received quantity is different, then the user can change and click submit button to complete the transaction. Depending on the flags set (as described above), the card will move to the next state.

The following process shows this flow if done through manual entry.
- To perform Receive action
  o Click on Actions from the top menu
  o Select Receive from Buyer Actions menu list
  o The following screen will be displayed

  o Select the Item you wish to receive
  o The cards that are "In Transit" will be displayed as shown below

        o Check the box to be received
        o Change the receive quantity if different
        o Add a storage location if necessary
        o Click Receive to complete the transaction

Goods Inspection

Let us assume that this part goes through all the steps. So the card would have moved to "Received at Dock" waiting for inspection. Once the inspection is complete it can be moved to the next stage via Scanning or Manual Entry.

Following screen in the mobile scanner is used to approve the goods:

User can scan the label it will automatically display the received quantity. If the approved quantity is different from the received quantity then the same can be entered. The transaction will be completed by clicking the Submit button.

- To perform this task manually,
  - o Click on Actions menu on the top
  - o Select Approve from the Buyer Actions list
  - o Following screen will be displayed for the items that are waiting for inspection

  - o Select the item and the cards waiting for inspection will be displayed as shown below:

Approve Cards List   Views ❓ How do I?

| Find Card ID 🔍🔎 | Approve \| » | Reject \| » | Attach Notes \| » | « \| Back To Items | « \| Change Filter |

▽	☐	Card ID ▲	Item ▲	Release Date ▽	Reqd Ship ▽	Ship Date ▽	Reqd Receive ▲	Receive Date ▽	Card Qty ▽	Ship Qty ▽	Receive Qty ▽	Approve Qty	Storage Location ▽
	☐	KCD2X76CNALB	003-0815-00	03/24/2011	03/31/2011	05/30/2011	04/04/2011	05/30/2011	1,500	1,500	1,500	1500	
📝	☐	KCD2X7FCNAQP	003-0815-00	03/24/2011	03/31/2011	05/30/2011	04/04/2011	05/30/2011	1,500	1,500	1,500	1500	
📝	☐	KCD3FWMCNAQ8	003-0815-00	03/24/2011	03/31/2011	05/30/2011	04/04/2011	05/30/2011	1,500	1,500	1,500	1500	
	☐	KCD2X6RCNAXF	003-0815-00	03/24/2011	03/31/2011	05/30/2011	04/04/2011	05/30/2011	1,500	1,500	1,500	1500	
	☐	KCD2X6WCNAWZ	003-0815-00	03/24/2011	03/31/2011	05/30/2011	04/04/2011	05/30/2011	1,500	1,500	1,500	1500	
	☐	KCD2X74CNAQ4	003-0815-00	03/24/2011	04/04/2011	05/30/2011	04/04/2011	05/30/2011	1,500	1,500	1,500	1500	

Sorted by: Item, Reqd Receive, Card ID   1 to 6 of 6

| Approve \| » | Reject \| » | Attach Notes \| » | « \| Back To Items | « \| Change Filter |

- o Check the card to be approved
- o Change the approved quantity if necessary
- o Add a storage location if necessary
- o Click Approve
- If the whole lot is to be rejected then
  - o Check the cards to be rejected
  - o Click Reject button
  - o The cards will be moved from "Received at Dock" to "In Process" in the supplier queue

Goods Put Away

Once approved the card will be moved from "Received at Dock" to "Put Away". The material handler will then move the material to its storage location or point of use. Again this task can be done by a scanner or manual entry.

- To manually put the material away:
  - o Click the Actions menu from the Top of the screen
  - o Select Put Away from Buyer Actions menu list
  - o Following screen will be displayed

Put Away Items List   🔽 Filters Views ❓ How do I? ⤒

Supplier	Cards	Show	Category	RYG
Bettcher Mexico ▼	All ▼	Items List ▼	All ▼	All ▼

| Filter By ▼ | Select Operator ▼ | Enter Value | 🔸 | Go ▶ |

Show Cards \| »

RYG	Item	Description	Total Qty	Total Cards
🟩	003-0815-00	Lower Bearing Plate	3,000.00	2

o   Select the item and list of cards which are waiting to be "Put Away" will be displayed

Put Away Cards List   Views How do I?

| Find Card ID | Deliver \| » | Send Back To Supplier \| » | Attach Notes \| » | « \| Back To Items | « \| Change Filter |

▽	☐	Card ID ▲	Item ▲	Receive Date ▽	Approved Date ▽	Receive Qty ▽	Approved Qty ▽	Put Away Qty	Storage Location ▽
	☐	KCD3FWFCNAG9	003-0815-00	05/30/2011	05/30/2011	1,500	1,500	1500	
	☐	KCD3FWNCNABA	003-0815-00	05/30/2011	05/30/2011	1,500	1,500	1500	

- To put the card away
  o   Check the box
  o   Change the Put Away quantity if different
  o   Add a storage location if necessary
  o   Click Deliver
  o   The card will be moved from "Put Away" to "On-Hand"
- Ultriva allows the user to return the card to the supplier at this state as well. To do so
  o   Check the card to be returned
  o   Click Send Back to Supplier button
  o   The card will be moved from "Put Away" state to "In Process" in the supplier queue

Once the card is back on hand it is ready for consumption again. Ultriva tracks the cards states and its association actions using a transactional work flow, thus guaranteeing no duplicate actions (releases or shipments or receipts).

Mobile Scanning:

Most of the actions described above as manual screens can also be done using Mobile Scanner in Ultriva. Given below is a list of actions that are supported through scanning.

Depending on the role of the users and their privileges, appropriate menu item will be displayed when they log in to the application through the scanner.

Recommended Scanners

Ultriva recommends the following scanners. Hand held are mobile scanners while keyboard wedge scanners are connected to the laptop or desktop

Brand	Model #
Motorola Hand held	MC89090
Intermec Hand held	CK31
Motorola keyboard wedge	DS4208
Intermec keyboard wedge	SR30

Visual Supply Chain board

- The entire flow described in the sections above can be visually tracked using this board. To get to it
    - Click Reports
    - Select Buyer Status from Buyer Reports menu list
    - Select the supplier and click Go
    - Following board is displayed

Buyer Status Report

RYG ▽	Item ▽	On Hand Cards	On Hand Qty	Released Cards	Released Qty	In Process Cards	In Process Qty	At Ship Hub Cards	At Ship Hub Qty	In Transit Cards	In Transit Qty	Received At Dock Cards	Received At Dock Qty	Put Away Cards	Put Away Qty	Others Cards	Others Qty
🟩	003-0815-00	24	35,650.00	0	0.0	4	6,000.00	6	9,000.00	5	7,500.00	6	9,000.00	2	3,000.00	0	0.0
🟩	510-0541-30	11	7,920.00	0	0.0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.0
🟩	510-0541-31	5	3,600.00	0	0.0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.0
🟩	003-0816-00	58	116,000.00	2	4,000.0	2	4,000.00	4	8,000.00	0	0.00	0	0.00	0	0.00	0	0.0

Sorted by:

- You can see for each items how many cards (orders) in each of the states. Both the buyer and supplier will have the same view. The different states are
    - ON HAND – This denotes the material that is on hand ready for consumption at the customer side (Normal wait in this state is the order cycle time – Lot Size/average usage per day)
    - RELEASED – This denotes that card (order) has been sent to the suppliers electronically but they have not yet acknowledged or accepted the order (Normal wait in this state is 24hrs to 48 hours)
    - IN PROCESS – This denotes that the cards (orders) are accepted and waiting for manufacturing to be completed. (Normal wait in this state is supplier's lead time)
    - AT SHIP HUB – This is an optional state. If the supplier is consolidating the shipments either by themselves or through logistics providers, then this flag is set. When the supplier completed production, he prints the label and moves it to Ship Hub (Wait time in this state can vary depending on the business process)
    - IN TRANSIT – This denotes that the goods are in transit (Air, Rail, Road). During this time customers should be able to track the shipment using transportation provider's website. (Normal wait time in this state is Supplier's Transit time)
    - RECEIVED AT DOCK – This denotes that goods have been received at the customer site and is waiting for INSPECTION. (Wait time at this state can vary based on business process)
    - PUT AWAY – This denotes that the material is ready to put away to its location or point of use. (Normal wait is less than 24 hours)
    - OTHERS – This denotes the cards are in one of the intermediate states. Some common intermediate states are:
        - Waiting for P.O. from ERP
        - Waiting for approval from buyer for reschedule

- Waiting for approval from supplier for reschedule or recall
- When you select a specific item then all the cards associated with that item at every state is displayed as shown below.

On Hand	
Released	
In Process	
At Ship Hub	
In Transit	
Rec'd At Dock	6 (Cards) 9,000 (Units)
Put Away	2 (Cards) 3,000 (Units)
Others	0 (Cards) 0 (Units)

Card Details: KCD2X74CNAQ4

Card Qty	1,500.00
Release Date	03/24/2011
Accept Date	05/11/2011
Ship Date	05/30/2011
Req Ship Date	04/04/2011
PO Number	009047
PO Line Number	0
Release Number	
Release Line Number	
Expected Receive Date	06/01/2011
Supplier	Bettcher Mexico
Ship Qty	1,500.00
Tracking No	3456789
Received Qty	1,500.00
Receive Date	05/30/2011
Last Action By	ultrivauser
Work Order Number	898980
Notes	

⚠ - Late ◥ - Note ⊠ - Not Printed

- In addition by placing the cursor on a specific card, all the details associated with card will be displayed. For e.g.
  - A card in on-hand state will show the last received date, who received it and quantity received
  - A card in Released state will show the release date, required ship date, required receive date, order quantity and supplier name
  - The card is actually a smart card as it accumulates more information as it goes through different states. Thus a card in In Process state will show additionally accepted date
  - A card in In Transit state will additionally show actual ship date, actual ship quantity and tracking number.
  - A card in Received at Dock state will actual receipt date, receipt quantity etc. as you can see in the above screen

How to focus on eliminating stock outs?

Ultriva has changed the supply chain paradigm to read "Eliminate stock outs while reducing inventory" instead of "Reduction in inventory leads to higher stock outs and vice versa". There are number of ways in which Ultriva guides the customer to accomplish this goal:
- Rightsizing
    - o With inventory sizing calculator Ultriva takes in to consideration the lead times, demands, safety stocks and lot sizes to compute how much inventory should be across the supply chain.
- Consumption triggers
    - o By triggering replenishment signals on actual consumption from the point of use instead of forecasted demand or planned orders, Ultriva eliminates the whip lashing of suppliers dramatically
- Validation of lead times
    - o Continuous monitoring of replenishment cycle times leads to validation of defined lead times vs. actual
- Monitoring Demand Changes
    - o Ultriva tracks the daily consumption for each day on a real time basis and provides resizing options as it sees changes in consumption patterns.
- Inventory health monitor
    - o Ultriva allows customers to set rules on defining stock out risks at individual item level. For some it could be defined as a percentage of inventory size; for others it could be when they dip below the safety stock. In either case the system in real time tags the item as RED, YELLOW, or GREEN. Red signifies high risk of stocking out while Green signifies low risk. The visibility of RED parts to the suppliers dramatically reduces the need for expediting

Shown below is the screen shot of the home page that highlights the RED, YELLOW and GREEN items. There are 37 of the total 514 items (7.2%) are in the high risk category. From the buyer and supplier perspective those are the parts that need attention.

The buyer or the supplier can then drill down to see the red parts by clicking on Red button. This will display the following material status screen:
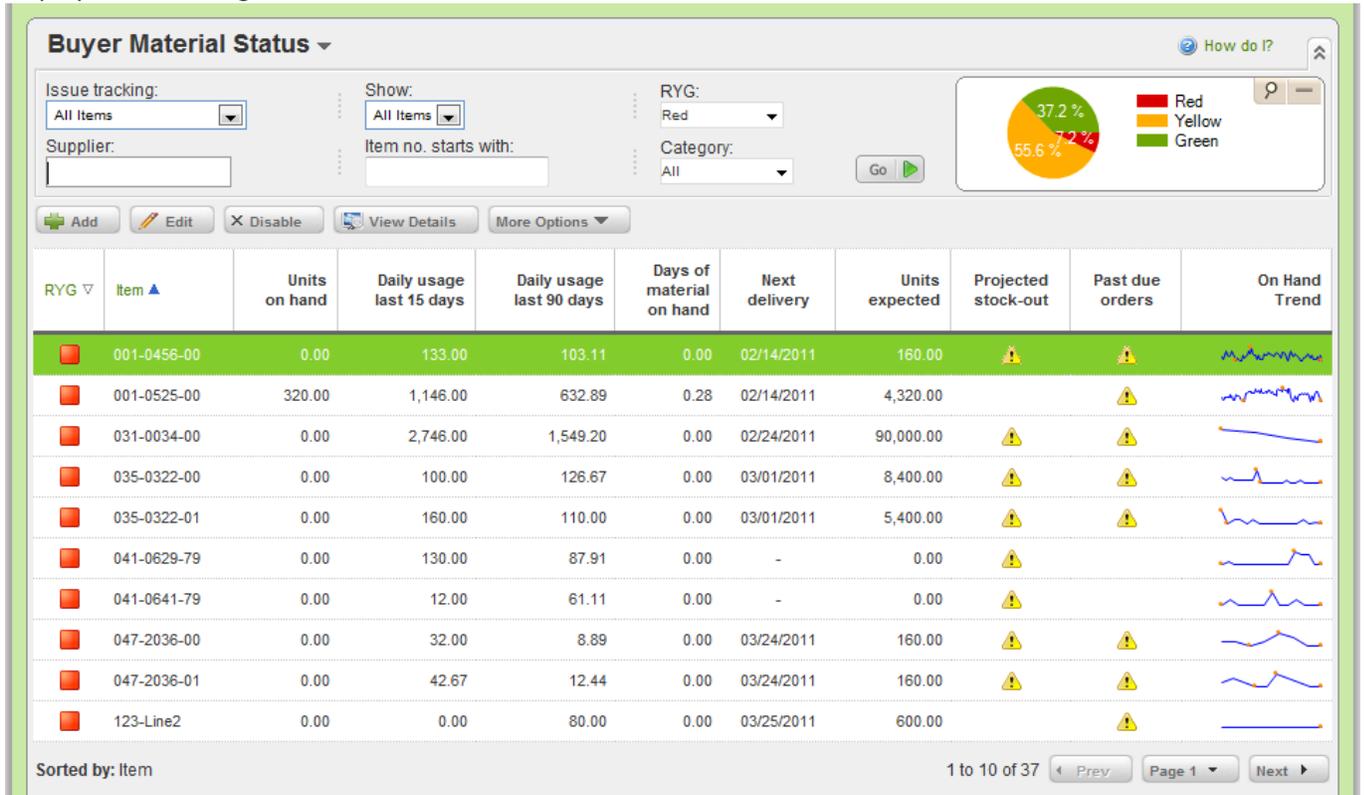
This comprehensive screen gives the complete view for each one of the 37 item. It provides the usage trends for the last 15 and 90 days, total units and number of days on hand, when is the next delivery and how much and finally is the system projecting a stock out.

Selecting a specific item and clicking View details button on top will provide next level of details at individual order lines (or cards) for that item as shown below:

As the screen shows it is easy for the buyer to see the status of orders for that red item. How many are in process at the supplier, how many are in transit, what are the tracking numbers and when they are expected to be at the dock.