Understanding Inventory Replenishment for Manufactured Items

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> This guide explains how to use the Target and Replenish Balance fields to automatically maintain inventory levels of assembled goods. It is intended for system administrators.

You can keep stock at just the right levels using aACE's robust automation features — including *automatic* updates in real time for existing replenishment production orders (see below for details).
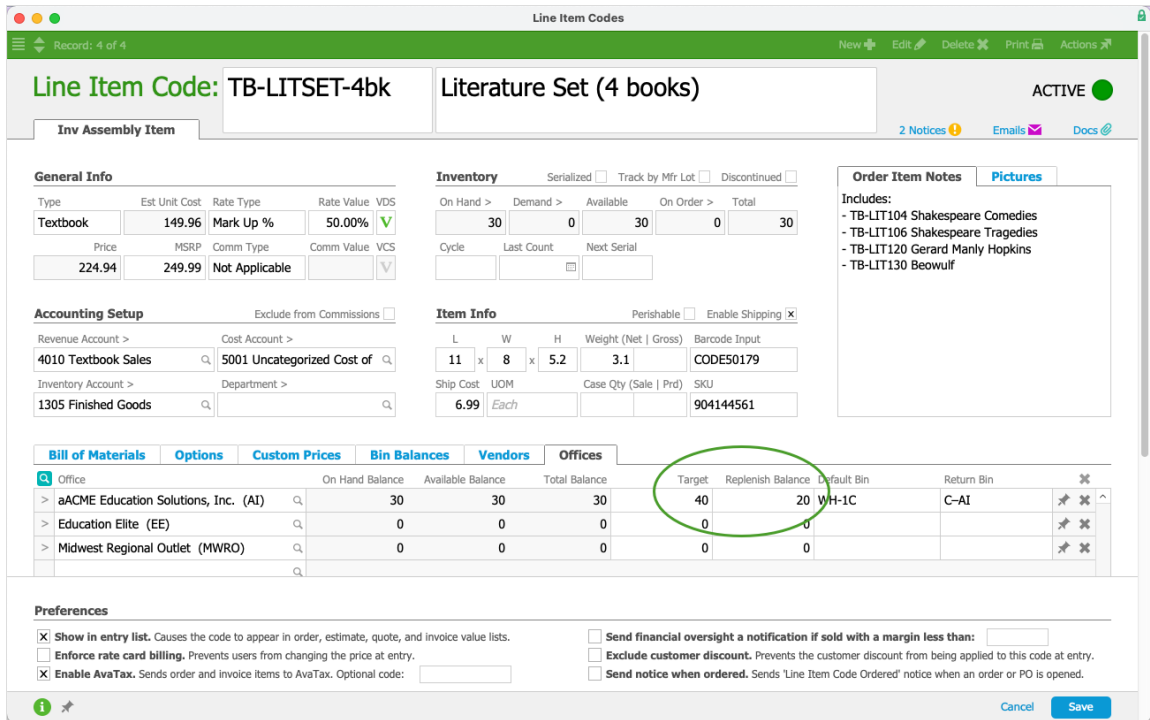
Configuring your system for inventory replenishment for manufactured items (https://aace5.knowledgeowl.com/help/configuring-inventory-replenishment-for-manufactured-items) involves 1) setting the Target and Replenish Balance fields on your line item codes (LICs), and 2) configuring the Generate Inventory Replenishment automation schedule in your system preferences, and 3) configuring your internal Company records. These inventory replenishment processes coordinate well with backorder management (http://aace5.knowledgeowl.com/help/understanding-backorder-management) to streamline your operations.

When you're setting up inventory replenishment on your system, use the following guidelines and best practices to get the most benefit.

1. Working with the Target and Replenish Balance Fields

aACE automates your manufactured items inventory based on the settings you enter for an item's Target and Replenish Balance (http://aace5.knowledgeowl.com/help/configuring-inventory-replenishment-for-purchased-items). The relation between these two fields can be summarized as, "When the inventory Total reaches the Replenish Balance level, generate a production order to reach the Target level." These parameters can be customized for each office in your organization that sells the item.

In the screenshot above, the textbook set LIC record shows the aACME main office Target value set to 40 and the Replenish Balance number set to 20. This tells aACE the maximum number we want on the shelf at any time is 40; however, when inventory levels decline to 20 or less, the system should automatically generate a production order to bring the count back up.

2. Running the Replenishment Process

After you set the Target and Replenish fields, you can configure the automation schedule (http://aace5.knowledgeowl.com/help/configuring-inventory-replenishment-for-purchased-items) to automatically run the replenishment process.

In addition, you can manually trigger the process from two modules:

- Order Setup > Line Item Codes
  Note: You can locate all items that need reorder by clicking the footer link to Find Items Requiring Replenishment. You may need to filter that list to show only assembly items.
  - To replenish a single item — At the list view, locate that item. Then click the Actions icon ( ) for that line and select Replenish Inventory.
  - To replenish a batch of items — At the list view, filter the list to show the desired items. Then click the Actions > Generate Production Orders for Inv Replenishment.
- System Admin > Preferences > Automation Schedules
  - On the Schedule Status tab, scroll to the entry for Generate Inventory

Replenishment, then click Run. Note: The system prompts whether to run the process locally or on the server; for most situations, the best option is to run it on the server.

Running the Generate Inventory Replenishment process creates both production orders and notices:

- Production Orders — aACE generates a production order for each line item that 1) has parameters entered for Target and Replenish Balance, and 2) has a Total balance below the Replenish Balance. These auto-generated orders are initially assigned the record Type of "Inventory Replenishment".
  Note: You can manually change that type; however, changing the record Type will *remove* that production order from aACE's ongoing, automatic updates (see below).
- Notices — aACE also generates a notice for the relevant team members. This internal message summarizes the purchase order information. You can jump directly to the production order records by clicking the Link To go-to link.
  Note: You can customize which team members receive notifications in two ways: 1) Changing the team in the Notice Setup module (http://aace5.knowledgeowl.com/help/overview-of-aace-auto-generated-notices), and 2) Changing the members on the team in the Teams module (http://aace5.knowledgeowl.com/help/creating-and-editing-teams).

Automatic Updates to Existing Production Orders

Your inventory levels change continually. Each day, you may have increased inventory from returns or additional demand from new orders. A production order created just a few hours ago might be outdated by the time it's sent to your fulfillment team. To help you manage this business reality, aACE can *automatically* update your inventory replenishment production orders.

While inventory replenishment production orders are in Pending status, if the replenishment process runs again (see above), line items with a changed Total balance will prompt adjustments to the existing production order:
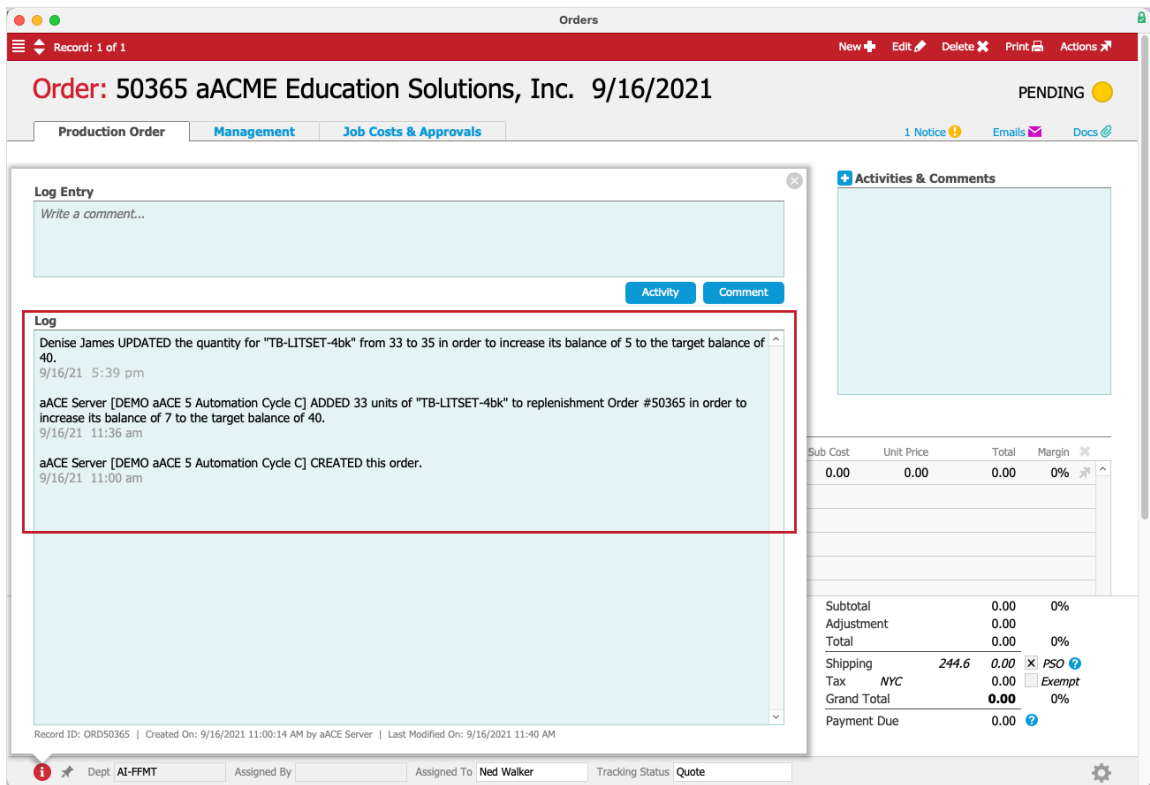
- For items with increased *inventory*, aACE automatically reduces their replenishment quantity.
- For items with increased *demand*, aACE automatically increases their replenishment quantity.

As updates are generated, aACE tracks everything in the production order log. You can review every change by clicking the Info icon ( ) in the lower-left corner of the production

order detail view. The log shows which automation cycle or manual trigger created or updated the production order, plus the relevant quantities, products, and target balances.

Example of Updates to Production Order

This screenshot shows the log of an inventory replenishment production order in Pending status. The order was initially created when the Generate Inventory Replenishment process ran as part of Automation Schedule C. The order was initially created for 33 units to bring the inventory level to the target balance of 40. Later on, another order for the item had been processed, reducing the inventory further. The team member who handled the order also manually triggered the replenishment process. This increased the production order quantity to ensure it would meet the target balance.

Tips

- Lead Times — When you set the Replenish Balance quantity, account for the time needed for new inventory to arrive.
- Case Quantities — If an inventory item is ordered by cases, the replenishment production order will ensure that the individual item count meets or exceeds the Target quantity. For example, suppose that an item was prepared in packages of 50. If the item's Target value was 75, and the current balance of booklets was below the Replenish Balance of 20, then aACE would order *two* packages to ensure the Target value was met.

- Removing Items from Replenishment — You can remove a specific LIC from the replenishment process by *clearing* the Target and Replenish Balance fields (i.e. *deleting* all values from these fields).
Warning: You must *delete* all values from these fields. If you enter zeroes, aACE will still include them in the replenishment process.